Before the
Federal Communications Commission
Washington, D.C. 20554

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	)	WT Docket No. 06-150
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Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102
	)	
Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones	)	WT Docket No. 01-309
	)	
	)	WT Docket No. 03-264
Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services	)	
	)	
	)	WT Docket No. 06-169
Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules	)	
	)	
	)	PS Docket No. 06-229
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	)	WT Docket No. 96-86
	)	
Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010	)	

COMMENTS OF REGION 43 REGIONAL PLANNING COMMITTEE

Regional Planning Committee for Region 43 (State of Washington) hereby submits these reply comments in response to the Commission's *Further Notice of Proposed Rulemaking* in the above-captioned proceedings.

Executive Summary

Washington State is a dynamic region over which wireless communication services are provided to commercial and governmental users. Not unlike other areas of the western United States, it contains vast rural areas, significant areas covered with mountainous terrain, and heavily developed urban areas. The heaviest population center of Central Puget Sound butts up against the rugged terrain of the Cascade Mountains and runs from the state capitol in the south, to the Canadian border to the north. Millions of residents occupy this dense population corridor, with similar populations on the Canadian side of the border.

The Region 43 Regional Planning Committee ("RPC") has supported planning efforts for the 700 MHz and 4.9 GHz public safety spectrum since our convening meeting in 2000, to FCC acceptance of our regional plan, through to our on-going commitment to expending access to this critical resource.

Region 43 is deeply alarmed by a number of key provisions present in the FCC Report and Order and Further Notice of Proposed Rulemaking, FCC 07-72 released on April 27th, 2007. Our review of this Rulemaking leads us to believe that the recent FNPRM will not deliver on its intended goals in regards to public safety communications. Indeed, the provisions of FCC 07-72 related to public safety spectrum assignment will create an environment considerably <u>less</u> conducive to the special requirements of the region rather than enhancing the communication options of the region.

Specifically, Region 43 submits that the current band plan for 700MHz wireless data operation should remain under the control of the public safety communications experts at the RPC level, and if the existing approved Region 43 Plan is changed at all, it should be modified to the extent of adding a local option permitting broadband operation. Based on our observations of public safety radio system user requirements, we are concerned that the proposed elimination of wideband wireless data capabilities would create enormous design challenges for system planners in our region.

Region 43 is concerned about the impact of band reconfiguration on systems that are already purchased, and in some cases, awaiting installation. Consideration of any restructuring strategy that does not provide a funding mechanism for these systems, without providing due compensation for reconfiguration to incumbent agencies or agencies that are involved in system development, will create significant costs for local governments in Washington State. As proposed in the FNPRM, the loss of spectrum available to public safety is an untenable situation and is strongly discouraged by Region 43. We also feel that the commission has significantly misinterpreted the lack of licensing activity in the 700 MHz band and should in no way base this Rule Making on such a flawed interpretation.

The Region is adjacent to a significant Canadian population which results in special

considerations, as experienced in the 800MHz rebanding effort, that need to be thoroughly addressed in any band plan change within the 700 MHz public safety spectrum.

We suggest that development of an entirely new broadband network, and removal of public safety spectrum from near-term availability, is poor public policy. Instead, we believe that existing technologies and creative spectrum allocation policy could facilitate the development of a national public safety broadband network without commercial intrusion into the already allocated 700 MHz public safety spectrum.

Background

The State of Washington is a single planning region (Region 43) for both the 700 MHz and 800 MHz public safety bands. Region 43 is bordered by Canada on the North, the Pacific Ocean on the West, the State of Idaho (Region 12) to the East, and the State of Oregon (Region 35) to the South. The Cascade Mountains divide the state into western and eastern halves that have uniquely different population distributions, economic conditions and climates. While much of the state is composed of wilderness or rural areas, there are significant areas
of urban and suburban development as well. Most of these are in the western portion of the state, and the most significant of these is in the Puget Sound basin, from Olympia (the state capitol) in the south to Everett in the north.

Seattle is the largest city in the state and along with the cities of Tacoma, Bellevue and Everett make up a metropolitan area that is the most significant economic engine in the state. Other key urbanized areas in the western portion of the state include the Bellingham area near the Canadian border and the Vancouver area, which is a part of the Portland, Oregon metropolitan area.

The eastern portion of the state is significantly more rural and agricultural in character than the western side of the state. The largest urban area is anchored by the city of Spokane and Spokane County, with other urbanized pockets in Yakima and the "tri-cities" area of Richland, Pasco and Kennewick.

Counties in the Puget Sound region in particular have a challenging mix of dense urban areas, growing suburban *zonas,* and very difficult to serve mountainous rural areas that make it impractical to implement a single broadband solution capable of meeting the mission critical data communications needs of local government and public safety agencies. Similarly, the eastern half of Washington State includes sparsely populated areas, with challenging terrain, making deployment of modern broadband systems technically difficult and economically impractical.

