

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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

**"Consensus Plan" REPLY COMMENTS OF**

**Statewide Wireless Network**

**New York State Office for Technology**

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February 24, 2003

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## I. SUMMARY AND INTRODUCTION

1. These reply comments from the Statewide Wireless Network, under the New York State Office for Technology, present the recommendations and concerns of the State with regards to WT Docket No. 02-55, specifically the "Consensus Plan<sup>1</sup>" as proposed by a consortium of affected parties. We applaud the Commission for addressing these issues, and for recognizing that Public Safety has immediate and critical spectrum needs. We further recognize the tremendous effort that has gone into producing this "Consensus Plan", a plan that addresses nearly all of the concerns that were raised in our previous filings.
2. The State has previously provided detailed comment on the "Consensus Plan Proposal", and now offers further comment on this "Consensus Plan". In particular:
  - There are still concerns with the proposed implementation of this plan in the border areas;
  - States that contain multiple NPSPAC Regions must have the option of requiring that all Regions within their State be relocated simultaneously, and according to the schedule of their highest priority region;

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<sup>1</sup> WT Docket 02-55 Ex Parte' Filing: "Supplemental Comments Of The Consensus Parties: Aeronautical Radio, Inc. ("ARINC"); The American Mobile Telecommunications Association ("AMTA"); The American Petroleum Institute ("API"); The Association of Public-Safety Communications Officials-International, Inc. ("APCO"); The Forest Industries Telecommunications ("FIT"); The Industrial Telecommunications Association, Inc. ("ITA"); International Association of Chiefs of Police ("IACP"); The International Association of Fire Chiefs, Inc. ("IAFC") and International Municipal Signal Association ("IMSA"); The Major Cities Chiefs Association ("MCC"); The Major County Sheriffs' Association ("MCSA"); The National Sheriffs' Association ("NSA"); National Stone, Sand and Gravel Association ("NSSGA"); Nextel Communications, Inc. ("Nextel"); The Personal Communications Industry Association ("PCIA"); The Taxicab, Limousine and Paratransit Association ("TLPA)", December 24, 2002

- The interference mitigation procedures presented within the "Consensus Plan" require additional refinement;
  - The proposed plan for moving the NPSPAC (and many other) channels is extremely spectrally inefficient;
  - Public Safety must be allowed to continue to design fiscally responsible<sup>2</sup> and environmentally friendly<sup>3</sup> noise-limited systems; and
  - There are considerable issues with solutions that propose to “move all public safety to 700 MHz”.
3. The State also notes that the "Consensus Plan" has done a commendable job in generating an effective and structured framework to resolve interference complaints, with clear roles, responsibilities, and lines of communications. In fact the "Consensus Plan" has offered a nearly-complete solution, one that not only can resolve most all of the interference issues plaguing the current 800 MHz band, but also can clear additional spectrum for Public Safety and B-I/LT services.
4. Because of this the State continues to support the essence of the Consensus Plan Proposal, and sees it as the best opportunity to resolve and segregate the technology and designs whose conflicts have led to interference within the 800 MHz band. However, our support remains conditional, as the issues highlighted within these (and previous) comments must be resolved in order for this plan to facilitate an equitable and effective solution for all.

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<sup>2</sup> i.e. utilizing sensitive high spec receivers to minimize siting requirements.

<sup>3</sup> Increasing signal levels to overcome interference will require increased transmitting tower site density – not considered environmentally friendly

5. We must continue to stress that under no circumstances should the FCC take action that would delay the implementation of New York State's Statewide Wireless Network, as it will provide a critical component within the State and National homeland defense efforts. Furthermore, it should again be noted that the costs of any mandated public safety spectrum transitions must not present a further burden on the taxpayer.

## **II. BORDER REGION CONCERNS**

6. In both its initial and reply comments under this Docket, the State of New York has expressed concern regarding Canadian and Mexican border region issues<sup>4,5</sup>. These border areas have a completely different band configuration from non-border areas, and current US 800 MHz allocations within these regions are limited, particularly in Canadian Region 2. For this reason, (a) homogeneous de-interlacing strategies cannot be applied Nationwide, and (b) the amount of additional spectrum that can be cleared for Public Safety in these regions may be either restricted or nonexistent.
7. The reason that clearing additional spectrum for Public Safety in the border areas is so critical is that Public Safety is already severely spectrally impoverished in these areas. This spectrum shortage is further compounded by the current Canadian Digital Television (DTV) Transition plan; a plan that completely blocks Public Safety agencies in New York (and elsewhere) from utilizing the new 700 MHz Public Safety allocations within the Canadian border areas.

