2015

Region 15

700 MHZ REGIONAL PLAN AMENDMENT

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Region 15 700 MHz Regional Plan

2 General information about the Regional Planning Committee

2.1 Current Regional Chair/Database Manager

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2.2 Other RPC Officers

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2.3 RPC Members

The members of Region 15, their contact information and voting status can be found in Appendix A.

2.4 Description of the Region

Region 15 consists of the State of Iowa. Iowa is situated between two rivers; the Mississippi River to the East and the Missouri River to the West. The topography of the state ranges from the Loess Hills in the West, the tallgrass prairie in central Iowa to the rolling hills and towering limestone bluffs in the East. There are seven State Forests in Iowa. Federal installations include the FBI, Army Corps of Engineers, Fish and Wildlife, and Camp Dodge Army Base.

There is one federally recognized Native American Tribe in Iowa, the Sac and Fox Tribe of the Mississippi in Iowa/Meskwaki. The twelve mile Sac & Fox settlement covers 7000+ acres in two counties. Better known as the Meskwaki Indians, they have tribal schools, tribunal courts, and a police force on the settlement of about 800 people. Also on the land is the Meskwaki casino resort that provides gaming activities. The Sac & Fox tribe's police officers are dispatched by Tama County and Tama County provides fire and rescue support to manage tribal emergencies.

The population of the State of Iowa is approximately ~~2,936,924 (2000 census)~~ 3,107,126 (2014 US Census Data) people which ranks it 30th in the nation. The urban population is some ~~65.3~~ 64.02 percent and the rural population is ~~34.7~~ 35.98 percent (2010).

The major population areas are:

Des Moines Metropolitan Area
Cedar Rapids Metropolitan Area
Davenport
Sioux City
Waterloo
Iowa City
Council Bluffs
Dubuque
Ames

There are 99 counties in the state with a total land mass of 55,965 square miles.

As is shown above, the population of the state is unevenly distributed across the land area. This presents some problems in area coverage for radio systems in that the entire land area of any given jurisdiction must be covered. The population per square mile is somewhat sparse (54.5 people/square mile) which generally indicates that the concentration of radio users for public safety activities is also sparse. The presence of federal facilities adds complexity to the public safety framework within Iowa. All of those items were taken under consideration in the allocation plan.

2.5 Major Elements of the Plan

The major elements of this Plan follow the National Coordination Committee (NCC) guidelines. Without the NCC Guidelines and document templates, it would have been much more difficult for the Region to develop its Plan. The Region would also like to express its appreciation for the Computer Assisted Pre-Coordination Resource and Database (CAPRAD) system which has been and will continue to be an invaluable tool.

The major elements of the Plan are these: 1) the declaration that this is the Region 15 Plan; 2) that Region 15 is comprised of the entire State of Iowa; 3) the administration and operation of the committee; 4) application requirements and an explanation of the process for requesting frequency assignments; 5) spectrum management, system design and efficiency standards; 6) Interoperability; 7) coordination with adjacent Regions; 8) future planning; and 9) a list of spectrum allotments in Appendix H.

2.6 Development of the Plan

The Plan was developed over a seven and a half year period with input sought both at formal meetings and via email. A subcommittee was tasked with developing a draft Plan using the guidelines and document templates provided by the National Coordination Committee (NCC) and provided to Regional Planning Committees for this purpose. The working draft plan was provided to members of Region 15 via email and at the annual meetings where input was sought and incorporated into a Final Draft which was then distributed to members via email, postings on the Iowa Statewide Interoperable Communications Systems Board website and on the CAPRAD database. Members and other eligible entities were notified through email that the Final Draft was available for review and vote. This meeting was also announced by the FCC in a Public Notice. At this meeting, members in attendance made suggestions to improve and clarify certain aspects of the Plan. These suggestions were voted on and incorporated into the Final Draft after which the Final Draft was adopted on April 13, 2010. The Plan was then sent to all adjacent Regions for the review and approval. Signed concurrences from all adjacent Regions can be found in Appendix E; signed Inter-Regional Dispute Resolution Agreements from all adjacent Regions are included in Appendix F.

2.7 Development of the Plan Modification

In a Report & Order adopted October 17, 2014 (FCC 14-172), the FCC reallocated twenty-four (24) 12.5 kHz frequencies from the “Reserve” pool into the General Use Pool. In Regions containing a T-band city, incumbent T-band licensees were to be given priority access to these frequencies. In Regions without a T-band city, up to 8 frequencies could be identified for deployable trunked operations. Before any of the “former reserve” frequencies can be licensed in a Region, that Region must modify its Regional Plan to address how it will handle applications for those frequencies.

Region 15 established a working group to review its original 700 MHz Plan, identify sections that required updating and discussed how the “former reserve” frequencies would be administered within the Region.

As described more fully in the cover letter, Section 3 of the original Plan was modified to incorporate processes to administer the former reserve frequencies and to adopt six of those frequencies for deployable trunked operations. Section 5 was amended to add language about licensing of Non-Governmental Organizations (NGOs) and deployable trunked systems. Section 7 was amended to remove references to the 6.25 kHz narrowbanding deadline which was eliminated in FCC 14-172. Appendix H was amended to add reference to the re-allocated 700 MHz narrowband former reserve frequencies. Appendix I (List of Low Power Pool Frequencies) was amended to match the language added to Section 3.5

Two appendices were added:

Appendix J – List of Frequencies Available for Deployable Trunked Systems

Appendix K – Sample Memorandum of Understanding (MOU)

3 Notification Process/Operation of the Region

3.1 Notification

Richard Hester, Iowa State Patrol, was appointed the Region 15 Convener. The first Regional Planning Committee meeting was held on May 29, 2002. Interested parties were given 60 days advance notice of this meeting. Prior to the meeting, notices were sent to the FCC and to LEATAC mailing list.

There is one federally recognized Indian Tribe located within Iowa. Representatives of the Sac & Fox Tribe of the Mississippi in Iowa/Meskwaki were provided with a copy of the Regional Plan and added to the notification list for planning meetings.

A copy of the FCC Public Notices, copies of the notices posted on the state website and distributed through the state email are provided in Appendix C.

3.2 Operations of the Regional Planning Committee

Region 15 uses Roberts Rules of Order to conduct meetings. This method allows all members to have their voice heard. All decisions are made by clear consensus. If consensus cannot be achieved, action is taken by vote with each Public Safety Agency having one vote. Additional voting considerations are included in Region 15's Bylaws which are attached in Appendix B. The meetings are open to all interested persons and public input time is provided for anyone to express a viewpoint or to have input to the Regional Planning process.

