

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

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| In the Matter of |) | |
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| Improving Public Safety Communications |) | WT Docket No. 02-55 |
| In the 800 MHz Band |) | |
| |) | |
| Consolidating the 900 MHz Industrial/Land |) | |
| Transportation and Business Pool Channels |) | |
| |) | |
| To: The Commission |) | |

COMMENTS OF THE COMMUNICATIONS DIVISION,
MICHIGAN DEPARTMENT OF INFORMATION TECHNOLOGY
REPRESENTING MICHIGAN'S PUBLIC SAFETY COMMUNICATIONS SYSTEM
TO SUPPLEMENTAL COMMENTS OF THE CONSENSUS PARTIES

February 10, 2003

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The State of Michigan has been a leader in implementing a statewide 800 MHz APCO-25 compliant trunking system for public safety on NPSPAC channels. The Michigan Public Safety Communications System (MPSCS) currently provides statewide communications to many Michigan state government agencies, a number of federal agencies, and a multitude of county, city, township, and tribal public safety agencies. Additional agencies are joining the system, and expansion of the system to provide improved service to users is an ongoing effort. The MPSCS is a key element in Michigan's homeland security preparations and interoperability efforts.

Michigan shares a significant border region with Canada. We must conform to the frequency use requirements of international treaties regulating border areas as a significant portion of the state lies within defined border regions. Michigan has the greatest number of counties affected by Canadian border issues. We would like to significantly expand our interoperability with Canadian public safety agencies in the border area to enhance our homeland security capabilities.

We also share significant borders with a number of states. Discussions have been underway for some time on interconnecting with adjoining state systems to further enhance interoperability. Michigan has been active in the Midwest Public Safety Communications Consortium, consisting of Michigan, Indiana, Illinois, Ohio, and Kentucky. This consortium represents the largest interoperability project announced to date.

The major portion of Michigan lies within NPSPAC Region 21. However, counties in the southwestern portion of the state lie within Region 54, a region encompassing densely populated areas of Indiana and Illinois, including Chicago, around the southern shore of Lake Michigan. The separate Regions must co-ordinate and approve any significant change in the frequency utilization within the Regions.

The State of Michigan is completing the final phase (the Upper Peninsula) of the statewide radio network, and has performed a significant system upgrade to the remainder of the system in the Lower Peninsula. This provides us a unique perspective on the effort involved in making significant changes to a large communications system.

Finally, the continuing problem of cellular and low-site CMRS interference to our public safety system has occupied a great deal of our engineering staff's time. In some instances, we have been successful in resolving interference at specific locations. However, the continuing proliferation of cellular and low-site CMRS sites across the state is clearly more than we can handle on an individual case basis. Even when a case of interference is resolved, there is little assurance that the problem will not arise again at the same or a nearby location due to the continuous modification and optimization of the cellular and low-site CMRS systems.

It is with this perspective that we have reviewed the Supplement to the Consensus Plan. We applaud the participants for formulating a compromise position on such a difficult issue. We support their efforts to solve what has become a significant problem for public safety agencies. The Plan may be the best solution presented to this point. We do, however, have significant concerns about many aspects of the plan.

The Consensus Parties claim the support of 90% of the affected users in the 800 MHz band. We wonder whether this is really the case. The Consensus parties may represent classes of users totaling 90% of the total users, but are those users actually members of the Parties organizations and do they actually support the organization's positions? The complexity and scope of this proposal requires in-depth knowledge of many areas of regulatory policy and system technical configuration. The legal and technical aspects of the proposal are not easily understood, and the volume of documentation is a considerable challenge to absorb. It may be

that many users are not fully aware of the implications of these changes, or feel that they can have little influence on the outcome of the proceedings. Many public safety agencies and small organizations are severely constrained by limited budgets and availability of technical expertise and simply may not have the resources to respond to this issue. We believe the FCC should view the Consensus Plan with these factors in mind, and should carefully consider whether the Consensus Plan provides the best solution, or merely the most convenient solution.

