

Prepared by

THE REGION 36 700 MHz REGIONAL PLANNING COMMITTEE

Randall Brozenick, Chairman Michael Rearick, Vice-Chairman Richard Matason, Secretary/ Treasurer

JANUARY 21, 2009

(Updated to version 1.1: May 26, 2009)

TABLE OF CONTENTS

- 1. General Information
 - 1.1 Current RPC Chair
 - 1.2 Other RPC Officers
 - 1.3 RPC Members
 - 1.4 Description of the Region
 - 1.5 Major Elements of the Plan
 - 1.6 Development of the Plan
- 2. Notification Process/Operation
 - 2.1 Notification Process
 - 2.2 Operations of the Committee
- 3. Regional Plan Administration
 - 3.1 Procedures for Requesting Channels
 - 3.1.1 Spectrum Re-use
 - 3.1.2 Application Submission
 - 3.1.3 Applications Distribution/Coordination
 - 3.1.4 Reallocation of Unused Spectrum
 - 3.1.5 Allocation Disputes
 - 3.2 Procedure for Frequency Coordination
 - 3.3 Methodology for Allocating Narrowband Voice Channels
 - 3.4 Orphan Channels
 - 3.5 Low Power Pool Channels
 - 3.5 Canadian Border Issues
 - 3.6 Dispute Resolution Intra-Regional
- 4. Priority Matrix
- 5. Interoperability
 - 5.1 Standard Nomenclature
 - 5.2 Minimum Channel Quantity
- 6. Coordination with Adjacent Regions
- 7. System Design and Efficiency Requirements
 - 7.1 Interference Protection
 - 7.2 Spectrum Efficiency Standards
 - 7.3 System Implementation
 - 7.4 Channel Loading
 - 7.4.1 Loading Tables
 - 7.4.2 Traffic Loading Study for Narrowband Systems
- 8. Future Planning
 - 8.1 Database Maintenance

- 8.2 Inter-Regional Dispute Resolution
- 8.3 Amendment Process
- 8.4 Meeting Announcements

9. Certification

Appendices

- Appendix A RPC Officers and Members
- Appendix B Bylaws
- Appendix C Copies of FCC Public Notices, Advertisements, Web Notices, Email notifications, meeting minutes, etc.
- Appendix D NCC Pre-Coordination Rules and Recommendations
- Appendix E Adjacent Region Concurrences
- Appendix F Inter-Regional Dispute Resolution Agreements
- Appendix G Table of 700 MHz Interoperability Channels
- Appendix H Region 36 Channel Allotments
- Appendix I Table of Low Power Pool Channels

700 MHz Regional Plan Region 36

1. General Information About the Regional Planning Committee

1.1 Current Regional Chair:

Randall Brozenick 450 East Market Street Kittanning, 16201-1409 **Office:** 724-548-3431

Fax: 724-548-3243

Email: rjbrozenick@co.armstrong.pa.us

1.2 Other RPC Officers

The officers of Region 36, their contact information (agency/affiliation, addresses and telephone numbers) and voting status can be found in Appendix A.

1.3 RPC Members

The members of Region 36, their contact information (agency/affiliation, addresses and telephone numbers) and voting status can be found in Appendix A.

1.4 Description of the Region

Region 36 consists of the following mix of rural, suburban and urban counties in the Commonwealth of Pennsylvania: Adams, Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Cameron, Centre, Clarion, Clearfield, Clinton, Crawford, Cumberland, Elk, Erie, Fayette, Forest, Franklin, Fulton, Greene, Huntingdon, Indiana, Jefferson, Juniata, Lawrence, McKean, Mercer, Mifflin, Perry, Potter, Snyder, Somerset, Union, Venango, Warren, Washington, and Westmoreland.

The Region includes Pittsburgh, the largest city in the Region with approximately 315,000 people. Other major cities in the Region include Altoona, Beaver Falls, Butler, Erie, Greensburg, Johnstown, New Castle and Washington.

The eastern border of Region 36 is defined by the Susquehanna River; the western border by the state borders between Pennsylvania and Ohio and Pennsylvania and West Virginia. The Southern border is defined by state borders between Pennsylvania and Maryland and Pennsylvania and West Virginia, the northern border by the border with Canada and state border between Pennsylvania and New York.

Topography includes the Allegheny and Monongahela Rivers which join in Pittsburgh to form the Ohio River, Lake Erie, other natural and man-made lakes, the Appalachian Mountains, the Laurel Highlands and the Allegheny Plateau. This topography causes coverage issues for the Regions public safety radio system users.

There are dozens of state forest and parks in Region 36 including Cherry Springs State Park, Goddard State Park, Moraine State Park Oil Creek State Park and Cook Forest State Park, offering many types of outdoor recreation including hunting, fishing, hiking, backpacking, biking, water sports and camping. National Parks include: Allegheny National Forest, Allegheny Portage Railroad, Flight 93 National Memorial, Fort Necessity National Battlefield, Johnstown Flood National Memorial and Gettysburg National Battlefield.

Industry includes coal mining, manufacturing, steel manufacture, high technology, health care, tourism, farming, fruit growing, and wine making.

There are many colleges, hospitals, universities, and museums within the Region. Federal facilities in the Region include Letterkenny Depot and Carlisle Barracks and the Raven Rock Mountain Complex.

The population of Region 36 is approximately 4,776,000 people with a land mass of 28,304 square miles.

The population of the Region is unevenly distributed across the land area. As a Commonwealth, the number of boroughs, townships and cities is greatly increased as well as the corresponding number of public safety agencies. Portions of the Region are very densely populated and highly industrialized. Other portions of the Region have a low population density and remain largely wilderness. This presents some problems in area coverage for radio systems in that the entire land area of any given jurisdiction must be covered. The Region has hundreds of miles of Interstate including Interstates 70, 76, 79, 80 and 99, as well as thousands of miles of state routes. These roadways are the primary east to west and north to south routes across the Region. Interstate 80 normally carries over 24,000 cars and almost 8,000 trucks per day in one single County alone. Interstate 79 and 80 are major evacuation routes for both Pennsylvania and neighboring States in the event of natural or man made disasters. This traffic would increase drastically in the event of a state or national emergency. The rural counties have thousands of summer homes and hunting camps that could and would be used to house evacuees from larger metropolitan areas like Pittsburgh and Erie in the event of a national emergency. The movement of people from the metropolitan areas could increase the population by as much a 50% and overload the current communication channel loading and infrastructure. The presence of federal facilities adds complexity to the public safety framework within western Pennsylvania. All of these items were taken under consideration in the allocation plan.

1.5 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 include:

- a. the declaration that this is the Region 36 Plan;
- b. that Region 36 is comprised of 39 counties in the western and central portions of Pennsylvania;
- c. the administration and operation of the committee;
- d. application requirements and an explanation of the process for requesting frequency assignments;
- e. spectrum management, system design and efficiency standards;
- f. interoperability;
- g. coordination with adjacent Regions;
- h. a request for a waiver of adjacent concurrence from one, unformed adjacent Region;
- i. future planning; and
- j. a list of spectrum allotments in Appendix H.

1.6 Development of the Plan

The Plan was developed over a one year period with input sought both at formal meetings, conference calls, and via email. A Plan Writing Committee was tasked with developing a draft Plan using the guidelines and document templates created by the National Coordination Committee (NCC) and provided to Regional Planning Committees for this purpose. A numbered series of DRAFT Plans were provided to members of Region 36 via email, including the State 9-1-1 Coordinators and EMA Directors list, as well as the Keystone Chapter of NENA's email list and posting on website: www.wcdps.org.

Once the Final Draft was completed, it was distributed to members via email, postings on the www.wcdps.org website(s) and on the CAPRAD database. Members and other eligible entities were notified that the Final Draft was available for review and input through email and direct mailing lists. The Region held a formal meeting on January 21, 2009, at which it voted to adopt the Final Draft as the 700 MHz Regional Plan for Region 36. The Plan was then sent to all adjacent Regions for their review and approval.

2. Notification Process/Operation of the Region

2.1 Notification

Richard Matason, Westmoreland County Director of Public Safety, was appointed the Region 36 Convener. The first regional planning committee meeting was held on May 14, 2008. Interested parties were given 60 days advance notice of this meeting. Prior to the meeting, notices were sent to the FCC, to professional magazines, local newspapers and email lists.

There are no federally recognized Native American Indian Tribes within Region 36.

A copy of the FCC Public Notice, copies of advertisements published in the APCO magazine, copies of the notices posted on the Westmoreland County Department of Public Safety website and distributed through the Region 36 group email list are provided in Appendix C.

2.2 Operations of the Regional Planning Committee

Region 36 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 with each Public Safety Agency having one vote. Additional voting considerations are included in Region 36'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 36'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 Vice Chair are unable to serve their full terms, one or the other will 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 36 progress in 700 MHz development is located in Appendix C of this document.

3. Regional Plan Administration

3.1 Procedure for Requesting Channels

Upon FCC approval of this Plan, Region 36 will announce to the Region that 700 MHz public safety channels are available in the Region and that channels have been assigned in pool allotments to counties within the Region for usage by Public Safety entities. The general usage spectrum may be used by all Local government entities and by State agencies with a showing of need. The Commonwealth of Pennsylvania shall be eligible to apply for and be licensed for frequencies under this Plan with the submission of a plan proving that there are not sufficient state controlled frequencies (state license, applicable interoperability allocations) for use or reuse to build out the state 700 MHz system within a particular county, and that use of the state system without infrastructure cost or user fees has been offered to local subscribers belonging to eligible entities with daily operations within that county. All available methods will be used to notify public safety entities of channel availability in the Region. All spectrum requests will be considered on a first come, first served basis. Region 36 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 36 Regional Planning Committee will adhere to the published National Coordination Committee Implementation Guidelines for 700 MHz Public Safety Regional Planning Committees.

3.1.1 Spectrum Re-Use

Region 36 utilized the CAPRAD pre-coordination database system to maximize channel re-use in the 700 MHz band. Since the spectrum is reused, 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.

3.1.2 Application Submission

To request channels from Region 36, a full application package must be submitted to the CAPRAD database at http://caprad.nlectc.du.edu/login/home. The application must include:

- The current FCC Form (currently the 601)
- A short description of the proposed system
- A justification for the additional spectrum
- A coverage prediction map using the current version of TIA/EIA TSB 88 guidelines
- Maps showing all interference predicted in the proposed system
- Documents indicating agency-funding commitments sufficient to fund the development of the proposed system(s)

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

3.1.3 Application Distribution / Coordination

The Chair will distribute the application request to all other affected agencies with frequency allotments in the county for review and approval. Absent a protest, the Regional Planning Committee 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.

3.1.4 Give Up or Give Back Spectrum

An agency that voluntarily chooses not to use spectrum allocated to them in the pool allotment may enter into negotiations with adjacent counties to release this spectrum to the adjacent county for use as outlined in this plan. The details and letters of agreement of this exchange would be included in the plan submitted to the committee for approval by the interested parties.

3.1.5 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 objecting agency or the Chairperson can 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 8.1 of this document. Any costs associated with field tests or any other requirements to obtain Region 36 Plan approval are the responsibility of the agency submitting application to Region 36.

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 special full Committee meeting will be scheduled to consider and vote on the protest. The burden of proof will be on the protesting party.

. If approved, the application will be submitted through the CAPRAD database to the applicant's chosen FCC-certified frequency coordinator for processing.

3.2 Procedure for Frequency Coordination

Once an application for 700 MHz frequencies has been reviewed and approved by the Regional Planning Committee, 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).

3.3 Method for Allocating Narrowband Voice Channels

The narrowband general use spectrum refers to the block of frequencies designated of local public safety users. The FCC has allocated six hundred and sixteen 6.25 kHz bandwidth channel pairs for narrowband general use.

The Region 36 Technical & Implementation Subcommittee recommends that allocations be made on the basis of one 25 KHz channel for every two (2) voice channel requests and one 25 kHz channel for each narrowband data channel request. 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 requirement of one voice channel per 6.25 KHz of spectrum. When applying for channels within Region 36, 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. Agencies using Frequency Division Multiplexing (FDMA) will be expected to maintain 12.5 KHz equivalency when developing systems and will be required to utilize BOTH 12.5 KHz portions of the 25 KHz block. In most cases, this will require the geographic separation of each 12.5 KHz adjacent channel. In order to promote spectrum efficiency, Region 36 will encourage that systems allocated 25 KHz channel blocks will utilize the entire channel and not "orphan" any portions of a system designated channel. (See next Section)

3.4 Orphan Channels

The narrowband channels within Region 36 have been allotted in 25 kHz building blocks, each comprised of four 6.25 kHz or two 12.5 kHz channels. These 25 kHz allotments have been characterized as "Technology Neutral" and flexible enough to accommodate multiple technologies utilizing multiple bandwidths. If agencies choose a technology that requires less than 25 kHz channel bandwidth for their system, there is the potential for residual, "orphaned channels" of 6.25 kHz or 12.5 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 36 will utilize "county areas" as guidelines for channel implementation with the area of Region 36. 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 36 will receive concurrence from the 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 36 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 36 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.

3.5 Low Power Pool Channels

The FCC in the 700 MHz band plan set aside channels 1 - 8 paired with 961 – 968 and 949 – 958 paired with 1909 – 1918 for low power use for 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 operation. Transmitter power must not exceed 2 watts (ERP). These channels may operate using analog operation. To facilitate analog modulation, this Plan will allow aggregation of two 6.25 KHz 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 eighteen fall under RPC jurisdiction), the Federal Communications Commission (FCC) suggested that there is a potential for multiple low power applications, and absent a compelling showing, a sharing approach be employed rather than making exclusive assignments for each specific application 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 36, 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 36.

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 - Channel #'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.

A list of the Low Power Pool Channels is available in Appendix I.

3.6 Canadian Border Issues

Agencies located in the border area with Canada should note the following conditions. Public safety licenses are granted subject to the conditions as set forth in 47 C.F.R. § 90.533. Public safety transmitters operating within 120 km or 75 miles of the Canadian border must accept any interference that may be caused by operations of UHF television broadcast transmitters in Canada and that conditions may be added during the term of the license if required by the terms of the international agreements between the United States and the government of Canada, as applicable, regarding the non-broadcast use of the 769-775 MHz and 799-805 MHz bands.

3.7 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 parts of this Plan, the agency must notify the Chair of the dispute in writing. This section does not apply to disputes over new spectrum allocations (see Section 4.6). 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 shall 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 appoint a Dispute Resolution Committee consisting of two members from the Commonwealth of Pennsylvania governmental agencies and at least five members from different counties in Region 36. 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 Dispute Resolution Committee. The Committee will hear input from the disputing agency, any affected agencies and the Region Chair. The Committee 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 Oversight Committee, a subcommittee of the National Public Safety Telecommunications Committee (NPSTC) for review. As a last resort, the dispute will be forwarded to the Federal Communications Commission for final resolution.

4. Priority Matrix

A matrix may be used to evaluate competing applications within the Region. The total point value totals 1100 possible points. The application receiving the highest number of points will receive the channels. There are six scoring categories:

• Service (Maximum score 550 points)

Police 100 points

Fire 100 points

EMS 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

• 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 in 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 preplanned 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

• Loading (Maximum score 150 points)

System's loading exceeds the loading outlined in Section 7.4.1 50 points

System's loading meets the loading outlined in Section 7.4.1 50 points

System is cooperative multi-organizational 50 points

The maximum achievable score in this section is 150 points. (An applicant whose loading exceeds the loading tables in Section 7.4.1 will not also receive points for meeting the loading requirements.)

• 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

• 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. Interoperability

Several members of the Region 36 Regional Planning Committee are also participants in the Pennsylvania State Interoperable Executive Committee, currently developing an interoperability plan for the state. The Commonwealth of Pennsylvania will hold any required licenses for the interoperability system. The Commonwealth of Pennsylvania will allow local entities to apply for licenses to operate backbone equipment on the interoperability frequencies. The state will review and approve any such applications. The state has delegated the responsibility for review and approval of any such applications to the Regional Planning Committee. Region 36 makes the following recommendations for 700 MHz equipment deployed within Pennsylvania.

5.1 Standardized Nomenclature:

Standardized nomenclature is recommended nationwide. 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 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.

5.2 Minimum Channel Quantity

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 state SIEC.

6. Coordination with Adjacent Regions

Region 36 is adjacent to the following 700 MHz Regions:

Region 20 Maryland

Region 28 Eastern PA/Delaware

Region 33 Ohio

Region 44 West Virginia

Region 55 Western New York

Each of the listed Regions has reviewed and approved Region 36's 700 MHz Regional Plan. The signed concurrences from every adjacent Region can be found in Appendix E.

7. System Design/Efficiency Requirements

7.1 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(s) served plus five miles area beyond.

Systems should be designed for minimum signal strength of $40~dB\mu$ 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 $40~dB\mu$, or greater, signal in all systems coverage areas. This may require patterned antennas and extra sites compared to a design that assumes noise limited coverage. Region 36 complies with National Coordination Committee recommendations listed in the Regional Planning Committee Guidelines published by the National Coordination Committee (NCC).

7.2 Spectrum Efficiency Standards

Initial allotments will be made on the basis of 25 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 dBu), 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 requirement of one voice channel per 6.25 KHz of spectrum. When applying for channels within Region 36, 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 four (4) 6.25 kHz channels/two (2) 12.5 KHz channels/one (1) 25 KHz channel. Narrowband 6.25 KHz channels can be aggregated to a maximum bandwidth of 25 KHz. As 6.25 KHz migration evolves, an agency that creates any "orphaned" 6.25 KHz or 12.5 kHz channels should realize that these channels could be allocated to nearby agencies requesting channels to maintain consistent grouping and utilization of spectrum within the Region. (See Section 3.4)

Region 36 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 greater throughput for all agencies involved than that which could be achieved individually.

7.3 System Implementation

There are incumbent high power broadcast TV stations and several low power or translator TV stations in Region 36. The low power stations are secondary to primary public safety operations; therefore agencies within the westernmost portion of the Region can immediately implement any 700 MHz spectrum for which they receive FCC authorizations. Other agencies can deploy after the TV transition deadline of February 17, 2009.

Region 36 has informed the low power TV and TV translator licensees in the Region that the 700 MHz Regional Planning process has begun. The notification reiterates these stations' secondary status.

7.4 Channel Loading

7.4.1 Loading Tables Voice Channels



Emergency		Non - Emergency	
Channels	Units/Channel	Channels	Units/Channel
1-5	50	1-5	60
6-10	55	6-10	70
11-15	60	11-15	80
16-20	65	16-20	90

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, any system having frequencies assigned under this Plan four or more years previously and not loaded to at least fifty percent may lose operating authority on frequencies to bring the system into compliance with the 50 percent loading standard. No agency shall lose more than 25% of their allocated frequencies in any four year period. Frequencies lost in this manner will be reallocated to other agencies to help satisfy the demand for additional frequencies.

7.4.2 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 the peak busy hour greater than 50 percent per channel or 30 minutes of airtime usage per hour on three days in a thirty day period will be required to satisfy loading criteria.

8. Future Planning

8.1 Database Maintenance

Region 36 will continue to use and maintain the CAPRAD database as a tool to perform spectrum allocations to Region 36 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 36, 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 36 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 the Region approves plan modifications, the Chairperson will, if necessary, obtain adjacent Region approval and file a Plan amendment with the Federal Communications Commission indicating the approved changes.

8.2 Inter-Regional Dispute Resolution

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

8.3 Amendment Process

Amendments to the Region 36 Plan will be made at Region 36 RPC meetings. All amendments will be voted on and passed 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 will be filed, by the Chairperson, with the FCC for approval. Electronic filing will be the preferred method.

8.4 Meeting Announcements

Meeting announcements will be made per the Region 36 Bylaws. Region 36 will utilize its membership list, Public Notices issued by the FCC, fax notification, email to individual, including the State 9-1-1 Coordinators and EMA Directors list, as well as the

Keystone Chapter of NENA's email list, associations, agencies and vendors, verbal announcements at meetings and/or appropriate publications.

9. Certification

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

January 23, 2009

Randall J. Brozenick
Chairman, Region 36

APPENDIX A

List of RPC members, their agencies/affiliations, business addresses, telephone numbers, and voting status.

RPC Officers

Chairperson Randall J Brozenick, Director

Armstrong County Department of Public Safety

450 East Market Street Kittanning, PA 16201-1409

Office: 724-548-3431 **Fax:** 724-548-3243

Email: rjbrozenick@co.armstrong.pa.us

Vice-Chair Michael T Rearick, Director

Clarion County Department of Emergency Services

Court House 421 Madison Road

Clarion, PA 16214

Office: 814-226-6631 **Fax**: 814-226-4294

Email: mrearick@oes.clarion.pa.us

Secretary/Treasurer Richard J Matason, Director

Westmoreland County Department of Public Safety

911 Public Safety Road Greensburg, PA 15601

Office: 724-600-7306 **Fax**: 724-600-7388

Email: rmatason@co.westmoreland.pa.us

RPC Membership

NAME	AFFILIATION	EMAIL	VOTING
Randy Howell	Motorola Corp	Randy.Howell@Motorola.com	no
Michael McGrady	MCM Consulting	Mike_mcmconsulting@comcast.net	no
John Riley	MCM Consulting	John_mcmconsulting@comcast.net	no
Kevin Fanning	Clinton County DES	kfanning@clintoncounty.pa.com	yes
Tony Matuszky	Westmoreland County DPS	tmatuszk@co.westmoreland.pa.us	Yes
Mark Brammell	Westmoreland County DPS	mbrammel@co.westmoreland.pa.us	Yes
Andrew Duli	unaffiliated	Andrew.Duli@Duli.org	No
John Eline	Adams County DES	jeline@adams.county.us	Yes
Mary Bowers	Adams County DES	mbowers@adamscounty.us	Yes
Jim Kaczynski	Transcore	James.kaczynski@transcore.com	no

Vicky Church	Transcore	Vicky.Church@transcore.com	No
Pete Pasqua	Fayette County EMA/911	PPasqua@FCEMA.ORG	Yes
Jo Lewis	Greene County EMA	jlewis@co.greene.pa.us	Yes
Jason Craig	Greene County EMA	jcraig@co.greene.pa.us	Yes
John Rowntree	Allegheny County DES	jrowntree@county.alegheny.pa.us	Yes
Keith Leto	Commonwealth of PA	cleto@state.pa.us	Yes
Norm Coltri	RCC	ncoltri@rcc.com	No
Guy Napolillo	Fayette County EMA/911	gnapolillo@fcema.org	Yes
Sandy Smythe	Westmoreland County DPS	ssmythe@co.westmoreland.pa.us	Yes
Kevin McGeary	L.R. Kimball	KevinMcgeary@LRKimball.com	No
Dale Baer	SSI	dbaer@ssiservices.com	No
Ronald Baustert	Armstrong County DPS	rbaustert@co.armstron.pa.us	Yes
Dan Tancibok	Centre County 911	datancibok@co.centre.pa.us	Yes
Dale Neff	Centre County 911	dineff@co.centre.pa.us	Yes
Pete Calisti	West.Cnty Park Police	pcalisti@co.westmoreland.pa.us	Yes
Clint Heiser	M/A-Com	heiserc@tycoelectronics.com	No
Bette Rinehart	Motorola Corp.	C18923@email.mot.com	No
James Bitting	Kimball Corp.	jim.bitting@kimballcorp.com	No
John R. Nicklin	Mercer County EMA	jnicklin@mcc.co.pa.us	Yes
Roger Kohr	Tyco Electronics	Roger.kohr@tycoelectonics.com	No
Jeff Parish	Lawrence County 911	jparish@co.lawrence.pa.us	Yes
Joe Mitchell	Clearfied County 911	jmitchell@clearfield911.com	Yes
Dave Fox	Somerset County 911	foxd@co.somerset.pa.us	Yes
Beverly Cunningham	Somerset County 911	cunninghamb@co.somerset.pa.us	Yes
Brian Melcer	Lawrence County EMA	bmelcer@co.lawrence.pa.us	Yes
Allen Smith	L.R. Kimball	AllenSmith@LRKimball.com	No

APPENDIX B

REGION 36 BYLAWS APPROVED: MAY 15, 2008

ARTICLE I NAME & PURPOSE

1.1 **Na**me and purpose. Then name of this Region shall be "Region 36". Its primary purpose is to foster cooperation, planning, and development of regional plans and the implementation of these plans, in the 700 MHz Public Safety Band.

ARTICLE II MEMBERS

For purposes of this Article, the term "Member", unless otherwise specified, refers to both voting and non-voting members.

2.1 Numbers, Election and Qualification. The Regional Committee shall have two classes of members, "voting members" and "non-voting members". New members may be added at annual, special, or regular meetings.

Voting Members. Voting members shall consist of one representative from any single agency engaged in public safety eligible to hold a license under 47 CFR 90.20, 47 CFR 90.253, or 47 CFR 2.103. Except that a single agency shall be allowed no more than one vote for each distinct eligibility category (e.g. police, fire, EMS, highway) within the agency's organization or political jurisdiction. In voting on any issue the individual must identify himself/herself and the agency and eligibility category which he or she represents. Voting members may not vote on issues involving their entity.