A minimum of one full committee meeting will be held every twelve months, normally in the spring. Notice of the annual meeting will be provided as outlined in Region 15's Bylaws.

If the Chair is unable to serve a complete term, the Vice Chair will serve as Chair until the next 700 MHz Regional meeting. If both the Chair and the Vice Chair are unable to serve their full terms, one or the other should make an effort to call a special meeting of the Committee to elect replacements. If for some reason, neither the Chair nor the Vice Chair can call the special meeting, the State or any County within the Region may call for a special meeting, giving at least 5 days notice, to elect replacements.

A chronological list of meetings, summary of minutes, meeting announcements and agendas outlining Region 15 progress in 700 MHz development is located in Appendix C of this document.

4 Regional Plan Administration

4.1 Procedure for Requesting Channels

Upon FCC approval of the Plan, a Notice will be posted on the Iowa Statewide Interoperable Communications Board website announcing an initial 90-day application filing window. All applications received during the first 90 days after FCC approval of the Plan will be considered. After this initial filing window, applications will be reviewed and approved on a first-come, first-served basis. The general use spectrum may be used by all Local government entities and by State agencies with a showing of need. The State of Iowa shall be eligible to apply for and be licensed for frequencies under this Plan with the

submission of a showing proving that there are not sufficient state-controlled frequencies (state license, applicable interoperability allocations) for use or reuse to build out the State of Iowa 700 MHz system within a particular county. All available methods will be used to notify public safety entities of channel availability in the Region. Region 15 supports the National Coordination Committee Pre-Assignment Rules and Recommendations listed in Appendix D, and will use these guidelines as a template to determine if an application submitted to the Regional Planning Committee meets Regional Planning standards. It is recommended that applicants familiarize themselves with these recommendations prior to submitting applications.

In general and unless otherwise noted, the Region 15 Regional Planning Committee will adhere to the published National Coordination Committee Implementation Guidelines for 700 MHz Public Safety Regional Planning Committees.

4.1.1 Spectrum Re-use

Region 15 utilized the CAPRAD Pre-coordination database system to maximize channel re-use in the 700 MHz band. Since the spectrum is re-used, each system will use the minimum power necessary to meet their needs. If power and ERP seems excessive to the committee, a reduction in power or antenna gain may be requested to minimize interference and increase spectrum efficiency to other co-channel and adjacent channel users.

4.1.2 Application Submission

To request channels from Region 15, a full application package must be submitted to the Database Manager through the CAPRAD database at http://caprad.org. The application must include:

- The current FCC Form (currently the 601)
- A short description of the proposed system on agency letterhead and signed by responsible party
- A justification for the additional spectrum
- A coverage prediction map using the current version of TIA/EIA TSB 88 guidelines. Coverage map must provide sufficient detail to effectively evaluate coverage.
- Maps showing all interference predicted in the proposed system. Interference maps must provide sufficient detail to effectively evaluate interference contours.
- Documents indicating agency funding commitments sufficient to fund the development of the proposed system(s)
- A list of “giveback” channels, if applicable.
- Self-scoring of the application using the Section 4 Priority Matrix

If an applicant has demonstrated a need for 700 MHz channels and cannot access the CAPRAD database, the Committee will accept hard copy applications.

4.1.3 Application Distribution/Coordination

The Database Manager will distribute the application request to the County Sheriff and County Emergency Management Director for dissemination to all other affected agencies with frequency allotments in the county for review and approval. Absent a protest, the Database Manager will approve the application and (if applicable), submit it, through the CAPRAD database, to the applicant’s preferred FCC-certified frequency coordinator for processing.

The CAPRAD database will reflect the approved application and place the channels for the proposed system in “pre-license” status.

4.1.4 Give Up or Give Back Spectrum

When applying for new 700 MHz channels, the Regional Planning Committee encourages applicants to relinquish some amount of currently licensed spectrum (“give back channels”) and make that spectrum again available for use within the Region. Agencies with existing licensed 800 MHz systems that are requesting 700 MHz channels for system expansion will not fall under this requirement. An agency may retain channels that are used for paging, telemetry, microwave or other functions that the 700 MHz spectrum does not meet the agency’s need.

When an applicant submits a request for 700 MHz spectrum, a “Give Back Plan” should accompany the application. This Plan should show what frequencies would be vacated, a time line for the transition and what channels are being retained. If an existing channel is being retained for interoperability purposes, please identify that channel in the “Give Back Plan.”

Frequency “give back” requirements shall hold true for regional systems where system constituents maintain discrete licenses for their own internal operations. In this case, constituent political subdivisions or agencies are required to participate in the “Give Back Plan”. Should a political subdivision or agency act as host of a regional system, both the host agency and the constituent agencies should participate in the “Give Back Plan.”

Frequencies used for non-voice critical infrastructure support functions [Supervisory Control and Data Acquisition (SCADA) systems] as well as frequencies that are used for interoperability with other regional, state or national agencies that rely on one certain frequency band for emergency operations, as well as other mutual aid or interoperable channels may be exempted by the Committee as candidates for “give back.” Frequencies used by an applicant for such purposes, as well as the specific use and a network/system diagram, must be specified in supportive documentation supplied with the application to enable the Regional Planning Committee to consider any possible exemption.

In case of hardship or failure to implement, the Regional Planning Committee will consider, on a case-by-case basis, extensions not to exceed five years from date of license issuance, of the “give back” timetable. The dispute arbitration process in Section 3.6 of this document shall apply should there be a protest.

4.1.5 Allocation Disputes

An agency may protest a proposed system within 30 calendar days of the original distribution. Protests will only be considered if the allocation does not conform to Plan criteria or the objecting agency or the Chairperson may show harmful interference is likely based on the information submitted by the agency requesting the new allocation. If an agency with pre-licensed/Region approved co-channel or adjacent channel allocations objects to a proposed allocation due to concerns about potential interference, the objecting agency may request field tests be done to confirm or refute interference potential. The completion of these field tests and the results will be required for Regional application approval. Coverage area service/interference contours of the proposed system(s) should meet values designated in Section 7.1 of this document. Any costs associated with field tests or any other requirements to obtain Region 15 Plan approval are the responsibility of the agency submitting the application to Region 15.

The parties involved must resolve the allocation dispute and notify the Region Chair within 30 calendar days. If the parties involved cannot resolve the allocation dispute within that timeframe, then a meeting of the Iowa Statewide Interoperable Communications Systems Board will be scheduled to consider and vote on the protest. The burden of proof will be on the protesting party.

