

**MINUTES**  
**Region 43 Regional Planning Committees**  
**September 29, 2004 - 1000 to 1500**  
**Snohomish Public Utility Operations Center**  
**1802 75<sup>th</sup> Street SW, Everett**

**Meeting Summary:**

The RPC met to discuss SIEC updates, actions in other RPCs and NPSTC, and recent FCC/Industry documents of interest. Edits to the Regional Plan for the Public Safety 700 MHz Band in Region 43 (Draft Plan Version 9) were discussed and a schedule was outlined for final edits and publication. Recent developments in regional planning for 4.9 GHz, the FCC stay of the plan due date and a framework for the Region 43 4.9 GHz plan were discussed. The upcoming 4.9 GHz Event in California to be presented by the Public Safety Broadband 4.9 GHz Resource Center was previewed. FCC/Industry documents of interest, impacts and planning issues related to the 800 MHz re-banding effort were discussed. Discussion of future meeting dates and format followed.

**Reminders/ Action Items:**

Contact info and List server - RPC participants are reminded to make sure that their contact information is correct on the sign-in sheet. Additionally they are reminded to self-subscribe to the List server on the web site at [www.region43.org](http://www.region43.org).

Voting status - at the present time only a small percentage of the people participating in the regional planning process are voting members. When the planning document is completed and it is ready to be sent off to the FCC only those participants designated as voting members will be able to vote. A letter or an email from your agency's manager or command staff sent to the RPC Chair naming you as the agency designated voting member is all that is required to be a voting member. This should be done right away as the final vote is imminent.

Standardized channel nomenclature - RPCs and SIEC agencies have been asked to review the lists of standardized channel nomenclature for accuracy. Initial reactions will be noted but comments/corrections should be returned in 3 to 4 days to the Chair for feedback to NPSTC. Lists are available at the NPSTC web site:  
<http://www.apco911.org/frequency/siec/documents/documents/IO-0107E-20030723.xls>

Vendor presentations - Kevin will set up a conference call with members of the Vendor Presentation subcommittee to discuss vendor presentation issues.

**1. Roll Call and Introductions**

The following individuals participated in the meeting:

Kevin Kearns	Susan Lang
Cammie Enslow	Ron Moyen
Dean Heinen	Travis Boettcher

Jon (Wiz) Wiswell  
Tom Howell  
Spencer Bahner  
Dean Ballew  
Hai Phung  
Gary Amundson  
Shahir Popatia  
Mike Webb

Gary Mullin  
Dean Ballew  
Walt Pierce  
Doug Kerr - phone  
Mike Doble - phone  
Bob Wentworth - phone  
Terry Miller - phone

During introductions participants were asked to identify themselves and their agencies and provide information on any known or expected interest by their agency or agencies around them in either the 700 MHz or the 4.9 GHz band in the next couple of years. Since this has been done at past meetings (see previous minutes for details) only new information is noted in these Minutes.

- Cammie Enslow – KCSO, new show of interest in frequencies for agency use.
- Dean Heinen – Yakima County, interested in 700 MHz band for wideband data, 4.9 GHz for hotspots and/or emergency operations.
- Jon (Wiz) Wiswell – City of Seattle, 4.9 GHz for hotspots and point to point.
- Tom Howell – SNOPAC, interested in 700 MHz for data.
- Spencer Bahner – King County, same interests as Kevin and Cammie.
- Shahir Popatia - ICT Consulting, interested for monorail and WSDOT.
- Mike Webb - ICT Consulting, interested in Canadian impact on 700 MHz.
- Susan Lang & Ron Moyon - Pierce Transit, current RFP, existing 900 MHz system; since KC Metro is planning to utilize 700 MHz, they would like to be able to communicate, and are concerned about timing.
- Gary Mullin - Port of Seattle, 1<sup>st</sup> meeting, interested in effect of 4.9 GHz on patrol mobile operations.
- Dean Ballew - Day Wireless Systems, 1<sup>st</sup> meeting, public safety entities are asking about the new frequencies and he wants to be well informed.
- Walt Pierce – Snohomish PUD, no immediate interest in 700 MHz, 4.9 GHz more interesting for potential hot spots.
- Doug Kerr - LPN wireless, their point-to-point system is type accepted and available, 1<sup>st</sup> system was installed in Watertown NY.
- Mike Doble – Public Safety Broadband 4.9 GHz Resource Center, announcing the first 4.9 GHz demonstration/exercise in the nation (see slides).
- Bob Wentworth - City of Spokane, interested in 4.9 to supplement mobile effort.
- Terry Miller-WSDOT, "spectrum hungry", interested in all of the frequencies.