Non-Voting Members. Non-voting members are all others interested in furthering the goals of public safety communications.

- Tenure. In general, each member shall hold MEMBERSHIP from the date of acceptance until resignation or removal.
- 2.3 Powers and Rights. In addition to such powers and rights as are vested in them by law, or these bylaws, the members shall have such other powers and rights as the membership may determine.
- 2.4 Suspension and Removal. A representative may be suspended or removed with cause by vote of a majority of members after reasonable notice and opportunity to be hears. Failure to attend 50% of meetings held in a calendar year shall be a specific cause for removal from the membership.
- 2.5 Resignation. A member may resign by delivering written resignation to the chairman, vice-chairman, treasurer, or secretary of the Regional Committee or to a meeting of the members.

- 2.6 Annual Meetings. The annual meeting of the members shall be held at the Westmoreland County Community College on the 15th of May each year, or if that date is a legal holiday or weekend in the place where the meeting is to be held, then at the same hour on the next succeeding day not a legal holiday or weekend. If an annual meeting is not held as herein provided, a special meeting of the members may be held in place thereof with the same force and effect as the annual meeting, and in such case all references in these bylaws, except in this Section 2.6, to the annual meeting of the members shall be deemed to refer to such special meeting. Any such special meeting shall be called and notice shall be given as provided in Sections 2.7 and 2.8.
- 2.7 Special Meetings. Special meetings of the membership may be held at any time and at any place within the Regional Committee area. Special meetings of the members may be called by the chairman or by the vice-chairman, or in case of death, absence, incapacity, by any other officer, or upon written application of two or more members.
- 2.8 Call and Notice.
 - A. Annual meetings. Reasonable notice of the time and place of special meetings of the members shall be given to each member. Such notice need not specify the purposes of a meeting, unless otherwise required by laws or these bylaws or unless there is to be considered at a meeting: (i) amendments to these bylaws, (ii) an increase or decrease in the number of members, or (iii) removal or suspension of a member who is an officer.
 - B. Reasonable and sufficient notice. Except as otherwise expressly provided, it shall be reasonable and sufficient notice to a member to send notice by mail at least five (5) days, or by e-mail / facsimile at least three (3) days, before the meeting, addressed to such member at this or her usual or last known business address, or, to give notice to such member in person or by telephone at least three (3) days before the meeting. (State notification requirements may differ.)
- 2.9 Quorum. At any meeting of the members, a majority of the officers and a majority of the voting members shall constitute a quorum. Any meeting may be adjourned to such date or dates not more than ninety days after the first session of the meeting by a majority of the votes cast upon the questions, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.
- 2.10 Action by Vote. Each voting member, representing a particular agency (one vote per agency) shall have one vote; non-voting members have no right to vote. When a quorum is present at any meeting, a majority of the votes properly cast by voting members present shall decide any question, including election to any office, unless otherwise provided by law or these bylaws.
- 2.11 Action by Writing. Any action required or permitted to be taken at any meeting of the members may be taken without a meeting if all members entitled to vote on the matter consent to the action in writing and the written consents are filed with the records of the meetings of the members. Such consents shall be treated for all purposes as a vote at a meeting.

- 2.12 Proxies. Voting members may vote either in person or by written proxy dated not more than one month before the meeting named therein, which proxies shall be filed before being noted with the secretary or other person responsible for recording the proceedings of the meeting. Unless otherwise specifically limited by their terms, such proxies shall entitle the holders thereof to vote at any adjournment of the meeting by the proxy shall terminate after the final adjournment of such meeting.
- 2.13 Voting on One's Own Application. At no time can voting member vote on his / her application.
- 2.14 Special Interest Voting. A voting member can not have a commercial interest in any of his / her region and / or adjacent regions application(s) on which he / she is reviewing, approving, and / or voting.

ARTICLE III OFFICERS AND AGENTS

- Number and qualification. The officers of the Regional Committee shall be a chairman, vice-chairman, secretary/treasurer, and such other officers, if any, as the voting members may determine. All officers must be voting members of the Regional Committee.
- 3.2 Election. The officers shall be elected by the voting members at their first meeting, and thereafter, at the annual meeting of the members.
- 3.3 Tenure. The officers shall each hold office until the annual meeting of the members held within one year from the adoption of these bylaws, or until their successor, if any, is chosen, or in each case until he or she sooner dies, resigns, is removed or becomes disqualified.
- 3.4 Chairman and Vice Chairman. The chairman shall be the chief executive officer of the Regional Committee and, subject to the control of the voting members, shall have general charge and supervision of the affairs of the Regional Committee The chairman shall preside at all meetings of the Regional Committee.
 - The Vice-Chairman shall have such duties and powers as the voting members shall determine. The vice-chairman shall have and may exercise all the powers and duties of the chairman during the absence of the chairman or in the event of his or her inability to act.
- 3.5 Secretary/ Treasurer. The secretary/ treasurer shall record and maintain records of all proceedings of the members in a file or series of files kept for that purpose, which file or files shall be kept within the Region and shall be open at all reasonable times to the inspection of any member. Such file or files shall also contain records of all meetings and the original, or attested copies, of bylaws and names of all members and the address (including e-mail address if available) of each. The secretary treasurer shall be the chief financial officer and the chief accounting officer of the Regional Committee. The secretary/ treasurer shall also be in charge of its financial affairs, funds, and valuable papers, and shall keep full and accurate records thereof. If the secretary/ treasurer is absent from any meeting of members, a temporary secretary/ treasurer chosen at the meeting shall exercise the duties of the secretary /treasurer at the meeting.

- 3.6 Suspension or removal. An officer may be suspended with cause by vote of a majority of the voting members.
- 3.7 Resignation. An officer may resign by delivering his or her written resignation to the chairman, vice-chairman, treasurer, or secretary of the Regional Committee. Such resignation shall be effective upon receipt (unless specified to be effective at some other time), and acceptance thereof shall not be necessary to make it effective unless it so states.
- 3.8 Vacancies. If the office of any officer becomes vacant, the voting members may elect a successor. Each such successor shall hold office for the remainder terms, and in the case of the chairman, vice-chairman, treasurer and secretary, until his or her successor is elected and qualified, or in each case until he or she sooner dies, resigns, is removed or becomes disqualified.

ARTICLE IV AMENDMENTS

These bylaws may be altered, amended, or repealed in whole or in part by vote. The voting members may by a two-thirds vote, alter, amend, or repeal any bylaws adopted by the regional Committee members, or otherwise adopt, alter, amend, or repeal and provision which FCC regulation of these bylaws requires action by the voting members.

ARTICLE V DISSOLUTION

This Regional Committee may be dissolved by the consent of two-thirds plus one of the members in good standing at a special meeting called for such purpose. The FCC shall be notified.

ARTICLE VI RULES OF PROCEDURES

The Conduct of Regional Meetings including without limitation, debate and voting, shall be governed by Robert's Rules of Order, newly revised 1990 edition, ninth edition, Sarah Corbin Robert, Henry M. Robert III, and William J. Evans.

APPENDIX C

MEETING NOTIFICATIONS

MEETING AGENDAS

SUMMARY OF MEETING MINUTES

PUBLIC NOTICE

Federal Communications Commission 445 12th St., S.W. Washington, D.C. 20554

DA 08-501

March 5, 2008

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ACTION

REGION 36 (WESTERN PENNSYLVANIA) 700 MHz REGIONAL PLANNING COMMITTEE ANNOUNCES FIRST MEETING

The Region 36 (Western Pennsylvania)¹ 700 MHz Public Safety Regional Planning Committee Convener announces that the initial meeting of Region 36 700 MHz Public Safety Regional Planning Committee will be held on Wednesday, May 14, 2008 at 7:00 p.m., in the main auditorium, Commissioner's Hall, Westmoreland County Community College, Youngwood, Pennsylvania. The purpose of the meeting is to elect a 700 MHz working group Chairperson and to begin developing the Region 36 700 MHz plan.

The Region 36 700 MHz Public Safety Regional Planning Committee meeting is open to the public. All eligible public safety providers whose sole or principal purpose is to protect the safety of life, health, or property in Region 36 may utilize these frequencies. It is essential that public safety agencies in all areas of government, including state, municipality, county, and Native American Tribal, and non-governmental organizations eligible under Section 90.523 of the Commission's rules, be represented in order to ensure that each agency's future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate, and represent their agency's needs.

All interested parties wishing to participate in planning for the use of public safety spectrum in the 700 MHz band within Region 36 should plan to attend. For further information, please contact:

Richard Matason, Convener Region 36 700 MHz Public Safety Regional Planning Committee rmatason@co.westmoreland.pa.us

Region 36 28 9/9/2009 1:49:27 PM 700 MHz Plan

¹ The Region 36 (Western Pennsylvania) 700 MHz regional planning area includes all Pennsylvania counties west of the West Branch Susquehanna River, and excludes the counties of Bucks, Chester, Montgomery, Philadelphia, Carbon, Columbia, Dauphin, Lackawanna, Lancaster, Northumberland, Pike, Schuylkill, Sullivan, Susquehanna, Tioga, Wayne, Wyoming and York, which are part of the Region 28 (New Jersey, Delaware, Eastern Pennsylvania) regional planning area.

"Region 36 will convene the first meeting of its 700 MHz Working Group On Wednesday, May 14, 2008 at 7:00 P.M. in the main Auditorium, Commissioners Hall, **Westmoreland County** Community College, Youngwood, PA. The purpose of the meeting is to elect a 700 MHz Working Group Chairperson and to begin developing the Region 36 700 MHz Plan. All parties interested in participating in this working group are invited to attend. For further information contact Rich Matason, 700 MHz Working Group Convener, at rmatason@co.westmoreland.pa.us.". or Call 724-600-7301





APCO International Inc.

Serving Public Safety Communications Professionals since 1935 | www.apcointlorg Board of Officers 2007-2008



President | Willis Carter

Shreveport Fire Department 1144 Texas Ave. Shreveport, LA 71101 318/675-2200 Fax: 318/675-2206 president@apcointl.org



President Elect | Chris Fischer

P.O. Box 98993 Des Moines, WA 98198 206/878-0962 pres-elect@apcointl.org



First Vice President | Richard A. Mirgon

Douglas County 9-1-1 1615 8th Street Minden, NV 89423-4232 775/782-9977 Fax: 775/782-9868 first-vp@apcointl.org



Second Vice President | Bill Carrow

Delaware State Police 165 Brick Store Landing Road Smyrna, DE 19977 302/659-2340; Fax: 302/659-6856 second-vp@apcointl.org



Executive Director | George S. Rice Jr.

351 N. Williamson Blvd. Daytona Beach, FL 32114 888/APCO-911 riceg@apcointl.org

Editorial Advisory Committee | apcoeac@apco911.org

Chair | Steve Proctor, Utah Vice Chair | Ralph H. Gould, Michigan Angela Bowen, Georgia Olivia A. Gasca, California T.G. Mieure, Illinois Sean O'Hara, New York Chuck Nash, Maryland Carl B. "Bernie" Olson, California Mark D. Pallans, Nevada Alan Shark, Washington, D.C. Debbie L. Smith, Florida Charles Taylor, California

The Editorial Advisory Committee's purpose is twofold: 1) It helps ensure that the magazine's content mirrors the interests of APCO's diverse membership, and 2) it provides the magazine staff with expert resources and writers who can share with APCO's members the knowledge and experience necessary to effectively staff, operate, equip and maintain public safety communications centers.

10 PUBLIC SAFETY COMMUNICATIONS | MARCH 2008 | WWW.APCOINTL.ORG



Public Safety Communications Center, Oklahoma City, Oklahoma. © HSMM, 2008. Chris Cunningham, Photographer

Workspace Layout

Supervisory Personnel

The layout of the workspace is another critical factor in the perception of the adequacy of the workspace. As noted previously, the ECC environment can often be compared to a fishbowl. The placement and attitude of supervisory personnel contributes to this. In many traditional designs, supervisory personnel were placed behind the call takers and dispatchers. This frequently created the perception that the supervisors were on the call takers' and dispatchers' backs. When coupled with an authoritarian style of supervision, the perception too often was reality. The trend now is to place the supervisors in front of or to the side of and facing the staff. Many agencies are also encouraging supervisors to be enablers, helpers and sources of information for their dispatchers.

Lavout

In addition to the placement of supervisory workstations, the layout of all of the workstations needs significant planning. As modern communications systems become more dependant on computer technology, it is important to remember that it is the people in the ECC that do the work. The layout must facilitate rather than inhibit the ability of the staff to receive the incoming calls for assistance and dispatch the help needed in the appropriate time frame. For true emergencies, the National Fire Protection Association's Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems (NFPA 1221 -2007) recommends that the dispatch of the call be accomplished within 60 seconds from the time the call is answered in the ECC. Many incidents require the dis-

patch of multiple resources. Anytime more than one resource is involved, coordination is required. Without communications, coordination doesn't occur. Careful study is required to determine how the placement of the individual workstations can facilitate coordination and communications.

Acoustical

Acoustical issues are frequently mentioned as an issue in many ECCs. Existing centers, particularly those in below grade locations, may have low ceilings and walls that don't provide much sound reduction. Workstation placement may also contribute to the noise level in the dispatch center. HVAC equipment and systems, printers, copiers, fax machines, other equipment and systems, as well as other personnel in the center may make for a very noisy environment. Sustained exposure to a noisy environment can be another contributor to increased stress. Modern noise reduction design techniques need to be incorporated into your new or remodeled ECC.

Space Allocation

The amount of space allocated for each workstation and the separation between workstations contributes both to the ability to coordinate and communicate as well as the noise level in the center. With the computerization of emergency communications, it is not uncommon for an individual workstation to have four or five computer monitors. While the use of the flat screen has reduced the size requirements a bit, a typical dispatch workstation may require a 12' x 4' area. Positions should be configured optimally with a 48-inch clearance between positions laterally and a 60-inch back to front clearance.

Region 36 700 MHz Meeting notice - Westmoreland County

Region 36 will convene the first meeting of its 700 MHz Working Group on Wednesday, May 14, 2008 at 7:00 P.M. in the main auditorium, Commissioners Hall, Westmoreland County Community College, Youngwood, PA. The purpose of the meeting is to elect a 700 MHz Working Group Chairperson and to begin developing the Region 36 700 MHz Plan. All parties interested in participating in this working group are invited to attend.

For further information, contact Rich Matason, 700 MHz Working Group Convener, (724) 600-7301 or via e-mail at rmatason@co.westmoreland.pa.us.

66 | ENPM | MARCH 2008

Classified Advertising Manager,		21ST day of APRIL, 2008.
Tribune Review Publishing Compan	у	Sabar O. C.
Statement of Advertising C	Costs	CC
SANDRA SMYTHE, ADMIN	. OFFICER	Cit
911 PUBLIC SAFETY RD.	Y DEPT. OF PUBLI	C SAFETY Mem
	# #	Region 36 will convene the first meeting of its
For Publishing the notice or adverti hereto on the above stated dates Probating Same Total	\$90.00 \$ 0 \$ 90.00	Group on Wednesday, May 14, 2008 at 7:00 P.M. In the main Auditorium, Commissioners Hall, Westmoreland County Community College, Youngwood, PA. The purpose of the meeting is to elect a 700 MHz. Working Group Cheir.
The Tribune-Review newspaper, hereby acknowledge the same have been fully paid. Tribune-Review Publishing Co	Publishing Compa es a receipt of the afo ompany, Publisher y Newspaper.	or Adverti to begin developing the Region 36 700 MHz
	SANDRA SMYTHE, ADMIN WESTMORELAND COUNT 911 PUBLIC SAFETY RD. GREENSBURG, PA 15601 To Tribune-Review Publishing C For Publishing the notice or advert hereto on the above stated dates Probating Same Total P The Tribune-Review newspaper, hereby acknowledge the same have been fully paid. Tribune-Review Publishing County Publishing Cou	GREENSBURG, PA 15601 To Tribune-Review Publishing Company, Dr. For Publishing the notice or advertisement attached hereto on the above stated dates \$90.00 Probating Same \$ 0 Total \$90.00 Publisher's Receipt for The Tribune-Review Publishing Companewspaper, hereby acknowledges a receipt of the aformal statement of the statem

Proof of Public	cation of Notice in Pittsburgh Post-
Under Act No 587, Approved May 1	16, 1929, PL 1784, as last amended by Act No 4
established in 1993 by the merging of the Pittsb Gazette and Sun-Telegraph was established in Pittsburgh Gazette established in 1786 and the P been regularly issued in said County and that a printed and published in the newspaper of general circulation on the following	circulation published in the City of Pittsburgh, Country Post-Gazette and Sun-Telegraph and The Pitts 1960 and the Pittsburgh Post-Gazette was established in 1842, since which date a copy of said printed notice or publication is attached to the property of the property of the copy of said printed notice or publication is attached to the property of the copy of said printed notice or publication is attached to the property of the property of the copy of the property of the p
that, as such agent, affiant is duly authorized to v	the PG Publishing Company, a corporation and pub erify the foregoing statement under oath, that affiant Il allegations in the foregoing statement as to time, p
REGION 36 will convene the first meeting of its 700 MHz Working Group on Wednesday May 14, 2008 at 7.00 P.M. in the main Auditorium Commissioners Hall, Westmoreland County Community College - August Working Group Community College - August Working Group Chairperson and to begin developing the Region 36 700 MHz Plan All Dartles interested in Participating in this Working group are in with the information contact Rich Madasen, 700 MHz Working Group Converse Rich MHz Working Conver	PG Publishing Company Sworn to and subscribed before me t April 21, 2008 COMMONWEALTH OF PENNS Notarial Seal Linda M. Gaertner, Notary Pt City Of Pittsburgh, Allegheny C My Commission Expires Jan. 3 Member, Pennsylvania Association STATEMENT OF ADVERT Westmoreland County D 911 Public Safety Rd. Greensburg PA 15601 To PG Publishing Coi
Duktal	Total
PG PUBLISHING COMPANY, published	er's Receipt for Advertising Costs er of the Pittsburgh Post-Gazette, a newspa

MEETING AGENDA FOR THE MAY 14, 2008 MEETING:

Region 36 700 MHz Working Group

Westmoreland County Community College-Commissioners Hall May 14, 2008 7:00 p.m. -9:00 p.m.

Organizational Meeting Agenda

Welcome and Introductions – Rich Matason, Westmoreland County
Department of Public Safety, Convener

Presentation - Regional Planning Basics - Bette Rinehart, Motorola

Presentation - Region 36 Presentation - Norm Coltri, RCC Consultants

Election of Chairperson

Election of Vice-Chairperson, Secretary and Treasurer

Working Group By-laws

- a. Distribution and Review of Proposed By-laws
- b. Discussion

Establish Committees

Region 36 800MHz Plan

- a. Distribution of Plan Template via email
- b. Assign Plan to appropriate committees

Establish Meeting Schedule

Date, time and location of next meeting

Adjourn

MINUTES OF THE MAY 14, 2008 MEETING:

Region 36 700 MHz Regional Planning Committee Meeting
Rich Matason, Convener
May 14, 2008
7:00 P.M. – 9:00 P.M.
Commissioners Hall, Westmoreland County Community College

Convening Meeting Minutes

1. Welcome and Introductions

Rich Matason, Director of Public Safety for Westmoreland County and 700 MHz Convener, welcomed the attendees and thanked them for their interest and participation. He then asked everyone present to introduce themselves and state their organizational affiliation. Mr. Matason asked everyone to make sure that they signed in and provided an email address, since that is how all communications and information will be transmitted to the membership. He also advised that all Committee documents will be posted to the Westmoreland County Public Safety website: www.wcdps.org.

Mr. Matason announced that Sandy Smythe is appointed as the temporary secretary for this evening's meeting since, under FCC rules, this is a public meeting that will be recorded and for which minutes will be produced.

2. Convener Comments

Mr. Matason stated that the purpose for this evening's meeting was to review the status of the FCC rules for the 700 MHz bandwidth; to establish the Region 36 700 MHz Regional Planning Committee; to elect a chairperson and other officers; to develop a plan that allocates the available 700 MHz spectrum to the public safety community in FCC's Region 36, which includes 38 counties in western and central Pennsylvania; and tom establish a meeting schedule and milestones to have a completed and approved plan by the FCC by February 2009.

3. Presentations on the Status for the 700 MHz Band

Mr. Matason introduced Ms. Bette Rinehart, Motorola National Regulatory Affairs Manager, who presented material on the status of current status of the 700 MHz program.

Her presentation covered the following topics: 700 MHz allocation basics; recent rule changes; writing the plan; what has to be included in the plan; additional items the RPC should include in the plan; filing the plan with the FCC; and the FCC Process.

She discussed the reallocation of TV channels 60-69 as per FCC Docket #96-86 and stated the FCC's goals were to: alleviate current LMR congestion in other bands; provide

Public Safety access to new technologies: promote interoperability: and satisfy PSWAC requirements.

She discussed the parts of the frequency spectrum that were allocated to Public Safety, and indicated that those eligible to hold 700 MHz channels were broadly representative of public safety disciplines (police, fire, rescue) and levels (state, city, county), were non-profit organizations, and had no commercial interest in license or license management. She emphasized that they were only to be used for the protection of life, health or property.

Ms. Rinehart reviewed the recent history on how the 700MHz band has evolved to its current state, discussed the Public Safety Spectrum Trust and its membership and its responsibilities regarding the 700 MHz spectrum, and discussed CAPRAD and how it can be used by the RPC as its moves forward with the planning process.

Ms. Rinehart then outlined what needed to be in the plan to include the following:

- Name, address, contact information of Chair
- ■List of RPC Officers
- Statement that 60 days notice was given prior to the 1st meeting
- Summary of the major elements of the Plan
- Description of how input was solicited from all RPC members
- ■Description of the Region
- Description of the types of agencies that are included in the Region
- ■Technical procedures for requesting channels
- •How the Region will decide between competing applications
- What role the RPC will play in administering the I/O channels
- Section referring to Canadian border agreement

She also reviewed items that the RPC would want in the Plan, to include:

- ■How will applications be handled?
- •Filing windows?
- •First come/first served?
- •Who will review the applications?
- •What attachments required?
- State application for general use frequencies
- •What showings required?
- Loading
- •How will Region review/approve wideband waiver requests?

She suggested that once the draft is complete, we should circulate final draft to members via list serve; post it on the website; Post it on CAPRAD; call a full meeting to discuss/vote on the Plan. The RPC should also document any discussion of the Plan, and then vote to accept draft as the Region's 700 MHz Plan.

After the Plan is approved by the Region, it must be sent to adjacent Regions for concurrence via CAPRAD and via mail/email.

The Plan then must be filed with the FCC. She suggested using the NCC's Appendix R as a final checklist and indicated that the RPC may use FCC's website electronic filing (ECFS), or mail an original and four copies to be filed with the Office of the Secretary. The RPC must also email an electronic version to Jeannie Benfaida (jeannie.benfaida@fcc.gov) The Plan will be posted on the FCC's website under Docket 02-378.

The FCC Has stressed that the Plan must include:

- Documentation of 60 day notice for the first meeting
- •Demonstrate how provided notice to all disciplines, tribal governments
- •FCC Public Notice should not be considered primary method
- Adjacent Region Concurrence
- **■**Dispute resolution
- •Primarily between Regions, but also within the Region
- •First 2-5 pages should orient the reader and the public to what's in the Plan
- ■Include:
- Bylaws
- •Membership list including contact information and voting status

The FCC process for plan approval generally takes 4-6 months from date of filing. The FCC will review submitted Plans for completeness and contact Chair for additional info. If complete, the Plan will be placed on Public Notice for 21 days for comments and 10 days for replies. Absent a protest, the Plan will be approved after the Comment period ends.

Ms. Rinehart suggested the RPC attempt to follow an aggressive schedule:

- ■Plan completed by end of August
- ■Plan adopted by Region in September
- ■To adjacent Regions in September
- Adjacent Region sign-off by December
- ■File Plan with FCC December
- ■Plan approved by February 2009

Mr. Matason then introduced Mr. Norm Coltri, Director, RCC Consultants, who presented additional material on the status of the 700 MHz program.

Mr Coltri's presentation included the following discussion items: 700 MHz background; Progress from 2006 –present; current regulatory issues impacting 700 MHz; and the development of the Regional Plan.

The process started with the FCC Issuing Docket WT 96-86, which started a number of regulatory initiatives up to and including Nine Notices of Proposed Rule Making (NPRMs) as well as Additional Instant Dockets. Little progress was made in implementation due to incumbent television stations using the spectrum.

Congressional Legislation established a *firm date* of February 17, 2009 for incumbent television stations to vacate channels 60-69. It also established dates for auction of 700 MHz frequencies from which \$1,000,000,000 was identified for 700 MHz public safety interoperability.

Multiple Notices of Proposed Rule Making (NPRMs) have been issued by the FCC since passage of the Deficit Reduction Act of 2005.

Under the current FCC Report and Order, 12 MHz of public safety spectrum will be reallocated from public safety and reassigned to a single national broadband licensee (SNBL). Of the 12 MHz taken from public safety, 10 MHz is used for data and 2 MHz for a guard band. The "D" Block provides another 10 MHz of spectrum to be added for the SNBL. The SNBL would be required to provide coverage based upon certain population benchmarks, *not land area*.