The protesting party may be liable for any costs associated with the protest if the complaint is unfounded. If approved, the application will be submitted through the CAPRAD database to the applicant's chosen FCC-certified frequency coordinator for processing.

4.2 Procedure for Frequency Coordination

Once an application for 700 MHz frequencies has been reviewed and approved, it will be submitted through the CAPRAD database, to the applicant's preferred FCC-certified frequency coordinator for processing. This process meets the requirements of FCC Rule 90.176(c)

4.3 Method for Allocating Narrowband Voice Channels

The narrowband general use spectrum refers to the block of frequencies designated for local public safety users. The FCC has allocated six hundred and sixteen 6.25 kHz bandwidth channel pairs for narrowband general use. These 6.25 kHz channel pairs can be aggregated into bandwidths of 12.5 kHz or 25 kHz if FCC mandated spectrum efficiency standards are met.

Region 15 recommends that allocations be made on the basis of one 12.5 kHz channel for every voice channel requested and one 25 kHz channel for each narrowband data channel request. Requests for 25 kHz data channels will require "trading" with adjacent counties and a plan amendment (see Section 3.4). This recommendation is approved by the full Committee and is part of this Plan. ~~It is the eventual goal of the FCC and the public safety community for radio equipment to meet the spectrum efficiency requirement of one voice channel per 6.25 kHz. When applying for channels within Region 15, the applicants should acknowledge the deadline for converting all equipment to 6.25 kHz or 6.25 kHz equivalent technology is 12/31/2016.~~

All agencies requesting spectrum during the initial filing window (see Section 3.1) will be allocated channels if Plan requirements are met.

4.4 Orphan Channels / Spectrum Aggregation

The narrowband channels within Region 15 have been allotted in 12.5 kHz building blocks, each comprised of two 6.25 kHz channels. These allotments have been characterized as "Technology Neutral" and flexible enough to accommodate multiple technologies utilizing multiple bandwidths. If agencies choose a technology that requires more than 12.5 kHz bandwidth for their system, there is the potential for aggregating 12.5 kHz channels by "trading" with other counties' allotments and filing a Plan amendment. If agencies choose a technology that requires less than 12.5 kHz channel bandwidth for their system, there is the potential for residual, "orphaned channels" of 6.25 kHz bandwidth immediately adjacent to the assigned channel within a given county area.

An orphan channel may (if possible) be used at another location within the county area where it was originally approved, if it meets co- and adjacent channel interference criteria. Region 15 will utilize "county areas" as guidelines for channel implementation within the area of Region 15. The definition of

"county area" in this Plan is the geographical/political boundaries of a given county, plus a distance of up to 5 miles outside of the county or jurisdictional boundary.

If the channel, or a portion of a channel, is being moved into a "county area" that is within 30 miles of an adjacent Region, Region 15 will receive concurrence from that affected Region. By extending the "county area" by a designated distance, it is anticipated this will increase the possibility that orphaned channel remainders will still be able to be utilized within the "county area," and reduce the potential for channel remainders to be forced to lay dormant and used with a county channel allotment. These movements will be documented on the CAPRAD database.

If the "orphaned channel" remainder does not meet co-channel and adjacent channel interference criteria by moving it within the "county area" as listed above, and it is determined by the Region that the "orphaned channel" cannot be utilized in the Region without exceeding the distance described in the "county area" listed above, Region 15 will submit a Plan amendment to the FCC to repack the channel to a location where its potential use will maintain maximum spectral efficiency. This FCC Plan amendment will require affected Region concurrence.

When in the best interest of public safety communications and efficient spectrum use within the Region, the Region 15 Regional Planning Committee shall have the authority to move orphan channel allotments, and/or co-/adjacent-channel allotments affected by the movement of orphan channels, within its "county areas," which are defined above.

This is to retain spectrum efficiency and/or minimize co-channel or adjacent channel interference between existing allotments within the Region utilizing disparate bandwidths and technologies.

4.5 Low Power Pool Channels

~~The FCC in the 700 MHz band plan sets aside channels 1-8 paired with 961-968 and 949-958 paired with 1909-1918 for low power use for on-scene incident response purposes 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 operations. 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 low power pool channels for 12.5 kHz bandwidth.~~

~~On scene temporary base and mobile relay stations are allowed (to the extent FCC rules allow) antenna height limit of 6.1 meter (20 feet) AGL (Above Ground Level). Vehicular repeater operation (MO3) is also allowed. However, users are encouraged to operate in simplex mode with the least practical amount of power to reliably maintain communications whenever possible. This Plan does not limit use to analog only operations and channels are intended for use in a wide variety of applications that may require digital modulation types as well. The use of EIA/TIA-102, Project 25 Common Air Interface is required when using a digital mode of operation.~~

~~In its dialog leading up to CFR §90.531 allocating the twenty-four low power 6.25 kHz frequency pairs (of which 18 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 as 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 (18) low power channels for which the Regional Planning Committee has responsibility:~~

> ~~Generic – Channel #'s 1-4 and 949-952 are set aside as generic base channels for use by public safety agencies operating within Region 15, and the complementary mobile channels # 961-964 and 1909-1912 are set aside as generic mobile channels also for use by public safety agencies likewise operating within Region 15~~
>
> ~~Fire/EMS/Consequence Management – Channel #'s 5-8 are designated as Fire Protection/Emergency Medical and Consequence Management base channels for licensing and exclusive use by the Fire/Emergency Medical disciplines, and the complementary mobile channel #'s 965-968 are set aside as Fire/Emergency Medical and Consequence Management mobile channels also for licensing and exclusive use by the Fire/Emergency Medical disciplines.~~
>
> ~~Law Enforcement/Crisis Management – Channels #'s 953-956 are set aside as Law Enforcement/Crisis Management base channels for licensing and exclusive use by the Law Enforcement discipline, and the complementary mobile channel #'s 1913-1916 are set aside as Law Enforcement/Crisis Management mobile channels also for licensing and exclusive use by the Law Enforcement discipline.~~
>
> ~~Multidisciplinary Joint Public Safety Operations – Channel #'s 957-958 are set aside as Multidisciplinary Joint Public Safety Operations base channels for licensing and the complementary mobile channel #'s 1917-1918 are also set aside as Multidisciplinary Joint Public Safety Operations Channels for use by political subdivisions and public safety agencies operating under a unified command at a common incident for the express mission of safety of life, property or environment.~~