The Plan stipulates that no public safety agency will be required to move without compensation, and that funding must be available for an entire NPSPAC region before any moves are initiated in the region. We are concerned that should adequate funding not be available, public safety agencies may be left stranded in an interference environment, especially considering that Nextel has been active in proposing to provide communications services to public safety agencies. While we realize the Plan contains a significantly greater funding commitment from Nextel than previously proposed, we are still concerned that the funding is adequate.

Among our concerns in regard to the Consensus Plan are the cost estimates for system frequency re-alignments. For example, we note that while the Plan drafters visited various systems to gain information on possible costs, the largest system visited was a 13 site countywide system. We doubt that examination of such a system could provide realistic estimates of the cost or complexity involved in modifying our 181-site system.

Among the costs the Consensus plan drafters seem to have overlooked is the cost of diverting the technical personnel of operating systems away from their normal duties in order to accomplish the Plan. This diversion will seriously impact the continuing operation, on-going expansion, and long range planning of our system in order to accomplish the frequency

relocation in the Plan. Most states are experiencing serious budget shortfalls at this time and it is unlikely that additional personnel will be available to maintain current projects while the relocation is undertaken.

Co-ordination fees represent a significant cost factor. We note that many of the Consensus Parties provide frequency co-ordination services and will benefit financially from enactment of the Plan. While these organizations presumably represent the best interests of their members, they would be receiving funding provided by Nextel. The Plan Parties request that FCC filing fees be waived because “waiver is in the public interest because licensees are being required to relocate systems under this Order.” However, the proponents of the Plan offer no corresponding suspension or reduction of co-ordination fees. We feel this is an arrangement that bears careful consideration.

If NPSPAC band users are to be relocated intact to identical frequency arrangements by the Plan, we question the need for co-ordination of these users and the attendant co-ordination fees. The volunteer regional frequency committees have established and approved criteria for channel usage, and based on those criteria have allocated channels within their regions. There may be instances, such as the few Canadian border channels without corresponding allocations in the new NPSPAC band that would require co-ordination.

The Plan proposes that duplicate systems be used to facilitate frequency changes without disruption of the public safety communications systems. However, the Plan fails to describe even in the most general terms just how such duplicate systems might be created. In many instances, the towers supporting the antennas for the existing system would be overstressed by the installation of additional antennas and feed lines. We feel this is an important consideration since many of our towers are located in remote areas. There may not be any other suitable support

structures within a remote area to allow creation of a duplicate system. Acquisition of land and construction of even temporary facilities could require an extended period and incur significant cost. There is also the question of providing suitable links between the sites and control locations. There may not be excess capacity on existing links to support a duplicate system. While establishing a duplicate system may seem initially feasible, in practice it may prove prohibitively expensive and time consuming to accomplish.

The ability to communicate with agencies across the border has become a key element in the protection of our international border areas. The relocation of the NPSPAC channels within the US will eliminate the five mutual aid channels we currently share with our Canadian neighbors. This is a serious loss at a critical time. The Plan pays token attention to this problem, mentioning only that the mutual aid channel arrangements can be re-established “without much difficulty”. However, since these arrangements are contained in international treaty documents, we submit that re-establishing the mutual aid channels is not trivial. Also the Plan does not address the issue that there will be costs involved for the Canadian agencies to provide the new channels in their equipment.

In order to facilitate the relocations, the Plan requires that licensees submit comprehensive data on their systems including site locations, frequencies, switch types, etc. While much of this information may be contained in public records, it is not usually so comprehensive or consolidated. We have concerns about the security of this information considering its significant value to commercial interests including some proponents of the Plan, and also to terrorist groups. We would like guarantees that this information will be scrupulously protected by all parties involved, a definition of exactly who will have access to it and for what purposes, and how it will be disposed of once the Plan has been implemented. While the Plan

threatens the licensees with the FCC's administrative authority, there appears to be no penalty mechanism for misuse or disclosure of this collected information. We believe this is an oversight that needs to be addressed.