Under the provisions of the FCC proposal:

- •Public safety users may be charged for use of broadband services;
- •Former public safety data spectrum is aggregated with commercial spectrum and the total spectrum is used by both public safety and commercial users;
- •Pre-emption of commercial users is unclear;
- •No spectrum is available for public safety wideband systems;
- •The role of Regional Planning Committees or any other public safety bodies is unspecified.

The process for Region 36 700 MHz Plan development requires compliance with 47 CFR §90 Subpart R (FCC section of the rules addressing 700 MHz); the development of internal procedures for defining criterion for channel assignments; the development of criterion for accepting license applications; the development of protocols for review by adjacent RPCs.

All users of 700 MHz must recognize the unique challenges of the band.

- •Spectral efficiency must be achieved by 12-31-2014;
- •Exceptions may permit a two-year extension;
- •Spectral efficiency demands advanced technologies such as Time Division Multiple Access or TDMA;
- •Systems can be initiated using Frequency Division Multiple Access (FDMA) provided that the licensee understands the limitations.

Mr. Coltri noted that there are a number of document templates that Region 36 RPC can use in the development of its plan:

•National Coordinating Committee

- •National Public Safety Telecommunications Council
- •CAPRAD Channel Pre-assignment Table located at http://caprad.nlectc.du.edu.

He noted that the RPC needs to determine how 700 MHz channels will be allocated (i.e., channels allocated geographically, converted to specific agency licenses), what criterion will be used to award channels when there are multiple applicants for available spectrum; will it be a regional system or single user; will trunking and spectrally efficient technologies be used; what is the availability of funding; what RFPs & procurement actions will be used; what number of subscriber devices will be used in the system; what is the defined timetable to be "on air".

He also noted that Plans typically announce filing "windows" in which the Region will accept applications for channels. The Plan should:

- •Define the period in which initial applications for 700 MHz channels will be accepted;
- •Define process for handling applications;
- •Identify a continuing schedule for the acceptance of applications;
- •Identify a provision to facilitate extraordinary cases.

The Plan must also define how interference to adjacent regions and intra-regional users will be minimized.

4. Election of Committee Chairperson, Vice-chairperson, and Secretary/Treasurer

Mr. Matason reviewed voting procedures with the membership prior to calling for nominations from the floor for the office of chairperson. He stated that voting members were representatives from any single agency engaged in public safety eligible to hold a license and indicated that each agency was entitled to one vote only. Non-voting members included all others who had an interest in furthering the goals of public safety communications.

Mr. Matason called for nominations for chairperson. Mr. John Rowntree from Allegheny County was nominated but declined. Mr. Matason from Westmoreland County was nominated but declined. Mr. Randy Brozenick from Armstrong County was nominated and accepted the nomination. The nominations were closed. Mr. Brozenick was elected as chairperson by unanimous voice vote.

Mr. Matason called for nominations for vice-chairperson. No nominations were made from the floor. Mr. Mike McGrady, representing the Northwest Central Task Force and carrying their proxy, nominated a representative from the executive board of the Northwest Central Task Force (to be named before the next RPC meeting) for the position. No objection was voiced from the floor and the nomination was approved by unanimous voice vote.

Mr. Matason polled the membership as to whether they favored electing a separate secretary and treasurer, or favored electing a secretary/ treasurer. The membership

favored the latter. Mr. Matason called for nominations from the floor for secretary/ treasurer. There were no nominations. The office will be opened for nominations again at the next RPC meeting.

5. By-Laws

Mr. Brozenick assumed the chairperson role. With the chairperson's approval, Mr. Matason instructed the membership to review the by-laws that were distributed prior to the start of the meeting and present their change, addition, deletion recommendations to either Mr. Brozenick or Mr. Matason before the next RPC meeting.

6. Establish Committees

Mr. Brozenick and Mr. Matason presented a list of committees that needed to be formed in order to carry out the work of the RPC. Those committees were:

Policy and Procedures Interoperability Planning and Plan Writing Implementation and Communications Technical

The chair called for volunteers to act as Committee Chairpersons. The following members volunteered:

Policy and Procedures – Pete Pasqua, Fayette County Interoperability – John Rowntree, Allegheny County Plan Writing – Rich Matason, Westmoreland County Implementation and Communications – John Eline, Adams County

No one volunteered for the Technical Committee Chair and that position will be filled by the next RPC meeting.

A question was raised as to whether the Committee had to conduct in-person meetings as a group. Mr. Brozenick stated that committees can meet in person or can conduct business via teleconference or video teleconference at the discretion of the Committee.

7. Establish Meeting Schedule

Mr. Brozenick asked the membership about their meeting schedule preferences. It was decided that the RPC will meet monthly on the 3rd Wednesday of the month. The RPC will meet at the Westmoreland County Community College. The membership will consider the suggestion to alternate afternoon meetings with evening meetings at the next RPC meeting.

Meeting dates for the rest of FY2008 are:

June 18 – 2:00 P.M. July 16 August 20 September 17 October 15 November 19 December 17

8. Adjourn

Mr. Brozernick called for questions and comments. Hearing none, the Chair heard a motion to adjourn which was seconded. The meeting was adjourned at 8:45 p.m.

EMAIL ANNOUNCMENT OF THE JUNE 18, 2008 MEETING

From: RICH MATASON [mailto:rmatason@co.westmoreland.pa.us]

Sent: Wednesday, June 11, 2008 9:19 AM

To: 'Andrew Duli'; 'Bette Rinehart'; Bill Fleming (bfleming@co.westmoreland.pa.us); 'Clint Heiser'; 'Dale Baer'; 'Dale Neff'; 'Dan Tancibok'; Guy Napolillo (gnapolillo@fcema.org); 'Jim Kaczynski'; 'Jo Lewis'; JOE NIEDZALKOSKI (jniedzal@co.westmoreland.pa.us); 'John Riley'; 'John

Rowntree'; 'Keith Leto'; 'Kevin Fanning'; 'Kevin McGeary'; Mark Brammell (mbrammel@co.westmoreland.pa.us); 'Mary Bowers'; Matuszky, Tony

(tmatuszk@co.westmoreland.pa.us); 'Mike McGrady'; 'Norman Coltri'; Pete Calisti

(pcalisti@co.westmoreland.pa.us); 'Pete Pasqua'; 'Randy Howell'; Rich Matason

(rmatason@co.westmoreland.pa.us); 'Ronald Baustert'; Sam Sarraff (docsam@comcast.net); Sandy Smythe (Sandy Smythe); Seighman, Mark (mseighma@co.westmoreland.pa.us); Allen

Clark (AClark@co.crawford.pa.us); bamanning@mckeancountypa.org;

bfrantz@ClintonCountyPA.com; camoes@cameroncountypa.com; caucker@snydercounty.org; Dcubbison@Bedfordcountypa.org; drobinson@ecdops.org; ema@huntingdoncounty.net;

qdennis@winbeam.net; John Eline (jeline@adamscounty.us); jquiqley@clearfield911.com;

isteiner@pottercountypa.net; Linda Holmes (jeffcoema2@alltel.net); lsmeigh@perryco.org;

Michael McAllister (elkoes@ncentral.com); Michael T Rearick (mrearick@oes.clarion.pa.us);

PLucas@co.mifflin.pa.us; rkrockey@co.centre.pa.us; sdutko@co.franklin.pa.us;

shale@co.forest.pa.us; thess@unionco.org; tlake@warren-county.net;

tsherman@co.venango.pa.us; twise@ccpa.net; vjoyce@fultoncntypa.org; William J Swatsworth (ema1@clearfieldco.org); Bob Full (rfull@county.allegheny.pa.us); Brian Feist

(bfeist@co.cambria.pa.us); Brian Melcer (bmelcer@co.lawrence.pa.us); Demichiei, Ray

(raymond.demichiei@city.pittsburgh.pa.us); Frank Jannetti (fjannetti@mcc.co.mercer.pa.us);

Frank Matis (fmatis@co.butler.pa.us); Jeff Marshall (jmarshall@greenepa.net); Jeff Yates (yatesj@co.washington.pa.us); John Nicklin (jnicklin@mcc.co.mercer.pa.us); Mike Huss

(mike.huss@city.pittsburgh.pa.us); Paul Beatty (pbeatty@indianacounty.org); Rich Lohr

(lohrr@co.somerset.pa.us); rjbrozenick@co.armstrong.pa.us; Ron Springer (rspringer@co.cambria.pa.us); Roy Jr Shipley (rshipley@fcema.org); Wes Hill

(whill@co.beaver.pa.us)

Subject: Region 36 700 MHz Committee Meeting

Importance: High

Hello everyone,

The next meeting of the Region 36 700 MHz Working Group will be held on June 18, 2008 at 1400 hours. The location for this meeting has been changed from WCCC to the Westmoreland Intermediate Unit Auditorium, due to a scheduling conflict at the College.

The Westmoreland Intermediate Unit is located at 102 Equity Drive, Greensburg PA 15601. The Auditorium is in the rear of the building. There is ample free parking. Mapquest will give you directions.

A copy of the agenda for the meeting is attached. A copy of the by-laws that we must approve at this meeting is also attached.

Also, we will be reviewing the Plan template that you can find at the following website: www.wcdps.org. Please take some time to review this template before the meeting.

Regards

Rich

Rich Matason, Director Westmoreland County Department of Public Safety 911 Public Safety Road Greensburg, PA 15601

Office: 724.600.7301 Cell: 724.640.6600 Fax: 724.600.7388 Pager: 724.853.0851

Email: rmatason@co.westmoreland.pa.us

"It is only by doing things others have not that one can advance."

General George S. Patton

AGENDA FOR THE JUNE 18, 2008 MEETING:

Region 36 700 MHz Working Group

Westmoreland Intermediate Unit Multi-Media Auditorium 102 Equity Drive Greensburg, PA 15601

> June 18, 2008 2:00 p.m. - 4:00 p.m.

Meeting Agenda

Welcome and Introductions – Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Website: www.wcdps.org

Email list – adds, deletes, changes

Review Minutes of May 14, 2008 Organizational Meeting

Confirm Vice-Chairperson – Mike Rearick, Clarion County

Election of Secretary/ Treasurer

Appointment of Committee Chairpersons

Policy/ Procedures — Pete Pasqua, Fayette County Interoperability — John Rowntree, Allegheny County Plan Writing — Rich Matason, Westmoreland County Implementation and Communications — John Eline, Adams County Technical — Joseph Mitchell, Clarion County

Vote/Approve By-Laws

Plan Concurrence Letters Status- adjacent Region Plans

Region 36 800MHz Plan Review Template Assign Tasks

Development of Region 36 700 MHz Logo

Meeting Schedule – discuss rotating location

Date, time and location of next meeting Adjourn

MINUTES OF THE JUNE 18, 2008 MEETING:

Region 36 700 MHz Regional Planning Committee

Meeting Minutes

June 18, 2008 2:00 p.m. - 4:00 p.m.

The second meeting of the Region 36 700 MHz Regional Planning Committee was called to order by Chairman Randy Brozenick at 2:10 p.m. at the Multi-media Auditorium of the Westmoreland Intermediate Unit.

The following were present:

Randall Brozenick, Armstrong County DPS Rich Matason, Westmoreland County DPS Randy Howell, Motorola Corp. Michael McGrady, Northwest Central ERG John Riley, Northwest Central ERG Kevin Fanning, Clinton County DES Tony Matuszky, Westmoreland County DPS Mark Brammell, Westmoreland County DPS Andrew Duli John Eline, Adams County DES Mary Bowers, Adams County DES Jim Kaczynski, TransCore Vicky Church, TransCore Pete Pasqua, Fayette County EMA/911 Jason Craig, Greene County EMA Jo Lewis, Green County EMA John Rowntree, Allegheny County DES Keith Leto. Commonwealth of PA

Chairman Brozenick asked Mr. Matason for administrative announcements. Mr. Matason asked everyone present to ensure they printed their name on the sign in sheet and verified their email address so that they will receive all committee information. He also stated that the website that Region 36 will be using, www.wcdps.org, was up and operational and currently had several documents posted for review.

Chairman Brozenick called for a review of the meeting minutes from May 14, 2008 and asked for additions, changes and/or deletions. Hearing none, Mike McGrady moved that the minutes be accepted. The motion was seconded and approved unanimously.

Chairman Brozenick announced that Mike Rearick, Clarion County, NW Central ERG, had been nominated for the vice-chair. Mike Rearick was approved unanimously by the voting members present.

Chairman Brozenick then called for nominations from the floor for the position of Secretary/Treasurer. Mark Brammell nominated Rich Matason from Westmoreland County. Hearing no other nominations, the nominations were closed and a vote was called for, in which Rich Matason was approved unanimously by the voting members present.

Chairman Brozenick reviewed the names of the Committees that would be conducting the day to day business of the Region 36 Planning Committee and also announced the appointment of Committee Chairs.

Policy/ Procedures – Pete Pasqua, Fayette County
Interoperability – John Rowntree, Allegheny County
Plan Writing – Rich Matason, Westmoreland County
Implementation and Communications – John Eline, Adams County
Technical – Joseph Mitchell, Clearfield County, NW Central ERG

The Secretary then presented the By-Laws for approval by the membership. The By-Laws has been posted to the website since last meeting. Two amendments to the By-Laws were proposed and accepted: (1) paragraph 2.1, last sentence: change the word "issued" to "issues". (2) paragraph 3.1: delete the word "treasurer" and change "secretary" to Secretary/treasurer". It was moved and seconded to accept the By-Laws as amended. The By-laws were approved unanimously by the voting members present.

Chairman Brozenick reviewed for the benefit of the membership a number of letters of concurrence for adjacent Regional Plans that he had received since the last meeting. He indicated that he sent the requested concurrence letters to Regions 20, 8, 30, and 55. He then indicated that any requests for concurrence that are received in the future will go to the Chairman of the Technical Committee and the Chairman of the Implementation Committee for review and recommendation. Mr. Brozenick will then send the appropriate response to said requests.

Mr. Matason then reviewed the Region 36 Plan template that was posted to the website. He stressed that this was just a template and that the Committees need to review their portions of the plan in detail and make the appropriate changes so that it becomes a true Region 36 Plan. To assist the membership in this process, Mr. Matason distributed a worksheet containing Assignments and Responsibilities for each Committee that corresponded to the structure of the Plan template. A copy of that Committee Assignments/Responsibilities Sheet is attached to these minutes.

Mr. Matason indicated that each committee chair must build their committees and begin the plan review process as soon as possible. Any changes to the template should be emailed to Mr. Matason or Mr. Brozenick at least two weeks prior to the nest meeting so that they can be posted to the Plan that resides on the website no later than one week prior

to the next meeting. Plan DRAFTS will be numbered DRAFT 1,2,3 etc. until the final product is completed.

Mr. Brozenick asked if the membership was interested in creating a Region 36 700 MHz Regional Plan logo. It was suggested that we use the cover sheet on the Plan Template and overwrite Region 36 700 MHz Regional Plan onto that graphic.

For future meetings, changing location was discussed. It was decided to keep meeting times at 2:00 p.m. but to move the location of the meetings to make it easier for persons traveling long distances to attend more easily. It was also discussed to use conference calling and video-teleconferencing when possible to ensure the maximum participation in future meetings.

The next meeting will be held on July 16 at 2:00 p.m. in Clarion County. Mike McGrady will advise Chairman Brozenick of the exact location and that will be announced in the Agenda for the next meeting.

The meeting was adjourned at 3:00 p.m.

Submitted for approval,

Rich Matason Secretary/Treasurer

EMAIL ANNOUNCEMENT OF THE JULY 16 MEETING

From: RICH MATASON [mailto:rmatason@co.westmoreland.pa.us]

Sent: Thursday, July 03, 2008 9:34 AM

To: 'Allen Weaver - 911 Coordinator'; 'Andrew Duli'; 'Berniece Jarbeck - 911 Coordinator'; 'Bette Rinehart'; Bill Fleming (bfleming@co.westmoreland.pa.us); 'Carol Peretin - 911 Coordinator'; 'Chad Aucker - 911 Coordinator'; 'Clint Heiser'; 'Dale Baer'; 'Dale Neff'; 'Dan Tancibok'; 'Dan Tancibok - 911 Coordinator'; 'David Fox - 911 Coordinator'; 'Debra Archer - 911 Coordinator'; 'Donna Powers'; 'Frank Jannetti, Jr. - 911 Coordinator'; 'Frank Matis - 911 Coordinator'; Guy Napolillo (gnapolillo@fcema.org); 'James Thompson - 911 Coordinator'; 'Jeff Parish - 911 Coordinator'; 'Jeffrey Yates - 911 Coordinator'; 'Jerry Flasher - 911 Coordinator'; 'Jim Kaczynski'; 'Jo Lewis'; JOE NIEDZALKOSKI (jniedzal@co.westmoreland.pa.us); 'John Grappy - 911 Coordinator'; 'John Harris - 911 Coordinator'; 'John Hetrick - 911 Coordinator'; 'John Riley'; 'John Rowntree'; 'Keith Leto'; 'Kevin Fanning'; 'Kevin McGeary'; 'Kevin Nicholson - 911 Coordinator'; 'Larry Norton - 911 Coordinator'; 'Larry Smeigh - 911 Coordinator'; 'Laura Narby - 911 Coordinator'; 'Lisa Wagner - 911 Coordinator'; 'Marcie Emhoff - 911 Coordinator'; Mark Brammell (mbrammel@co.westmoreland.pa.us); 'Mary Bowers'; Matuszky, Tony (tmatuszk@co.westmoreland.pa.us); 'Mike McGrady'; 'Norman Coltri'; 'Pam Corley - 911 Coordinator'; 'Paul Beatty - 911 Coordinator'; Pete Calisti (pcalisti@co.westmoreland.pa.us); 'Pete Pasqua'; 'Philip Lucas - 911 Coordinator'; 'Randy Howell'; Rich Matason (rmatason@co.westmoreland.pa.us); 'Robert Repasky - 911 Coordinator'; 'Ronald Baustert'; Sam Sarraff (docsam@comcast.net); Sandy Smythe (Sandy Smythe); 'Scott Beveridge - 911 Coordinator'; 'Scott Henry - 911 Coordinator'; Seighman, Mark (mseighma@co.westmoreland.pa.us); 'Steve Rembold - 911 Coordinator'; 'Theodore Wise - 911 Coordinator'; 'Todd Lake - 911 Coordinator'; 'Todd Oleary - 911 Coordinator'; 'Wesley Hill - 911 Coordinator'; Allen Clark (AClark@co.crawford.pa.us); bamanning@mckeancountypa.org; bfrantz@ClintonCountyPA.com; camoes@cameroncountypa.com; Dcubbison@Bedfordcountypa.org; drobinson@ecdops.org; ema@huntingdoncounty.net; qdennis@winbeam.net; John Eline (jeline@adamscounty.us); jquiqley@clearfield911.com; jsteiner@pottercountypa.net; Linda Holmes (jeffcoema2@alltel.net); Michael McAllister (elkoes@ncentral.com); Michael T Rearick (mrearick@oes.clarion.pa.us); rkrockey@co.centre.pa.us; sdutko@co.franklin.pa.us; shale@co.forest.pa.us; thess@unionco.org; tsherman@co.venango.pa.us; vjoyce@fultoncntypa.org; William J Swatsworth (ema1@clearfieldco.org); Bob Full (rfull@county.allegheny.pa.us); Brian Feist (bfeist@co.cambria.pa.us); Brian Melcer (bmelcer@co.lawrence.pa.us); Demichiei, Ray (raymond.demichiei@city.pittsburgh.pa.us); Jeff Marshall (jmarshall@greenepa.net); John Nicklin (jnicklin@mcc.co.mercer.pa.us); Mike Huss (mike.huss@city.pittsburgh.pa.us); Rich Lohr (lohrr@co.somerset.pa.us); rjbrozenick@co.armstrong.pa.us; Ron Springer (rspringer@co.cambria.pa.us); Roy Jr Shipley (rshipley@fcema.org) Subject: July 16 - 700 MHz Regional Plan meeting

Hello everyone,

The next meeting of the Regional 700 MHz Plan Committee will be held at 2:00 p.m. on July 16 in Clarion County at the Clarion County Department of Emergency Services. The address is on the attached agenda.

Attached to this email are the following documents:

1. Agenda for the July 16 meeting

- 2. The Committee Assignments and Responsibilities List
- 3. Minutes from the June 18th meeting

The following updated documents have been added to the Region 36 700 MHz site at: www.wddps.org.

- 1. Approved By-Laws
- 2. DRAFT 1 Region 36 700 MHz Plan

Please review the DRAFT Plan prior to the meeting. Committee Chairs, please bring any changes, additions, deletions to the DRAFT Plan for your areas of responsibility to the meeting for discussion, and provide me with an electronic copy after the meeting so that I can post them to the DRAFT.

Please acknowledge by return email if you plan to be an active participant in the 700 MHz Plan Development process so that Committee chairs can contact you for help. Also advise if you plan to attend the July 16 meeting.

If you know of anyone who should be receiving 700 MHz Plan development information, please provide their name and email address and I will add them to the mailing list

If you do not wish to receive any further emails concerning the 700 MHz Plan development, please advise by return email and I will remove your name from out mailing list.

Thanks for your cooperation.

Regards,

Rich

Rich Matason, Director Westmoreland County Department of Public Safety 911 Public Safety Road Greensburg, PA 15601

Office: 724.600.7301 Cell: 724.640.6600 Fax: 724.600.7388 Pager: 724.853.0851

Email: rmatason@co.westmoreland.pa.us

AGENDA FOR THE JULY 16 MEETING:

Region 36 700 MHz Working Group

July 16, 2008 2:00 p.m. - 4:00 p.m.

Clarion County Dept of Emergency Services Courthouse, 421 Madison Road Clarion, PA 15214

Meeting Agenda

Welcome and Introductions – Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Review Minutes of June 18, 2008

Committee Reports

Policy/ Procedures - Pete Pasqua, Fayette County

Interoperability – John Rowntree, Allegheny County

Plan Writing – Rich Matason, Westmoreland County

Implementation and Communications – John Eline, Adams County

Technical – Joseph Mitchell, Clearfield County

Plan Concurrence Letters Status- adjacent Region Plans

Region 36 800MHz Plan - DRAFT 1

Recent changes, additions, etc:

- New cover page with logo
- Paragraphs 1 and 2 updated with current information
- Annex A added officer contact information
- Annex B added approved By-laws
- Annex C added meeting notifications, meeting agendas, and meeting minutes

Date, time and location of next meeting:

August 20, 2008 2:00 p.m. Location -

Adjourn

MINUTES OF THE JULY 16, 2008 MEETING:

Region 36 700 MHz Regional Planning Committee

Meeting Minutes

July 16, 2008 2:00 p.m. - 3:00 p.m.

The third meeting of the Region 36 700 MHz Regional Planning Committee was called to order by Vice-Chairman Mike Rearick at 2:00 p.m. at the Clarion County EOC.

The following were present:

Mike Rearick, Clarion County EMA
Tony Matuszky, Westmoreland County DPS
John Riley, Northwest Central ERG
John Eline, Adams County DES
Andrew Duli
Jim Kaczynski, TransCore
Kevin Fanning, Clinton County DES
Joe Mitchell, Clearfield County
Dale Neff, Centre County
Randy Howell, Motorola Corp.
John Rowntree, Allegheny County DES
Dan Tancibok, Centre County
Jeff Parish, Lawrence County

Vice-Chairman Rearick asked Tony Matuszky, acting as secretary due to Rich Matason's absence, for administrative announcements. There were none.

Vice-Chairman Rearick called for a review of the meeting minutes from June 18, 2008 and asked for additions, changes and/or deletions. Hearing none, Joe Mitchell moved that the minutes be accepted. The motion was seconded and approved unanimously.

Committee reports:

Policy/Procedures: No report.

Interoperability – John Rowntree advised that Jason Craig would like to be on his committee. After by-laws review members decided to let the Chairpersons pick their committee members.

Plan Writing – No report.

Implementation and Communications – John Eline advised that his committee will be doing Section 3 of the Plan and they are currently reviewing it.

Technical – Joe Mitchell has obtained information from other agencies to review. This will assist them with their tasks.

New Business:

John Riley requested that we put together a list to 0 opt in or out of the Committee. He suggested possibly using the NENA list as a contact list; this way no one could say they were left out of the process. The membership agreed.

No new Plan concurrence letters from surrounding Regions have been received for review and concurrence.

John Eline asked if spectrum giveback is required by the FCC for 700 MHz. John Rile discussed how plans prioritize their channels and how counties could barter with each other for channels not being utilized. John Eline had heard that the State was allocated so much spectrum and they could confiscate spectrum for use on their system. John Riley advised that if we write our plan correctly they would have to apply to our Region first and prove they needed the spectrum more than we do.

Mike Rearick agreed to make copies of a Public Notice from the NPSTC for all members to review amendments they would like to make and they are requesting any comments from interested members.

Mike Rearick reviewed the list of additions/deletions in Draft 1 of the Plan. Mike requested that Rich Matason update the Plan Draft, post it to the website, and email the changes to all members as soon as possible.