~~Simplex operations may occur on either the base or mobile channels. Users are cautioned to coordinate on-scene use among all agencies involved, particularly when the use of repeater modes is possible at or in proximity to a common incident. Users should license multiple channels and be prepared to operate on alternate channels at any given operational area.~~

The purpose of this section is to provide guidelines relative to the use of the Low-Power Narrowband 700 MHz Frequencies as defined by 47 CFR §90.531(b)(3) that fall under authority of the RPC. Region 15 intends to designate these eighteen (18) 6.25 kHz frequencies as interoperability frequencies with the following requirements:

Eligibility

The following entities are eligible to use low-power frequencies under the control of the Regional Planning Committee pursuant to 47 CFR §90.523(a) and (b):

- (a) State or local government entities – Any territory, possession, state, city, county, town or similar state or local governmental entity is eligible to hold authorizations in the 769-775 and 799-805 MHz frequency bands
- (b) Nongovernmental organizations – A nongovernmental organization (NGO) that provides services, the sole or principal purpose of which is to protect the safety of life, health or property, is eligible to hold an authorization for a system operating in the 769-775 and 799-805 MHz frequency bands for transmission or reception of communications essential to providing such services if (and only for so long as) the NGO applicant/licensee:
    - Has the ongoing support (to operate such system) of a state or local governmental entity whose mission is the oversight of or provision of services, the sole or principal purpose of which is to protect the safety of life, health, or property;
    - Operates such authorized system solely for transmission of communication essential to providing services the sole or principal purpose of which is to protect the safety of life, health, or property; and
    - Accompanies all applications it submits with a new, written certification of support (for the NGO applicant to operate the applied-for system) by the state or local governmental entity referenced in the first sub-paragraph of this section.
    - The local governmental entity must notify the Iowa Statewide Interoperable Communications System Board (ISICSB) in writing of any arrangement between itself and an NGO within 30 days
        - The notification must include the start and ending dates of any contractual arrangements
        - The local government unit retains all responsibility and liability for use of any low-power pool frequency by the NGO.
    - NGO must obtain and provide a letter of support from the Iowa State Interoperable Communications Systems Board (ISICSB)

Low-Power 700 MHz Channel Use

Frequencies will be used in a simplex or repeater mode as specified within this provision of the Region's Plan for 700 MHz channels. The Plan will combine two (2) channels as contained in 47 CFR §90.531(b)(3) to yield a 12.5 kHz simplex operating frequency. In the repeater mode, four (4) 700 MHz channels shall be combined to yield a 12.5 kHz transmit and a 12.5 kHz receive frequency.

Use within the Region

The low-power 700 MHz frequencies are limited to transmissions with effective radiated power (ERP) of no more than two (2) watts. These frequencies can be used at the broad discretion of first responders in one of two methodologies – direct radio-to-radio or simplex operation or as an Incident Area Network (IAN) or other low-power technology requiring a repeater capability. The use of these frequencies for official public safety or public service communications is permitted by a single public safety agency prior

to the actual invocation of interoperable communications between two or more public safety agencies. Communications of a personal, non-official purpose are prohibited.

Assignment of Frequencies

Typically, first responders will have broad discretion in the use of these channels. However, if an incident is of sufficient scale to invoke the National Incident Management System (NIMS), the Incident Commander shall determine which low-power channels shall be used for first responders, as well as determine the use of simplex and/or IAN repeater technology.

Modulation

Pursuant to 47 CFR §90.525(a), systems operating on these frequencies may utilize digital or analog modulation. Analog operations will utilize the 11K0F3E emission designator.

Programming of Frequencies

Eligible licensees are encourage to program related frequencies into 700 MHz capable mobile and portable radios as may be practical pursuant to the Service Assignment tables in Appendix I. This programming is not mandatory, as some licensees may not have sufficient capability in subscriber devices to accommodate these frequencies.

Service Assignments

Tables of repeater, subscriber, and direct or simplex assignments are shown in Appendix I. These assignments notate specific frequencies reserved for EMS, fire, and law enforcement users. For all other users, General Public Safety/Public Service frequencies exist that can be used by any eligible licensee as defined by 47 CFR §90.523.

Repeater/Incident Area Network Operation

From the Department of Homeland Security SAFECOM Statement of Requirements “An incident area network (IAN) is a network created for a specific incident.” “This network is temporary in nature.” For the IAN or other repeater operation, the Region will follow the national deployment model; i.e. the lower frequency shall be used for the Repeater transmitter frequency, while the upper channel is employed for mobile/portable transmissions. Repeater operation is identified by the “2” (2-channel) behind the service name, e.g. “7TAC21” meaning 700 MHz (7) Tactical (TAC) frequency with Repeater (2) frequency 1 (1).

Direct Radio-to-Radio or Simplex Operation

Direct or simplex operation is identified by the “1” (1 channel) behind the service name, e.g. “7TAC11” meaning 700 MHz (7) Tactical (TAC) Frequency with “Direct” or simplex communications (1) on Frequency 1 (1). Please refer to Appendix I.

4.6 Intra-Regional Dispute Resolution

In the event an agency disputes the implementation of this Plan or the Federal Communications Commission approval of this Plan or part of this Plan, the agency must notify the Chair of the dispute in

writing. This section does not apply to protests over new spectrum allocations (see Section 3.1.5). The Chair will attempt to resolve the dispute on an informal basis. If a party to the dispute employs the Chair, then the Vice Chair will attempt resolution. In such cases, the Chair will be deemed to have a conflict of interest and will be precluded from voting on such matters. If after 30 days the dispute is not resolved, the Chair (or Vice Chair) will defer the matter to the Iowa Statewide Interoperable Communications Systems Board. That committee will select a Chair to head the committee and a secretary to document the proceedings.

The Regional Plan Chair (or Vice Chair) will represent the Region in presentations to the Iowa Statewide Interoperable Communications Systems Board. The Board will hear input from the disputing agency, any affected agencies and the Region Chair. The board will then meet in executive session to prepare a recommendation to resolve the dispute. Should this recommendation not be acceptable to the disputing agency/agencies, the dispute and all written documentation from the dispute will be forwarded to the National Regional Planning Council (NRPC) for review. As a last resort, the dispute will be forwarded to the FCC for final resolution.

4.7 Treatment of 700 MHz Narrowband Former Reserve Frequencies

In October, 2014, the FCC adopted a Report and Order releasing the twenty four (24) 700 MHz narrowband reserve frequencies to General Use under the administration of the Regional Planning Committees (RPCs).