The Region 43 RPC has devoted nearly seven years and thousands of hours of uncompensated time on the part of Committee participants to establish the 700 MHz Regional Plan approved by the FCC in 2006. Within the Central Puget Sound region there are currently over $70 million worth of funded and Region 43 approved governmental 700 MHz communications systems in the process of implementation.

The proximity of the Puget Sound Region to the Canadian border is absolutely the single most critical and limiting factor in wireless communications system planning for the Region. Every decision about communications system architecture, hardware, frequency band selection, specific frequency selection, propagation modeling, and operational constraints must take the restrictions on spectrum use imposed by the border and consequent international agreements into consideration. The Regional Planning Committee process is best suited for planning and management of this unique area.

It is very likely that the Seattle-Tacoma-Everett area is the single largest urban area in the U.S. impacted by this situation. The other large cities that are well within the Canadian treaty/agreement/arrangement zone, Cleveland and Detroit, have larger frequency assignments than Seattle, and geographic circumstances that are much more conducive to resolution of coverage and interference problems with restricted spectrum availability. The effects of these circumstances are particularly acute given the upcoming 2010 Olympic Winter Games in British Columbia and their impact on Washington State public safety operations.

Given these circumstances, we urge early and frequent consultation with Canadian authorities with respect to any revisions to the band plan or other treaty related issues.

The Current Allocation of Spectrum to Public Safety Must Remain Intact

We believe that the current public safety 700 MHz allocation for voice and wideband channels is simply "adequate" and urge that this resource remain under the control of the Regional Planning Committee process in order to best meet local and regional public safety needs. This allocation only remains adequate if the entire public safety assignment between 746 MHz and 806 MHz spectrum remains intact.

Because of the coverage requirements in suburban and rural zones, we see a requirement for wideband data technology to properly serve these areas. Our interpretation, based on vendor presentations, is that broadband service will be unlikely to provide the full extent of required coverage needed in these rural zones. Because of this, the decision to remove wideband operation from the band plan makes it impractical for a nationwide vendor to provide adequate coverage in dynamic coverage areas such as the State of Washington.

Our strongest recommendation is that the Commission should not remove public safety spectrum and control from the Regional Planning Committees which are comprised of local government and public safety agencies.

We see merit in providing the RPCs the flexibility to allow both wideband and broadband operations by public safety eligible agencies within the existing data segment of the 700 MHz band. We perceive the national broadband approach to be slow and insufficient for regional planning requirements. We also believe, that with the engagement of the RPCs and with proper system engineering, these systems can co-

exist. Provided wideband capability remains available, we view broadband capability as beneficial to the public safety mission. However, this capability must not be implemented at the expense of wideband capability, nor should it affect the control of the RPCs and local government and public safety agencies over 700 MHz spectrum.

FCC Interpretation of 700 MHz Licensing Activity

We are concerned that the Commission's interpretation of the apparent lack of activity in developing 700 MHz systems is flawed. We suggest that careful analysis will show that where forward movement on plan development and adoption by RPCs would result in assignable channels, these regions have moved forward with such efforts. Region 43 is one of these regions.

While other regions have been slow to complete regional planning processes, those regions that urgently require spectrum, including southern California, Washington State and New England, have moved forward and have completed their regional plans. It must be recognized that in certain regions, access to spectrum is blocked due to incumbent broadcast television operation and forward progress is inhibited until the deadline of February 17, 2009 set by Congress in the Digital Television and Public Safety Act of 2005 ("DTV Act"). The lack of significant licensing activity for wideband systems has more to do with the regulatory uncertainty created by Congress and the FCC than with any lack of interest in wideband systems on the part of public safety agencies.

We also note that the vendor community has been slow to bring wideband products to the market due in part to the lack of an FCC adopted interoperability standard for 700 MHz data. We suggest that the broader issue of wideband and broadband wireless data interoperability should be addressed as a part of Commission action on this Rule Making.

It is critical to note that state and local governments typically require 2-5 years to build the administrative and political support required to fund system deployments. Even with the benefit of federal grant assistance, local funding is almost always required for such systems, with the consequence of added time prior to implementation. This can create a lag in the time period between adoption of a regional Plan, licensing activity and system purchases.

We also note that almost without exception, the same jurisdictions likely to implement 700 MHz systems are in many cases deeply mired in the 800 MHz rebanding process. The lack of effective forward movement in the rebanding effort has drawn resources from public safety system management, engineering and consultant staff. Region 43 is one of those international border regions where lack of an effective band plan has created huge challenges and forced much of the hard work of spectrum planning at 800 MHz back into the hands of the same professionals who would be responsible for development of new 700 MHz data systems.

