I. PLAN DEVELOPMENT

A. INTRODUCTION

In December of 1983, the United States Congress directed the Federal Communications Commission (FCC) to establish a Plan to ensure that the communication needs of state and local public safety authorities would be met. By their regular means of initiation, the FCC began the process of developing such a Plan. Through their efforts, and the efforts of the National Public Safety Planning Advisory Committee (NPSPAC), the Plan was begun.

The National Public Safety Planning Advisory Committee provided an opportunity for the public safety community and other interested members of the public to participate in an overall spectrum management approach by recommending policy guidelines, technical standards, and procedures to satisfy public safety needs for the foreseeable future. After consideration of NPSPAC's Final Report and comments filed in Docket No. 87-112, a Report and Order was released by the FCC in December 1987, which established a structure for the National Plan that consists of guidelines for the development of regional Plans.

The National Plan provides guidelines for the development of regional Plans. The particulars of this Plan are found in FCC Docket No. 87-359, which contains the required steps and contents for regional Plan development. It is on this document that the Region 43 Plan is developed.

B. PURPOSE

Public safety communications has, for many years, been inadequate throughout the United States. This is as true for Washington State as it is for any other state. Many, if not all, public safety radio users are constantly bombarded with outside interference, noise, and over-crowding. It is with these problems in mind that this Plan was developed.

This regional Plan was developed with the objective of assuring all levels of public safety/public service agencies that radio communications in the near and distant future will not suffer from the problems of the past.

The National Plan, as developed by NPSPAC, was followed very closely in all considerations for frequency allocation, re-use, turn back, regional interoperability, spectrum requirements and adjacent region operations. This Plan should provide the flexibility to accommodate the growth and changes that are occurring in public safety and public service communications operations long into the future.

C. NOTIFICATION

Several methods of notification were used to invite interested parties to participate in the development of this Plan. Initially, the "convener" issued a mailer to the Washington State Fire Chief's Association, the Washington Police Chief's and Sheriff's Association, the City Managers and Mayors Association, the Washington State Office of Emergency Management and its affiliates in the state of Washington, Washington State School District Associations, Veterinary Associations, Ambulance Associations, and all members of the Northwest Chapter of APCO, and other interested parties, inviting them to a meeting to organize and establish a NPSPAC committee and various subcommittees for Washington State known as NPSPAC Region 43. The Convener has a copy of the original mailing list for review if any individual, organization, or entity wishes to do so.

During the initial meeting, names and addresses of those individuals present who wished to either participate in the Planning process, or who wanted to be kept informed on the progress of the Planning efforts were recorded. These individuals or agencies were sent announcements for meetings and bulletins of progress.

A copy of the completed Plan was mailed to all participating members and to all the County Seats for review and comment by interested parties prior to a vote for acceptance and submittal to the FCC. The meeting and acceptance vote was conducted on May 1, 1991.

The vote was conducted by a simple show of hands by all attendees of the meeting.

D. WRITTEN RESPONSES

During the comment period, no written responses or questions were received by the Committee. The Plan is submitted as approved on May 1, 1991.

E. PLAN REVISIONS

Since the adoption and approval of this Plan in 1991, the Region 43 Regional Review Committee has gained considerable experience in dealing with applications for frequencies covered by this Plan and the administration of the Plan. By the close of 1993 the Committee had identified several revisions needed in the Plan to improve its ability to meet the needs of public safety users in the Region. These changes make the Plan easier to read and clarify previously confusing information regarding processing of applications.

On December 15, 1993, the Regional Review Committee held a meeting at which it approved this revised edition of the Plan. This meeting was advertised to numerous public safety agencies and bodies in the Region and prior to adoption the Committee took testimony and made final modifications to this revision.

With this revision the Regional Review Committee also extends the expected service life of the Plan to the year 2005.

Late in 2005 the Committee recognized that there were several policy issues that needed to be altered in the Plan to allow more efficient administration of the Plan now that the spectrum in the Plan is relatively fully deployed. Early in 2006, two administrative Plan revisions were approved by the Committee (ending the use of the Zone Representative approach and ending the use of filing windows) and consent letters for the changes were obtained from Region 35 (Oregon) and Region 12 (Idaho). These revisions were forwarded to the FCC for approval and were formally approved on August 1, 2006.

Being a Canada Border Regional Planning Committee, on October 22, 2018, the Regional Planning Committee amended the Plan per the direction of DA 18-866, released August 21, 2018, to reflect the reconfigured 800 MHz band plan established in the Commission's 800 MHz rebanding proceeding, using the streamlined amendment procedure.

II. REGIONAL DESCRIPTION AND DEMOGRAPHICS

A. INTRODUCTION

The purpose of this section is to provide a geographic and demographic description of Region 43. The population data for year 2000 as shown in this section, will be the basis for channel assignments.