Discussion was held on the next meeting site. Tony Matuszky asked if we had gotten anywhere with the video-teleconferencing. John Rowntree advised that Region 13 has both video and tele-conferencing capabilities. The problem is that call-ins can be given a PIN to access the conference, but that PIN would also allow them to access any conference because the number is a permanent number. He is trying to come up with a temporary PIN. John will try to set this up for the next meeting. John Riley has a conference bridge with a moderator PIN and this may be a solution to get around the permanent PIN issue.

John Rowntree advised all members that if they did not have a login for CAPRAD, they should get one as the site has some interesting information posted for members.

For the Good of the Order: Nothing to report.

Next Meeting: August 20, 2008 at 1400 hours in the Clearfield County EOC at 911 Leonard Street, Clearfield.

Adjournment: John Rowntree moved to adjourn the meeting. The motion was seconded by John Eline. Meeting was adjourned.

Respectfully submitted,

Rich Matason Westmoreland County Public Safety Director

Secretary

AGENDA FOR THE AUGUST 20 MEETING

Region 36 700 MHz Working Group

August 20, 2008 2:00 p.m. - 4:00 p.m.

Clearfield County Dept of Emergency Services 911 Leonard Street Clearfield, PA

Meeting Agenda

Welcome and Introductions - Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Review Minutes of July 16, 2008

Committee Reports

Policy/ Procedures - Pete Pasqua, Fayette County

Interoperability – John Rowntree, Allegheny County

Plan Writing – Rich Matason, Westmoreland County

Implementation and Communications – John Eline, Adams County

Technical – Joseph Mitchell, Clearfield County

Plan Concurrence Letters Status- adjacent Region Plans

Region 36 800MHz Plan - DRAFT 2

Recent changes, additions, etc:

- Paragraphs 1 and 2 updated with current information
- Annex C added July 16 meeting notifications, meeting agendas, and meeting minutes

Date, time and location of next meeting:

September 17, 2008 2:00 p.m. Location -

(NOTE: This date conflicts with PEMA Conferences at Penn State which end at 1300 on September 17; consider having the September meeting at Penn State on that date or consider changing date)

Adjourn

MINUTES FORM THE AUGUST 20, 2008 MEETING

Region 36 700 MHz Regional Planning Committee

Meeting Minutes

August 20, 2008 2:00 p.m. - 3:00 p.m.

The fourth meeting of the Region 36 700 MHz Regional Planning Committee was called to order by Chairman Randy Brozenick at 2:00 p.m. at the Clearfield County EOC.

The following were present:

Randy Brozenick, Armstrong County-Chairman Rich Matason, Westmoreland County-Secretary John Riley, NWCERG Andrew Duli Jim Kaczynski, TransCore Vicky Church, Trans Core Bette Rinehart, Motorola Corp. Joe Mitchell, Clearfield County Dave Fox, Somerset 911 Beverly Cunningham, Somerset 911 Mike McGrady, NWCERG Jim Bitting, Kimball Roger Kohr, Tyco Electronics Dale Neff, Centre County

<u>Teleconference</u>:

John Rowntree, Allegheny County DES John Eline, Adams County DES

Video-teleconference:

Mark Brammell, Westmoreland County DPS

Chairman Brozenick asked Secretary Rich Matason for administrative announcements. Rich asked the group to forward to him the names and email addresses of anyone who they thought mi8ght be interested in being part of the Committee and he would add them to the mailing list.

Chairman Brozenick called for a review of the meeting minutes from July 16, 2008 and asked for additions, changes and/or deletions. Hearing none, the minutes were accepted as reported.

Committee reports:

Policy/Procedures: Pete Pasqua - No report.

Interoperability – John Rowntree advised that he has received a couple of offers from people to participate on his committee and he was still in the process of getting organized. No further report.

Plan Writing – Rich Matason advised that DRAFT 2 was posted to the WCDPS website and contained all of the changes he has received to date.

Implementation and Communications – John Eline advised that a recruiting email has been sent out to build up membership on his committee. No further report.

Technical – Joe Mitchell advised that an email has been sent out soliciting membership for his committee. He currently has three members plus himself. His committee will start moving forward with their review of their part of the plan and will have a report at the next meting.

New Business:

Plan Concurrence Letters for Adjacent region Plans.

No new letters have been received. It was noted that Region 20 recently received its plan approval notification from the FCC.

Region 36 Plan – DRAFT 2

Rich Matason reported that paragraphs 1 and 2 of the plan have been updated with changes provided by Mike McGrady. Mike suggested that future drafts of the plan show tracked changes that have been made to make it easier for everyone to pick them out. Rich also noted that all of the meeting announcements, meeting agendas, and meeting minutes are located at Annex C of the Plan. Also, the membership list in Annex A will also be updated after each meeting. There are currently 33 members on the Committee – 22 voting and 11 non-voting.

New Business:

It was recommended that the Secretary send out an email to all email recipients listing the name and contact information for all Committee Chairmen and requesting that interested parties contact the Chairman of the Committee on which they would be willing to participate.

Joe Mitchell asked how we want changes to be posted to the Plan. It was decided that questions and comments should be directed to the appropriate Committee chair, and then introduced by the Chair for discussion at a general meeting before they are added to the Plan.

Mike McGrady advised that there is a National Committee on 700 MHz that is available as a resource to help us write our plan. He also advised that he will send a review of the Plan to Joe Mitchell and Mike Rearick for parceling out to the appropriate committees for their review. On the issue of spectrum give back that was discussed at the last meeting, Mike McGrady agreed to re-write both the "give-back" and the "negotiate with adjacent counties" sections of the Plan and will send those recommendations to the appropriate Committees for review

A discussion was held concerning whether the Committee should set a deadline as to when people could become members of the Committee. Also discussed was the idea of setting a goal for committee recruitment and once that date has passed we should move forward with the people we have that have expressed an interest. It was pointed out that the FCC would not look favorably on any membership restrictions. In addition, Bette Rinehart noted that we must hold a public meeting to approve the final plan and it must appeal to the widest possible audience. Therefore it would not be in the best interest of the Committee to restrict membership.

A discussion was held on how to reach the widest audience possible. It was suggested that the Committee consider holding its meeting in association with other organizations that share an interest in the 700 MHz Plan issue. Mike McGrady suggested that our next meeting be held in conjunction with the NENA Conference at the Toftrees in Penn State on the pre-session day, Wednesday, September 10. Mike agreed to arrange for a meeting room. Future meetings could be held in association wit the APCO conference later this year.

The next meeting of the Committee will be on September 10 at 1400 hours at the Toftrees near Penn State.

The meeting was adjourned at 1445 hours.

Respectfully submitted,

Rich Matason Westmoreland County Public Safety Director

Secretary

ANNOUNCEMENT OF THE SEPTEMBER 10 MEETING:

From: RICH MATASON [mailto:rmatason@co.westmoreland.pa.us]
Sent: Friday, August 22, 2008 11:08 AM

To: 'Allen Weaver - 911 Coordinator'; 'Andrew Duli'; 'Berniece Jarbeck - 911 Coordinator'; 'Bette Rinehart'; 'Beverly Cunningham'; Bill Fleming (bfleming@co.westmoreland.pa.us); 'Carol Peretin -911 Coordinator'; 'Chad Aucker - 911 Coordinator'; 'Clint Heiser'; 'Dale Baer'; 'Dale Neff'; 'Dan Tancibok'; 'Dan Tancibok - 911 Coordinator'; 'David Fox - 911 Coordinator'; 'Debra Archer - 911 Coordinator'; 'Donna Powers'; 'Frank Jannetti, Jr. - 911 Coordinator'; 'Frank Matis - 911 Coordinator'; Guy Napolillo (gnapolillo@fcema.org); 'James Bitting'; 'James Thompson - 911 Coordinator'; 'Jeff Parish - 911 Coordinator'; 'Jeffrey Yates - 911 Coordinator'; 'Jerry Flasher - 911 Coordinator'; 'Jim Kaczynski'; 'Jo Lewis'; 'Joe Mitchell'; JOE NIEDZALKOSKI (iniedzal@co.westmoreland.pa.us); 'John Grappy - 911 Coordinator'; 'John Harris - 911 Coordinator'; 'John Hetrick - 911 Coordinator'; 'John Nicklin'; 'John Riley'; 'John Rowntree'; 'Keith Leto'; 'Kevin Fanning'; 'Kevin McGeary'; 'Kevin Nicholson - 911 Coordinator'; 'Larry Norton - 911 Coordinator'; 'Larry Smeigh - 911 Coordinator'; 'Laura Narby - 911 Coordinator'; 'Lisa Wagner -911 Coordinator'; 'Marcie Emhoff - 911 Coordinator'; Mark Brammell (mbrammel@co.westmoreland.pa.us); 'Mary Bowers'; Matuszky, Tony (tmatuszk@co.westmoreland.pa.us); 'Mike McGrady'; 'Norman Coltri'; 'Pam Corley - 911 Coordinator'; 'Paul Beatty - 911 Coordinator'; Pete Calisti (pcalisti@co.westmoreland.pa.us); 'Pete Pasqua'; 'Philip Lucas - 911 Coordinator'; 'Randy Howell'; Rich Matason (rmatason@co.westmoreland.pa.us); 'Robert Repasky - 911 Coordinator'; 'Roger Kohr'; 'Ronald Baustert'; Sam Sarraff (docsam@comcast.net); Sandy Smythe (Sandy Smythe); 'Scott Beveridge - 911 Coordinator'; 'Scott Henry - 911 Coordinator'; Seighman, Mark (mseighma@co.westmoreland.pa.us); 'Steve Rembold - 911 Coordinator'; 'Theodore Wise - 911 Coordinator'; 'Todd Lake - 911 Coordinator'; 'Todd Oleary - 911 Coordinator'; 'Tracey Zents'; 'Wesley Hill - 911 Coordinator'; Allen Clark (AClark@co.crawford.pa.us); bamanning@mckeancountypa.org; bfrantz@ClintonCountyPA.com; camoes@cameroncountypa.com; Dcubbison@Bedfordcountypa.org; drobinson@ecdops.org; ema@huntingdoncounty.net; gdennis@winbeam.net; John Eline (jeline@adamscounty.us); iquigley@clearfield911.com; jsteiner@pottercountypa.net; Linda Holmes (jeffcoema2@alltel.net); Michael McAllister (elkoes@ncentral.com); Michael T Rearick (mrearick@oes.clarion.pa.us); rkrockey@co.centre.pa.us; sdutko@co.franklin.pa.us; shale@co.forest.pa.us; thess@unionco.org; tsherman@co.venango.pa.us; vjoyce@fultoncntypa.org; Bob Full (rfull@county.allegheny.pa.us); Brian Feist (bfeist@co.cambria.pa.us); Brian Melcer (bmelcer@co.lawrence.pa.us); Jeff Marshall (JMarshall@co.greene.pa.us); John Nicklin (inicklin@mcc.co.mercer.pa.us); Mike Huss (mike.huss@city.pittsburgh.pa.us); Ray DeMichiei (raymond.demichiei@city.pittsburgh.pa.us); Rich Lohr (lohrr@co.somerset.pa.us); rjbrozenick@co.armstrong.pa.us; Ron Springer (rspringer@co.cambria.pa.us); Roy Jr Shipley (rshipley@fcema.org); 'Tom Stutzman' Subject: Region 36 700 MHz Committee Meeeting-September 10

Hello everyone

The next meeting of the Region 36 700 MHz Committee will be held at 2:00 pm on September 10, 2008 at the Toftrees Hotel and Resort, Penn State, in conjunction with the first day of the NENA Conference.

A copy of the meeting Agenda and a copy of the August 20 meeting minutes are attached.

I have posted DRAFT 3 to the following website: www.wcdps.org . I have also attached a copy to this email.

If you know of someone who is should be receiving these emails but is not, please advise me by return email and provide me their email address to add to the mailing list. I cannot get information to interested parties if I do not have a good email address.

Thanks. See you on the 10th.

Regards

Rich

Rich Matason, Director Westmoreland County Department of Public Safety 911 Public Safety Road Greensburg, PA 15601

Office: 724.600.7301 Cell: 724.640.6600 Fax: 724.600.7388 Pager: 724.853.0851

Email: rmatason@co.westmoreland.pa.us

"It is only by doing things others have not that one can advance."

General George S. Patton

AGENDA FOR THE SEPTEMBER 10 MEETING:

Region 36 700 MHz Working Group

September 10, 2008 2:00 p.m. - 4:00 p.m.

Toftrees Penn State Clearfield, PA

Welcome and Introductions – Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Review Minutes of August 20, 2008

Committee Reports

Policy/ Procedures - Pete Pasqua, Fayette County

Interoperability – John Rowntree, Allegheny County

Plan Writing – Rich Matason, Westmoreland County

Implementation and Communications – John Eline, Adams County

Technical – Joseph Mitchell, Clearfield County

Plan Concurrence Letters Status- adjacent Region Plans

Region 36 800MHz Plan - DRAFT 3

New Business

Date, time and location of next meeting:

October 15, 2008 2:00 p.m. Location - TBD

Adjourn

MINUTES OF THE SEPTEMBER 10 MEETING:

Region 36 700 MHz Regional Planning Committee

Meeting Minutes

September 10, 2008 2:00 p.m. - 2:45 p.m.

The fifth meeting of the Region 36 700 MHz Regional Planning Committee was called to order by Secretary/Treasurer Rich Matason, acting as Chair for this meeting, at 2:00 p.m. at the Toftrees Hotel and Resort, Penn State.

The following were present:

Rich Matason, Westmoreland County-Secretary
Mike McGrady, NWCERG
Mark Cress, Motorola Corp.
Randy Howell, Motorola Corp.
Bette Rinehart, Motorola Corp.
Judith R. Bracken, Chester County and Region 28
Jay Groce, Chester County and NRPC Eastern District
Vicky Church, Trans Core
Jeff Logan, Tyco Electronics
John Riley, NWCERG
Jeff parish, Lawrence County 911
Jim Kaczynski, TransCore
Roger Kohr, Tyco Electronics

Teleconference:

John Rowntree, Allegheny County DES John Eline, Adams County DES Jo Lewis Joe Mitchell, Clearfield County Pete Pasqua Jason Craig Dan Smith, Kimball

Secretary Rich Matason called the meeting to order at 2:00 p.m. He then reviewed the minutes form the August 10, 2008 meeting. No corrections were noted and the minutes were approved as read.

Committee reports:

Policy/Procedures - Pete Pasqua reported that Jo Lewis and Guy Napolillo will be serving on his Committee. No additional information to report.

Interoperability – John Rowntree advised that his committee is in a holding pattern. No further report. Randy Howell volunteered for his committee.

Plan Writing – Rich Matason advised that DRAFT 3 was posted to the WCDPS website and contained all of the changes he has received to date.

Implementation and Communications – John Eline advised that the following will be members of his committee: Kevin Fanning, John Caulfield, Bette Rinehart, Vicki Church, Mary Bowers. Members reviewed major responsibilities of the committee which include: developing a template for the priority matrix; drafting a letter to send out to neighboring regions for plan concurrence; interagency dispute resolution policy; public information especially before the required annual meeting; help with maintaining records, minutes, etc.

Technical – Joe Mitchell advised that his committee has not met yet but will move forward by next meeting. Joe is reviewing the material that Mike McGrady sent him. Mark Cress from Motorola volunteered to be on this committee. Tyco Electronics will send a representative to this committee. Kenwood and Motorola will also provides engineers for membership on this committee.

<u>Plan Concurrence Letters for Adjacent region Plans.</u>

No new letters have been received.

Region 36 Plan – DRAFT 3

Appendix A and C were updated.

Mike McGrady will send some tracked changes that will be added to Draft 4.

New Business:

Jay Groce - discussed the NRPC and discussed an NRPC brochure which is going to be sent to all members separately. The NRPC can assist the regional planning committee in education and training, and provides information we may be looking for as we write our plan that other regions have already done.

He has a list of national region committee contacts and we advised him that all of our current contact information is currently in our Draft Plan

He also advised that the FCC will be conducting a new 700 Mhz spectrum auction in the near future.

Jay will send the secretary a copy of the NRPC brochure electronically so that he can send it out to the membership prior to the next meeting.

The next meeting of the Committee will be on October 15 at 1400 hours at the Lawrence County EOC. Video-teleconferencing will be available.

The meeting was adjourned at 1445 hours.

Respectfully submitted,

Rich Matason Westmoreland County Public Safety Director

Secretary

ANNOUNCEMENT OF THE OCTOBER 15 MEETING:

From: RICH MATASON [mailto:rmatason@co.westmoreland.pa.us]

Sent: Wednesday, October 08, 2008 11:49 AM To: 'Allen Weaver - 911 Coordinator'; 'Andrew Duli'; 'Berniece Jarbeck - 911 Coordinator'; 'Bette Rinehart'; 'Beverly Cunningham'; Bill Fleming (bfleming@co.westmoreland.pa.us); 'Carol Peretin -911 Coordinator'; 'Chad Aucker - 911 Coordinator'; 'Clint Heiser'; 'Dale Baer'; 'Dale Neff'; 'Dan Tancibok'; 'Dan Tancibok - 911 Coordinator'; 'David Fox - 911 Coordinator'; 'Debra Archer - 911 Coordinator'; 'Donna Powers'; 'Frank Jannetti, Jr. - 911 Coordinator'; 'Frank Matis - 911 Coordinator'; Guy Napolillo (gnapolillo@fcema.org); 'James Bitting'; 'James Thompson - 911 Coordinator'; 'Jeff Parish - 911 Coordinator'; 'Jeffrey Yates - 911 Coordinator'; 'Jerry Flasher - 911 Coordinator'; 'Jim Kaczynski'; 'Jo Lewis'; 'Joe Mitchell'; JOE NIEDZALKOSKI (iniedzal@co.westmoreland.pa.us); 'John Grappy - 911 Coordinator'; 'John Harris - 911 Coordinator'; 'John Hetrick - 911 Coordinator'; 'John Nicklin'; 'John Riley'; 'John Rowntree'; 'Keith Leto'; 'Kevin Fanning'; 'Kevin McGeary'; 'Kevin Nicholson - 911 Coordinator'; 'Larry Norton - 911 Coordinator'; 'Larry Smeigh - 911 Coordinator'; 'Laura Narby - 911 Coordinator'; 'Lisa Wagner -911 Coordinator'; 'Marcie Emhoff - 911 Coordinator'; Mark Brammell (mbrammel@co.westmoreland.pa.us); 'Mary Bowers'; Matuszky, Tony (tmatuszk@co.westmoreland.pa.us); 'Mike McGrady'; 'Norman Coltri'; 'Pam Corley - 911 Coordinator'; 'Paul Beatty - 911 Coordinator'; Pete Calisti (pcalisti@co.westmoreland.pa.us); 'Pete Pasqua'; 'Philip Lucas - 911 Coordinator'; 'Randy Howell'; 'Rich Cashera'; Rich Matason (rmatason@co.westmoreland.pa.us); 'Robert Repasky - 911 Coordinator'; 'Roger Kohr'; 'Ronald Baustert'; Sam Sarraff (docsam@comcast.net); Sandy Smythe (Sandy Smythe); 'Scott Beveridge - 911 Coordinator'; 'Scott Henry - 911 Coordinator'; Seighman, Mark (mseighma@co.westmoreland.pa.us); 'Steve Rembold - 911 Coordinator'; 'Theodore Wise - 911 Coordinator'; 'Todd Lake - 911 Coordinator'; 'Todd Oleary - 911 Coordinator'; 'Tracey Zents'; 'Wesley Hill - 911 Coordinator'; Allen Clark (AClark@co.crawford.pa.us); bamanning@mckeancountypa.org; bfrantz@ClintonCountyPA.com; camoes@cameroncountypa.com; Dcubbison@Bedfordcountypa.org; drobinson@ecdops.org; ema@huntingdoncounty.net; gdennis@winbeam.net; John Eline (jeline@adamscounty.us); iquigley@clearfield911.com; jsteiner@pottercountypa.net; Linda Holmes (jeffcoema2@alltel.net); Michael McAllister (elkoes@ncentral.com); Michael T Rearick (mrearick@oes.clarion.pa.us); rkrockey@co.centre.pa.us; sdutko@co.franklin.pa.us; shale@co.forest.pa.us; tsherman@co.venango.pa.us; vjoyce@fultoncntypa.org; Bob Full (rfull@county.allegheny.pa.us); Brian Feist (bfeist@co.cambria.pa.us); Brian Melcer (bmelcer@co.lawrence.pa.us); Jeff Marshall (JMarshall@co.greene.pa.us); John Nicklin (inicklin@mcc.co.mercer.pa.us); Mike Huss (mike.huss@city.pittsburgh.pa.us); Ray DeMichiei (raymond.demichiei@city.pittsburgh.pa.us); Rich Lohr (lohrr@co.somerset.pa.us); rjbrozenick@co.armstrong.pa.us; Ron Springer (rspringer@co.cambria.pa.us); Roy Jr Shipley (rshipley@fcema.org); 'Tom Stutzman'

Hello everyone

Subject: October 15 Region 36 700 MHz Meeting

This is a reminder that the monthly meeting of the region 36 700 MHz Planning Committee will be held on October 25 at 1400 hours in the Lawrence County EOC.

A copy of the agenda for that meeting is attached. Also attached is DRAFT \$ of the Region 36 Plan and the minutes from our September 10 meeting at the Toftrees.

Lawrence County EOC has video-teleconferencing capability through the Region 13 Polycom system for those of you who cannot attend the meeting in person. Since all Region 13 counties have this capability, please check with your nearest Region 13 county coordinator to se if their teleconferencing capability would be available to you.

DRAFT 4 has been posted to the <u>www.wcdps.org</u> web site.

Regards

Rich Matason, Director Westmoreland County Department of Public Safety 911 Public Safety Road Greensburg, PA 15601

Office: 724.600.7301 Cell: 724.640.6600 Fax: 724.600.7388 Pager: 724.853.0851

Email: rmatason@co.westmoreland.pa.us

"It is only by doing things others have not that one can advance."

General George S. Patton

AGENDA FOR THE OCTOBER 15 MEETING

Region 36 700 MHz Working Group

October 15, 2008 2:00 p.m. - 4:00 p.m.

Lawrence County EOC 110 East Lincoln Ave #2B New Castle, 16101

Welcome and Introductions – Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Review Minutes of September 10, 2008

Committee Reports

Policy/ Procedures - Pete Pasqua, Fayette County

Interoperability – John Rowntree, Allegheny County

Plan Writing - Rich Matason, Westmoreland County

Implementation and Communications – John Eline, Adams County

Technical – Joseph Mitchell, Clearfield County

Plan Concurrence Letters Status- adjacent Region Plans

Region 36 800MHz Plan - DRAFT 4

New Business

Date, time and location of next meeting:

November 19, 2008 2:00 p.m. Location – TBD

Adjourn

MINUTES FROM THE OCTOBER 15 MEETING;

Region 36 700 MHz Regional Planning Committee

Meeting Minutes

October 15,, 2008 2:00 p.m. - 2:45 p.m.

The sixth meeting of the Region 36 700 MHz Regional Planning Committee was called to order by Chairman Randy Brozenick at 2:00 p.m. at the Lawrence County EOC, new Castle PA.

The following were present:

Randy Brozenick, Armstrong County-Chairman Rich Matason, Westmoreland County-Secretary Randy Howell, Motorola Corp. Vicky Church, Trans Core John Riley, NWCERG Brian Melcer, Lawrence County EMA Jeff Parish, Lawrence County 911 Mike McGrady, NWCERG

Teleconference:

John Rowntree, Allegheny County DES
Mary Bowers, Adams County DES
Dale Neff, Centre County
Pete Pasqua, Fayette County
Guy Napolillo, Fayette County
Joe Mitchell, Clearfield County
Mike Rearick, Vice-Chairman, Clarion County
Dan Tancibok, Centre County EMA
Bette Rinehart, Motorola
Keith Leto, Harrisburg Radio Office

Secretary Rich Matason reviewed the minutes from the September 10, 2008 meeting. No corrections were noted and the minutes were approved as read.

Committee reports:

Policy/Procedures - Pete Pasqua reported that he reviewed Plan DRAFT 4 and had no changes to recommend at this time. He is also looking at some of the sites that are referred to in the emails we have been sending out for any useful information there.\

Interoperability – John Rowntree reported that the committee has not had any issues to review or report on.

Plan Writing – Rich Matason advised that DRAFT 4 was posted to the WCDPS website and contained all of the changes he has received to date. Comments that Mike sent have been added to the current draft.

Implementation and Communications – Bette Rinehart reported that the drafts for the concurrences for adjacent regions have been written, and so have the interregional dispute resolution agreements using existing FCC templates. They also have a template for the scoring matrix and the committee will be meeting to review that and make recommendations. This should be ready to send out in November. Randy asked the committee to prepare a matrix of concurrence requests that we have received (Regions 20, 8, 30, 55 and any others) and send back to the requestor and the current the status of those plans. This should also be ready for distribution in November. Rich Matason asked that Bette send him an electronic version of the templates they have developed so far so that they can be posted to the website for review. Bette reviewed the content of each letter verbally and also agreed to send it to Rich for posting.