## **2. Agenda Modifications - None**

PowerPoint slides were used to discuss agenda topics.  
These may be viewed on the Region 43 web page at [www.region43.org](http://www.region43.org).

### **3. Approval of Minutes of May 26, 2004**

Jon (Wiz) Wiswell made a motion to approve the minutes. Dean Heinen seconded the motion and the minutes were approved.

### **4. Financial Report**

Kevin Kearns reported that the balance remains the same. APCO did not charge for the room for the Spokane meeting. Terry Miller verified that he attended the CAPRAD training. Kevin asked about reimbursement. He reported that it is still pending (his agency may have picked up the charge).

### **5. General Information Updates – All**

#### **• SIEC updates – Kevin Kearns for Dennis Hausman**

Kevin reported for Dennis, as he was not available on the conference line (may be in working group meeting). The SIEC statewide inventory of Public Safety communications systems - Phase 1 has been completed and filed with the state legislature. The document is published on the SIEC website, <http://isb.wa.gov/siec/documents/Interim%20PlanFINAL4.20.04.pdf>. It was not possible to complete the inventory by the SIEC deadline due to the complexity of the undertaking. The local government aspect of this project is complex as the mandate asks for a lot of detail (cell phones, pagers, etc.) A web-based data collection tool was preferred. A Homeland Security grant of approximately \$800K was approved to complete the survey and develop a statewide interoperability plan, and meetings are being coordinated within the 9 DHS regions in the state to complete the inventory. A consulting firm, Federal Engineering, was brought in to conduct this work. Dennis Hausman and the consulting firm are reaching out to the remaining agencies. Surveys of a sampling of approximately 2% of the 14,000 public safety agencies in the state (representing 55% of the population) were compiled to prepare the Phase 1 report. The intent was to file a picture of the situation with the legislature to indicate progress.

#### **• Actions in other RPCs and NPSTC – Kevin Kearns**

Other RPCs:

- Oregon – Region 35 didn't meet during the summer. The next meeting Region 35 RPC meeting will be held on December 1<sup>st</sup>.
- Missouri – Region 24 plan has still not been approved. NPSTC has filed a letter in their support.
- Reminder: to see any plans filed for the 700 MHz band search on Proceeding 02-378 at:

[http://gullfoss2.fcc.gov/prod/ecfs/comsrch\\_v2.cgi](http://gullfoss2.fcc.gov/prod/ecfs/comsrch_v2.cgi)

NPSTC:

- NPSTC meetings occurred on September 21<sup>st</sup> and 22<sup>nd</sup>. Kevin was unable to attend. Information will be available on the NPSTC website at <http://www.npstc.org/meetings.htm>
- **Recent FCC or industry documents of interest**  
The SIEC has completed three of five planning documents and reports of interest. These are available on their website: <http://isb.wa.gov/siec/SIECPublications.htm> .

Interoperability news:

Per APCO and NPSTC the FCC may be close to taking action on the final recommendations of the NCC. Spectrum, technology, and interoperability subcommittees have been formed. The NCC has submitted recommendations over and above the primary 700 MHz mandates, including a recommendation to establish the use of standardized channel nomenclature in the 700 MHz band and to force vendors to use the standard naming convention. This will support Public Safety interoperability needs in national and regional emergency situations. The FCC expressed reluctance to formalize channel names in the rules since they lack a method to enforce the requirement. However, the Public Safety community said the FCC doesn't have to undertake enforcement but they want this in the rules so they can use peer pressure to encourage compliance. The proposed naming strategy is available on the NPSTC web site:

<http://www.apco911.org/frequency/siec/documents/documents/IO-0107E-20030723.xls>

RPCs and SIEC agencies have been asked to review the lists of standardized channel nomenclature for accuracy. Initial reactions will be noted but comments/corrections should be returned in 3 to 4 days to the Chair for feedback to NPSTC. Discussion followed regarding accommodating legacy equipment since some displays may only accommodate 6 digits where 8 digits may be required. Another issue discussed was whether the information could be loaded so it can't be overwritten. It is expected that a time window to complete the change will be negotiated and legacy products will be exempt from this requirement if they cannot accommodate the requisite an 8-digit display.