Region 15 has elected to place eighteen (18) of the former reserve frequencies into a Region-wide pool allotment to be assigned on a first-come, first-served basis to any eligible applicant.

As a non-T-band Region 15 (a Region in which there are no incumbent PS licensees operating on 470-512 MHz) has the option to identify up to eight of these former reserve frequencies for deployable trunked systems. Region 15 has decided to adopt the six frequencies suggested by the task force established by NPSTC and the National Regional Planning Council (NRPC) as frequencies which may be used for deployable trunked systems.

The frequencies available for deployable trunked operations may be found in Appendix J.

The former reserve frequencies which are available Region-wide may be found in the beginning of Appendix H.

5 Priority Matrix

In the event that spectrum allocation requests conflict and cannot all be accommodated, Region 15 will use the following criteria to evaluate competing applications. This matrix will be used during the initial 90-day filing window and following that if two requests are received in the same timeframe for the same number of channels. Otherwise, the first-come, first-served procedure will be used.

A matrix will be used to evaluate competing applications within the Region. The total point value totals ~~550~~ 750 possible points. The application receiving the highest number of points will receive the channels. There are ~~five~~ six scoring categories:

5.1 SERVICE (MAXIMUM SCORE 100 POINTS)

Police	100 points
Fire	100 points
Combined/Multi-Agency Systems (e.g. Police, Fire and Local Government on a single system	100 points
Multi-jurisdictional systems (more than one county/town/etc.)	100 points
Local Government	50 points

5.2 INTERSYSTEM & INTRASYSTEM INTEROPERABILITY (MAXIMUM SCORE 100 POINTS)

How well the proposed system will be able to communicate with other levels of government and services during an emergency on "regular" channels, not the I/O channels.

Interoperability must exist among many agencies to successfully accomplish the highest level of service delivery to the public during a major incident, accident, natural disaster or terrorist attack. Applicants requesting 700 MHz spectrum shall inform the Region of how and with whom they have been achieving interoperability within their present system.

The applicant shall stipulate how they will accomplish interoperability in their proposed system (gateway, switch, cross-band repeater, console cross patch, software defined radio, or other means) for each of the priorities listed below:

1. Disaster and extreme emergency operation 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 pre-planned nature (including task force operations).
4. Single agency secondary communications
5. Routine day-to-day non-emergency operations.

- Provides automatic infrastructure gateways (other than the applicant's system) 40 points
- Use of interoperability channels is supported (infrastructure) 30 points
- Provides console patches to other systems (other than the applicant's system) 10 points
- Communicates with other systems with which the Agency holds mutual aid agreements 10 points
- All subscriber units have the tactical interoperability channels programmed within them 10 points
- No interoperability or intersystem capability is provided 0 points

5.3 LOADING (MAXIMUM SCORE 150 POINTS)

System's loading exceeds the loading outlined in Section 7.5.1	50 points
System's loading meets the loading outlined in Section 7.5.1	50 points
System is cooperative multi-organizational	50 points
Expansion of existing 700 and/or 800 MHz system	50 points

The maximum achievable score in this section is 150 points. (An applicant whose loading exceeds the loading tables in 7.5.1 will not also receive points for meeting the loading requirements).

5.4 Spectrum Efficient Technology (Maximum score 150 points)

Points will be awarded upon the following criteria:

Trunked system	50 points
Integrated Voice & Data System	50 points
12.5 kHz/6.25 kHz Efficiency	50 points

~~The FCC requires all applications filed after December 31, 2014 to meet 6.25 kHz efficiencies; points will be awarded only for 6.25 kHz efficiencies as of January 1, 2015.~~

5.5 Systems Implementation Factors (Maximum Score 150 Points)

Applicants should demonstrate funding and system planning and provide a construction/implementation schedule. A document stipulating the system the agency is planning to implement signed by an official within the organization who handles the money is required.

Budget Commitment Demonstrated	50 points
System Plan Provided	50 points
Construction Schedule Provided	50 points

5.6 Givebacks (Maximum Score 100 Points)

Consider the number of channels given back
Consider the extent of availability and usability of those channels to others

6 Interoperability

Interoperability between federal, state, and local governments during daily, emergency, and disaster operations will normally take place on the interoperability channels identified in Appendix G.

The State of Iowa formed an Iowa Statewide Interoperable Communications Systems Board (ISICSB) to develop an interoperability plan for the state. The State of Iowa will hold any required licenses for the interoperability system. Individual agencies who wish to enter into an MOU with the state to operate on the interoperability frequencies should contact the ISICSB. Agencies who wish to hold a license for fixed infrastructure on the interoperability frequencies must provide a compelling reason and justification for this request. The ISICSB will review and approve any such applications.

~~The State of Iowa has formed an Iowa Statewide Interoperable Communications Systems Board (ISICSB). The ISICSB is developing an interoperability plan for the State. Members of the Region 15 Regional Planning Committee participate in and provide input to the ISICSB. The State of Iowa will hold any required licenses for the interoperability system. The State will review and approve any such applications. Region 15 makes the following recommendations for 700 MHz equipment deployed within Iowa.~~

6.1 Standardized Nomenclature:

Standardized nomenclature is recommended nationwide. The channel display must be in accordance with the NCC guidelines and have common alphanumeric nomenclature to avoid any misinterpretation of use. All 700 MHz public safety subscriber equipment using an alphanumeric display of at least eight digits should be programmed to show the recommended label from the Table in Appendix G when programmed to operate on the associated 700 MHz channel set. The Table shows the recommended label for equipment operating in the mobile relay (repeater) mode. When operating in direct (simplex) mode, the letter "D" should be appended to the end of the label. The use of encryption is prohibited on all interoperability channels both tactical and calling.

~~All 700 MHz public safety subscriber equipment using an alphanumeric display of at least eight digits should be programmed to show the recommended label from the Table in Appendix E G when programmed to operate on the associated 700 MHz channel set. The Table shows the recommended label for equipment operating in the mobile relay (repeater) mode. When operating in direct (simplex) mode, the letter "D" should be appended to the end of the label.~~

6.2 Minimum Channel Quantity

All mobile and portable units operating in this Region should be programmed with all the interoperability channels, both repeat and direct modes. The radios must be programmed with the minimum number of channels called for in the NCC guidelines or as the Iowa Statewide Interoperable Communications Systems Board specifies.