Development and Use of Existing Commercial Broadband Services

Existing commercial systems offering broadband data services in our region do not currently provide adequate coverage, capacity, and reliability for mission critical requirements. These capacity and coverage issues become very significant outside the major urban areas within the region.

However, these existing commercial broadband wireless service providers offer broadband data services today that, with appropriate regulatory and financial incentives, would be capable of immediately expanding coverage and increasing the capacity and reliability of broadband service over a far larger region than they now serve. Within the Region 43 market, there are at least 3 commercial carriers offering broadband service over much of the urban and suburban areas.

We believe that expansion of these misting commercial broadband wireless systems, already operational within the region is much more fiscally responsible than the creation of an entirely new entity. It is our belief that entirely new entities, attempting to build new fixed infrastructure to serve enormous geographic regions with public safety grade networks would require significant time to market. We urge that the Commission consider auction credits sufficient to entice these incumbent service providers to bid on the "auctionable" spectrum at 700 MHz.

There are areas of Region 43 that now have a critical requirement for public safety grade wireless data, which given regulatory certainty, could implement new systems within 2 to 5 years. In contrast, the time required to implement a nationwide commercial wireless network capable of supporting public safety data communications is likely to fall in the 5 to 10 year range. This extended timeline argues strongly for local control and implementation.

It is also obvious to public safety communication system planners in urbanized regions that additional 700 MHz spectrum is needed to add considerable broadband capability for public safety. We see such an addition of spectrum for dedicated public safety use from the spectrum identified for commercial auction as critical.

US-Canada Coordination

We suggest that concurrent action by the FCC and Department of State are required as a part of this rule-making and that the present situation created by inaction on 800 MHz Rebanding on the part of the FCC with regard to the border regions must not be allowed to be repeated.

Without modification of the Canadian 700 MHz band plan, adoption of the band plan proposed in the FNPRM results in a significant loss of access to public safety narrowband voice and data spectrum in the border regions. With the current demand for additional usable public safety spectrum in Washington State, this creates an unacceptable situation.

Although our primary recommendation is that the Commission permit the RPCs the

flexibility to allow both broadband and wideband operations, we believe that relocation of the data segment to Channels 63 (764-769 MHz) and 68 (794-799 MHz) and creation of a 1 MHz guard band between the public safety data segment and the public safety voice segment may be an appropriate band plan. However, we see no benefit in providing access to this broadband spectrum far shared development of commercial wireless carrier systems providing service to public safety.

Close coordination with Canada will be required to allow immediate use of this band segment for data operations in the U.S.-Canada border region. Along with retention of this data segment under the control of the RPC, we believe that secondary assignments within the 1 MHz guard band should be at the discretion of the RPCs.

Relocation Costs

Based on the FCC approved Region 43 Plan, there are at least three agencies in Washington State currently developing *700* MHz systems. The value of the equipment and services associated with these systems is greater than $70 million. All of these systems face significant re-engineering with consequent cost increases should the band restructuring strategy under consideration by the Commission in FCC 07-72 be adopted.

Region 43 recognizes the technical benefits in shifting the relative position of the data segment within the public safety allocation to the lower band edge. The Region broadly supports such a band restructuring based on the opportunity created for supporting broadband operation, as well as the existing wideband capabilities. These changes must not be made at the expense of critical, limited public safety spectrum and regional control of spectrum planning. If the 700 MHz band plan is revised in this fashion, the Region 43 RPC is committed to prompt revision, adoption, and submittal to the Commission of its T00 MHz Regional Plan.

We are concerned about the time required to accomplish any such band modification and the financial impact caused by these proposed changes. Specifically on those systems that were purchased and are in the final manufacturing and system implementation process. At least one of those systems has shipped from the manufacturer and is ready for installation, with a second system at factory staging. We estimate that tho cost of reengineering and retuning these systems will be substantial. This added cost for the relocation of incumbents must be considered as part of any Commission action regarding revision of the adopted Region 43 band plan.

Conclusion

Our greatest concern in response to this FNPRM is the potential intrusion of commercial wireless interests into the management and control of critically needed public safety spectrum.

If commercial broadband providers assess Public Safety Broadband service as a commercially viable prospect, then the FCC should economically encourage these

entities to bid on and procure the new bands set aside for auction. Commercial broadband providers would then be free to develop the proposed nationwide Public Safety Broadband interoperable system without intrusion upon the new public safety spectrum or restriction of RPC local planning control.

We recognize the benefit in creating flexibility to deploy both broadband and wideband wireless data technologies and support consideration of a revised band plan that provides for this capability. These changes to the existing 700 MHz public safety band plan must not be at the expense of public safety allocations and regional planning and control.

A plan that effectively removes a key technical option available to public safety agencies and reallocates public safety spectrum to commercial use is in our view, deeply flawed and must be removed from further consideration.

Respectfully submitted,

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Region 43 Regional Planning Committee Chair

19 May 2007