- **700 MHz Regional Planning Issues:**  
There was hope that licenses would no longer be issued after the FCC released R&O FCC 04-220 [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-04-220A4.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-220A4.pdf) regarding digital LPTV and TV translators, but that was not the case and the channels are still being used (see slides for pertinent text of the R&O). The good news is that one of incumbents was reassigned to the 50 to 59 ranges.

Congress has now entered the TV clearing arena and has voted to set December 2007 as the date by which the channels must be cleared. A solid date to clear the band is required for vendors to invest in new products and for Public Safety to ramp up for funding for spectrum use. An amendment was added to allow

the FCC discretion in clearing certain stations (see quote in slides). This issue will continue to be heavily lobbied as we move towards the pending deadline.

Several States and/or RPCs have been considering requesting that the FCC allocate 12 of the 27 Reserve Wideband channels for statewide licensing, with 6 coming from the 63/68 pairing and 6 from the 64/69 pairing. The intent is to allow them to be used in the design of statewide systems without dipping into the general use wideband channels already under RPC authority. This would essentially mirror the approach in the narrowband channels where 2.4 MHz of spectrum is carved out for statewide use. Members were asked for comments:

- Terry Miller commented that one of his thoughts is that the wideband channels seem to be properly coordinated statewide anyway. Frequencies would not be reused in adjacent counties as they are packed and reused on a statewide basis. There appears to be no difference between packing at a local or statewide level. It would be best to reduce the impact to local agencies through coordination of channel use. One thought that has crossed his mind is that in rural areas it may fall to the state to support access to digital systems.
- Kevin Kearns noted that since it is possible to aggregate three 50 kHz channels for higher bandwidth system designs, the whole idea of “packing” these channels is problematic in and of itself. One advantage of the State having their own allocation of channels is it would give the ability to plan and use them the way that works best for them, without impacting the number of channels available to the local jurisdictions. The local downside is that this plan pulls 12 channels out of the reserve block that might end up in general use later.
- Spencer Bahner replied that the greatest interest in 700 MHz will be for data use and that there should be a demonstrable regional benefit. Terry Miller asked if this might be wishful thinking. He would love to see separate spectrum allocated for state use, but wondered if it is realistic. He felt it might work if it was filed with the Commission. Spencer Bahner mentioned the type of use/packing of the spectrum – for 50 kHz channels, the available number would increase vs. 150 kHz. He wondered how we perceive our needs for spectrum.
- Kevin Kearns noted that he has struggled with this issue. He commented that just like with the narrowband channel plan where the possibility exists to create “orphan” 12.5 kHz channels if assignments aren’t made carefully, we have a potential in the wideband deployments to “orphan” 50 kHz channels depending on how systems are planned and deployed. He asked for ideas on this issue:
  - Terry Miller remarked that this is a catch-22 situation, a conflict between general planning, and allocation on a case-by-case basis to utilize channels to the greatest efficiency. He said his hope is that a filing window over 8 years might affect the greatest efficiency in planning.

Spencer Bahner said this strategy benefits the locals. The question arose, can the state effectively utilize these two blocks? There is no way to know until statewide system planning occurs. The discussion on this issue will be funneled to NARPC for continued debate. Region 43 is in agreement to allocate these channels on statewide licensing basis. We would also recommend that the State would need to demonstrate that they had exhausted this spectrum before they could request general use spectrum from the RPC. We would also recommend that local jurisdictions would be able to request permission from the state to use the state spectrum.

## **6. DRAFT 700 MHz Plan Review and Editing**

- **Updates to Draft Plan, Version 9**
  - Section 3.3 - Impacts on Existing Plans as a Result of Adding 700 MHz Interoperability Channels: rewrote some of the language in the 2<sup>nd</sup> paragraph.
  - Section 3.4.6 - Tribal Lands: removed the map as it did not copy well and added a second paragraph on the role of the Governor's Office of Indian Affairs.
  - Section 5 - Regional Plan Summary: rewrote some of the language in the opening paragraph.
  - Section 8 – Allocation of General Use Spectrum: added language to clarify RPC discussion around this issue. Two concepts are pertinent. The FCC thinks that spectrum is only worth something if used. Spectrum can be allocated on a 1<sup>st</sup> come, 1<sup>st</sup> served basis, or it can be allocated via filing windows. If there were only one request from an eligible licensee, then there would not be a problem. However, if county X had 20 channel blocks and there were 4 applicants this would be problematic. To protect and preserve some channels for future use filing windows are to be implemented for a while, followed by open season. The group settled on 4 years with 6 month filing windows, with the option of making a decision to continue the windows or move to open season. A new plan would require a plan amendment. Specifics are outlined in the language of the section.
  - Section 10 - An Explanation of How all the Region Eligibles' Needs were Considered, and to the extent possible met: new language was added.
  - Section 12 – Detailed Description of How the Plan Put Spectrum to the best possible use: new language was added to this section.