~~All mobile and portable units operating under this Plan and utilizing 700 MHz channels must be programmed with the minimum number of channels called for by the Iowa Statewide Interoperable Communications System Board.~~

6.3 Non-Governmental Organizations (NGOs)

Non-Governmental Organizations (NGOs) as defined in Section 3.5 of this Plan are eligible to operate on the interoperability frequencies so long as any use of any interoperability channel is clearly and specifically articulated in contract between the NGO and a local government. The local government must notify the ISICSB in writing of the existence of such arrangement including the start and ending dates of any contractual arrangements for use of interoperability channels and frequencies within 30 days. The local government unit retains all responsibility and liability of use of any interoperability channel or frequency by such NGO. A sample Memorandum of Understanding (MOU) is included as Appendix K.

6.4 Deployable Systems

This plan strongly supports 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. Agencies should have conventional deployable systems capable of being tuned to any of the interoperability tactical channels. Those agencies that are part of a multi-agency trunked system that commonly provide mutual aid to each other are encouraged to have trunked deployable systems that operate on the tactical channels designated by the FCC for

interoperability use. It is expected that the tactical channels set aside for trunked operation will be heavily used by deployable systems. Therefore, the tactical channels cannot be assigned to augment general use trunked systems. Additional frequencies available for deployable trunked systems are listed in Appendix J.

6.5 Monitoring of Calling Channels

All 700 MHz licensees will be responsible for monitoring the interoperability calling channel.

7 Coordination With Adjacent Regions

Region 15 is adjacent to the following 700 MHz Regions:

Region 13	Illinois
Region 22	Minnesota
Region 24	Missouri
Region 26	Nebraska
Region 38	South Dakota
Region 45	Wisconsin

Each of the listed Regions has reviewed and approved Region 15's 700 MHz Regional Plan Amendment. The signed concurrences can be found in Appendix ~~G~~ E.

8 System Design/Efficiency Requirements

8.1 Interference Protection

The frequency allotment list will be based on an assumption that systems will be engineered on an interference-limited basis, not a noise floor-limited basis. Agencies are expected to design their systems for maximum signal levels within their coverage area and minimum levels in the coverage area of other co-channel users. Coverage area is normally the geographical boundaries of the Agency(ies) served plus five miles area beyond.

Systems should be designed for minimum signal strength of 40 dBµ in the system coverage area while minimizing signal power out of the coverage area. TIA/EIA TSB88-A (or latest version) will be used to determine harmful interference assuming 40 dBµ, or greater, signal in all system's coverage areas. This may require patterned antennas and extra sites compared to a design that assumes noise limited coverage. Region 15 complies with National Coordination Committee recommendations listed in the Regional Planning Committee Guidelines published by the National Coordination Committee (NCC).

8.2 Use of Frequencies in Aircraft

The degree to which these 700 MHz frequencies are to be reused within the Region and their assignments in adjacent Regions require that their use in aircraft be restricted.

Limitations are:

1. A maximum ERP of 1.0 watt above 500 ft. AGL
2. Avoid using the input frequency to the mobile relay station and use the "talk-around" mode whenever possible.

8.3 Spectrum Efficiency Standards

Initial allotments will be made on the basis of 12.5 kHz channels. To maximize spectrum utilization, prudent engineering practices and receivers of the highest quality must be used in all systems. Given a choice of radios to choose from in a given technology family, agencies should use the units with the best specifications. This Plan will not protect agencies from interference if their systems are under-constructed (i.e. areas with the established service area having minimum signal strength below 40 dBµ), or the systems utilize low quality receivers. The applicant's implementation of best engineering practices will be encouraged by the Regional Planning Committee at all times.

~~It is the eventual goal of the FCC and the public safety community for radio equipment to meet the spectrum efficiency requirement of one voice channel per 6.25 kHz. When applying for channels within Region 15, the applicants should acknowledge the deadline for converting all equipment to 6.25 kHz or 6.25 kHz equivalent technology is 12/31/2016.~~

For narrowband mobile data requests, one mobile data channel will consist of two (2) 12.5 kHz channels/one (1) 25 kHz channel. Narrowband 6.25 kHz channels can be aggregated for data or voice use to a maximum bandwidth of 25 kHz. A Plan amendment will be required. As 6.25 kHz migration evolves, an agency that creates any "orphaned" 6.25 kHz channels should realize that these channels could be allocated to nearby agencies requesting channels to maintain consistent grouping and utilization of 12.5 kHz blocks within the Region (see Section 3.4)

Region 15 encourages small agencies to partner with other agencies in multi-agency or regional systems as they promote spectrum efficiency and both small and large agency capacity needs can be met. Loading criteria can also be achieved in multi-agency systems that will allow great throughput for all agencies involved than that which could be achieved individually.

If deemed by the Region to be appropriate for Region 15 applicants, Region 15 reserves the right to implement the spectrum efficiency standards being developed by the National Regional Planning Council (NRPC).

8.4 System Implementation

There are no incumbent high power broadcast TV stations in Iowa; however there are several low power or translator TV stations across the state. These low power stations are secondary to primary public safety operations; therefore all agencies within the state can immediately implement any 700 MHz spectrum from which they receive FCC authorizations.

Region 15 has informed the low power TV and TV translator licensees in the Region that the 700 MHz Regional Planning process has been finalized. The notification reiterates these stations' secondary status.

8.5 Channel Loading

8.5.1 Loading Tables Voice Channels

Emergency		Non-Emergency	
Channels	Units/Channel	Channels	Units/Channel
1-5	70	1-5	80
6-10	75	6-10	90
11-15	80	11-15	105
16-20	85	16-20	120

Agencies requesting additional frequencies must show loading of 100 percent or greater on their existing system. Should a demand for frequencies exist after assignable frequencies become exhausted, an system having frequencies assigned under this Plan four or more years previously and not loaded to at least seventy perfect will lose operating authority on several frequencies to bring the system into compliance with the 70 percent loading standard. Frequencies lost in this manner will be reallocated to other agencies to help satisfy the demand for additional frequencies.

If deemed by the Region to be appropriate for Region 15 applicants, Region 15 reserves the right to implement the loading standards being developed by the National Regional Planning Council (NRPC).

8.5.2 Traffic Loading Study for Narrowband Systems

Justification for adding frequencies, or retaining existing frequencies, may be provided by a traffic loading study instead of loading by number of transmitters per channel. It will be the responsibility of the requesting agency to provide a verifiable study showing sufficient airtime usage to merit additional frequencies. A showing of airtime usage, excluding telephone interconnect air time, during peak busy hour greater than 70 percent per channel on three consecutive days will be required to satisfy loading criteria.