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<sup>4</sup> WT Docket 02-55, Comments of Statewide Wireless Network, New York State Office for Technology, §3.2.2-3, 3.2.5, 4.1, 4.4-5, 8.2, and Appendices A-G, I-J, May 2002

<sup>5</sup> WT Docket 02-55, Reply Comments of New York State Office for Technology, §III-B-15, August 6, 2002

## Potential for Successful Border Resolution Under Current Plan

8. The "Consensus Plan" has introduced several band configurations that will "fit together" with the final plan for the non-border areas. This is a plausible proposal, since the band currently operates with dissimilar spectrum allocations in different areas of the US. However, we still believe the Consensus Plan for the border area cannot successfully accommodate all Public Safety and B/ILT licensees within New York State.<sup>6</sup> This general view regarding border area plan appears to be shared by others as evidenced by the many Comments filed that addressed the border issues. In one, Boeing wrote that *"...the proposed solution for the Canadian and Mexican border areas in general, and Canadian Border Region 5 in particular, is neither technically nor internationally feasible."*<sup>7</sup>

## Shifts in Spectrum Allocation Between Services

9. In our last filing, the State of New York noted that<sup>8</sup>, in general, Public Safety allocations in Region 7 will be reduced if its channel allocations were to be redistributed as a non-border region. Furthermore we strongly maintained the State must remain whole throughout any band reorganization, and cannot suffer any net loss of 800 MHz spectrum as a result of this proceeding. We cautioned that the Commission should take heed that even if New York is made whole with regard to current and planned spectrum holdings, other States may see that elimination of the present distribution of channel allocations in

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<sup>6</sup> This has been clearly explained in our previous comments regarding this, see Section II and Annex-I, "Consensus Plan" COMMENTS OF Statewide Wireless Network New York State Office for Technology, February 10, 2003.

<sup>7</sup> §I, Consensus Plan COMMENTS OF THE BOEING COMPANY, February 10, 2003

Region 7 may serve to reduce the overall 800 MHz spectrum allocations for both Public Safety and B-I/ILT services.

10. Others have made similar observations about the distribution of spectrum within the border area plans. Boeing stated<sup>9</sup> that this plan “...Results in an Inequitable Channel Redistribution”, and that “...SMR (services) consistently gained a disproportionate number of channels as compared to Public Safety and B/ILT uses.” The Border Area Coalition also noted<sup>10</sup> “An examination of the proposed channel assignments reveals that SMR licensees gain considerably more spectrum than Public Safety licensees, and B/ILT/CII licensees lose a substantial number of channels in the four border areas analyzed. The Public Safety spectrum allocation is increased only marginally, even though increasing Public Safety spectrum was one of the originally stated objectives of this proceeding” and further that “...the proposals for both the Canadian and Mexican border areas suffer deficiencies with regard to B/ILT/CII channel allocations.”

### **International Mutual Aid Channels**

11. The State of New York has previously stated that there must be clearly defined international mutual aid channels set aside at each step of the 800 MHz re-banding, with continual, uniform, and unfettered access to these channels across both the US and its neighbors - regardless of the total time required for completion of all the international negotiations that are required to resolve these border region matters. For this reason, the State recommended that the Commission undertake whatever immediate action is

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<sup>8</sup> §II-A Consensus Plan" COMMENTS OF Statewide Wireless Network New York State Office for Technology, February 10, 2003

<sup>9</sup> §B-1, Consensus Plan COMMENTS OF THE BOEING COMPANY, February 10, 2003

necessary to circumvent any international spectrum allocation inconsistencies that may hinder 800 MHz mutual aid operations on a common set of channels.

12. There has been concern noted within the filings from the Region 43 NPSPAC Regional Planning Committee and King County, WA who both wrote *“the band plan outlined in Appendix G-4 of the Supplemental Filing would create a situation where the goal of five consistent mutual aid channels shared by the US and Canada along the border would be compromised.”*<sup>11</sup>. The State of Michigan has also commented<sup>12</sup> on this, adding, *“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.”*

### **Interference Protection in the Border Areas**

13. New York’s prior comments regarding interference in the border regions mainly centered on the concern that some licensees would be forced into accepting Guard band assignments where the price for interference protection was high<sup>13</sup>. Several commentators had similar concerns, and a few had in fact questioned the ability to operate at the levels

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<sup>10</sup> §I-D, Consensus Plan COMMENTS OF THE BORDER AREA COALITION, February 10, 2003

<sup>11</sup> Similarly stated in the Comments of both Region 43 and King County (p.3 and p.4 respectively), February 10, 2003

<sup>12</sup> p.5, 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

<sup>13</sup> §IV-E, Consensus Plan" COMMENTS OF Statewide Wireless Network New York State Office for Technology, February 10, 2003

necessary to acquire interference protection on guard band channels when operating in Canadian border areas. Boeing wrote<sup>14</sup> that “...the increased power levels called for in the Supplement would have the potential to violate bilateral agreements with Canada because the increased U.S. signal levels at the borders would exceed the currently allowable limits” further stating that “Existing sites could not provide power increases of such a magnitude given transmitter power and antenna gain limitations. Realigning B/ILT sites to increase relative signal levels would essentially require B/ILT licensees to transform their systems into cellular-type low-site systems.” This was also reiterated by the Border Area Coalition, who stated<sup>15</sup> that “If Appendix F did apply to border area licensees, however, the provisions in the Supplement regarding increasing desired signal levels by 33 dB (between 860.5 and 861.0 MHz) to attain -65 dBm “on the street” levels (from the -98 dBm baseline) are neither technically nor economically feasible” noting that “to meet the increased power provisions contained in the Supplement, many border area incumbents would be forced to redesign their entire systems” and “Redesigning new radio systems to operate on the increased “on the street” levels prescribed by the Supplement that will also not cause harmful interference to Canadian and Mexican operations requires significantly more equipment, land, technical analysis, and other resources. Further, the increased signal strengths called for in the Supplement would likely violate existing bilateral agreements with Canada and Mexico.” New York has many years of experience in operating under the ERP and effective antenna height (EAH)