B. GEOGRAPHY OF REGION 43

Region 43 includes 66,511 square miles, encompassing the entire State of Washington. Its boundaries are the Canadian border to the North, the State of Oregon to the South, the Pacific Ocean to the West, and the State of Idaho to the East.

The geography of Region 43 is as diverse as any in the country. Two mountain ranges dominate the terrain of the State. The Olympic Mountain Range is located on the Olympic Peninsula in the western portion of the State and the Cascade Mountain Range is located in the west-central portion. Between these two ranges lies the Puget Sound region. It is in the Puget Sound region that the major population and industrial centers of the state are located. East of the Cascade range, basaltic tableland provides the dominant geographic foundation. With average elevations ranging between 5000 and 8000 feet, the Cascade Mountains provide a distinct demarcation between the eastern and western portions of the state.

C. POPULATION AND DEMOGRAPHICS

1. Current Population and Growth

The 1990 population of the State of Washington is estimated to be 4,640,643 (1). Population of the state continues to grow at a rate of 1.9% annually (2). Exhibit 3 presents population growth projections through the year 2000 (3).

2. Geographic Distribution of Population

The population of the region resides in either incorporated cities and towns or in the unincorporated portions of counties. Thirty-nine counties are spread across the region. Approximately 51% of the population live within 267 incorporated municipalities. Ten standard metropolitan statistical areas (SMSA's) representing the significant population centers are located within Region 43 (1). Seven of the ten SMSA's are located west of the Cascade Mountain range.

3. Geographic Distribution of Population Growth

Most of the increase in population during the last decade occurred in nine of the states' largest counties (3). Six of these, King, Kitsap, Pierce, Snohomish, Thurston and Whatcom, border on Puget Sound in Western Washington. The three other fastest growing counties are Clark in the southwestern, Spokane in the eastern, and Yakima in the south central part of the state.

4. Population and Demographic Tables

Included herein are the following maps and tables:

Exhibit 1 page 6	Washington State map, showing counties and the County Seat located in each county.
Exhibit 2 page 7	Standard Metropolitan Statistical Areas Map (1)
Exhibit 3 page 8	Estimates and Forecasts of Total Persons for Counties and the State of Washington through 2000. (3)
Exhibit 4 page 9	Population, Land Areas, and Density (1987)(1)
Exhibit 5 page 14	Percent Growth Projection Map through 2000.(3)
Exhibit 6 page 15	State Map showing Zones (see Regional Review Committee)

5. Reference/Source Footnotes

(1) State of Washington Data Book, Office of Financial Mgt.,1987)
(2) U.S. Department of Commerce, Bureau of the Census
(3) Forecasts of the State and County, State of Washington, Office of Financial Management
(4) Population Trends for Washington State, State of Washington, Office of Financial Management

WASHINGTON STATE MAP SHOWING COUNTIES AND THE COUNTY SEATS

CONSOLIDATED STATISTICAL AREA
METROPOLITAN STATISTICAL AREAS,
COUNTIES AND SELECTED PLACES

ESTIMATES & FORECASTS OF TOTAL PERSONS FOR COUNTIES AND THE STATE OF WASHINGTON THROUGH 2000

POPULATION, LAND AREAS &
DENSITY 1987

POPULATION, LAND AREAS &
DENSITY 1987 (CON'T)

POPULATION, LAND AREAS &
DENSITY 1987 (CON'T)

POPULATION, LAND AREAS &
DENSITY 1987 (CON'T)

POPULATION, LAND AREAS &
DENSITY 1987 (CON'T)

1980 TO 2000

STATE MAP SHOWING REGION 43
ZONES

III. IMPLEMENTATION AND PROCEDURES

A. REGIONAL REVIEW COMMITTEE

1. Membership

Per FCC DA 06-1562, voting members shall consist of one official from any non-federal single agency engaged in public safety and eligible to hold a license under 47 C.F.R. § 90.20. Voting members shall be designated in writing to the chair by an official from the eligible agency who is at least one level senior in the reporting structure of an agency to the designated voting member. A single agency shall be allowed no more than one vote for each distinct eligible category (e.g., police, fire, EMS, highway) within the agency's organization of political jurisdiction. In voting any issue, the individual must identify him/herself, the agency and eligibility.[1]

The Committee will elect a Chairperson annually from its membership and meet as often as deemed necessary by the members to conduct business. At a minimum the Committee will meet at least once per year. A simple majority of the Committee will constitute a quorum.

2. Purpose

Upon approval of the Region 43 Plan by the Commission, the Regional Review Committee will be established for the purpose of reviewing of new applications, conducting an annual system implementation review, making action recommendations to the Commission, resolving inter-regional problems, reviewing and recommending modifications and amendments (if needed) annually to the Plan, and to exercise general oversight of the Plan. The Regional Review Committee will establish at its first meeting its own operating procedures and by-laws.