Technical – Joe Mitchell advised that he sent out the technical committee portion of the plan to all committee members and is waiting to hear back from them. He will them report back to the main committee. Joe was asked to send a copy of his report to the secretary for positing to the website when it was completed.

Plan Concurrence Letters for Adjacent Region Plans.

No new letters have been received.

New Business:

Randy asked if everyone has reviewed the plan and if we are headed in the right direction. He asked if we should set a time line for completion of the plan. Originally we had intended to have a good final draft by December.

Rich asked Bette if she felt we were on track for having the plan done by February. She indicated that if we could get all of the committee work done and in, we would be moving along satisfactorily. She felt if we had the input from the technical and the communications and implementation committees we should be in good shape.

Randy wanted to know if we were sending information out to all the people that should get it so that they could make an informed decision of whether or not they were interested in getting 700 MHz frequencies. Several email lists are currently being used. Bette

suggested that their committee could send out a letter inquiring if the recipients were planning on using the 700 MHz frequencies. John Riley did not see a real need to gather that information at the expense of actually finishing the plan first. Mike McGrady felt the potential user community may be waiting to see the plan first before making any decision on using the 700 MHz frequencies. Therefore the plan must come first.

A discussion was held concerning the current allocation of frequencies by County. It was pointed out that on the CAPRAD database a listing of which county was allocated which frequencies was already done and available for review. These frequency allocations are only place holders however. A plan must still be in place first so that counties can actually begin to develop their plans for negotiating the use of the allocated frequency spectrum.

Guy Napolillo asked if the committee would be monitoring the frequency growth plan once our region plan was in place. It was noted that the FCC would be doing that, not the regional committee.

Randy closed the meeting by asking once again that the committees review their materials and provide their input as soon as possible so that we can keep to our proposed timeline for the completion of the plan.

The next meeting of the Committee was originally scheduled for November 19 but was changed to Tuesday November 18 at 1400 hours due to conflict with two regional task force events. The location will be the Fayette County EOC, pending approval from Fayette County EMA. Region 13 video-teleconferencing will be available. There also will be a teleconferencing bridge established for those who would like to attend via teleconference. The number is 1-877-252-4049; Pass code is 911.

The meeting was adjourned at 1445 hours.

NOTE: Due to a communications mix-up, it was necessary on November 18 to change the meeting to Tuesday, November 25 at the time and place listed above.

Respectfully submitted,

Rich Matason Westmoreland County Public Safety Director

Secretary

ANNOUNCEMENT OF THE NOVEMBER 25 MEETING

From: SANDRA SMYTHE [mailto:ssmvthe@co.westmoreland.pa.us]

Sent: Tuesday, November 18, 2008 9:13 AM

To: rmatason@co.westmoreland.pa.us; 'Allen Weaver - 911 Coordinator'; 'Andrew Duli'; 'Berniece Jarbeck - 911 Coordinator'; 'Bette Rinehart'; 'Beverly Cunningham'; 'Bill Fleming'; 'Carol Peretin -911 Coordinator'; 'Chad Aucker - 911 Coordinator'; 'Clint Heiser'; 'Dale Baer'; 'Dale Neff'; 'Dan Tancibok'; 'Dan Tancibok - 911 Coordinator'; 'David Fox - 911 Coordinator'; 'Debra Archer - 911 Coordinator'; 'Donna Powers'; 'Frank Jannetti, Jr. - 911 Coordinator'; 'Frank Matis - 911 Coordinator'; 'Guy Napolillo'; 'James Bitting'; 'James Thompson - 911 Coordinator'; 'Jeff Parish -911 Coordinator'; 'Jeffrey Yates - 911 Coordinator'; 'Jerry Flasher - 911 Coordinator'; 'Jim Kaczynski'; 'Jo Lewis'; 'Joe Mitchell'; 'JOE NIEDZALKOSKI'; 'John Grappy - 911 Coordinator'; 'John Harris - 911 Coordinator'; 'John Hetrick - 911 Coordinator'; 'John Nicklin'; 'John Riley'; 'John Rowntree'; 'Keith Leto'; 'Kevin Fanning'; 'Kevin McGeary'; 'Kevin Nicholson - 911 Coordinator'; 'Larry Norton - 911 Coordinator'; 'Larry Smeigh - 911 Coordinator'; 'Laura Narby - 911 Coordinator'; 'Lisa Wagner - 911 Coordinator'; 'Marcie Emhoff - 911 Coordinator'; 'Mark Brammell'; 'Mary Bowers'; 'Matuszky, Tony'; 'Mike McGrady'; 'Norman Coltri'; 'Pam Corley - 911 Coordinator'; 'Pete Calisti'; 'Pete Pasqua'; 'Philip Lucas - 911 Coordinator'; 'Randy Howell'; 'Rich Cashera'; 'Robert Repasky - 911 Coordinator'; 'Roger Kohr'; 'Ronald Baustert'; 'Sam Sarraff'; 'Scott Beveridge - 911 Coordinator'; 'Scott Henry - 911 Coordinator'; 'Seighman, Mark'; 'Steve Rembold - 911 Coordinator'; 'Theodore Wise - 911 Coordinator'; 'Todd Lake - 911 Coordinator'; 'Todd Oleary - 911 Coordinator'; 'Tracey Zents'; 'Wesley Hill - 911 Coordinator'; 'Allen Clark'; bamanning@mckeancountypa.org; bfrantz@ClintonCountyPA.com; camoes@cameroncountypa.com; Dcubbison@Bedfordcountypa.org; drobinson@ecdops.org; ema@huntingdoncounty.net; qdennis@winbeam.net; 'John Eline'; jquiqley@clearfield911.com; jsteiner@pottercountypa.net; 'Linda Holmes'; 'Michael McAllister'; 'Michael T Rearick'; rkrockey@co.centre.pa.us; sdutko@co.franklin.pa.us; shale@co.forest.pa.us; tsherman@co.venango.pa.us; vjoyce@fultoncntypa.org; 'Bob Full'; 'Brian Feist'; 'Brian Melcer'; 'Jeff Marshall'; 'John Nicklin'; 'Mike Huss'; 'Ray DeMichiei'; 'Rich Lohr'; rjbrozenick@co.armstrong.pa.us; 'Ron Springer'; 'Roy Jr Shipley'; 'Tom Stutzman' Subject: November Region 36 Meeting Confirmation

Good Morning,

The Region 36 700 MHz meeting has been scheduled for Tuesday, November 25, 2008 at 14:00 at the Fayette County EMA Office. There has been a bridge established for those of you who would like to attend via teleconference. The number is 1-877-252-4049, Passcode of 911. More information on the minutes / agenda will be forwarded as it becomes available.

Sandra Smythe
Administrative Officer
Westmoreland County Department of Public Safet
911 Public Safety Road
Greensburg, PA 15601
Phone: 724-600-7306
Fax: 724-600-7388

E-Mail: ssmythe@co.westmoreland.pa.us

"All that is necessary for the triumph of evil is for good men to do nothing."

Sir Edmund Burke

AGENDA OF THE NOVEMBER 25 MEETING

Region 36 700 MHz Working Group

November 25, 2008 2:00 p.m. - 4:00 p.m.

Fayette County EOC

24 East Main St Public Service Building, 4th Floor
Uniontown, 15401

Welcome and Introductions – Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Review Minutes of October 15, 2008

Committee Reports

Policy/ Procedures - Pete Pasqua, Fayette County

Interoperability – John Rowntree, Allegheny County

Plan Writing (DRAFT 5) – Rich Matason, Westmoreland County

Implementation and Communications – John Eline, Adams County

Technical – Joseph Mitchell, Clearfield County

Plan Concurrence Letters Status- adjacent Region Plans

New Business

Date, time and location of next meeting:

December 17, 2008 2:00 p.m. Location – TBD

Adjourn

MINUTES OF THE NOVEMBER 25 MEETING

Region 36 700 MHz Regional Planning Committee

Meeting Minutes

November 25, 2008 2:00 p.m. - 3:00 p.m.

The seventh meeting of the Region 36 700 MHz Regional Planning Committee was called to order by Chairman Randy Brozenick at 2:00 p.m. at the Fayette County EOC, Uniontown PA.

The following were present:

Randy Brozenick, Armstrong County-Chairman Mike McGrady, NWCERG Bette Rinehart, Motorola Pete Pasqua, Fayette County EMA/911 Guy Napolillo, Fayette County EMA/911

Teleconference:

Mary Bowers, Adams County DES
John Eline. Adams County DES
Dan Tancibok, Centre County EMA
Dale Neff, Centre County 911
Joe Mitchell, Clearfield County EMA
Al Smith, Kimball
Jim Kaczynski, Transcore
Vicki Church, Transcore
Kevin Fanning, Clinton County DES

Video-teleconference:

Rich Matason, Westmoreland County-Secretary Rick Lohr, Somerset County DES Dave Fox, Somerset County 911 Jason Craig, Greene County EMA

Secretary Rich Matason reviewed the minutes from the October 15, 2008 meeting. No corrections were noted and the minutes were approved as read.

Committee reports:

Policy/Procedures – There was nothing new to report since last meeting.

Interoperability – There was nothing new to report since last meeting.

Plan Writing – DRAFT 5 was posted to the WCDPS website. No new changes or additions were noted.

Implementation and Communications – There was nothing new to report since last meeting.

Technical – Joe Mitchell advised Allen Smith from Kimball will be joining his committee and, otherwise, nothing new to report since last meeting.

Plan Concurrence Letters for Adjacent Region Plans.

No new request for concurrence letters were received from neighboring regions.

New Business:

Chairman Brozenick opened a discussion on the letters of concurrence. He expressed concern that we need to make sure that we have sent letters of concurrence out to all of the regions that have asked us for them because we will be sending our plan out shortly and we will be asking the same of them. After some discussion it was noted that in the June 18 minutes for this Committee that concurrence letters have been sent out by us for the following regional plans: 20, 8, 30 and 55. We still need to know if we sent a concurrence letter out to Region 28, since we did receive a copy of their plan also. The Technical Committee will review the Region 28 plan and issue a letter of concurrence if all is in order.

Chairman Brozenick called for questions on DRAFT 5 of the plan. Hearing none, he stated that he would like to have a FINAL DRAFT of the plan for the January meeting. He proposed that we do not meet in December and that all committees meet and review their portions of the plan assigned to them and get their changes into Secretary Matason no later than December 17. Secretary Matason will add those changes to the FINAL DRAFT and will send it out to the membership during the first week of January. Members will review the FINAL DRAFT prior to the January meeting and will come prepared to make any last minute changes if necessary and to vote on the plan. The final version and requests for letters of concurrence will be sent out to our surrounding regions by February with the hope that we get their letters of concurrence back quickly so that we can them forward the plan to the FCC for approval.

Secretary Matason will notify all the members that the January meeting is a voting meeting on the plan and that they can vote in person, by video-teleconference or by phone bridge teleconference.

The next meeting of the Committee is scheduled for January 21, 2009 at 1400 hours at the Westmoreland County EOC in Greensburg. Region 13 video-teleconferencing will be available. There also will be a teleconferencing bridge established for those who would like to attend via teleconference. The number is 1-877-252-4049; Pass code is 911.

The meeting was adjourned at 1500 hours.

Respectfully submitted,

Rich Matason Westmoreland County Public Safety Director

Secretary

Announcement of the January 21, 2009 Voting Meeting:

From: RICH MATASON [mailto:rmatason@co.westmoreland.pa.us]

Sent: Monday, January 12, 2009 3:36 PM

To: 'Allen Weaver - 911 Coordinator'; 'Andrew Duli'; 'Berniece Jarbeck - 911 Coordinator'; 'Bette Rinehart'; 'Beverly Cunningham'; Bill Fleming (bfleming@co.westmoreland.pa.us); 'Carol Peretin -911 Coordinator'; 'Chad Aucker - 911 Coordinator'; 'Clint Heiser'; 'Dale Baer'; 'Dale Neff'; 'Dan Tancibok'; 'Dan Tancibok - 911 Coordinator'; 'David Fox - 911 Coordinator'; 'Debra Archer - 911 Coordinator'; 'Donna Powers'; 'Frank Jannetti, Jr. - 911 Coordinator'; 'Frank Matis - 911 Coordinator'; Guy Napolillo (gnapolillo@fcema.org); 'James Bitting'; 'James Thompson - 911 Coordinator'; 'Jeff Parish - 911 Coordinator'; 'Jeffrey Yates - 911 Coordinator'; 'Jerry Flasher - 911 Coordinator'; 'Jim Kaczynski'; 'Jo Lewis'; 'Joe Mitchell'; JOE NIEDZALKOSKI (jniedzal@co.westmoreland.pa.us); 'John Grappy - 911 Coordinator'; 'John Harris - 911 Coordinator'; 'John Hetrick - 911 Coordinator'; 'John Nicklin'; 'John Riley'; 'John Rowntree'; 'Keith Leto'; 'Kevin Fanning'; 'Kevin McGeary'; 'Kevin Nicholson - 911 Coordinator'; 'Larry Norton - 911 Coordinator': 'Larry Smeigh - 911 Coordinator': 'Laura Narby - 911 Coordinator': 'Lisa Wagner -911 Coordinator'; 'Marcie Emhoff - 911 Coordinator'; Mark Brammell (mbrammel@co.westmoreland.pa.us); 'Mary Bowers'; Matuszky, Tony (tmatuszk@co.westmoreland.pa.us); 'Mike McGrady'; 'Norman Coltri'; 'Pam Corley - 911 Coordinator'; 'Paul Beatty - 911 Coordinator'; Pete Calisti (pcalisti@co.westmoreland.pa.us); 'Pete Pasqua'; 'Philip Lucas - 911 Coordinator'; 'Randy Howell'; Rich Matason (rmatason@co.westmoreland.pa.us); 'Roger Kohr'; 'Ronald Baustert'; Sam Sarraff (docsam@comcast.net); Sandy Smythe (Sandy Smythe); 'Scott Beveridge - 911 Coordinator'; 'Scott Henry - 911 Coordinator'; Seighman, Mark (mseighma@co.westmoreland.pa.us); 'Steve Rembold - 911 Coordinator'; 'Theodore Wise - 911 Coordinator'; 'Todd Lake - 911 Coordinator'; 'Todd Oleary - 911 Coordinator'; 'Tracey Zents'; 'Vicky Church'; 'Wesley Hill - 911 Coordinator'; Allen Clark (AClark@co.crawford.pa.us); bamanning@mckeancountypa.org; bfrantz@ClintonCountyPA.com; camoes@cameroncountypa.com; Dcubbison@Bedfordcountypa.org; drobinson@ecdops.org; ema@huntingdoncounty.net; qdennis@winbeam.net; John Eline (jeline@adamscounty.us); jquiqley@clearfield911.com; jsteiner@pottercountypa.net; Linda Holmes (jeffcoema2@alltel.net); Michael McAllister (elkoes@ncentral.com); Michael T Rearick (mrearick@oes.clarion.pa.us); rkrockey@co.centre.pa.us; sdutko@co.franklin.pa.us; shale@co.forest.pa.us; tsherman@co.venango.pa.us; vjoyce@fultoncntypa.org; Bob Full (rfull@county.allegheny.pa.us); Brian Feist (bfeist@co.cambria.pa.us); Brian Melcer (bmelcer@co.lawrence.pa.us); Jeff Marshall (JMarshall@co.greene.pa.us); John Nicklin (jnicklin@mcc.co.mercer.pa.us); Mike Huss (mike.huss@city.pittsburgh.pa.us); Ray DeMichiei (raymond.demichiei@city.pittsburgh.pa.us); Rich Lohr (lohrr@co.somerset.pa.us); rjbrozenick@co.armstrong.pa.us; Ron Springer (rspringer@co.cambria.pa.us); Roy Jr Shipley (rshipley@fcema.org); 'Tom Stutzman' Subject: IMPORTANT: REGION 36 700 MHZ PLAN VOTING MEETING

This email is official notification that the Region 36 700 MHz Regional Planning Committee will meet on January 21, 2009 at 1400 hours at the Westmoreland County Emergency Operations Center, 911 Public Safety Road, Greensburg, PA.

Importance: High

The purpose of this meeting is to conduct a final review of the FINAL DRAFT of the Region 36 700 MHz Plan and to VOTE on its approval so that we can send our plan to our adjacent Regions for their concurrence before we send it to the FCC for final approval.

As a voting member, you may cast your vote by one of the following three methods: (1) you may cast your vote in person; (2) you may cast your vote via teleconference - a teleconferencing bridge will be established for those who would like to attend via teleconference. The number is 1-877-252-4049; Pass code is 911; (3) you may cast your vote using the Region 13 Polycom teleconference network if you have access to one of the terminals. Only voting members as defined in the by-laws may vote. A voting organization my cast only one vote per organization.

For your convenience, a copy of the FINAL DRAFT of the plan with edits and current changes is attached so that you may read it over prior to the January 21 meeting. Note that paragraph 4 contains the suggested priority matrix. Appendix E contains sample letters of concurrence. Appendix F contains sample Intraregion Dispute Resolution agreements. Also, all technical committee changes have been posted. A copy of the FINAL DRAFT has been posted to the www.wcdps.org website as well.

If you have any additional changes to suggest, please do so prior to January 21 by emailing them directly to the appropriate committee chair for the chairperson's consideration before it is sent to me for inclusion in the final draft.

I have also attached a copy of the agenda for the January 21st meeting for your information.

Best regards,

Rich

Rich Matason, Director Westmoreland County Department of Public Safety 911 Public Safety Road Greensburg, PA 15601

Office: 724.600.7301 Cell: 724.640.6600 Fax: 724.600.7388 Pager: 724.853.0851

Email: rmatason@co.westmoreland.pa.us

"It is only by doing things others have not that one can advance."

General George S. Patton

Agenda for the January 21, 2009 Meeting:

Region 36 700 MHz Working Group

January 21, 2009 2:00 p.m. - 4:00 p.m.

Westmoreland County EOC 911 Public Safety Road Greensburg, PA 15601

Welcome and Introductions – Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Review Minutes of November 25, 2008

Committee Reports

Policy/ Procedures - Pete Pasqua, Fayette County

Interoperability – John Rowntree, Allegheny County

Plan Writing (FINAL DRAFT) – Rich Matason, Westmoreland County

Implementation and Communications – John Eline, Adams County

Technical – Joseph Mitchell, Clearfield County

Plan Concurrence Letters Status

Status of Region 28 Plan Concurrence Letter

New Business

Review of the FINAL DRAFT of the Plan

Vote on the Final Plan

Date, time and location of next meeting:

Adjourn

Minutes of the January 21, 2009 voting meeting:

Region 36 700 MHz Regional Planning Committee

Meeting Minutes

January 21, 2009 2:00 p.m. - 3:00 p.m.

The eighth meeting of the Region 36 700 MHz Regional Planning Committee was called to order by Chairman Randy Brozenick at 2:00 p.m. at the Westmoreland County EOC, Greensburg PA.

The following were present:

Randy Brozenick, Armstrong County-Chairman Rich Matason, Westmoreland County-Secretary Bette Rinehart, Motorola Jim Kaczynski, Transcore Ron Baustert, Armstrong County Mark Cress, Motorola Randy Howell, Motorola Pete Pasqua, Fayette County Mark Brammell, Westmoreland County

Teleconference:

Mike McGrady, NWCERG
John Eline. Adams County DES
Dan Tancibok, Centre County EMA
Dale Neff, Centre County 911
Joe Mitchell, Clearfield County EMA
Curt Andrich, Kimball
Andy Duli- resident, Westmoreland County
Al Smith, Kimball
Keith Leto, Commonwealth of PA
Jeff Parrish, Lawrence County

Video Teleconference

Jason Craig, Greene County

Secretary Rich Matason reviewed the minutes from the November 25, 2008 meeting. No corrections were noted and the minutes were approved as read.

Committee reports:

Policy/Procedures – There was nothing new to report since last meeting.

Interoperability – There was nothing new to report since last meeting.

Plan Writing – DRAFT 5 was posted to the WCDPS website. No new changes or additions were noted.

Implementation and Communications – John Eline thanked Better Rinehart for all the work she put in to the concurrence letters.

Technical – Joe advised we could send the concurrence letter for the plan we recently received to evaluate.

Plan Concurrence Letters for Adjacent Region Plans.

Randy received concurrence letter requests back from Region 33 and Region 28 for his signature. Randy stated that he has processed all of the requests that Region 36 has received for concurrence from adjacent regions. Our concurrence letters requests are ready to send out to all adjacent regions we need to send them out to for their approval and signature. The technical committee will be sending five letters out: 20, 28, 33, 44, and 55. The plan will be sent along with the letter requests in .pdf format.

New Business:

Randy requested a review of the final draft of the plan.

Rich Matason moved to approve the plan; Pete Pasqua seconded the motion. All members entitled to vote approved the plan unanimously. The Secretary will put the plan in .pdf file format after all the mark-ups are removed and the plan is properly formatted.

The next meeting of the Committee, which is the required annual meeting, has been scheduled for May 15, 2009 at 1300 hours at the Westmoreland County Community College, Commissioners Hall in Youngwood.

NOTE: Meeting date was later changed by the chairman and secretary to May 26, due to Meeting Room availability. Meeting time was set for 1400 hours.

The meeting was adjourned at 1500 hours.

Respectfully submitted,

Rich Matason Westmoreland County Public Safety Director

Secretary

Announcement of the May 26, 2009 Annual Meeting

This email is official notification that the Region 36 700 MHz Regional Planning Committee will conduct its annual meeting as required by the Committee By-laws on May 26, 2009 at 1400 hours in Room 212, Commissioner's hall, Westmoreland County Community College, Youngwood Campus.

The purpose of this meeting is to conduct the annual committee meeting as required by the By-laws. The agenda for this meeting includes the following items:

- a. a review of the FINAL DRAFT of the Region 36 700 MHz Plan and notation of any recommendations for changes;
 - b. a review of the status of concurrence letters to our plan;
 - c. next steps for the committee.

For your convenience, a copy of the FINAL DRAFT of the plan is attached so that you may read it over prior to meeting. A copy of the FINAL DRAFT has been posted to the www.wcdps.org website as well.

If you have any additional changes to suggest, please do so prior to the meeting by emailing them directly to the appropriate committee chair for the chairperson's consideration before it is sent to me for inclusion on the Agenda..

I have also attached a copy of the agenda for the meeting for your information.

Best regards.

Rich

Rich Matason, Director Westmoreland County Department of Public Safety 911 Public Safety Road Greensburg, PA 15601

Office: 724.600.7301 Cell: 724.640.6600 Fax: 724.600.7388 Pager: 724.853.0851

Email: rmatason@co.westmoreland.pa.us

Agenda for the May 26, 2009 Meeting

Region 36 700 MHz Working Group

May 26, 2009 2:00 p.m. - 4:00 p.m.

Westmoreland County Community College Room 2112 Commissioners Hall Youngwood, PA 15601

Welcome and Introductions - Randy Brozenick, Armstrong County, Chairperson

Administrative Announcements

Review Minutes of January 21, 2009 Meeting

Committee Reports

Policy/ Procedures - Pete Pasqua, Fayette County

Interoperability – John Rowntree, Allegheny County

Plan Writing – Rich Matason, Westmoreland County

Implementation and Communications – John Eline, Adams County

Technical – Joseph Mitchell, Clearfield County

Plan Concurrence Letters Status

New Business

Change Recommendations to Final Draft

Next Steps for the Committee

Date, time and location of next meeting:

Adjourn

Minutes of the May 26, 2009 Meeting

APPENDIX D

Simplified 700 MHz Pre-assignment Rules

Introduction

This paper describes a process for coordinating the initial block assignments of 700 MHz channels before details of actual system deployments is available. In this initial phase, there is little actual knowledge of the specific equipment to be deployed and the exact antenna sites locations. As a result, a simple, high-level method is proposed to establish guidelines for frequency coordination. When actual systems are deployed, additional details will be known and the system designers will be required to select specific sites and supporting hardware to control interference.

Overview

Assignments will be based on a defined service area for each applicant. This will normally be an area defined by geographical or political boundaries such as city, county or by a data file consisting of line segments creating a polygon that encloses the defined area. The service contour is normally allowed to extend slightly beyond the geo/political boundaries such that systems can be designed for maximum signal levels within the boundaries, or coverage area. Systems must also be designed to minimize signal levels outside their geo/political boundaries to avoid interference into the coverage area of other co-channel users.

For co-channel assignments, the 40 dB μ service contour will be allowed to extend beyond the defined service area by 5 miles. The co-channel 5 dB μ interfering contour will be allowed to touch but not overlap the 40 dB μ service contour of the system being evaluated. All contours are (50,50).

For adjacent and alternate channels, the 60 dBµ interfering contour will be allowed to touch but not overlap the 40 dBµ service contour of the system being evaluated. All contours are (50,50).

Discussion

Based upon the ERP/HAAT limitations referenced in 47CFR ¶ 90.541(a), the maximum field strength will be limited to 40 dB relative to $1\mu V/m$ (customarily denoted as 40 dB μ). It is assumed that this limitation will be applied similar to the way it is applied in the 821-824/866-869 MHz band. That is, a 40 dB μ field strength can be deployed up to a defined distance beyond the edge of the service area, based on the size of the service area or type of applicant, i.e. city, county or statewide system. This is important that public

safety systems have adequate margins for reliability within their service area in the presence of interference, including the potential for interference from CMRS infrastructure in adjacent bands.