Remaining work:

Text needs to be drafted for Section 3.4.2 - State Agencies, regarding administration of the 2.4 MHz of state licensed spectrum. Terry Miller will develop this. The group needs to revisit and discuss the scoring process, and draft some language for Section 9 - Explanation of How Needs Were Assigned

Priorities in Areas Where Not All Eligibles Could Receive Licenses. Finally, the document needs to be compared to the Guidelines document, the Regions 5 and 24 experiences, and a final scrub completed.

The Chair is looking for a subcommittee to:

Really look at section 8 and make sure it reflects our view! Determine when we start the filing window (there is still a high power TV on channel 62 in Surrey, B.C. and an allocation in Saturna, probably not a problem). The TV will be moved. There will still be channels available for allocation. The text indicates 6 months from plan approval, but is still a debate issue, open to floor: Kevin Kearns suggested that we do it from plan adoption, as there is little risk. Dean Heinen agreed and Wiz suggested that we could review this issue in the next month. Kevin is expecting feedback on all the text as soon as possible. We will tentatively plan on reaching agreement on a final draft at the November 17<sup>th</sup> and try to have a final vote at the December 15<sup>th</sup> meeting so we can submit our plan to the FCC by the New Year. Notification process: Kevin plans to coordinate this with Kit Eldridge and Cammie. Spencer Bahner suggested we use the DHS regions for notification.

Additional questions: At one time there was a copy of the channel plan in the document. Why was it removed? This was a cut-and-paste from the FCC's PDF document so the quality wasn't very good. Since the chart is in the FCC rules, it seemed like it wasn't needed in the regional plan. It was agreed that if a cleaner copy could be developed it would be added back into the plan as an Appendix.

## **7. 4.9 GHz Regional Planning – Dean Heinen**

- **4.9 GHz Wireless Broadband Event**

Mike Doble previewed the upcoming live 4.9 GHz demonstration/exercise to be held in California (see slides for details). The first 4.9 GHz multi-point and point-to-point systems, and the first airborne video system will be demonstrated. Vendors include CelPlan, LPN Wireless, MRC, Motorola, Cisco, IBM, Padcom, and others. There is lots of movement and this technology is moving ahead quickly. LPN Wireless is the 1<sup>st</sup> vendor in the market to receive type acceptance. Alvarion is aggressive and has product in the labs, will soon be seeking type acceptance. Expect products in the 1<sup>st</sup> quarter of next year with Motorola lagging the group. New York has a billion dollar RFP on the street. Mike will be at the TIA meeting next week and has prepared a letter to NPSTC highly recommending 4.9 GHz not be used for mission critical voice. As he talks to vendors, it is clear that the technology is coming. The Radio-telescope groups have been down for maintenance; he is hoping to get them online for testing. As yet an application has not been submitted to the FCC for an experimental license for 4.9 GHz airborne. The goal is to set a November/December date for event. Kevin Kearns remarked that there might be some people from up here that want to attend so

please try not to schedule his event for 12/15, as that is the date the RPC will be meeting in December. Mike is expecting approximately 100 attendees and is hoping to break the group out into 2 demos to accommodate them all. He will be using the LA County EOC and Sheriff's Comm. Center for the event. New York wants to allocate 2 MB to every first responder, and is looking at deploying 4.9 throughout the city. It is calculated that it will require 10,000 cell sites to cover the city! It is more feasible to use hybrid solutions, e.g. 700 MHz supplemented with 4.9 GHz hot spots. To attend, sign up on the list server at <http://www.4.9GHz.org>. When the date is nailed down, he will add a separate list for attendees.

- **FCC Stay of 4.9 GHz Deadline for Regions to file 4.9 GHz Plans**

The FCC did issue a stay, as it is impossible to issue a plan without knowing what technology will be available. The stay is for 6 months after the FCC issues a ruling on the outstanding Petitions for Reconsideration. Emission mask issues, enforcement, etc are currently under consideration. It is anticipated that the FCC is getting close to a decision since NPSTC and the industry have reached agreement on many key issues. When the order is issued that starts the 6-month time window for regional planning. IEEE standards have been adopted for 802.11J, the Japanese standard for 802.11 devices. Since the Japanese standard lines up with some of our bands this activity has created interest. There has been a flurry of activity with respect to the emission mask. The closer we stay to COTS equipment, the better. See the FCC or Industry Document links in the slides. There is an ongoing technical debate between Motorola and NPSTC regarding power levels and adjacent channel issues.