It is vital to the interest of Washington State public safety agencies that the Regional Review Committee be maintained as an active and on-going committee for the duration of the Region 43 NPSPAC Plan.

[1] The Zone concept was replaced with the Membership structure per the amendment adopted in 2006.

B. GENERAL PROCEDURES FOR APPLICATION

1. Timetable for System Implementation

Applicants will have one year after issuance of the FCC license to begin implementation of their system. The time tables for full loading of the system will be the same as prescribed by the Commission in part 90.631 concerning trunked systems, 90.633 concerning conventional systems, and section 90.629 regarding extended time for implementation also applies. For the purpose of this Plan, all trunking systems are to be considered slow growth and should be licensed as such by applicants.

2. Frequency Recall

The Regional Review Committee will monitor the implementation process. If one year after the license has been issued no system implementation has begun the applicant will be notified of the possible consequences of not utilizing the frequencies. The Regional Review Committee has the option of notifying the FCC to take back the license and restore the frequencies to the pool.

If the system is being implemented slower than the Plan anticipates, the Regional Review Committee will review the system progress and make recommendations based on the region's need for frequencies. Alternatives may include: continue with the on-going implementation, recommend the sharing of channels, or such other alternatives as the Committee deems necessary.

In all instances, the Plan envisions and the Regional Review Committee shall insist on a "good faith" showing where there is a conflict between the assignments indicated in the Plan, and a real need by another agency for channels.

3. Re-assignment of Frequencies

Applicants for frequencies covered in this Plan are expected to turn back frequencies in other bands presently used by the applicant. These turned back frequencies will be returned to the FCC authorized frequency coordinators for the frequencies' original service so they can be re- assigned to agencies awaiting channels in the lower frequency bands.

Normal coordination procedures will be followed with these "give back" channels. In cases where specific channels are required by numerous applicants, it will be the responsibility of the authorized coordinator to determine how they will be assigned.

It is not consistent with the goals and objectives of this Region, nor is it proper, to permit the direct re-assignment of radio frequencies between agencies. All frequencies are to be returned to their respective service pools to be assigned where it will be of the most benefit to the public's safety.

Frequencies obtained through interservice sharing should be returned to their original service pool before non-shared frequencies are turned back. Similarly, an agency shall not be allowed to "farm down" frequencies to other services within their political structure simply to take advantage of surplus equipment. The need for communications by such an agency will probably be outweighed by the needs of other agencies. Many public safety agencies do not have enough frequencies to adequately provide for their day-to-day dispatching. These needs must be provided for before less important needs can be provided for in the lower frequency bands.

C. REQUIREMENTS FOR LICENSE APPLICATION

The Regional Review Committee will adopt and maintain Application Review Procedures that will specify the exact material needed in an application and the process the Committee will use to review and approve the application. These Procedures will at a minimum require that the applicant provide complete and adequate information so the Committee can assess the compliance with this Plan and the FCC rules and regulations. In addition, the Procedures will require enough information to protect present and future users of frequencies covered in this Plan from harmful radio frequency interference.

D. APPLICATION FILING WINDOWS AND CRITERIA FOR PRIORITIZATION

Applications for frequencies covered by this Plan will be processed by the Regional Review Committee two (2) times per year. These periods will be referred to as Filing Windows. The purpose of processing applications in this manner is to allow the Committee to better understand the needs of the applicants and make informed decisions on the distribution of frequencies where the demand exceeds the supply. The deadline for applications for each Filing Window will be March 31 and September 30. The Committee shall review all applications received by these dates and act on these no later than May 31 and November 30, respectively. Deliberations may include meetings where the Committee takes testimony from interested parties. Further details will be defined in the Committee's Application Review Procedures document.

In the event that there are applications for more than the available number of frequencies the Committee shall use the following weighted criteria to assist in making its decision. These point values represent a maximum allowable value for each criterion and the actual assignment of a value will be described in detail in the Committee's Procedures.

Maximum Allowable Point value

6 Immediate need to protect life and property
5 The number and the ability to reassign the turn back channels.
4 Channel loading
3 Effective system design.
2 Consolidation or the use of the channel by others.
1 Implementation schedule.

The Committee will use the results of this scoring and other information that is available to make an allocation of frequencies that best meets the overall public safety needs of the Region.

E. APPEAL PROCESS

Throughout the frequency application process applicants will be given an opportunity to appeal decisions that caused rejection of an application. The appeal process will have two levels. The first is the Regional Review Committee and the second is the FCC. The applicant who decides to appeal a rejection should begin the appeal process immediately. If the appeal reaches the second level, the FCC's decision will be final and binding upon all parties. The method of administering the appeal is defined by in the Committee's Procedures document.