The value of $40 \text{ dB}\mu$ in the 700 MHz band corresponds to a signal of -92.7 dBm, received by a half-wavelength dipole ($\lambda/2$) antenna. The thermal noise floor for a 6.25 kHz bandwidth receiver would be in the range of -126 dBm, so there is a margin of approximately 33 dB available for "noise limited" reliability. Figure 1 shows show the various interfering sources and how they accumulate to form a composite noise floor that can be used to determine the "reliability" or probability of achieving the desired performance in the presence of various interfering sources with differing characteristics.

If CMRS out-of-band emissions (OOBE) noise is allowed to be equal to the original thermal noise floor, there is a 3 dB reduction² in the available margin. This lowers the reliability and/or the channel performance of Public Safety systems. The left side of Figure 1 shows that the original 33 dB margin is reduced by 3 dB to only 30 dB available to determine "noise + CMRS OOBE limited" performance and reliability.

There are also different technologies with various channel bandwidths and different performance criteria. C/N in the range of 17 – 20 dB is required to achieve channel performance.

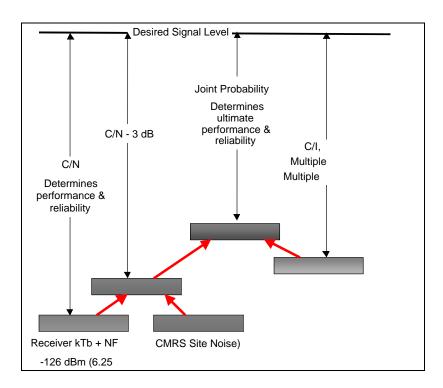


Figure 1 - Interfering Sources Create A "Noise" Level Influencing Reliability

² TIA TR8 made this 3 dB allowance for CMRS OOBE noise during the meetings in Mesa, AZ, January 2001.

In addition, unknown adjacent and alternate channel assignments need to be accounted for. The co-channel and adjacent/alternate sources are shown in the right hand side of Figure 1. At the edge of the service area, there would normally be only a single co-channel source, but there could potentially be several adjacent or alternate channel sources involved. It is recommended that co-channel assignments limit interference to <1% at the edge of the service area (worst case mile). A C/I ratio of 26.4 dB plus the required capture value (~10 dB) is required to achieve this goal.³.

The ultimate performance and reliability has to take into consideration both the noise sources (thermal & CMRS OOBE) and all the interference sources. The center of Figure 1 shows that the joint probability that the both performance criteria and interference criteria are met must be determined.

Table 1 shows estimated performance considering the 3 dB rise in the noise floor at the 40 dBμ signal level. Performance varies due to the different Cf/N requirements and noise floors of the different modulations and channel bandwidths.

Note that since little is known about the affects of terrain, an initial lognormal standard deviation of 8 dB is used.

Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver ENBW (kHz)	6	6	9	18
Noise Figure(10 dB)	10	10	10	10
Receiver Noise Floor (dBm)	-126.22	-126.22	-124.46	-121.45
Rise in Noise Floor (dB)	3.00	3.00	3.00	3.00
New Receiver Noise Floor (dB)	-123.22	-123.22	-121.46	-118.45
40 dBu = -92.7 dBm	-92.7	-92.7	-92.7	-92.7
Receiver Capture (dB)	10.0	10.0	10.0	10.0
Noise Margin (dB)	30.52	30.52	28.76	25.75
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
C/N Margin (dB)	13.52	13.52	10.76	5.75
Standard deviation (8 dB)	8.0	8.0	8.0	8.0
Z	1.690	1.690	1.345	0.718
Noise Reliability (%)	95.45%	95.45%	91.06%	76.37%
C/I for <1% prob of capture	36.4	36.4	36.4	36.4
l (dBu)	3.7	3.7	3.7	3.7
I (dBm)	-129.0	-129.0	-129.0	-129.0
Joint Probability (C & I)	94.7%	94.7%	90.4%	76.1%

Table 1 Joint Probability For Project 25, 700 MHz Equipment Configurations.

_

³ See Appendix A for an explanation of how the 1% interference value is defined and derived.

These values are appropriate for a mobile on the street, but are considerably short to provide reliable communications to portables inside buildings.

Portable In-Building Coverage

Most Public Safety communications systems, today, are designed for portable inbuilding coverage and the requirement for >95 % reliable coverage. To analyze the impact of requiring portable in building coverage and designing to a 40 dB μ service contour, several scenarios are presented. The different scenarios involve a given separation from the desired sites. Whether simulcast or multi-cast is used in wide-area systems, the antenna sites must be placed near the service area boundary and directional antennas, directed into the service area, must be used. The impact of simulcast is included to show that the 40 dB μ service contour must be able to fall outside the edge of the service area in order to meet coverage requirements at the edge of the service area. From the analysis, recommendations are made on how far the 40 dB μ service contour should extend beyond the service area.

Table 2 estimates urban coverage where simulcast is required to achieve the desired portable in building coverage. Several assumptions are required to use this estimate.

- Distance from the location to each site. Equal distance is assumed.
- CMRS noise is reduced when entering buildings. This is not a guarantee as the type
 of deployments is unknown. It is possible that CMRS units may have transmitters
 inside buildings. This could be potentially a large contributor unless the CMRS
 OOBE is suppressed to TIA's most recent recommendation and the "site isolation" is
 maintained at 65 dB minimum.
- The 40 dBµ service contour is allowed to extend beyond the edge of the service area boundary.
- Other configurations may be deployed utilizing additional sites, lower tower heights, lower ERP and shorter site separations.

Estimated Performance at 2.5 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 2.5 miles (dBm)	-72.7	-72.7	-72.7	-72.7
Margin (dB)	53.50	53.50	51.80	45.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	20	20	20	20
Antenna Loss (dBd)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability	85.60%	85.60%	76.58%	39.17%

⁴ Building penetration losses typically required for urban = 20 dB, suburban = 15 dB, rural = 10 dB.

(%)				
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 2, Estimated Performance From Site(s) 2.5 Miles From Typical Urban Buildings.

Table 2 shows for the example case of 2.5 miles a single site cannot provide >95% reliability. Either more sites must be used to reduce the distance or other system design techniques must be used to improve the reliability. For example, the table shows that simulcast can be used to achieve public safety levels of reliability at this distance. Table 2 also shows that the difference in performance margin requirements for wider bandwidth channels requires more sites and closer site-to-site separation.

Figures 2 and 3 show how the configurations would potentially be deployed for a typical site with 240 Watts ERP. This is based on:

• 75 Watt transmitter, 18.75 dBW

• 200 foot tower

• 10 dBd 180 degree sector antenna +10.0 dBd

• 5 dB of cable/filter loss. <u>- 5.0 dB</u>

 $23.75 \text{ dBW} \approx 240 \text{ Watts (ERPd)}$

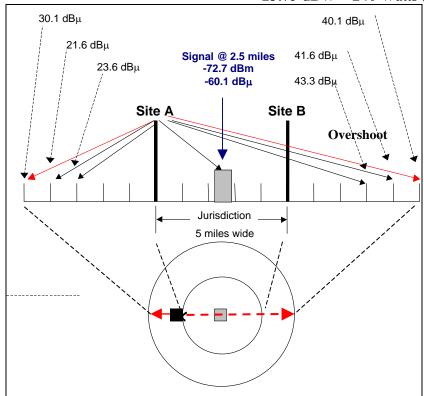


Figure 2 - Field Strength From Left Most Site.

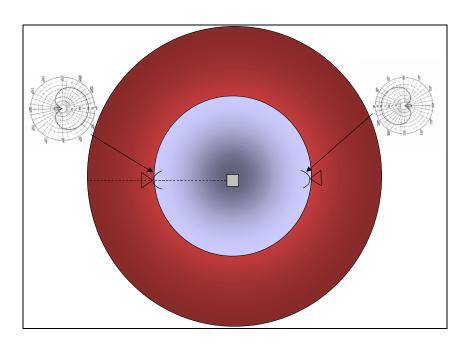


Figure 3 - Antenna Configuration Required To Limit Field Strength Off "Backside"

Figure 2 is for an urbanized area with a jurisdiction defined as a 5 mile circle. To provide the necessary coverage to portables in buildings at the center of the jurisdiction requires that the sites be placed along the edge of the service area and utilize directional antennas oriented toward the center of the service area (Figure 3). In this case, at 5 miles beyond the edge of the service area, the sites would produce a composite field strength of approximately 40 dBμ. Since one site is over 10 dB dominant, the contribution from the other site is not considered. The control of the field strength behind the site relies on a 20 dB antenna with a Front to Back Ratio (F/B) specification as shown in Figure 3. This performance may be optomistic due to back scatter off local obstructions in urbanized areas. However, use of antennas on the sides of buildings can assist in achieving better F/B ratios and the initial planning is not precise enough to prohibit using the full 20 dB.

The use of a single site at the center of the service area is not normally practical. To provide the necessary signal strength at the edge of the service area would produce a field strength 5 miles beyond in excess of 44 dB μ . However, if the high loss buildings were concentrated at the service area's center, then potentially a single site could be deployed, assuming that the building loss sufficiently decreases near the edge of the service area allowing a reduction in ERP to achieve the desired reliability.

Downtilting of antennas, instead of directional antennas, to control the $40~dB\mu$ is not practical, in this scenario. For a 200 foot tall tower, the center of radiation from a 3 dB

down-tilt antenna hits the ground at ~ 0.75 miles⁵. The difference in angular discrimination from a 200 foot tall tower at service area boundary at 5 miles and service contour at 10 miles is approximately 0.6 degrees, so ERP is basically the same as ERP toward the horizon. It would not be possible to achieve necessary signal strength at service area boundary and have 40 dB μ service contour be less than 5 miles away.

Tables 3 and 4 represent the same configuration, but for less dense buildings. In these cases, the distance to extend the 40 dBµ service contour can be determined from Table 5.

Estimated Performance at 3.5 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 3.5 miles (dBm)	-77.7	-77.7	-77.7	-77.7
Margin (dB)	48.50	48.50	46.80	40.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	15	15	15	15
Antenna Loss (dBd)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability (%)	85.60%	85.60%	76.58%	39.17%
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 3 - Lower Loss Buildings, 3.5 Mile From Site(s)

F (1 1 1 5					
Estimated Performance at 5.0 miles from each site					
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz	
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50	
Signal at 5.0 miles (dBm)	-82.7	-82.7	-82.7	-82.7	
Margin (dB)	43.50	43.50	41.80	35.80	
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0	
Building Loss (dB)	10	10	10	10	
Antenna Loss (dBd)	8	8	8	8	
Reliability Margin	8.50	8.50	5.80	-2.20	
Z	1.0625	1.0625	0.725	-0.275	
Single Site Noise Reliability (%)	85.60%	85.60%	76.58%	39.17%	
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%	
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%	
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%	

Table 4 - Low Loss Buildings, 5.0 Miles From Site(s)

Note that the receive signals were adjusted to offset the lowered building penetration loss. This produces the same numerical reliability results, but allows increasing the site to

_

⁵ Use of high gain antennas with down-tilt on low-level sites is one of the causes of far-near interference experienced in the 800 MHz band.

building separation and this in turn lowers the magnitude of the "overshoot" across the service area.

Table 5 shows the field strength for a direct path and for a path reduced by a 20 dB F/B antenna. This allows the analysis to be simplified for the specific example being discussed.

	Site A	Site B
	Direct Path	Back Side of
		20 dB F/B Antenna
Overshoot Distance (mi)	Field Strength	Field Strength
	(dBµ)	(dBµ)
1	73.3	53.3
2	63.3	43.3
2.5	60.1	40.1
3	57.5	37.5
4	53.3	33.5
5	50.1	30.1
	•••	
10	40.1	
11	38.4	
12	37.5	
13	36.0	
14	34.5	
15	33.0	

Table 5 - Field Strength Vs. Distance From Site

For the scenarios above, the composite level at the Service Contour is the sum of the signals from the two sites. The sum can not exceed 40 dB μ . Table 5 allows you to calculate the distance to Service Contour given the distance from one of the sites.

Scenario 1: Refer to Figure 3a. Site B is just inside the Service Area boundary and Service Contour must be <5 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 30.1 dB μ . Signal level for Site A can be up to 40 dB μ , since when summing two signals with >10 dB delta, the lower signal level has little effect (less than 0.4 dB in this case). Therefore, Site A can be 10 miles from the Service Contour, or 5 miles inside the Service Area boundary. The coverage perfomance for this scenario is shown in Table 2, above, for 20 dB building loss typical of urban areas.

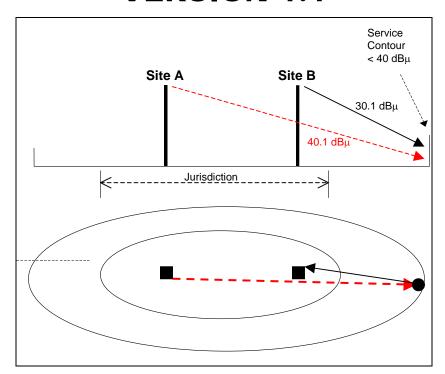


Figure 3a. Scenario 1 on of Use of Table 5

Scenario 2: Refer to bold data in Table 5. Site B is just inside the Service Area boundary and Service Contour must be <4 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 33.5 dBμ. Signal level for Site A can be up to 38.4 dBμ. (See Appendix B for simple method to sum the powers of signals expressed in decibels.) The composite power level is 39.7 dBμ. Therefore, Site A can be slightly less than 11 miles from the Service Contour, or ~7 miles inside the Service Area boundary. The coverage perfomance for this example is shown in Table 3, above, for 15 dB building loss typical of suburban areas.

Scenario 3: Site B is just inside the Service Area boundary and Service Contour must be <3 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 37.5 dBμ. Signal level for Site A can be up to 36.4 dBμ. (See Appendix B simple method to sum signals expressed in decibels.) The composite power level is 40.0 dBμ. Therefore, Site A can be ~13 miles from the Service Contour, or ~10 miles inside the Service Area boundary. The coverage perfomance for this example is shown in Table 4, above, for 10 dB building loss typical of rural areas.

Service Contour Extension Recommendation

The resulting recommendation for extending the 40 dB μ service contour beyond the service area boundary is:

Type of Area	Extension (mi.)
Urban (20 dB Buildings)	5
Suburban (20 dB	5
Buildings)	
Rural (20 dB Buildings)	5

Table 6 - Recommended Extension Distance Of 40 dBu Field Strength

Using this recommendation the $40 \text{ dB}\mu$ service contour can then be constructed based on the defined service area without having to perform an actual prediction.

Interfering Contour

Table 1 above shows that 36.4 dB of margin is required to provide 10 dB of co-channel capture and <1% probability of interference. Since the 40 dB μ service contour is beyond the edge of the service area, some relaxation in the level of interference is reasonable. Therefore, a 35 dB co-channel C/I ratio is recommended and is consistent with what is currently being licensed in the 821-824/866-869 MHz Public Safety band.

Co-Channel Interfering Contour Recommendation

- Allow the constructed 40 dBμ (50,50) service contour to extend beyond the edge of the defined service area by the distance indicated in Table 6.
- Allow the 5 dBμ (50,50) interfering contour to intercept but not overlap the 40 dBμ service contour.

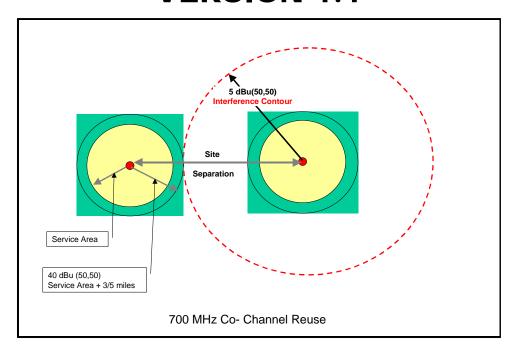


Figure 4 - Co-Channel Reuse Criterion

Adjacent and Alternate Channel Considerations

Adjacent and alternate channels are treated as being noise sources that alter the composite noise floor of a victim receiver. Using the 47 CFR § 90.543 values of ACCP can facilitate the coordination of adjacent and alternate channels. The C/I requirements for <1% interference can be reduced by the value of ACCPR. For example to achieve an X dB C/I for the adjacent channel that is -40 dBc a C/I of [X-40] dB is required. Where the alternate channel ACP value is -60 dBc, then the C/I = [X-60] dB is the goal for assignment(s). There is a compounding of interference energy, as there are numerous sources, i.e. co channel, adjacent channels and alternate channels plus the noise from CMRS OOBE.

There is insufficient information in 47 CFR § 90.543 to include the actual receiver performance. Receivers typically have "skirts" that allow energy outside the bandwidth of interest to be received. In addition, the FCC defines ACCP differently than does the TIA. The term used by the FCC is the same as the TIA definition of ACP. The subtle difference is that ACCP defines the energy intercepted by a defined receiver filter (e.g., 6 kHz ENBW). ACP defines the energy in a measured bandwidth that is typically wider than the receiver (e.g., 6.25 kHz channel bandwidth). As a result, the FCC values are optimistic at very close spacing and somewhat pessimistic at wider spacings, as the typical receiver filter is less than the channel bandwidth.

In addition, as channel bandwidth is increased, the total amount of noise intercepted rises compared to the level initially defined in a 6.25 kHz channel bandwidth. However, the effect is diminished at very close spacings as the slope of the noise curve falls off rapidly.

At greater spacings, the slope of the noise curve is essentially flat and the receiver's filter limits the noise to a rise in the thermal noise floor.

Digital receivers tend to be less tolerant to interference than analog. Therefore, a 3 dB reduction in the C/(I+N) can reduce a DAQ=3 to a DAQ=2, which is threshold to complete muting in digital receivers. Therefore to maintain a DAQ=3, at least 17 dB of fading margin plus the 26.4 dB margin for keeping the interference below 1% probability is required, for a total margin of 43.4 dB. However, this margin would be at the edge of the service area and the 40 dB μ service contour is allowed to extend past the edge of the service area.

Frequency drift is controlled by the FCC requirement for 0.4-ppm stability when locked. This equates to approximately a 1 dB standard deviation, which is negligible when associated with the recommended initial lognormal standard deviation of 8 dB and can be ignored.

Project 25 requires that a transceiver receiver have an ACIPR of 60 dB. This implies that an ACCPR \geq 65 dB will exist for a "companion receiver". A companion receiver is one that is designed for the specific modulation. At this time the highest likelihood is that receivers will be deploying the following receiver bandwidths at the following channel bandwidths.

Estimated Receiver Parameters		
Channel Bandwidth Receiver Bandwidth		
6.25 kHz	5.5 kHz	
12.5 kHz	5.5 or 9 kHz	
25 kHz	18.0 kHz	

Table 7 - Estimated Receiver Parameters

Based on 47 CFR \P 90.543 and the P25 requirement for an ACCPR \geq 65 dB into a 6.0 kHz channel bandwidth and leaving room for a migration from Phase 1 to Phase 2, allows for making the simplifying assumption that 65 dB ACCPR is available for both adjacent 25 kHz spectrum blocks.

The assumption is that initial spectrum coordination sorts are based on 25 kHz bandwidth channels. This provides the maximum flexibility by using 65 dB ACCPR for all but one possible combination of 6.25 kHz channels within the 25 kHz allotment.

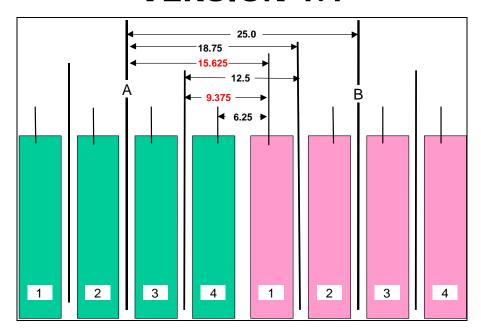


Figure 5, Potential Frequency Separations

Case	Spacing	ACCPR
25 kHz to 25 kHz	25 kHz	65 dB
25 kHz to 12.5 kHz	18.750 kHz	65 dB
25 kHz to 6.25 kHz	15.625 kHz	>40 dB
12.5 kHz to 12.5 kHz	12.5 kHz	65 dB
12.5 kHz to 6.25 kHz	9.375 kHz	>40 dB
6.25 kHz to 6.25 kHz	6.25 kHz	65 dB

Table 8 - ACCPR Values For Potential Frequency Separations

All cases meet or exceed the FCC requirement. The most troublesome cases occur where the wider bandwidths are working against a Project 25 Phase 2 narrowband 6.25 kHz channel. This pre-coordination based upon 25 kHz spectrum blocks still works if system designers and frequency coordinators keep this consideration in mind and move the edge 6.25 kHz channels inward away from the edge of the system. This approach allows a constant value of 65 dB ACCPR to be applied across all 25 kHz spectrum blocks regardless of what channel bandwidth is eventually deployed. There will also be additional coordination adjustments when exact system design details and antenna sites are known.

For spectrum blocks spaced farther away, it must be assumed that transmitter filtering, in addition to transmitter performance improvements due to greater frequency separation, will further reduce the ACCPR.

Therefore it is recommended that a consistent value of 65 dB ACCPR be used for the initial coordination of adjacent 25 kHz channel blocks. Rounding to be conservative due to the possibility of multiple sources allows the Adjacent Channel Interfering Contour to be approximately 20 dB above the 40 dB μ service contour, at 60 dB μ .

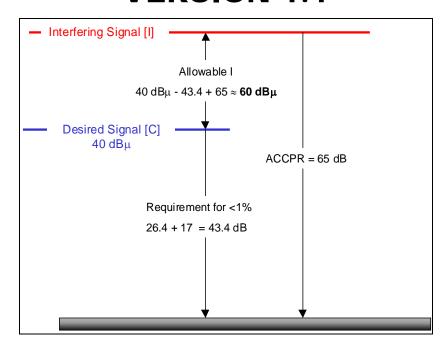


Figure 6 - Adjusted Adjacent 25 kHz Channel Interfering Contour Value

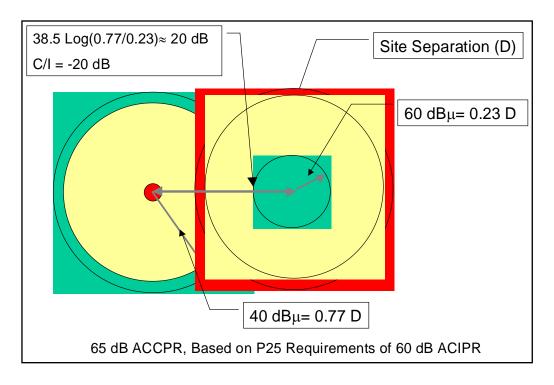


Figure 7 - Example Of Adjacent/Alternate Overlap Criterion

Adjacent Channel Interfering Contour Recommendation

An adjacent (25 kHz) channel shall be allowed to have its 60 dB μ (50,50) interfering contour touch but not overlap the 40 dB μ (50,50) service contour of a system being evaluated. Evaluations should be made in both directions.

Final Detailed Coordination

This simple method is only adequate for presorting large blocks of spectrum to potential entities. A more detailed analysis should be executed in the actual design phase to take all the issues into consideration.

Additional factors that should be considered include:

- Degree of Service Area Overlap
- Different size of Service Areas
- Different ERPs and HAATs
- Actual Terrain and Land Usage
- Differing User Reliability Requirements
- Migration from Project 25 Phase 1 to Phase 2
- Actual ACCP
- Balanced Systems
- Mobiles vs. Portables
- Use of voting
- Use of simulcast
- Radio specifications
- Simplex Operation
- Future unidentified requirements.

Special attention needs to be paid to the use of simplex operation. In this case, an interferer can be on an offset adjacent channel and in extremely close proximity to the victim receiver. This is especially critical in public safety where simplex operations are frequently used at a fire scene or during police operation. This type operation is also quite common in the lower frequency bands. In those cases, evaluation of base-to-base as well as mobile-to-mobile interference should be considered and evaluated.

Appendix A to Appendix D

Carrier to Interference Requirements

There are two different ways that Interference is considered.

- Co Channel
- Adjacent and Alternate Channels

Both involve using a C/I ratio. The C/I ratio requires a probability be assigned. For example, if 10% Interference is specified, the C/I implies 90% probability of successfully achieving the desired ratio. 1% interference means that there is a 99% probability of achieving the desired C/I.

$$\frac{C}{I}\% = \frac{1}{2} \bullet erfc \left(\frac{\frac{C}{I} \text{ margin}}{2\sigma} \right)$$
 (1)

This can also be written in a form using the standard deviate unit (Z). In this case the Z for the desired probability of achieving the C/I is entered. For example, for a 90% probability of achieving the necessary C/I, Z = 1.28.

$$\frac{C}{I}\% = Z \cdot \sqrt{2} \cdot \sigma \tag{2}$$

The most common requirements for several typical lognormal standard deviations (σ) are included in the following table based on Equation (2).