The Plan proposes to prioritize the relocation of public safety systems by NPSPAC regions, breaking it into two groups, one of 14 regions and then the remaining 41 regions. There is little indication of how that split was arrived at or exactly what criteria were used in prioritizing the regions. Generally, the prioritization seems to be based on population. However, a number of regions with small populations are ranked ahead of regions with two to four times the population. Michigan region 21 is ranked fourteenth even though the Michigan statewide system is currently one of the largest operating systems and covers a significant population. We feel the prioritization needs further examination and clearly defined guidelines on the priority criteria.

The purpose of this proceeding is to resolve interference issues. The Consensus Plan attempts to do that by a major realignment of the 800 MHz band allowing increased separation of CMRS/cellular and public safety frequencies. However, the Consensus Parties have added an additional section on interference mitigation that places additional demands on public safety system and equipment designs. These demands will increase the cost of current and future public safety systems in order to mitigate interference from the CMRS systems. The Consensus Parties recognize that interference problems may exist even after the reorganization of the band. If interference will exist after the planned realignment, is the Plan truly the best approach? While at first glance it appears that the cellular/CMRS systems will also be required to also change their operational parameters, the changes do not appear significant and may represent little more than just good engineering practice. Another aspect of this section is that it preempts the FCC's long

standing interference resolution policy, in effect creating a new regulatory stance. The intent of this proceeding was to mitigate interference, not to redefine the playing field to a particular spectrum user's convenience.

The Consensus Plan obviously encompasses many compromises and concessions. The Plan's framers worked co-operatively to craft their proposal. We are, however, troubled at the "take it as is or nothing" attitude expressed within the Plan. There may be situations that do not fall within the scope considered by the Plan and require some flexibility. We would hope that the spirit of co-operation that produced the Plan will permit re-examination of various aspects of the Plan should the need arise.

Even under optimal circumstances, the Plan will require several years to accomplish. Until then, public safety personnel continue to face an increasingly dangerous situation. We ask that the Commission consider enacting interim measures such as mandating minimum utilization of close spaced frequencies, restricting metropolitan low-site power levels, and rigid enforcement of the interference abatement procedures that have been in place for some time. Our experience in dealing with interfering carriers has generally been successful, however, we request the Commission to consider enactment of "immediate temporary shutdown of site" provisions. This would provide a measure of safety to our officers should an event occur in close proximity to an interfering site. We also ask the Commission to require carriers to have current information on individual site locations, including details of frequency utilization and power levels, available immediately to public safety agencies in the event of on-going situations where interference is occurring.

The FCC has a difficult problem to alleviate. However, the Commission has been slow to react to the problem, and largely incidental in solution of existing situations. The Commission is being asked to enact a complicated arrangement that appears to resolve many of the cellular/CMRS-public safety interference issues. The public record shows that proponents of the Plan have appeared frequently at the FCC. Multiple requests for an extension of time to carefully examine and respond to the Supplement to the Consensus Plan were granted only a one-week extension. This causes us concern; we believe these issues are pressing but deserve carefully considered input from all affected spectrum users. Public safety should not be sacrificed to accommodate corporate goals.

We recognize that spectrum usage has changed dramatically in recent years. Spectrum issues affect public safety agencies as much as other users of radio systems. Complicating the issue is the incompatibility of certain system architectures, modulation methods, bandwidth utilization, etc. Public safety agencies have been slow in many instances to adopt new technologies primarily due to funding and political considerations. However, there are many public safety agencies that have embraced new technologies, and followed the guidelines set forth by regulatory and advisory agencies. The FCC has a responsibility to insure that the transition to a new 800 MHz band arrangement is handled in such fashion as to preserve the public safety.



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Representing Michigan's Public Safety Communications System