F. FREQUENCY DISTRIBUTION

The specific assignment of frequencies in Region 43 has been drawn from pools established utilizing the CET/APCO frequency packing program. This process began with the return and evaluation of the 800 MHz survey forms sent to all eligible agencies.

G. FREQUENCY ALLOCATION PROCESS

The method used for frequency "packing" Region 43 was the C.E.T. computerized method. The geographical locations, in latitude and longitude, for several prominent government sites in each county were provided to C.E.T. along with the environmental type of the county and the approximate radius to the county lines. Additional information supplied was the request for a minimum of 2 channels per county and a minimum of 1 additional channel per 25,000 population in counties with populations above 25,000. The City of Seattle was provided channels based solely on 1 channel per 25,000 population. The portion of the Region within 140 kilometers of the Canadian border could only have frequencies - by treaty - above 822.5 MHz assigned on a primary basis. Frequencies below 822.5 MHz have to be assigned to Canadian users on a non- interfering basis. Due to the density of the population west of the Cascade Mountains above the 140 kilometer line, it was impossible to pack the frequencies without using frequencies primarily assigned to Canada. To use the Region 43 Plan to the fullest will require and depend on the applicable frequency advisors and the Regional Review Committee to coordinate and monitor the operation of the Plan.

The Regional Review Committee will review all applications for compliance with this Plan and to assist in the coordination of frequency uses to insure a minimum or no impact on all surrounding Regions and our Canadian neighbors.

The Committee will first attempt to meet an applicant's needs with channels listed in 90.617 and then from NPSPAC channels assigned to the applicant's County. In the event all NPSPAC channels reserved for use in one County are assigned, unused channels from other areas may be used if there is a clear showing to the Committee's satisfaction that there is little or no expectation that the channels will be needed in the County where they were originally allocated.

A table showing frequency allocation and channel assignment information is included in the Plan as Appendix A.

IV. TECHNICAL DESIGN REQUIREMENTS

A. INTRODUCTION

The purpose of this section is to define the technical requirements necessary to assure the maximum utilization of the valuable spectrum addressed in this Plan. "System coverage area" and "service area" will be limited to the smallest geographical area necessary to provide sufficient coverage of the geo-political area of the licensee.

Agencies requesting channels under this Plan shall have their proposed system design evaluated by the Regional Review Committee.

Agencies with service areas outside their political boundaries may request an extended service area. Such requests for extended coverage must be accompanied by written justification.

Extended service areas will not be authorized unless approved by the Regional Review Committee. Favorable consideration will be given to those systems that are made available for use by eligibles other than the licensee.

B. SYSTEM DESIGN STANDARDS

1. Definition of Service Area

"Service area" is the minimum area needed to be covered. This usually coincides with the geo-political boundaries of the requesting agency unless an exception is granted by the Regional Review Committee (see above).

2. Definition of System Coverage Area

"System Coverage Area" is defined as the boundary where received signal strength falls to 40 dBu (decibels above 1 microvolt per meter - approximate. 4.6 microvolts of signal across 50 ohms at 850 MHz). This shall be kept as close to the service area as possible but will normally be a little larger to assure sufficient coverage of all parts of the service area.

NOTE: This section is subordinate to section 8, 9 and 11 (below). The levels of interference given in these sections cannot be exceeded unless approved by the Regional Review Committee or any existing co-channel and adjacent channel licensee.

3. Responsibility for calculating System Coverage Area

It will be the responsibility of the requesting agency to calculate the proposed system coverage area.

4. Proposed System Coverage Area Exhibit

An applicant will be required to provide various map displays and exhibits of the proposed system coverage area to allow the Regional Review Committee to evaluate the impacts of the proposed system on present and future licensees. The exact nature of such exhibits are defined in the Committee's Application Review Procedures document and FCC rules.

5. Maximum Effective Radiated Power

The maximum effective radiated power (ERP) of all transmitters shall be limited to the minimum amount necessary to provide coverage of the agency's service area or as specified in FCC rules.

6. Antenna Design

The Regional Review Committee may require both directional and down- tilt antennas designed to reduce interference to other areas as deemed advisable or as required to meet listed criteria.

7. Low Level Sites

Emphasis will be placed on the use of low level sites to allow maximum frequency reuse.

8. Frequency Re-use

Careful adherence to the system technical design requirements of this Plan will allow for maximum co-channel usage within this region. Agencies requesting frequencies that have been previously licensed within this region, or an adjacent region, must show that their proposed system will operate on an interference-free basis with any existing co-channel system. Requesting agencies must demonstrate that the proposed system will produce signal levels not to exceed 5 dBu at any point inside the service area of all existing co-channel systems. It must further be shown that this signal level is not exceeded in Counties where co-channel frequencies have been assigned in this Plan but are not yet implemented.

