

# 800 MHz REBANDING

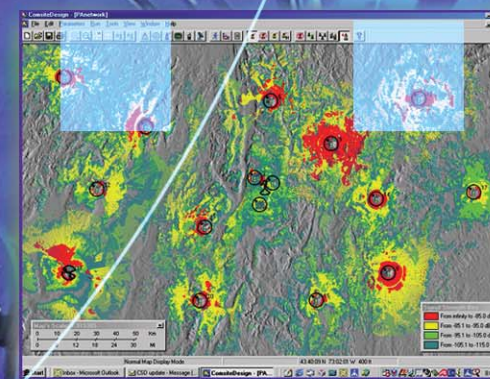
An historic reconfiguration of the 800 MHz land mobile radio communications band is about to be undertaken. Modification of hundreds of currently operational critical communications systems without interruption of service is required during a short transition period. A complex web of interrelated issues must be contemplated and addressed in operational plans to achieve a smooth transition of legacy systems to reallocated spectrum. RCC Consultants, Inc. offers a suite of services that will assist owners and operators of licensed radio systems to address the technical, financial, regulatory, and operational planning needed to ensure that no existing communications capability is lost in the transition.

RCC believes that licensees should begin the planning process immediately to allow careful consideration of the effects to their operations that will result from the proposed "rebanding" of the 800 MHz band. Decisions made early in the process may have profound effects on reimbursement for system modification, compliance with transition schedules, interoperability, and radio system performance. We offer an assessment of existing systems that will produce a high level plan for affected system owners and operators. Additional detailed planning and implementation services are offered as the "rebanding" process proceeds. Customized services are available to meet the particular needs of the client. Components of these services are described in this brochure.



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# WHO WILL BE AFFECTED

- Licensees in the 851-854 MHz band.
- Licensees of National Public Safety Planning Advisory Committee (NPSPAC) channels 821/824 MHz to 866/869 MHz.
- Licensees who interoperate with other affected licensees or who have NPSPAC mutual-aid channels programmed in their radios.
- Incumbent licensees above 854/809 MHz who may find themselves short spaced with new co-channel neighbors.

## REBANDING PROCESS

The FCC has decided to reorder the 800 MHz band to eliminate harmful interference encountered by many public safety radio systems. This rebanding will move licensees in the General Category band (851-854/809-817 MHz) up in frequency to make room for public safety licensees. Public safety licensees currently in the NPSPAC band (866-869/821-824 MHz) will move down into the vacated spectrum.

Rebanding is not a voluntary action. Voluntary and mandatory negotiation periods are identified in the rebanding plan leaving licensees no choice in making the move. Even though you have no choice in retuning your system to the new frequency spectrum, the plan declares that licensees, who are subject to rebanding, are entitled to comparable facilities.

The good news is that this process comes at no cost to the licensee. The FCC order requires Nextel to pay the full costs of rebanding, which is to be guaranteed with a \$2.5 billion letter of credit. Covering the

full cost of rebanding includes reimbursement of all of the licensee's reasonable expenses associated with this effort. This includes internal personnel costs, legal representation, and technical consulting services directly related to the rebanding effort.

Even though your costs will be covered, there are still significant risks associated with the process. Retuning of these mission-critical systems will involve complex technological issues as well as the negotiation of a relocation agreement, which addresses timing, cost and comparability of the rebanded system. A Transition Administrator appointed by the FCC will arbitrate settlement agreements between the licensee and Nextel.

RCC Consultants, Inc. has more than 20 years experience in representing the best interests of mission critical clients and in helping them resolve complex technical issues.

**The long-range risks and costs of a process of comfortable inaction could be damaging to the welfare of emergency responders. It is imperative that public safety agencies and local governments act now to ensure that their best interests are protected during this process.**

## RECOMMENDED APPROACH

*It is imperative that system owners thoroughly assess their system, document their existing system components and develop a rebanding plan of action to ensure that you receive comparable facilities. RCC recommends that system owners carefully consider the following:*