9 Future Planning

9.1 Database Maintenance

Region 15 will continue to use and maintain the CAPRAD database as a tool to perform spectrum allocations to Region 15 members and will update the database as allocations are made and FCC authorizations are granted. The Committee has the authority to change the original frequency allotment if necessary. To keep the most effective frequency allotments within Region 15, an annual review of the allotments will be made at the yearly full committee meeting. Recommended changes to the Plan will be voted on. If at any time a system is allocated channels within Region 15 and the system

cannot be developed within the agreed upon guidelines (90.629, 90.631 or 90.633), the channels will be returned to the county pool allotments they originated from and again be available to other agencies in the Region. If Plan modifications are approved by the Region, the Chairperson will, if necessary, obtain adjacent Region approval and file a Plan amendment with the Federal Communications Commission indicating the approved changes.

9.2 Inter-Regional Dispute Resolution

Signed Inter-Regional Dispute Resolution Agreements from all adjacent Regions are attached as Appendix F.

9.3 amendment Process

Amendments to the Region 15 Plan will be made at Region 15 RPC meetings. All amendments will be voted on and passed by or rejected by a simple majority vote. The Chairman or his designee will make the appropriate changes to the Plan and notify the adjacent Regions for their concurrence. Once the concurrences are received from the adjacent Regions, the Plan amendment will be filed, by the Chairperson, with the FCC for approval. Electronic filing will be the preferred method.

9.4 Meeting Announcements

Meeting announcements will be made per the Region 15 Bylaws. Region 15 will utilize its membership list, Public Notices issued by the FCC, fax notifications, email to individuals, associations, agencies and vendors, verbal announcements at meetings and/or appropriate publications.

10 Certification

I hereby certify that all planning committee meetings, including subcommittee or executive committee meetings were open to the Public.

/s/ Leslie E. Fish

Leslie E. Fish
Chair, Region 15

Appendix E

October 13th, 2015

Mr. Les Fish

Chairperson, Region 15 Regional Planning Committee

Chief Communications Engineer

State Patrol Communications

5912 NW 2nd St.

Des Moines, IA 50313-1307

Dear Mr. Fish,

Region 45 (Wisconsin) has reviewed the proposed changes to Region 15's 700 MHz Regional Plan. Region 45 has also reviewed Region 15's proposed allotments of the former reserve frequencies, now allocated for general use.

This letter serves as the official, written concurrence of Region 45 to your proposed 700 MHz Regional Plan amendment.

Sincerely,

Mr. Russell Schreiner

Chairperson Region 45

Communications Engineer

City of Sheboygan Police Department

1315 North 23rd Street

Sheboygan, WI 53081

700 MHz Region 22 Planning Committee

October 2, 2015

Mr. Les Fish
Chairperson, Region 15 Regional Planning Committee
Chief Communications Engineer
State Patrol Communications
5912 NW 2nd St.
Des Moines, IA 50313-1307

Dear Mr. Fish,

Region 22 (Minnesota) has reviewed the proposed changes to Region 15's 700 MHz Regional Plan. Region 22 has also reviewed Region 15's proposed allotments of the former reserve frequencies, now allocated for general use.

This letter serves as the official, written concurrence of Region 22 to your proposed 700 MHz Regional Plan amendment.

Sincerely,

Mr. James R. Mohn
Chairperson Region 22
Chief Engineer
Office of Statewide Radio Communications
Minnesota Department of Transportation
1500 West County Road B2, Mailstop 730
Roseville, MN 55113

REGION 24 700 MHZ REGIONAL PLANNING COMMITTEE

1503 BENTON DR
MACON, MO 63552
(660) 415-0014
BIGHAMS@APCOINTL.ORG

October 2, 2015

Mr. Les Fish
Chairperson, Region 15 Regional Planning Committee
Chief Communications Engineer
State Patrol Communications
5912 NW 2nd St.
Des Moines, IA 50313-1307

Dear Mr. Fish,

Region 24 (Missouri) has reviewed the proposed changes to Region 15's 700 MHz Regional Plan. Region 24 has also reviewed Region 15's proposed allotments of the former reserve frequencies, now allocated for general use.

This letter serves as the official, written concurrence of Region 24 to your proposed 700 MHz Regional Plan amendment.

Sincerely,

Scott Bigham

Mr. Scott Bigham
Missouri APCO Local Frequency Advisor
Chairperson Region 24
1503 Benton Drive
Macon, MO 63552

Pete Ricketts
Governor

State of Nebraska
Office of the Chief Information Officer
Ed Toner
Chief Information Officer
P.O. Box 95045
Lincoln, Nebraska 68509-5045
402-471-3560

October 22, 2015

Mr. Les Fish
Chairperson, Region 15 Regional Planning Committee
Chief Communications Engineer
State Patrol Communications
5912 NW 2nd St.
Des Moines, IA 50313-1307

Dear Mr. Fish,

Region 26 (Nebraska) has reviewed the proposed changes to Region 15's 700 MHz Regional Plan. Region 26 has also reviewed Region 15's proposed allotments of the former reserve frequencies, now allocated for general use.

This letter serves as the official, written concurrence of Region 26 to your proposed 700 MHz Regional Plan amendment.

Sincerely,

Mike Jeffres
Chairperson Region 26
Office of the CIO
501 S. 14th Street,
Lincoln, NE 68508

State of South Dakota
State Radio
Bureau of Information & Telecommunications

09/25/2015

Mr. Les Fish
Chairperson, Region 15 Regional Planning Committee
Chief Communications Engineer
State Patrol Communications
5912 NW 2nd St.
Des Moines, IA 50313-1307

Dear Mr. Fish,

Region 38 (South Dakota) has reviewed the proposed changes to Region 15's 700 MHz Regional Plan. Region 38 has also reviewed Region 15's proposed allotments of the former reserve frequencies, now allocated for general use.

This letter serves as the official, written concurrence of Region 38 to your proposed 700 MHz Regional Plan amendment.

Sincerely,

Todd Dravland

Mr. Todd Dravland
Chair Region 38
State of South Dakota
State Radio Engineering
1302 E. Highway 14, Suite 8
Pierre, SD 57501

Appendix H

Frequencies Assigned As “Pool” Frequencies, available to any eligible entity in Region 15 on a first-come, first-served basis.