- **4.9 GHz Regional Planning Timeline**

4.9 GHz Regional Planning Workgroup chairman, Dean Heinen has customized the California 4.9 GHz survey for our use. He plans to send it to the Notification Committee for distribution. Cammie Enslow expressed concerns about its complexity and wondered if targeted personnel would fill it out. Doug Kerr replied that the technical nature of the document was necessary to obtain the requisite information. The authors of the document tried to put down suggested alternatives and applications to relate it to sensors for fireman, fingerprint ID units, etc. Mike Doble sent it out to county, city managers, etc. and got it pushed down to agencies. It was placed on association lists so it got passed around. The survey was returned within a couple months time frame with 80% response. Results are published on the 4.9 GHz website. We need to have plan prepared by 6 to 8 months. Dean Heinen says he would like to put together a plan by the next several meetings and be thinking about how frequency coordination might apply. Kevin Kearns asked how it is handled in the California plans, because perhaps others can follow their lead. Perhaps it would be possible to select the least impacting channel. NPSTC would like to put some

teeth into coordinating the frequencies. Perhaps, if an entity used a band without coordinating with the RPC, they could be considered secondary.

## **8. 800 MHz Regional Review Committee**

- **Key documents of interest with respect to the 800 MHz Rebanding**

The slides list documents of interest. Kevin suggested we read the rebanding order and erratum. The FCC and APCO have web sites on this issue. APCO has created a Webinar, for those who were not able to attend and the IWCE is hosting a road show (see slides).

- **800 MHz Rebanding Issues**

Impacts in Region 43 – although NPSPAC channel allocation is pretty straightforward in non-border areas, there are still unresolved issues about whether there will be similar planning in the border areas, such as Canada. Furthermore, in region 5 licensees currently use Canadian channels on a secondary basis. Some Regions are considering repacking. Some footprints are large but not so in California. Questions arise: can we reassign and repack? Some regions have an interest in repack, some think things are OK as is because it is so problematic for existing users to repack. It is likely the process would be too time consuming and costly to be accomplished within the timelines for the rebanding effort. At the October meeting we will discuss repacking. Tools are available to help with the process. The CAPRAD pre-pack tool might be able to be used, and can be loaded with known sites using real data to present a more realistic model. What will this do to tightly coordinated Vancouver, Portland, Multnomah county areas? Spencer Bahner feels that there are too many variables to consider. It may already be as efficient as it can be given our need to use high sites. Concerning the Canadian border interoperability reserved channels, what are our real needs? Is it necessary to have 5 channels across the border areas? Send comments to Kevin as they are looking for info from Regions 43 and 5. Kevin Kearns also overviewed the sample system information sheet that might be a model for the data to be collected when Nextel and the Transition Administrator start working with 800 MHz incumbents.

## **9. Vendor Presentations**

There was a brief discussion on the subject of vendor presentations. It was decided to add approximately one hour to the end of each meeting for vendors to present new technology for the 700 MHz, 800 MHz and 4.9 GHz bands. It was arranged that the Notification/Vendor Presentation subcommittee consisting of Kit Eldredge, Fred Radovich and Cammie Enslow would discuss the details of the presentations with the Chair via email, followed by a conference call.

## 10 Other Items/Good of the Order

None

## 11 Future Meeting Dates

All future meetings will be joint meetings of the 700 MHz/4.9 GHz, and the 800 MHz Planning Committees. It is expected that an amendment will be filed with the FCC formalizing this arrangement so that there is only a single Region 43 Regional Planning Committee. Future meetings will be held on the last Wednesday of each month, or as needed. The conference call number for the October meeting will be announced and meeting Agenda and material will be posted to the web site, <http://www.region43.org>, and sent to the list server prior to the meeting.

- **October 27<sup>th</sup> meeting will be in Yakima at the Police Department**
- **November 17<sup>th</sup> meeting will be at Snohomish County Public Utility**
- **December 15<sup>th</sup> meeting will be at Snohomish County Public Utility**
- **2005 dates will be posted on the web site ([www.region43.org](http://www.region43.org)) in December**

## 12 Adjourn

Motion to adjourn was made and seconded. The meeting was adjourned at 1315.