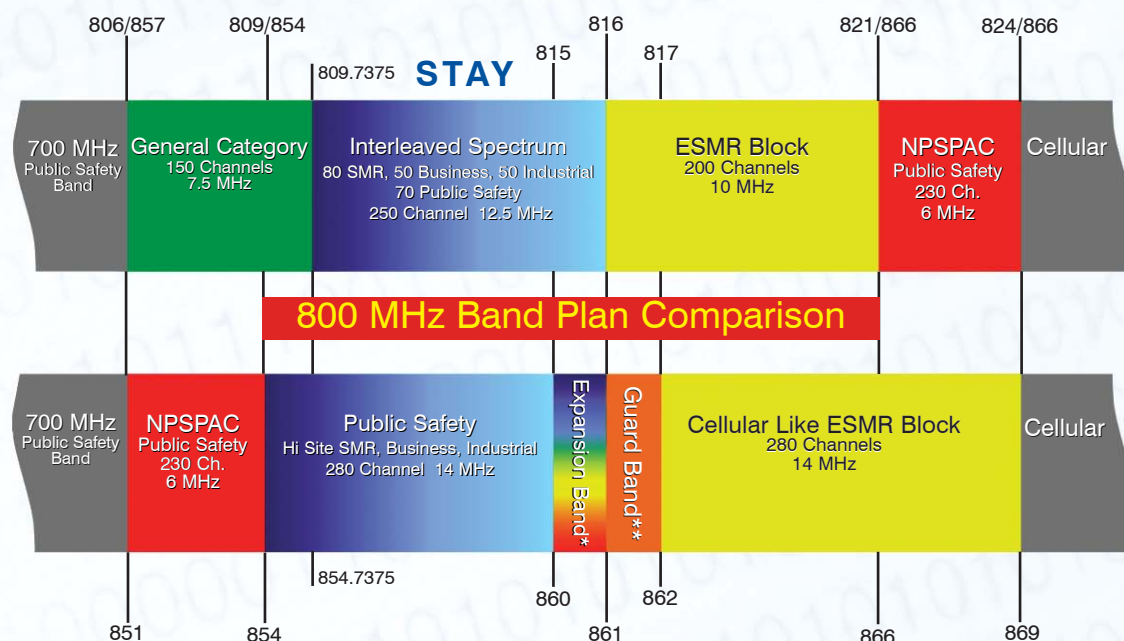
- **UNDERSTAND THE IMPACT OF REBANDING** - The FCC's order ensures recovery of all reasonable costs of the rebanding process but there are still significant risks to the system owner. Begin by learning all that you can about the FCC's rebanding order and how the process will unfold. Begin to think about how rebanding will impact your system, operations and personnel resources.
- **BASELINE YOUR SYSTEM** - Identify which equipment is compatible with new programming and frequencies. Make sure you have all of your FCC licenses available and up to date. Identify interdependencies such as interoperability frequencies, mutual aid agreements, microwave backbone and CAD interfaces. Prepare a detailed inventory of your system.
- **BASELINE YOUR OPERATING ENVIRONMENT** - Document coverage provided by your existing system. This will enable you to compare coverage before and after the retuning. Identify the presence or absence of interference on the system. Assess the potential for interference on the new channels and check to make sure there is sufficient capacity on the new channels. Your antennas, combiners and equipment shelters should also be assessed to determine if the antenna systems are compatible with the new frequencies and that there is room to install any swing equipment that may be required during rebanding.
- **PREPARE AN ACTION PLAN** - System owners should be prepared before they enter into a final agreement. The rebanding of your system will be a complex process and can require as much preparation and management as your original implementation. Your plan should include the strategies for dealing with the effect rebanding will have on your existing FCC licenses, how you will distribute a fleet of swing radios to users while your radios are being reprogrammed, the capability and capacity of your local radio shop to handle the workload, overtime and payroll charges for your staff, and prepare for a complex negotiation to protect your interests.

## A COMPLETE SOLUTION

RCC has more than 20-years experience supporting mission critical communications and in helping our clients resolve complex technical issues. RCC was at the forefront in the identification and development of mitigation techniques for commercial mobile radio interference to public safety and other mission critical communications systems. We have unparalleled experience in the consulting industry in the design, specification, implementation, optimization and testing of 800 MHz radio communications systems.

Let RCC help you prepare a customized program of appropriate action and reduce the risks and costs of not acting now to protect your system.

## CURRENT CHANNEL PLAN



## FCC'S FINAL PLAN

\*No public safety system will be required to remain in or relocate to the Expansion band, although they may do so if they choose

\*\*No public safety or CII licensee may be involuntarily relocated to occupy the Guard Band.

**REBANDING EDUCATION** - RCC can help you stay abreast of the 800 MHz rebanding process through a variety of methods. RCC provides a wide range of tools such as: on-site meetings; live Web seminars; collaborative Web sessions; and, a secure Rebanding Intranet page where you can keep current on the rebanding process. RCC can prepare a Rebanding impact assessment that will help you better understand how this process will affect your system.

**SYSTEM BASELINING** - RCC can help you prepare a comprehensive picture of your existing system. Our ComSiteManager™ infrastructure baselining tool is a new way to capture and record critical system information, helping to do the job faster and easier.

**OPERATIONAL BASELINING** - RCC offers a proven approach to establishing accurate measurements for the basis of decision-making. Our extensive work with mission-critical systems around the world has enabled RCC to deliver an engineering tool suite that aids in the design of more efficient systems. RCC's ComSiteDesign™ and ComSitePro™ engineering tools will ensure that the baseline of your system is consistent with the Enhanced Best Practices guidelines for the rebanding effort.

**DEVELOP REBANDING PLAN** - In helping our clients plan for the realignment of their communications system, RCC follows a precise process that helps our clients identify sooner, rather than later, scenarios that may cause unacceptable outages or reductions in operational efficiencies and capacity. A well thought-out process aids system owners in ensuring both a smooth realignment as well as comparability in the rebanded system.

**IMPLEMENTATION MANAGEMENT AND VERIFICATION TESTING** - RCC has all the tools and offers a combination of technical, financial, regulatory, and operational experience to provide the range of services needed to protect the interest of our clients throughout the rebanding process. RCC has experience in the negotiation of complex settlements of radio system spectrum and other commercial transactions affecting communications network licensure, relocation and procurement, and we have the tools and processes to challenge the results if they do not meet the best interests of our clients.

For additional information please visit:

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or call toll-free **800.247.4796**