9. Adjacent channel design

Because of the close proximity of adjacent channel frequencies, adjacent channel consideration must be planned similar to that of co-channel designs. Proposed systems must be designed so signal levels will not exceed 25 dBu inside the service area of existing adjacent channel licensees or inside the County where adjacent channels are assigned by this Plan but not yet implemented.

10. Absolute Mileage Separation

In any case where the boundaries of the service areas of adjacent channel systems are separated by at least 50 miles, the interference studies as set forth in this Plan are unnecessary because of free space and terrain losses.

11. Control station and mobile units

Control stations and mobile units of agencies granted frequencies shall limit their signals to the degree necessary to provide a minimum of 35 dB of protection to existing base station receivers operating on the same channel.

Control stations and mobile units of agencies granted frequencies shall limit their signals to provide a minimum of 15 dB of protection to existing base station receivers operating on adjacent channels.

12. Trunking Requirement

As referenced in the National Plan, trunking is mandated for any new system with more than four channels in the 800 MHz band. Request for exceptions will be considered by the Regional Review Committee. Requests for waiver of the trunking requirement will be considered by the Regional Review Committee after presentation of evidence by the applicant. Recommendation by the Committee to the FCC for approval of a waiver from the trunking requirement will be based on the individual merits of the presentation.

13. Transmitter Standards

Transmitters utilized on the new spectrum covered in this Plan will be type accepted for operation on the 806-809/851-854 MHz band and must meet the technical standards defined in Part 90 of the Commission's Rules and Regulations.

Portable and mobile transmitters, type accepted for operation in the 806- 821/851-866 MHz band, may be used by licensees in the Public Safety and Special Emergency Radio Services on the five National Mutual Aid channels without special authorization.

14. Coded squelch

The use of CTCSS (Continuous Tone-Coded Squelch Systems), CDCSS (Continuous Digital-Coded Squelch Systems), or other subsequently developed equivalent technology is required. System designers shall coordinate the coded squelch to enhance system discrimination between desired and undesired signals.

C. SYSTEM LOADING AND IMPLEMENTATION REQUIREMENT

Agencies using frequencies in the 806-809/851-854 MHz band shall comply with loading requirements as called for in Part 90.631 of the FCC Rules and Regulations for trunked radio systems, and in Part 90.633 for conventional systems. As referenced in 90.631 and 90.633, section 90.629 shall also apply.

1. **Conventional Systems:**
   An agency requesting a single frequency and turning back a frequency for reassignment will not be required to meet loading requirements to obtain the new frequency. If the single frequency is not loaded within time constraints of the slow growth channels, the frequency will be available for assignment on a shared basis.

2. **Trunking Systems:**
   Agencies requesting and implementing a trunking system will meet the slow growth requirements for trunk loading as specified in the FCC rules. Agencies not loaded to that extent will face the possibility of a reduction in channels dictated by the Region's need for channels.

3. **Number of frequencies requested**
   The following criteria shall be used to justify the number of channels requested and will form a part of the scoring of the channel loading criteria outlined in Section II D of this Plan:

   a. Compliance with FCC Rules for channel loading
   b. Population served and projected growth trends
   c. Numbers of agencies, and/or departments served.
   d. Commitments to release specific channels, and time frame for release.

4. **Traffic Loading Study**
   Justification for adding frequencies, or retaining existing frequencies in the 806-809/851-854 MHz band, can be provided by a traffic loading study in lieu of loading by number of transmitters per channel. It will be the responsibility of the requesting agency to provide a verifiable study showing sufficient air time usage to merit additional frequencies. A showing of air time usage, excluding telephone interconnect air time, during the peak busy hour greater than 70 percent per channel on three consecutive days will be required to justify additional or retain existing frequencies.

E. MOBILE TELEPHONE USE

The use of a radio telephone via interconnect through an 800 MHz trunked radio system or other two-way radio communications system normally requires a significant amount of air time. Therefore, telephone interconnect is discouraged. The use of a defeatable interconnect for radio telephone use is allowed under this Regional Plan. Where available, the use of cellular telephones or other methods should be used to access the Public Switched Telephone Network, rather than expending limited 800 MHz channels for this purpose.

V. INTEROPERABILITY

It is the intent of this Plan to encourage all Part 90 (B)(C) eligible agencies to implement communications capability on the National Common and Statewide Tactical channels, even if they do not license private systems on any of the frequencies covered by this Plan. It is also the intent of this Plan to retain,(and use) all present Mutual Aid systems such as Law Enforcement Radio Network (LERN), On Scene Command and Control Radio (OSCCR), Hospital Emergency Ambulance Radio (HEAR), or other similar systems.

A. INTEROPERABILITY AND MUTUAL AID CHANNELS

Ten channels will be reserved for interoperability and mutual aid. Five of these channels are the National Common Channels mandated by the FCC and five additional channels are to be used on a statewide basis.