Location Standard Deviation (σ) dB	5.6	6.5	8	10
Probability %				
10%	10.14 dB	11.77 dB	14.48 dB	18.10 dB
5%	13.07 dB	15.17 dB	18.67 dB	23.33 dB
4%	13.86 dB	16.09 dB	19.81 dB	24.76 dB
3%	14.90 dB	17.29 dB	21.28 dB	26.20 dB
2%	16.27 dB	18.88 dB	23.24 dB	29.04 dB
1%	18.45 dB	21.42 dB	26.36 dB	32.95 dB

9/9/2009 1:49:27 PM

Table A1 - Probability Of Not Achieving C/I For Various Location Lognormal Standard Deviations

These various relationships are shown in Figure A1, a continuous plot of equation(s) 1 and 2.

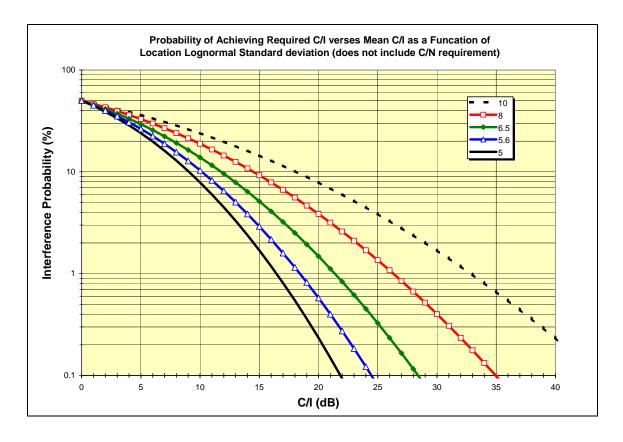


Figure A1, Probability Of Achieving Required C/I As A Function Of Location Standard Deviation

For co-channel the margin needs to include the "capture" requirement. When this is done, then a 1% probability of co channel interference can be rephrased to mean, there is

a 99% probability that the "capture ratio" will be achieved. The capture ratio varies with the type of modulation. Older analog equipment has a capture ratio of approximately 7 dB. Project 25 FDMA is specified at 9 dB. Figure A1 shows the C/I requirement without including the capture requirement.

The 8 dB value for lognormal location standard deviation is reasonable when little information is available. Later when a detailed design is required, additional details and high-resolution terrain and land usage databases will allow a lower value to be used. The TIA recommended value is 5.6 dB. Using 8 dB initially and changing to 5.6 dB provides additional flexibility necessary to complete the final system design.

To determine the desired probability that both the C/N and C/I will be achieved requires that a joint probability be determined. Figure A2 shows the effects of a family of various levels of C/N reliability and the joint probability (Y-axis) in the presence of various probabilities of Interference. Note that at 99% reliability with 1% interference (X-axis) that the reduction is nearly the difference. This is because the very high noise reliability is degraded by the interference, as there is little probability that the noise criterion will not be satisfied. At 90%, the 1% interference has a greater likelihood that it will occur simultaneously when the noise criterion not being met, resulting in less degradation of the 90%.

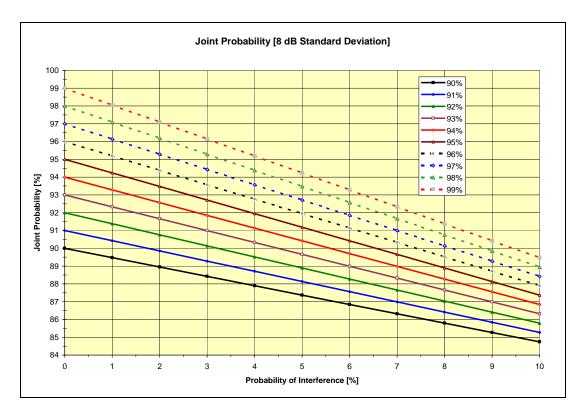
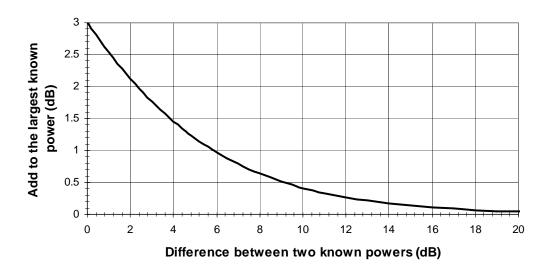


Figure A2 - Effect Of Joint Probability On The Composite Probability

For adjacent and alternate channels, the channel performance requirement must be added to the C/I ratio. When this is applied, then a 1% probability of adjacent/alternate channel interference can be rephrased to mean, there is a 99% probability that the "channel performance ratio" will be achieved.

Appendix B to Appendix D

Adding Two Known Non-Coherent Powers



In order to sum the power of two or more signals expressed in dBm or dB μ , they level should be converted to a voltage level or a power level, summed (root of the sum of the squares), and then converted back to dBm or dB μ .

The chart above provides simple method to sum two power levels expressed in dBm or dB μ . First find the difference between the two signals on the horizontal axis. Go up to the curve and across to the vertical axis to find the power delta. Add the power delta to the larger of the two original signal levels.

Example 1: Signal A is 36.4 dB μ . Signal B is 37.5 dB μ . Difference is 1.1 dB. Power delta is about 2.5 dB. Composite signal level is 37.5 dB μ + 2.5 dB = 40 dB μ .

Example 2: Signal is -96.3 dBm. Signal B is -95.2 dBm. Difference is 1.1 dB. Power delta is about 2.5 dB. Composite signal level is -95.2 dBm + 2.5 dB = -92.7 dBm.

Appendix E Adjacent Region Concurrences

This Appendix will contain completed letters of concurrence. A sample cover letter and a sample letter of concurrence is added here as a place saver until the signed letters of concurrence are received back from the adjacent regions.



REGION 28 - 700 MHz REGIONAL PLANNING COMMITTEE

EASTERN PENNSTLVANIA, SOUTHERN NEW JERSEY, and DELAWARE

Department of Technology & Information Telecommunications Team 801 Silver Lake Blvd. Dover, DE 19964-2497

Richard R. Reynolds, Chairperson Jay Groce III. Vice Chairperson Jody Nestor, Secretary VOICE: (302) 739-9648 FAX: (302) 739-7243 VOICE: (610) 344-5084 FAX: (610) 344-5050 VOICE: (609) 984-6995 FAX: (609) 292-0703

Date April 3, 2009

Randall J. Brozcnick Chairperson Region 36, Western Pennsylvania Director, County of Armstrong Department of Public Safety 450 E. Market St. Kittanning, PA 16201

Dear Mr. Brozenick

Region 28 (Eastern Pennsylvania, Southern New Jersey and Delaware) is in receipt of your proposed 700 MHz Regional Plan, submitted to this Committee on 02/20/2009.

This letter serves as the official, written concurrence of Region 28 to Region 36's 700 MHz Regional Plan.

Sincerely,

Mr. Richard R. Reynolds Chairperson Region 28 State of Delaware - DTI 801 Silver Lake Blvd. Dover, DE 19904-2407

Region 44 - West Virginia 700 MHz Regional Planning Committee

1300 Harrison Avenue Elkins, West Virginia 26241 304.637.0200 – V 304.637.0203. – F

May 11, 2009

Randall J. Brozenick Chairperson Region 36, Western Pennsylvania Director, County of Armstrong Department of Public Safety 450 E. Market St. Kittanning, PA 16201

Dear Mr. Brozenick

Region 44 (West Virginia) is in receipt of your proposed 700 MHz Regional Plan, submitted to this Committee on 02/12/09.

This letter serves as the official, written concurrence of Region 44 to Region 36's 700 MHz Regional Plan.

Sincerely,

Mr. David W. Saffel Chairperson Region 44 West Virginia State Police 1300 Harrison Ave.

David W. Joffel

Elkins, WV 26241

March 24, 2009

Randall J. Brozenick Chairperson, Region 36, Western Pennsylvania Director, County of Armstrong Department of Public Safety 450 E. Market St. Kittanning, PA 16021

Dear Mr. Brozenick,

Region 55 (New York - Buffalo) is in receipt of your proposed 700 MHz Regional Plan, submitted to this Committee on February 12, 2009.

This letter serves as the official, written concurrence of Region 55 to region 36's 700 MHz Regional Plan.

Respectfully,

Steven C. Sharpe

Chairperson, Region 55

Steven C. Sharpe.

Cc: Matthew Trusso

Thomas Harvey Pete Stritzinger

Region 20 - 700MHz Regional Planning Committee

District of Columbia, State of Maryland and Northern Virginia



G. Edward Ryan II, Chairman

Region 20 700 and 800 MHz Planning Committee
Department of Natural Resources
580 Taylor Avenue, E-3
Annapolis, MD 21401
Telephone: (410) 260-8843
Fax: (410) 260-8878

Email: gryan@dnr.state.md.us Email: Region20chair@msn.com

July 29, 2009

Randall J. Brozenick, Chairman

Region 36 700 MHz Planning Committee Director County of Armstrong Department of Public Safety 450 E. Market St. Kittanning, PA 16201

Regarding: Interregional Concurrence for the Region 36 700-MHz Public-Safety Communications Plan and Addenda

Dear Mr. Brozenick:

Regional Planning Committee (RPC) 20 is in receipt of the proposed RPC 36 700-MHz Regional Plan and Addenda for the General Use Channels in the 769-775 MHz frequency band. RPC 20, having fully reviewed the RPC 36 700-MHz Public-Safety Communications Plan and Addenda sends this letter to serve as the official, written concurrence for your proposed Plan.

Best Regards,

_G. Edward Ryan, II	29 July 2009
G. Edward Ryan II, Chairman	Date
Region 20 700 and 800 MHz Planning Committees	

cc: Mr. Gary P. McKelvey, Vice Chair Ms. Maria-Elena Perez, Secretary

Mr. Wayne McBride, Chair, Technical Committee

Region 33 (Ohio) 700 MHz. Planning Committee
Paul M. Mayer, Chairman
Ohio Office of Information Technology
2323 W. 5th Ave., Columbus, Ohio 43204
614-995-0063 (voice) 995-0067 (fax)
E-mail paul.mayer@ohio.gov or mayerp@apco911.org

March 13, 2009

Randall J. Brozenick Chairperson, Region 36 700 MHz. Planning Committee Director, Armstrong County Department of Public Safety 450 E. Market St. Kittanning PA 16201

Dear Mr. Brozenick:

The Region 33 700 MHz. Planning Committee has reviewed the 700 MHz. Plan of Region 36 (Western Pennsylvania) and, finding it compliant with our wishes of using the CAPRAD database for allotting frequencies, and of coordinating requests within 70 miles of the borders of our two states, is pleased to offer this letter of concurrence.

Sincerely,

Paul M. Mayer

Chairman, Region 33 700 MHz. Planning Committee

Appendix F

Intra-Regional Dispute Resolution Agreements

This Appendix will contain agreements from adjacent regions on inter-regional dispute resolution. A sample letter is added here as a place saver until the signed letters of concurrence are received back from the adjacent regions.

Inter-Regional Coordination Procedures and Procedures for Resolution of Disputes

That May Arise Under FCC Approved Plans

Between Region 36 Western Pennsylvania and Region 28 Eastern Pennsylvania, Southern

New Jersey and Delaware

I. Coordination Procedures

I. INTRODUCTION

This is a mutually agreed upon Inter-Regional Coordination Procedures
 Agreement (Agreement) by and between the following 700 MHz Regional Planning Committees:
 Western Pennsylvania (Region 36) and Eastern Pennsylvania, Southern New Jersey and Delaware (Region 28).

II. INTER-REGIONAL COORDINATION AGREEMENT

- 2. The following is the specific procedure for inter-regional coordination which has been agreed upon by Regions 36 and 28, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
 - b. Applications by eligible entities are accepted.
- c. An application filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed

service area, shall then be forwarded to the adjacent Region(s) for review. This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

f. The adjacent Region reviews the application. If the application is approved, a letter of concurrence shall be sent, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days.

II. Dispute Resolution

- (1) If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:
 - (i) Unconditional concurrence;
 - (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or
 - (iii) partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.
- (2) If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Planning Oversight Committee

¹ If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel contour. Other definitions of service area or interference shall be justified with an accompanying

(NPOC)², of the National Public Safety Telecommunications Council. Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

- g. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.
- h. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).
- i. Upon Commission issuance of an Order adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the Order to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

III. CONCLUSION

Memorandum of Understanding (MOU) or other application documentation between agencies, i.e. mutual aid agreements.

² The National Planning Oversight Committee (NPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

 IN AGREEMENT HERETO, Regions 36 and 28 do hereunto set their signatures the day and year first above written.

Respectfully,

Randall J. Brozenick
Chairperson Region 36

Lithur Brozenick
Richard R. Reynolds

Richard R. Reynolds Chairperson Region 28

Date: 4/3/2009

Inter-Regional Coordination Procedures and

Procedures for Resolution of Disputes

That May Arise Under FCC Approved Plans Between Region 36 Western Pennsylvania and Region 44 West Virginia

I. Coordination Procedures

I. INTRODUCTION

1. This is a mutually agreed upon Inter-Regional Coordination Procedures
Agreement (Agreement) by and between the following 700 MHz Regional Planning
Committees: Western Pennsylvania (Region 36) and West Virginia (Region 44).

II. INTER-REGIONAL COORDINATION AGREEMENT

- 2. The following is the specific procedure for inter-regional coordination which has been agreed upon by Regions 36 and 44, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
 - b. Applications by eligible entities are accepted.
- c. An application filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of

proposed service area, shall then be forwarded to the adjacent Region(s) for review. ⁶

This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

f. The adjacent Region reviews the application. If the application is approved, a letter of concurrence shall be sent, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days.

II. Dispute Resolution

- (1) If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:
 - (i) Unconditional concurrence;
 - (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or

۵

⁶ If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel contour. Other definitions of service area or interference shall be justified with an accompanying *Memorandum of Understanding (MOU)* or other application documentation between agencies, i.e. mutual aid agreements.

- (iii)partial or total denial of proposed frequencies due to inability to meet cochannel/adjacent channel interference free protection to existing licensees within the adjacent Region.
- (2) If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Planning Oversight Committee (NPOC)⁷, of the National Public Safety Telecommunications Council. Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.
- g. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.
- h. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).
- i. Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s)

⁷ The National Planning Oversight Committee (NPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

III. CONCLUSION

IN AGREEMENT HERETO, Regions 36 and 44 do hereunto set their 3. signatures the day and year first above written.

Respectfully,

Randall J. Brozenick
Chairperson Region 26 Randall J. Brozenick

Chairperson Region 36

David W. Saffel

Chairperson Region 44

Date: May 11, 2009

9/9/2009 1:12:03 PM

Inter-Regional Coordination Procedures
and
Procedures for Resolution of Disputes
That May Arise Under FCC Approved Plans
Between Region 36 Western Pennsylvania and Region 55 New York - Buffalo

I. Coordination Procedures

I. INTRODUCTION

This is a mutually agreed upon Inter-Regional Coordination Procedures
 Agreement (Agreement) by and between the following 700 MHz Regional Planning Committees:
 Western Pennsylvania (Region 36) and New York – Buffalo (Region 55).

II. INTER-REGIONAL COORDINATION AGREEMENT

- The following is the specific procedure for inter-regional coordination which has been agreed upon by Regions 36 and 55, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
 - Applications by eligible entities are accepted.
- An application filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

¹ If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel

f. The adjacent Region reviews the application. If the application is approved, a letter of concurrence shall be sent, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days.

II. Dispute Resolution

- (1) If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:
 - (i) Unconditional concurrence;
 - (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or
 - (iii) partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.
- (2) If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Planning Oversight Committee (NPOC)², of the National Public Safety Telecommunications Council. Each Region involved in the dispute shall include a detailed explanation of its position, including

contour. Other definitions of service area or interference shall be justified with an accompanying Memorandum of Understanding (MOU) or other application documentation between agencies, i.e. mutual aid agreements.

engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

g. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.

h. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).

i. Upon Commission issuance of an Order adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the Order to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

III. CONCLUSION

 IN AGREEMENT HERETO, Regions 36 and 55 do hereunto set their signatures the day and year first above written.

Respectfully,

² The National Planning Oversight Committee (NPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

Randall J. Brozenick Chairperson Region 36

Steven C. Sharpe

Chairperson Region 55

Region 20 – 700 MHz Regional Planning Committee

District of Columbia, State of Maryland and Northern Virginia

G. Edward Ryan, II, Chairman c/o Maryland Department of Natural Resources 580 Taylor Avenue, E-4 Annapolis, Maryland 21401 e-mail: gryan@dnr.state.md.us

Phone: 410-260-8843

Fax: 410-260-8878

Inter-Regional Coordination Procedures

and

Procedures for Resolution of Disputes That May Arise Under FCC Approved Plans

I. INTRODUCTION - COORDINATION PROCEDURES

This is a mutually agreed upon Inter-Regional Coordination Procedures Agreement (Agreement) by and between the following 700 MHz Regional Planning Committees; Region 20 and Region 36, hereinafter known as the "Regions".

II. INTER-REGIONAL COORDINATION AGREEMENT

The following is the specific procedure for inter-regional coordination which has been agreed upon by the Regions, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.

- A. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
- B. Applications by eligible entities are accepted.
- An application filing window (if this procedure is being used) is closed after appropriate time interval.
- Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- E. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. ¹ This

¹ If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel contour. Other definitions of service area or interference shall be justified with an accompanying *Memorandum of Understanding (MOU)* or other application documentation between agencies, i.e. mutual aid agreements.

Region 20 – 700 MHz Regional Planning Committee

District of Columbia, State of Maryland and Northern Virginia

G. Edward Ryan, II, Chairman c/o Maryland Department of Natural Resources 580 Taylor Avenue, E-4 Annapolis, Maryland 21401

Phone: 410-260-8843

e-mail: gryan@dnr.state.md.us

information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

Fax: 410-260-8878

F. The adjacent Region reviews the application. If the application is approved, a letter of concurrence shall be sent, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days.

III. DISPUTE RESOLUTION

If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairperson's email (CAPRAD database). Findings may include, but not be limited to:

- A. Unconditional concurrence
- B. Conditional concurrence contingent upon modification of applicant's technical parameters; or
- C. Partial or total denial of proposed frequencies due to inability to meet cochannel/adjacent channel interference free protection to existing licensees within the adjacent Region

If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC)², of the National Public Safety Telecommunications Council.

Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant.

The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support

² The Regional Plan Oversight Committee (RPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

Region 20 – 700 MHz Regional Planning Committee

District of Columbia, State of Maryland and Northern Virginia

G. Edward Ryan, II, Chairman c/o Maryland Department of Natural Resources 580 Taylor Avenue, E-4 Annapolis, Maryland 21401

Phone: 410-260-8843

e-mail: gryan@dnr.state.md.us

either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

Fax: 410-260-8878

Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.

Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).

Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

IV. CONCLUSION

IN AGREEMENT HERETO, Regions 20 does hereunto set their signatures the day and year first above written.
Respectfully,

Name of Regional Chair	Region	Date
G. Edward Ryan, II G. Edward Ryan, II	20	May 30, 2008
Name of Regional Chair	Region	Date
Randall Brozenick, Chairman Regional Planning Committee 36	36	June, 2 2008

Inter-Regional Coordination Procedures and Procedures for Dispute Resolution

Introduction

This is a mutually agreed upon Inter-Regional Coordination Procedure and Dispute Resolution Agreement (Agreement) by and between Region 36 and the neighboring Regional Planning Committees. The purpose is to provide a mechanism to resolve issues that may arise under FCC approved plans.

Inter-Regional Coordination Agreement

The following is the specific procedure for inter-regional coordination which has been agreed upon by Regions, which will be used by the Regions to coordinate with adjacent Regional Planning Committees.

- I. An application filing window is opened or a Region announces that it is prepared to begin accepting applications on a first-come-first-served basis.
- 2. Applications by eligible entities are accepted.
- 3. An application filing window (if this applies) is closed after appropriate time interval.
- 4. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- 5. After intra-regional review, a copy of those frequency specific applications requiring adjacent Region approval, including a definitive statement of proposed service area, shall be forwarded to the adjacent Region(s) for review. This information will be sent to the adjacent Regional chairperson(s) via the CAPRAD system.
- 6. The adjacent Region will review the application. If approved, a letter of concurrence shall be sent, via CAPRAD, to the initiating Regional chairperson within thirty (30) calendar days.

Dispute Resolution

If the adjacent Region(s) cannot approve an application request, the adjacent Region shall document the reasons for partial or non-concurrence and respond to the initiating Region within ten (10) calendar days via e-mail. If the initiating Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the Regions involved shall convene within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons via e-mail or the CAPRAD system.

Findings may include, but are not limited to:

I. Unconditional

- 2. Unconditional concurrence contingent upon modification of the applicant's technical parameters; or
- 3. Partial or total denial of proposed frequencies due to inability to meet cochannel/adjacent channel interference free protection to existing licensees within the adjacent Region.

If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC), of the National Public Safety Telecommunications Council (NPSTC). Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD system. The NPOC's decision may support any of the disputing Regions or it may develop a proposal that it deems mutually advantageous to the disputing Regions.

- 1. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's current FCC approved channel assignment matrix, then the initiating Region may the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the FCC
- 2. Where adjacent Region concurrence has been secured, and the channel assignments result in a change to the Region's current FCC approved channel assignment matrix, then the initiating Region shall file to the FCC a "Petition to Amend" their current Regional plan's frequency matrix. The petition shall reflect the new channel assignments and copy of the petition shall be sent to the adjacent Regional chairperson(s).
- 3. Upon FCC issuance of an "Order" adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the "Order" to the adjacent Regional chairperson(s) and may the advise the applicant(s) that they may forward their application(s) to the frequency coordinator for processing and filing with the FCC.

Conclusion

IN AGREEMENT HERETO, Regions [36 and 33] do hereunto set their signatures the day and year first above written.

Respectfully,

Region 36 Barrolal | Brogunich Date Jan 21, 2009

Region 33 Date 100 20, 2008

Appendix G Table of 700 MHz Interoperability Channels

16 Channel Sets	Description	Label
Channel 23 & 24	General Public Safety Services (secondary trunked)	7TAC51
Channel 103 & 104	General Public Safety Services (secondary trunked)	7TAC52
Channel 183 & 184	General Public Safety Services (secondary trunked)	7TAC53
Channel 263 & 264	General Public Safety Services (secondary trunked)	7TAC54
Channel 39 & 40	Calling Channel	7CALL50
Channel 119 & 120	General Public Safety Service	7TAC55
Channel 199 & 200	General Public Safety Service	7TAC56
Channel 279 & 280	Mobile Data	7DATA69
Channel 63 & 64	Emergency Medical Service	7MED65
Channel 143 & 144	Fire Service	7FIRE63
Channel 223 & 224	Law Enforcement Service	7LAW61
Channel 303 & 304	Mobile Repeater	7MOB59
Channel 79 & 80	Emergency Medical Service	7MED66
Channel 159 & 160	Fire Service	7FIRE64
Channel 239 & 240	Law Enforcement Service	7LAW62
Channel 319 & 320	Other Public Service	7GTAC57
Channel 657 & 658	General Public Safety Services (secondary trunked)	7TAC71
Channel 737 & 738	General Public Safety Services (secondary trunked)	7TAC72
Channel 817 & 818	General Public Safety Services (secondary trunked)	7TAC73
Channel 897 & 898	General Public Safety Services (secondary trunked)	7TAC74
Channel 681 & 682	Calling Channel	7CALL70
Channel 761 & 762	General Public Safety Service	7TAC75
Channel 841 & 842	General Public Safety Service	7TAC75 7TAC76
Channel 921 & 922	Mobile Data	7DATA89
Chamier 721 & 722	THOOLO Data	(1)(1)(1)
Channel 641 & 642	Emergency Medical Service	7MED86
Channel 721 & 722	Fire Service	7FIRE83
Channel 801 & 802	Law Enforcement Service	7LAW81
Channel 881 & 882	Mobile Repeater	7MOB79
Channel 697 & 698	Emergency Medical Service	7MED87
Channel 777 & 778	Fire Service	7FIRE84
Channel 857 & 858	Law Enforcement Service	7LAW82
Channel 937 & 938	Other Public Services	7GTAC77

Project 25 Common Air Interface Interoperability Channel Technical Parameters

Certain common P25 parameters need to be defined to ensure digital radios operating on the 700 MHz Interoperability Channels can communicate. This is analogous to defining the common CTCSS tone used on NPSPAC analog Interoperability channels.

Network Access Code

In the Project 25 Common Air Interface definition, the Network Access Code (NAC) is analogous to the use of CTCSS and CDCSS signals in analog radio systems. It is a code transmitted in the pre-amble of the P25 signal and repeated periodically throughout the transmission. Its purpose is to provide selective access to and maintain access to a receiver. It is also used to block nuisance and other co-channel signals. There are up to 4096 of these NAC codes. For ease of migration in other frequency bands, a NAC code table was developed which shows a mapping of CTCSS and CDCSS signals into corresponding NAC codes. Document TIA/EIA TSB102.BAAC contains NAC code table and other Project 25 Common Air Interface Reserve Values.