Repeater Channel #	**Repeater Frequency**	**Mobile Channel #**	**Mobile Frequency**
77-78	769.48125	1037-1038	799.48125
157-158	769.98125	1117-1118	799.98125
197-198	770.23125	1157-1158	800.23125
221-222	770.38125	1181-1182	800.38125
237-238	770.48125	1197-1198	800.48125
277-278	770.73125	1237-1238	800.73125
301-302	770.88125	1261-1262	800.88125
317-318	770.98125	1277-1278	800.98125
643-644	773.01875	1603-1604	803.01875
683-684	773.26875	1643-1644	803.26875
699-700	773.36875	1659-1660	803.36875
723-724	773.51875	1683-1684	803.51875
763-764	773.76875	1723-1724	803.76875
779-780	773.86875	1739-1740	803.86875
803-804	774.01875	1763-1764	804.01875
843-844	774.26875	1803-1804	804.26875
859-860	774.36875	1819-1820	804.36875
923-924	774.76875	1883-1884	804.76875

Appendix I

Low Power Pool Frequencies

Table I-1, Repeater Service Assignments

Frequency Identifier	Repeater Transmitter Channels	Repeater Receiver Channels	Applicable Service
7TAC21	1-2	961-962	Generic Public Safety/Public Service
7TAC22	3-4	963-964	Generic Public Safety/Public Service
7TAC23	957-958	1917-1918	Generic Public Safety/Public Service
7FIRE21	5-6	965-966	Fire
7FIRE22	7-8	967-968	Fire
7MED21	949-950	1909-1910	EMS
7MED22	951-952	1911-1912	EMS
7LAW21	953-954	1913-1914	Law Enforcement
7LAW22	955-956	1915-1916	Law Enforcement

Table I-2, Subscriber Service Assignments

Frequency Identifier	Repeater Transmitter Channels	Repeater Receiver Channels	Applicable Service
7TAC21	961-962	1-2	Generic Public Safety/Public Service
7TAC22	963-964	3-4	Generic Public Safety/Public Service
7TAC23	1917-1918	957-958	Generic Public Safety/Public Service
7FIRE21	965-966	5-6	Fire
7FIRE22	967-968	7-8	Fire
7MED21	1909-1910	949-950	EMS
7MED22	1911-1912	951-952	EMS
7LAW21	1913-1914	953-954	Law Enforcement
7LAW22	1915-1916	955-956	Law Enforcement

Appendix I Page 2

Table I-3, Simplex Communications Service Assignments

Applicable Service	Channels	Frequency Identifier
Generic Public Safety/Service	1-2	7TAC11D
Generic Public Safety/Service	3-4	7TAC12D
Generic Public Safety/Service	961-962	7TAC13D
Generic Public Safety/Service	963-964	7TAC14D
Generic Public Safety/Service	957-958	7TAC15D
Generic Public Safety/Service	1917-1918	7TAC16D
Fire Incident Management	5-6	7FIRE11D
Fire Incident Management	7-8	7FIRE12D
Fire Incident Management	965-966	7FIRE13D
Fire Incident Management	967-967	7FIRE14D
EMS	949-950	7MED11D
EMS	951-952	7MED12D
EMS	1909-1910	7MED13D
EMS	1911-1912	7MED14D
Law Enforcement	953-954	7LAW11D
Law Enforcement	955-956	7LAW12D
Law Enforcement	1913-1914	7LAW13D
Law Enforcement	1915-1916	7LAW14D

Appendix J

Frequencies Available for Deployable Trunked Systems

Deployable Trunked Channel	Channel Number	12.5 kHz Channel Center	Channel Spacing (kHz)
A	37-38	769.23125	N/A
B	61-62	769.38125	150
C	117-118	769.73125	350
D	141-142	769.88125	150
E	883-884	774.51875 CC-P (Channel 883-884 is designated as a Primary Control Channel (CC-P) for the nationwide deployable system)	4500
F	939-940	774.86875 CC-A (Channel 939-940 is designated Alternate Control Channel (CC-A) for the nationwide deployable system)	350

Appendix K

Sample Memorandum of Understanding

RPC Letterhead

To: (Signer of Application and Title/Agency Name)

From: (Name) Region 15 Regional Planning Committee

Date: (mm/dd/yyyy)

Subject: Memorandum of Understanding for Operating on the 700 MHz Interoperability Channels

This Memorandum of Understanding (hereinafter referred to as MOU) shall be attached to the application when submitting it. By virtue of signing and submitting the application and this MOU (agency/name) (hereinafter referred to as APPLICANT) affirms its willingness to comply with the proper operation of the Interoperability channels as dictated by the Region 15 Regional Plan as approved by the Federal Communications Commission (hereafter referred to as FCC) and the conditions of this MOU.

The APPLICANT shall abide by the conditions of this MOU which are as follows:

- To operate by all applicable State, County and City laws/ordinances
- To utilize "plain language" for all transmissions
- To monitor the Calling Channel(s) and coordinate use of the Tactical Channels
- To identify inappropriate use and mitigate the same from occurring in the future.
- To limit secondary Trunked operation to the interoperability channels specifically approved on the application and limited to channels listed below
- To relinquish secondary trunked operation of approved interoperability channels to request for primary conventional access with same or higher priority.
- To mitigate contention for channels by exercising the Priority Levels identified in this MOU.

The preceding conditions are the primary, though not complete, requirements for operating on the interoperability channels. Refer to the Regional Plan for the complete requirements list.

Priority Levels:

1) Disaster or extreme emergency operation 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 (default priority).

To resolve contention within the same priority, the channel should go to the organization with the wider span of control/authority. This shall be determined by the RPC for the operation or by the levels of authority/government identify in the contention.

For clarification purposes and an aid to operate as authorized, any fixed base or mobile relay stations identified on the license for temporary locations (FCC station class FBT or FB2T, respectively) shall remain within the licensed area of operation. Similarly vehicular/mobile repeater stations (FCC station

class MO3) shall remain within the licensed area of operation. Federal agencies are permitted access to interoperability channels only as authorized by 47 CFR 2.102 (c) & 2.102 and Part 7.12 of the NTIA Manual.

Any violation of this MOU, the Regional Plan, or FCC Rules shall be addressed immediately. The first level of resolution shall be between the parties involved, next the RPC and finally, the FCC.

_____ (typed or printed name of authorized signer)

_____ (authorized signer identified above and consistent with the application)

_____ (date)

_____ (agency name)

_____ (agency address)

_____ (agency address)

_____ (agency address)

_____ (signer's phone)

_____ (signer's email address if available)