FCC mandated frequencies to be used as Mutual Aid channels are listed below:

CHAN #	FREQUENCY	DESIGNATION .	
1	806/851.0125 MHz	National Calling Channel	8CALL90
39	806/851.5125 MHz	National Working Channel	8TAC91
77	807/852.0125 MHz	National Working Channel	8TAC92
115	807/852.5125 MHz	National Working Channel	8TAC93
153	808/853.0125 MHz	National Working Channel	8TAC94

Statewide mutual aid tactical channels and recommended service are listed below:

CHAN #	FREQUENCY	DESIGNATION .	
116	807/852.5375 MHz	Tactical, Fire/EMS	STATEOPS-1
118	807/852.5625 MHz	Tactical, Law Enforcement	STATEOPS-2
120	807/852.5875 MHz	Tactical, Local Gov't, Others	STATEOPS-3
122	807/852.6125 MHz	Tactical, Fire/EMS	STATEOPS-4
124	807/852.6375 MHz	Tactical, Law Enforcement	STATEOPS-5

B. CRITERIA FOR INTEROPERABILITY REQUIREMENTS

1. Primary and Secondary Users

Users will be separated into the categories of primary and secondary.

Primary User:

A Primary User is an agency that operates on five or more channels or operates a trunking system.

Primary Users will be required to have the capability of operating on the National Calling Channel. Wide area coverage transmitters configured as full mobile relays may be required to be installed to maximize regional coverage along with satellite receivers, as needed, to enhance the talk-in coverage. All Primary Users in the Regional Planning Area are required to operate a control station, either individually or jointly, to provide 24 hour monitoring and rendering assistance on the Calling Channel.

All licensees are encouraged to operate additional stations on the remaining four Common Channels (Working Channels). Each Primary User may be required to sponsor, individually or jointly, one or more existing or additional mobile relays on the five Common Channels in order to provide a number of working channels in an area. The frequency, placement, and coverage of these systems will be controlled by the Regional Review Committee. The suggested guidelines for the number of required Common Channels is one Common Channel for each four trunking channels.

Secondary User:

A Secondary User is an agency that will operate a non-trunkin system on four channels or less. Secondary Users include any Federal, State or Local disaster management agencies, police, fire, and providers of basic and advanced life support services.

All Secondary Users shall, as a minimum, operate a control station (if a mobile relay is providing coverage to the Secondary Users area) or a base station (half duplex is encouraged in order to communicate with portables and mobiles programmed for repeater operation) for continuous monitoring of the National Calling Channel. A Secondary User whose area is encompassed by one or more Primary Users may apply for a waiver from the Regional Review Committee for full time monitoring of the National Calling Channel. A Secondary User that has successfully petitioned for a monitoring waiver will be required to have an installed and operational control station on the National Calling Channel.

Other public safety users such as, school buses, volunteer emergency corps, Red Cross, Radio Amateur Civil Emergency Service (RACES), Amateur Radio Emergency Services (ARES), Salvation Army, C.A.P., etc., are encouraged to participate in the use of these interoperability channels. These agencies may also choose to monitor the National Calling Channel (8CALL90) but will not be required to do so.

2. Shared Trunking System:

In the case of two or more agencies agreeing to share a trunking system; they must, as a group, meet all the above requirements of a Primary User. Each individual agency must, at a minimum, meet the Secondary User requirements.

3. Channel Counting:

These rules apply to the use of the 806-809/851-854 MHz band. It is feasible, however, that an agency with an 800 MHz trunking system outside this band will apply for one or more additional frequencies within the 806-809/851-854 MHz band. For this reason the following counting rules are set forth:

All 800 MHz trunking channels and all 800 MHz non-trunked voice channels, whether or not in the 806-809/851-854 MHz band, will be counted to determine if an applicant for a channel in the 806-809/851-854 MHz band is a Primary User or a Secondary User.

All 800 MHz trunking channels, whether used for voice only, data only or data and voice will be counted.

C. CHANNEL ASSIGNMENT

1. National Calling Channel (8CALL90)

The Calling 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 8TAC channels for continuing incident operations or other interoperability communication needs.

2. National Working Channels (8TAC91 thru 8TAC94)

The remaining four Common Channels (Working 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. Individual Working Channels may be designated for use by various services on an incident basis by the controlling agency. In the event of multiple incidents requiring the use of these channels, channels shall be designated by mutual agreement between controlling agencies. In no case shall control of these channels remain with any single agency beyond the termination of the emergency.

3. State Tac Channels (STATEOPS-1 thru STATEOPS-5)

In addition to the above FCC mandated five Common Channels, five Tactical Channels will be set aside. Fixed base stations and fixed mobile relay stations are prohibited on these Tactical Channels. Temporary portable mobile relay stations with the minimum required power shall be permitted, except for Priority 4 usage.