The use of NAC code \$293 is required for the 700 MHz Interoperability Channel NAC code.

Talk group ID

In the Project 25 Common Air Interface definition, the Talk group ID on conventional channels is analogous to the use of talk groups in trunking. In order to ensure that all users can communicate, all units should use a common Talk group ID.

Recommendation: Use P25 default value for Talk group ID = \$0001

Manufacturer's ID

The Project 25 Common Air Interface allows the ability to define manufacturer specific functions. In order to ensure that all users can communicate, all units should not use a specific Manufacturer's ID, but should use the default value of \$00.

Message ID

The Project 25 Common Air Interface allows the ability to define specific message functions. In order to ensure that all users can communicate, all units should use the default Message ID for unencrypted messages of \$00000000000000000000.

Encryption Algorithm ID and Key ID

The Project 25 Common Air Interface allows the ability to define specific encryption algorithms and encryption keys. In order to ensure that all users can communicate, encryption should not be used on the Interoperability Calling Channels, all units should use the default Algorithm ID for defaults may be used for the other Interoperability channels when encryption is not used.

Use of encryption is allowed on the other Interoperability channels. Regional Planning Committees need to define appropriate Message ID, Encryption Algorithm ID, and Encryption Key ID to be used in the encrypted mode on Interoperability channels.

Appendix H Region 36 Channel Allotments

				Base	Mobile
Region	State	County	Channel	Frequency	Frequency
36	PA	Adams County	449-452	766.8125	796.8125
36	PA	Adams County	493-496	773.0875	803.0875
36	PA	Adams County	593-596	773.7125	803.7125
36	PA	Adams County	677-680	774.2375	804.2375
36	PA	Adams County	781-784	774.8875	804.8875
36	PA	Adams County	825-828	775.1625	805.1625
36	PA	Allegheny County	41-44	764.2625	794.2625
36	PA	Allegheny County	81-84	764.5125	794.5125
36	PA	Allegheny County	125-128	764.7875	794.7875
36	PA	Allegheny County	169-172	765.0625	795.0625
36	PA	Allegheny County	209-212	765.3125	795.3125
36	PA	Allegheny County	249-252	765.5625	795.5625
36	PA	Allegheny County	289-292	765.8125	795.8125
36	PA	Allegheny County	329-332	766.0625	796.0625
36	PA	Allegheny County	373-376	766.3375	796.3375
36	PA	Allegheny County	421-424	766.6375	796.6375
36	PA	Allegheny County	465-468	766.9125	796.9125
36	PA	Allegheny County	481-484	773.0125	803.0125
36	PA	Allegheny County	521-524	773.2625	803.2625
36	PA	Allegheny County	561-564	773.5125	803.5125
36	PA	Allegheny County	617-620	773.8625	803.8625
36	PA	Allegheny County	677-680	774.2375	804.2375
36	PA	Allegheny County	717-720	774.4875	804.4875
36	PA	Allegheny County	757-760	774.7375	804.7375
36	PA	Allegheny County	797-800	774.9875	804.9875
36	PA	Allegheny County	837-840	775.2375	805.2375
36	PA	Allegheny County	905-908	775.6625	805.6625
36	PA	Allegheny County	945-948	775.9125	805.9125
36	PA	Armstrong County	345-348	766.1625	796.1625
36	PA	Armstrong County	389-392	766.4375	796.4375
36	PA	Armstrong County	457-460	766.8625	796.8625
36	PA	Armstrong County	529-532	773.3125	803.3125
36	PA	Armstrong County	601-604	773.7625	803.7625

36	PA	Armstrong County	861-864	775.3875	805.3875
36	PA	Beaver County	57-60	764.3625	794.3625
36	PA	Beaver County	133-136	764.8375	794.8375
36	PA	Beaver County	217-220	765.3625	795.3625
36	PA	Beaver County	337-340	766.1125	796.1125
36	PA	Beaver County	401-404	766.5125	796.5125
36	PA	Beaver County	445-448	766.7875	796.7875
36	PA	Beaver County	497-500	773.1125	803.1125
36	PA	Beaver County	585-588	773.6625	803.6625
36	PA	Beaver County	785-788	774.9125	804.9125
36	PA	Beaver County	825-828	775.1625	805.1625
36	PA	Bedford County	45-48	764.2875	794.2875
36	PA	Bedford County	121-124	764.7625	794.7625
36	PA	Bedford County	421-424	766.6375	796.6375
36	PA	Bedford County	701-704	774.3875	804.3875
36	PA	Bedford County	757-760	774.7375	804.7375
36	PA	Bedford County	905-908	775.6625	805.6625
36	PA	Blair County	17-20	764.1125	794.1125
36	PA	Blair County	93-96	764.5875	794.5875
36	PA	Blair County	253-256	765.5875	795.5875
36	PA	Blair County	293-296	765.8375	795.8375
36	PA	Blair County	413-416	766.5875	796.5875
36	PA	Blair County	493-496	773.0875	803.0875
36	PA	Blair County	533-536	773.3375	803.3375
36	PA	Blair County	617-620	773.8625	803.8625
36	PA	Blair County	673-676	774.2125	804.2125
36	PA	Blair County	713-716	774.4625	804.4625
36	PA	Butler County	13-16	764.0875	794.0875
36	PA	Butler County	241-244	765.5125	795.5125
36	PA	Butler County	281-284	765.7625	795.7625
36	PA	Butler County	321-324	766.0125	796.0125
36	PA	Butler County	381-384	766.3875	796.3875
36	PA	Butler County	433-436	766.7125	796.7125
36	PA	Butler County	477-480	766.9875	796.9875
36	PA	Butler County	541-544	773.3875	803.3875
36	PA	Butler County	593-596	773.7125	803.7125
36	PA	Butler County	633-636	773.9625	803.9625
36	PA	Butler County	869-872	775.4375	805.4375
36	PA	Cambria County	81-84	764.5125	794.5125

36	PA	Cambria County	173-176	765.0875	795.0875
36	PA	Cambria County	281-284	765.7625	795.7625
36	PA	Cambria County	349-352	766.1875	796.1875
36	PA	Cambria County	405-408	766.5375	796.5375
36	PA	Cambria County	469-472	766.9375	796.9375
36	PA	Cambria County	501-504	773.1375	803.1375
36	PA	Cambria County	545-548	773.4125	803.4125
36	PA	Cambria County	585-588	773.6625	803.6625
36	PA	Cambria County	661-664	774.1375	804.1375
36	PA	Cambria County	797-800	774.9875	804.9875
36	PA	Cambria County	837-840	775.2375	805.2375
36	PA	Cameron County	49-52	764.3125	794.3125
36	PA	Cameron County	321-324	766.0125	796.0125
36	PA	Cameron County	361-364	766.2625	796.2625
36	PA	Cameron County	593-596	773.7125	803.7125
36	PA	Cameron County	749-752	774.6875	804.6875
36	PA	Cameron County	917-920	775.7375	805.7375
36	PA	Centre County	57-60	764.3625	794.3625
36	PA	Centre County	133-136	764.8375	794.8375
36	PA	Centre County	209-212	765.3125	795.3125
36	PA	Centre County	337-340	766.1125	796.1125
36	PA	Centre County	437-440	766.7375	796.7375
36	PA	Centre County	477-480	766.9875	796.9875
36	PA	Centre County	481-484	773.0125	803.0125
36	PA	Centre County	521-524	773.2625	803.2625
36	PA	Centre County	577-580	773.6125	803.6125
36	PA	Centre County	637-640	773.9875	803.9875
36	PA	Centre County	705-708	774.4125	804.4125
36	PA	Centre County	873-876	775.4625	805.4625
36	PA	Clarion County	53-56	764.3375	794.3375
36	PA	Clarion County	129-132	764.8125	794.8125
36	PA	Clarion County	205-208	765.2875	795.2875
36	PA	Clarion County	413-416	766.5875	796.5875
36	PA	Clarion County	485-488	773.0375	803.0375
36	PA	Clarion County	549-552	773.4375	803.4375
36	PA	Clarion County	621-624	773.8875	803.8875
36	PA	Clarion County	833-836	775.2125	805.2125
36	PA	Clarion County	913-916	775.7125	805.7125
36	PA	Clearfield County	41-44	764.2625	794.2625

36	PA	Clearfield County	125-128	764.7875	794.7875
36	PA	Clearfield County	393-396	766.4625	796.4625
36	PA	Clearfield County	445-448	766.7875	796.7875
36	PA	Clearfield County	605-608	773.7875	803.7875
36	PA	Clearfield County	785-788	774.9125	804.9125
36	PA	Clearfield County	825-828	775.1625	805.1625
36	PA	Clearfield County	865-868	775.4125	805.4125
36	PA	Clearfield County	945-948	775.9125	805.9125
36	PA	Clinton County	89-92	764.5625	794.5625
36	PA	Clinton County	373-376	766.3375	796.3375
36	PA	Clinton County	425-428	766.6625	796.6625
36	PA	Clinton County	513-516	773.2125	803.2125
36	PA	Clinton County	565-568	773.5375	803.5375
36	PA	Clinton County	613-616	773.8375	803.8375
36	PA	Clinton County	793-796	774.9625	804.9625
36	PA	Crawford County	93-96	764.5875	794.5875
36	PA	Crawford County	337-340	766.1125	796.1125
36	PA	Crawford County	377-380	766.3625	796.3625
36	PA	Crawford County	429-432	766.6875	796.6875
36	PA	Crawford County	585-588	773.6625	803.6625
36	PA	Crawford County	625-628	773.9125	803.9125
36	PA	Crawford County	677-680	774.2375	804.2375
36	PA	Crawford County	717-720	774.4875	804.4875
36	PA	Crawford County	781-784	774.8875	804.8875
36	PA	Crawford County	837-840	775.2375	805.2375
36	PA	Crawford County	877-880	775.4875	805.4875
36	PA	Cumberland County	49-52	764.3125	794.3125
36	PA	Cumberland County	89-92	764.5625	794.5625
36	PA	Cumberland County	177-180	765.1125	795.1125
36	PA	Cumberland County	249-252	765.5625	795.5625
36	PA	Cumberland County	289-292	765.8125	795.8125
36	PA	Cumberland County	329-332	766.0625	796.0625
36	PA	Cumberland County	373-376	766.3375	796.3375
36	PA	Cumberland County	417-420	766.6125	796.6125
36	PA	Cumberland County	465-468	766.9125	796.9125
36	PA	Cumberland County	509-512	773.1875	803.1875
36	PA	Cumberland County	625-628	773.9125	803.9125
36	PA	Cumberland County	869-872	775.4375	805.4375
36	PA	Elk County	97-100	764.6125	794.6125

36	PA	Elk County	249-252	765.5625	795.5625
36	PA	Elk County	329-332	766.0625	796.0625
36	PA	Elk County	401-404	766.5125	796.5125
36	PA	Elk County	461-464	766.8875	796.8875
36	PA	Elk County	525-528	773.2875	803.2875
36	PA	Elk County	669-672	774.1875	804.1875
36	PA	Elk County	709-712	774.4375	804.4375
36	PA	Erie County	17-20	764.1125	794.1125
36	PA	Erie County	57-60	764.3625	794.3625
36	PA	Erie County	121-124	764.7625	794.7625
36	PA	Erie County	201-204	765.2625	795.2625
36	PA	Erie County	241-244	765.5125	795.5125
36	PA	Erie County	281-284	765.7625	795.7625
36	PA	Erie County	321-324	766.0125	796.0125
36	PA	Erie County	369-372	766.3125	796.3125
36	PA	Erie County	421-424	766.6375	796.6375
36	PA	Erie County	477-480	766.9875	796.9875
36	PA	Erie County	481-484	773.0125	803.0125
36	PA	Erie County	521-524	773.2625	803.2625
36	PA	Erie County	573-576	773.5875	803.5875
36	PA	Erie County	617-620	773.8625	803.8625
36	PA	Erie County	661-664	774.1375	804.1375
36	PA	Erie County	705-708	774.4125	804.4125
36	PA	Erie County	745-748	774.6625	804.6625
36	PA	Erie County	825-828	775.1625	805.1625
36	PA	Erie County	865-868	775.4125	805.4125
36	PA	Erie County	945-948	775.9125	805.9125
36	PA	Fayette County	177-180	765.1125	795.1125
36	PA	Fayette County	365-368	766.2875	796.2875
36	PA	Fayette County	429-432	766.6875	796.6875
36	PA	Fayette County	473-476	766.9625	796.9625
36	PA	Fayette County	513-516	773.2125	803.2125
36	PA	Fayette County	569-572	773.5625	803.5625
36	PA	Fayette County	637-640	773.9875	803.9875
36	PA	Fayette County	781-784	774.8875	804.8875
36	PA	Fayette County	821-824	775.1375	805.1375
36	PA	Forest County	45-48	764.2875	794.2875
36	PA	Forest County	513-516	773.2125	803.2125
36	PA	Forest County	577-580	773.6125	803.6125

36	PA	Forest County	637-640	773.9875	803.9875
36	PA	Forest County	757-760	774.7375	804.7375
36	PA	Forest County	821-824	775.1375	805.1375
36	PA	Franklin County	161-164	765.0125	795.0125
36	PA	Franklin County	217-220	765.3625	795.3625
36	PA	Franklin County	321-324	766.0125	796.0125
36	PA	Franklin County	389-392	766.4375	796.4375
36	PA	Franklin County	441-444	766.7625	796.7625
36	PA	Franklin County	549-552	773.4375	803.4375
36	PA	Franklin County	709-712	774.4375	804.4375
36	PA	Franklin County	789-792	774.9375	804.9375
36	PA	Franklin County	913-916	775.7125	805.7125
36	PA	Fulton County	53-56	764.3375	794.3375
36	PA	Fulton County	201-204	765.2625	795.2625
36	PA	Fulton County	401-404	766.5125	796.5125
36	PA	Fulton County	513-516	773.2125	803.2125
36	PA	Fulton County	749-752	774.6875	804.6875
36	PA	Greene County	53-56	764.3375	794.3375
36	PA	Greene County	205-208	765.2875	795.2875
36	PA	Greene County	321-324	766.0125	796.0125
36	PA	Greene County	417-420	766.6125	796.6125
36	PA	Greene County	493-496	773.0875	803.0875
36	PA	Greene County	557-560	773.4875	803.4875
36	PA	Greene County	601-604	773.7625	803.7625
36	PA	Greene County	713-716	774.4625	804.4625
36	PA	Greene County	873-876	775.4625	805.4625
36	PA	Huntingdon County	241-244	765.5125	795.5125
36	PA	Huntingdon County	365-368	766.2875	796.2875
36	PA	Huntingdon County	457-460	766.8625	796.8625
36	PA	Huntingdon County	561-564	773.5125	803.5125
36	PA	Huntingdon County	741-744	774.6375	804.6375
36	PA	Indiana County	245-248	765.5375	795.5375
36	PA	Indiana County	333-336	766.0875	796.0875
36	PA	Indiana County	377-380	766.3625	796.3625
36	PA	Indiana County	425-428	766.6625	796.6625
36	PA	Indiana County	517-520	773.2375	803.2375
36	PA	Indiana County	573-576	773.5875	803.5875
36	PA	Indiana County	629-632	773.9375	803.9375
36	PA	Indiana County	901-904	775.6375	805.6375

36	PA	Jefferson County	85-88	764.5375	794.5375
36	PA	Jefferson County	177-180	765.1125	795.1125
36	PA	Jefferson County	217-220	765.3625	795.3625
36	PA	Jefferson County	353-356	766.2125	796.2125
36	PA	Jefferson County	473-476	766.9625	796.9625
36	PA	Jefferson County	497-500	773.1125	803.1125
36	PA	Jefferson County	537-540	773.3625	803.3625
36	PA	Jefferson County	589-592	773.6875	803.6875
36	PA	Jefferson County	745-748	774.6625	804.6625
36	PA	Juniata County	129-132	764.8125	794.8125
36	PA	Juniata County	205-208	765.2875	795.2875
36	PA	Juniata County	409-412	766.5625	796.5625
36	PA	Juniata County	485-488	773.0375	803.0375
36	PA	Juniata County	537-540	773.3625	803.3625
36	PA	Lawrence County	121-124	764.7625	794.7625
36	PA	Lawrence County	353-356	766.2125	796.2125
36	PA	Lawrence County	425-428	766.6625	796.6625
36	PA	Lawrence County	533-536	773.3375	803.3375
36	PA	Lawrence County	573-576	773.5875	803.5875
36	PA	Lawrence County	661-664	774.1375	804.1375
36	PA	McKean County	13-16	764.0875	794.0875
36	PA	McKean County	285-288	765.7875	795.7875
36	PA	McKean County	349-352	766.1875	796.1875
36	PA	McKean County	417-420	766.6125	796.6125
36	PA	McKean County	561-564	773.5125	803.5125
36	PA	McKean County	609-612	773.8125	803.8125
36	PA	McKean County	789-792	774.9375	804.9375
36	PA	McKean County	861-864	775.3875	805.3875
36	PA	McKean County	941-944	775.8875	805.8875
36	PA	Mercer County	161-164	765.0125	795.0125
36	PA	Mercer County	213-216	765.3375	795.3375
36	PA	Mercer County	253-256	765.5875	795.5875
36	PA	Mercer County	365-368	766.2875	796.2875
36	PA	Mercer County	417-420	766.6125	796.6125
36	PA	Mercer County	469-472	766.9375	796.9375
36	PA	Mercer County	509-512	773.1875	803.1875
36	PA	Mercer County	753-756	774.7125	804.7125
36	PA	Mifflin County	377-380	766.3625	796.3625
36	PA	Mifflin County	569-572	773.5625	803.5625

36	PA	Mifflin County	621-624	773.8875	803.8875
36	PA	Mifflin County	669-672	774.1875	804.1875
36	PA	Mifflin County	833-836	775.2125	805.2125
36	PA	Mifflin County	941-944	775.8875	805.8875
36	PA	Perry County	13-16	764.0875	794.0875
36	PA	Perry County	517-520	773.2375	803.2375
36	PA	Perry County	633-636	773.9625	803.9625
36	PA	Perry County	821-824	775.1375	805.1375
36	PA	Perry County	861-864	775.3875	805.3875
36	PA	Potter County	177-180	765.1125	795.1125
36	PA	Potter County	297-300	765.8625	795.8625
36	PA	Potter County	341-344	766.1375	796.1375
36	PA	Potter County	389-392	766.4375	796.4375
36	PA	Potter County	441-444	766.7625	796.7625
36	PA	Potter County	581-584	773.6375	803.6375
36	PA	Potter County	701-704	774.3875	804.3875
36	PA	Snyder County	281-284	765.7625	795.7625
36	PA	Snyder County	345-348	766.1625	796.1625
36	PA	Snyder County	461-464	766.8875	796.8875
36	PA	Snyder County	545-548	773.4125	803.4125
36	PA	Snyder County	597-600	773.7375	803.7375
36	PA	Snyder County	661-664	774.1375	804.1375
36	PA	Somerset County	165-168	765.0375	795.0375
36	PA	Somerset County	213-216	765.3375	795.3375
36	PA	Somerset County	325-328	766.0375	796.0375
36	PA	Somerset County	385-388	766.4125	796.4125
36	PA	Somerset County	449-452	766.8125	796.8125
36	PA	Somerset County	525-528	773.2875	803.2875
36	PA	Somerset County	593-596	773.7125	803.7125
36	PA	Somerset County	941-944	775.8875	805.8875
36	PA	Union County	169-172	765.0625	795.0625
36	PA	Union County	325-328	766.0375	796.0375
36	PA	Union County	449-452	766.8125	796.8125
36	PA	Union County	505-508	773.1625	803.1625
36	PA	Union County	781-784	774.8875	804.8875
36	PA	Venango County	173-176	765.0875	795.0875
36	PA	Venango County	293-296	765.8375	795.8375
36	PA	Venango County	405-408	766.5375	796.5375
36	PA	Venango County	449-452	766.8125	796.8125

36	PA	Venango County	493-496	773.0875	803.0875
36	PA	Venango County	569-572	773.5625	803.5625
36	PA	Venango County	613-616	773.8375	803.8375
36	PA	Venango County	701-704	774.3875	804.3875
36	PA	Venango County	741-744	774.6375	804.6375
36	PA	Venango County	793-796	774.9625	804.9625
36	PA	Warren County	81-84	764.5125	794.5125
36	PA	Warren County	165-168	765.0375	795.0375
36	PA	Warren County	257-260	765.6125	795.6125
36	PA	Warren County	385-388	766.4125	796.4125
36	PA	Warren County	437-440	766.7375	796.7375
36	PA	Warren County	505-508	773.1625	803.1625
36	PA	Warren County	545-548	773.4125	803.4125
36	PA	Warren County	597-600	773.7375	803.7375
36	PA	Warren County	901-904	775.6375	805.6375
36	PA	Washington County	17-20	764.1125	794.1125
36	PA	Washington County	97-100	764.6125	794.6125
36	PA	Washington County	161-164	765.0125	795.0125
36	PA	Washington County	349-352	766.1875	796.1875
36	PA	Washington County	409-412	766.5625	796.5625
36	PA	Washington County	453-456	766.8375	796.8375
36	PA	Washington County	505-508	773.1625	803.1625
36	PA	Washington County	577-580	773.6125	803.6125
36	PA	Washington County	625-628	773.9125	803.9125
36	PA	Washington County	701-704	774.3875	804.3875
36	PA	Washington County	741-744	774.6375	804.6375
36	PA	Washington County	865-868	775.4125	805.4125
		Westmoreland			
36	PA	County	49-52	764.3125	794.3125
26	D. 4	Westmoreland	00.00	5645625	504.5605
36	PA	County Westmoreland	89-92	764.5625	794.5625
36	PA	County	137-140	764.8625	794.8625
30	171	Westmoreland	137 140	704.0025	774.0025
36	PA	County	201-204	765.2625	795.2625
		Westmoreland			
36	PA	County	257-260	765.6125	795.6125
26	DA	Westmoreland	207 200	765.0605	705.0605
36	PA	County Westmoreland	297-300	765.8625	795.8625
36	PA	County	357-360	766.2375	796.2375
	111	County	321 300	100.2313	170.4313

		Westmoreland		1	I
36	PA	County	397-400	766.4875	796.4875
		Westmoreland			
36	PA	County	441-444	766.7625	796.7625
		Westmoreland			
36	PA	County	489-492	773.0625	803.0625
		Westmoreland			
36	PA	County	553-556	773.4625	803.4625
		Westmoreland			
36	PA	County	609-612	773.8125	803.8125
		Westmoreland			
36	PA	County	669-672	774.1875	804.1875
		Westmoreland			
36	PA	County	709-712	774.4375	804.4375
		Westmoreland			
36	PA	County	749-752	774.6875	804.6875
		Westmoreland			
36	PA	County	789-792	774.9375	804.9375
		Westmoreland			
36	PA	County	829-832	775.1875	805.1875
		Westmoreland			
36	PA	County	877-880	775.4875	805.4875
		Westmoreland			
36	PA	County	917-920	775.7375	805.7375

APPENDIX I

Low Power Pool Frequencies
Pursuant to 2nd Report & Order
(Released August 10, 2007/Effective October 23, 2007)

Channel	Center	Center	Center	Use	Channel	Center	Center	Center
#	Frequency	Frequency	Frequency		#	Frequency	Frequency	Frequency
	(6.25 kHz)	(12.5 kHz)	(25 kHz)			(6.25 kHz)	(12.5 kHz)	(25 kHz)
1	769.003125			RPC Admin	961	799.003125		
2	769.009375	769.00625		RPC Admin	962	799.009375	799.00625	
3	769.015625		769.0125	RPC Admin	963	799.015625		799.0125
4	769.021875	769.01875		RPC Admin	964	799.021875	799.01875	
5	769.028125			RPC Admin	965	799.028125		
6	769.034375	769.03125		RPC Admin	966	799.034375	799.03125	
7	769.040625		769.0375	RPC Admin	967	799.040625		799.0375
8	769.046875	769.04375		RPC Admin	968	799.046875	799.04375	
9	769.053125			Itinerant	969	799.053125		
10	769.059375	769.05625		Itinerant	970	799.059375	799.05625	
11	769.065625		769.0625	Itinerant	971	799.065625		799.0625
12	769.071875	769.06875		Itinerant	972	799.071875	799.06875	
949	774.928125			RPC Admin	1909	804.928125		
950	774.934375	774.93125		RPC Admin	1910	804.934375	804.93125	
951	774.940625		774.9375	RPC Admin	1911	804.940625		804.9375
952	774.946875	774.94375		RPC Admin	1912	804.946875	804.94375	
953	774.953125			RPC Admin	1913	804.953125		
954	774.959375	774.95625		RPC Admin	1914	804.959375	804.95625	
955	774.965625		774.9625	RPC Admin	1915	804.965625		804.9625
956	774.971875	774.96875		RPC Admin	1916	804.971875	804.96875	
957	774.978125			RPC Admin	1917	804.978125		
958	774.984375	774.98125		RPC Admin	1918	804.984375	804.98125	
959	774.990625		774.9875	Itinerant	1919	804.990725		804.9875
960	774.996875	774.99375		Itinerant	1920	804.996875	804.99375	

141