Two channels are primarily intended for Fire/EMS use, two channels are primarily intended for Law Enforcement use, and the remaining channel is intended primarily for use by General Government and other eligibles. Agencies operating 800 MHz mobiles and portables are encouraged to use these channels in the simplex mode for their interoperability and other "repeater talk-around" needs, as outlined in Section D.

D. CHANNEL USAGE

Plain English shall be used on all interoperability channels at all times; encrypting shall be prohibited. Units will use the unit identifiers they normally use in their own system, but will then adapt to any prescribed identifier and on-air protocols as determined by the controlling agency.

Paging, alerting, and other means of signaling on these Mutual Aid channels is prohibited.

The use of the Calling Channel for intra-system normal dispatch and routine agency operations is strictly prohibited. Normally, the five Common Channels are to be used only for activities requiring communications between agencies not sharing any other compatible communication system. Under emergency situations, one or more Working Channels may be assigned by the controlling agency for the duration of the incident.

All ten Mutual Aid channels (except as noted) are subject to a priority usage concept. These priorities are as follows:

Priority 1: Disaster and extreme emergency operations, for mutual aid and inter agency communications.

Priority 2: Emergency or urgent operations involving imminent danger to the safety of life or property.

Priority 3: Special event control activities, generally of a pre-planned nature, and generally involving joint participation of two or more agencies.

Priority 3a: Drills, tests, and exercises of a civil defense or disaster nature.

Priority 4: Single agency secondary communications (Applies only to the five State OPS channels)

NOTE: Secondary communications are defined as that usage required by an extraordinary number of simultaneous incidents causing a temporary overload of an agency's normal communications system, or unusual occurrences occurring on an intermittent basis, such as being unable to use the agency's normal system and needing to communicate in a simplex (Talk-around) mode for a limited time.

E. REQUIREMENT FOR CHANNEL CAPABILITY

It is the intent of this Plan that all agencies that license frequencies from this Plan will implement, at a minimum, the following Interoperability channels in their mobile and portable radios:

8CALL90, 8TAC91 thru 8TAC94 will be implemented in full repeat mode so the radio can access any of these channels if a repeater is available in the area.

STATEOPS-3 will be implemented in simplex mode on the repeater output frequency (852.5875). This will provide a common simplex communications path for any 800 MHz radio used in the Region.

In addition to the above required channels, licensees are also encouraged to implement as many of the other State OPS channels as is reasonable for their operation. For example, a fire department may also choose to put STATEOPS-1 and STATEOPS-4 on their radios and a police department may choose STATEOPS-2 and STATEOPS-5. Additionally, agencies may choose to implement the STATEOPS channels in the full repeat mode if they also operate, or participate in the operation of, a temporary mobile repeater for unique events.

All interoperability channels shall be controlled by sub-audible tone 156.7 Hz. All interoperability repeaters shall have input and output tone of 156.7 Hz.

F. CHANNEL LOADING

Since these ten Mutual Aid channels are required for inter-agency communication during an emergency, they shall not be considered in channel loading and channel justification formulas.

APPENDIX SECTION

APPENDIX A

Channel Assignment by Number

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
1	**851.0125**	**806.0125**
2	851.0375	806.0375
3	851.05	806.05
4	851.0625	806.0625
5	851.075	806.075
6	851.0875	806.0875
7	851.1	806.1
8	851.1125	806.1125
9	851.125	806.125
10	851.1375	806.1375
11	851.15	806.15
12	851.1625	806.1625
13	851.175	806.175
14	851.1875	806.1875
15	851.2	806.2
16	851.2125	806.2125
17	851.225	806.225
18	851.2375	806.2375
19	851.25	806.25
20	851.2625	806.2625
21	851.275	806.275
22	851.2875	806.2875
23	851.3	806.3
24	851.3125	806.3125
25	851.325	806.325
26	851.3375	806.3375

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
27	851.35	806.35
28	851.3625	806.3625
29	851.375	806.375
30	851.3875	806.3875
31	851.4	806.4
32	851.4125	806.4125
33	851.425	806.425
34	851.4375	806.4375
35	851.45	806.45
36	851.4625	806.4625
37	851.475	806.475
38	851.4875	806.4875
	851.5	806.5
39	**851.5125**	**806.5125**
40	851.5375	806.5375
41	851.55	806.55
42	851.5625	806.5625
43	851.575	806.575
44	851.5875	806.5875
45	851.6	806.6
46	851.6125	806.6125
47	851.625	806.625
48	851.6375	806.6375
49	851.65	806.65
50	851.6625	806.6625
51	851.675	806.675
52	851.6875	806.6875
53	851.7	806.7
54	851.7125	806.7125

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
55	851.725	806.725
56	851.7375	806.7375
57	851.75	806.75
58	851.7625	806.7625
59	851.775	806.775
60	851.7875	806.7875
61	851.8	806.8
62	851.8125	806.8125
63	851.825	806.825
64	851.8375	806.8375
65	851.85	806.85
66	851.8625	806.8625
67	851.875	806.875
68	851.8875	806.8875
69	851.9	806.9
70	851.9125	806.9125
71	851.925	806.925
72	851.9375	806.9375
73	851.95	806.95
74	851.9625	806.9625
75	851.975	806.975
76	851.9875	806.9875
77	**852.0125**	**807.0125**
78	852.0375	807.0375
79	852.05	807.05
80	852.0625	807.0625
81	852.075	807.075
82	852.0875	807.0875
83	852.1	807.1

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
84	852.1125	807.1125
85	852.125	807.125
86	852.1375	807.1375
87	852.15	807.15
88	852.1625	807.1625
89	852.175	807.175
90	852.1875	807.1875
91	852.2	807.2
92	852.2125	807.2125
93	852.225	807.225
94	852.2375	807.2375
95	852.25	807.25
96	852.2625	807.2625
97	852.275	807.275
98	852.2875	807.2875
99	852.3	807.3
100	852.3125	807.3125
101	852.325	807.325
102	852.3375	807.3375
103	852.35	807.35
104	852.3625	807.3625
105	852.375	807.375
106	852.3875	807.3875
107	852.4	807.4
108	852.4125	807.4125
109	852.425	807.425
110	852.4375	807.4375
111	852.45	807.45
112	852.4625	807.4625

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
113	852.475	807.475
114	852.4875	807.4875
115	**852.5125**	**807.5125**
116	852.5375	807.5375
117	852.55	807.55
118	852.5625	807.5625
119	852.575	807.575
120	852.5875	807.5875
121	852.6	807.6
122	852.6125	807.6125
123	852.625	807.625
124	852.6375	807.6375
125	852.65	807.65
126	852.6625	807.6625
127	852.675	807.675
128	852.6875	807.6875
129	852.7	807.7
130	852.7125	807.7125
131	852.725	807.725
132	852.7375	807.7375
133	852.75	807.75
134	852.7625	807.7625
135	852.775	807.775
136	852.7875	807.7875
137	852.8	807.8
138	852.8125	807.8125
139	852.825	807.825
140	852.8375	807.8375
141	852.85	807.85

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
142	852.8625	807.8625
143	852.875	807.875
144	852.8875	807.8875
145	852.9	807.9
146	852.9125	807.9125
147	852.925	807.925
148	852.9375	807.9375
149	852.95	807.95
150	852.9625	807.9625
151	852.975	807.975
152	852.9875	807.9875
153	**853.0125**	**808.0125**
154	853.0375	808.0375
155	853.05	808.05
156	853.0625	808.0625
157	853.075	808.075
158	853.0875	808.0875
159	853.1	808.1
160	853.1125	808.1125
161	853.125	808.125
162	853.1375	808.1375
163	853.15	808.15
164	853.1625	808.1625
165	853.175	808.175
166	853.1875	808.1875
167	853.2	808.2
168	853.2125	808.2125
169	853.225	808.225
170	853.2375	808.2375

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
171	853.25	808.25
172	853.2625	808.2625
173	853.275	808.275
174	853.2875	808.2875
175	853.3	808.3
176	853.3125	808.3125
177	853.325	808.325
178	853.3375	808.3375
179	853.35	808.35
180	853.3625	808.3625
181	853.375	808.375
182	853.3875	808.3875
183	853.4	808.4
184	853.4125	808.4125
185	853.425	808.425
186	853.4375	808.4375
187	853.45	808.45
188	853.4625	808.4625
189	853.475	808.475
190	853.4875	808.4875
191	853.5	808.5
192	**853.5125**	**808.5125**
193	853.525	808.525
194	853.5375	808.5375
195	853.55	808.55
196	853.5625	808.5625
197	853.575	808.575
198	853.5875	808.5875
199	853.6	808.6

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
200	853.6125	808.6125
201	853.625	808.625
202	853.6375	808.6375
203	853.65	808.65
204	853.6625	808.6625
205	853.675	808.675
206	853.6875	808.6875
207	853.7	808.7
208	853.7125	808.7125
209	853.725	808.725
210	853.7375	808.7375
211	853.75	808.75
212	853.7625	808.7625
213	853.775	808.775
214	853.7875	808.7875
215	853.8	808.8
216	853.8125	808.8125
217	853.825	808.825
218	853.8375	808.8375
219	853.85	808.85
220	853.8625	808.8625
221	853.875	808.875
222	853.8875	808.8875
223	853.9	808.9
224	853.9125	808.9125
225	853.925	808.925
226	853.9375	808.9375
227	853.95	808.95
228	853.9625	808.9625

Channel Number	Base Frequency (MHz)	Mobile Frequency (MHz)
229	853.975	808.975
230	853.9875	808.9875