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<sup>14</sup> <sup>14</sup> §C, Consensus Plan COMMENTS OF THE BOEING COMPANY, February 10, 2003

<sup>15</sup> <sup>15</sup> §I-F, Consensus Plan COMMENTS OF THE BORDER AREA COALITION, February 10, 2003

restrictions in the Canadian border areas, and these comments raise serious concern as to how Guard Band Channel interference protection could be afforded in these areas.

14. Further, the State does not generally object to the increase in desired signal levels within the guard band. However, we are concerned that in practice there may be cases where licensees or near-term applicants<sup>16</sup> are forced<sup>17</sup> to accept guard band channel assignments (or any assignment greater than 814/859 MHz). In these instances, the FCC must ensure that such licensees or near-term applicants are exempt from the requirement to provide increased signal levels in order to claim protection from interference.

### **III. INTERFERENCE ISSUES (“APPENDIX F”)**

15. The State of New York appreciates that the parties to the Consensus Plan have expended a great deal of effort in order to develop a comprehensive set of guidelines for mitigating interference conflicts within 800 MHz, and in fact have been involved with the development of these guidelines. It is clear that effective and structured framework to resolve interference complaints, with clear roles, responsibilities, and lines of communications has been developed. While the State feels that a solid foundation has been laid, we also feel that the interference mitigation procedures presented within the "Consensus Plan" are incomplete, and currently too ambiguous. Specific procedures that we address here are minimum signal level requirements and intermodulation and receiver overload effects. We are also concerned by the underlying theme that all 800 MHz

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<sup>16</sup> For example, a NPSPAC applicant in the Canadian border Region that is currently in the Regional Planning process, preparatory to license application. (Some NPSPAC Planning Regions have encountered excessive delays in the Regional Plan amendment approval process.)

<sup>17</sup> For example, non-campus-based systems (Public Safety or otherwise) may be required to operate on Guard Band channels in certain areas.

operations should migrate toward interference-limited designs. We cannot make this point clear enough - Public Safety must be allowed to continue to design fiscally responsible<sup>18</sup> and environmentally friendly<sup>19</sup> noise-limited systems.

### **Minimum Signal Level**

16. In Appendix F of the "Consensus Plan" proposal, protection from interference is extended, provided<sup>20</sup> that the alleged victim maintains a desired signal strength level of -95 to -98 dBm (for new/replacement and legacy systems respectively) in the area of complaint. The State has several concerns regarding this criterion.

17. The levels themselves imply that Public Safety will need to introduce at least an additional 3-dB reliability margin in their system designs as newer systems are designed and constructed. As noted in our comments<sup>21</sup> on ET Docket 02-135, this implies a tremendous increase in the costs and environmental impacts of Public Safety radio systems. Motorola has concurred with this, noting<sup>22</sup> that "...*public safety and private licensees might be required to construct a considerable number of additional transmit sites to their existing systems to obtain interference protection...*" that "...*a public safety licensee operating a 10 site system may need to expand its system to 33 sites to achieve a -95 dBm signal level throughout its existing coverage area*" and that "*The proposed -95*

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<sup>18</sup> i.e. utilizing sensitive high spec receivers to minimize siting requirements.

<sup>19</sup> Increasing signal levels to overcome interference will require increased transmitting tower site density – not considered environmentally friendly.

<sup>20</sup> "Consensus Plan" § Appendix F-2, 2.1.1 a-b

<sup>21</sup> § Appendix A, Comments of Statewide Wireless Network, New York State Office for Technology, January 7, 2003, FCC ET Docket No. 02-135

<sup>22</sup> §III-A-1, Consensus Plan Comments of Motorola Inc., February 10, 2003

*dBm and -98 dBm thresholds would therefore require public safety/private licensees to make significant investments merely to qualify for interference protection in substantial portions of their coverage areas after rebanding.”*

18. While -95 to -98 dBm is very close to the values specified for regulatory contours, past systems have not been mandated to design to these levels. In our prior filing we noted that a commercial high site SMR or fiscally challenged Public Safety system may get adequate coverage with a rural system designed to levels well below -98 dBm. Motorola again concurred, adding that “*Licensees in this band operate noise-limited systems, which will have acceptable audio quality, as defined by TIA Technical Services Bulletin 88, with signal strengths as low as -106 dBm*” and “*...proposed signal strength thresholds do not reflect the expected usable signal strengths of today’s public safety systems.*” Motorola further<sup>23</sup> cautions that “*these proposed criteria would require public safety and private licensees operating in the 851-859 MHz band to increase their signal level by approximately 8 to 11 dB from current levels to retain the right to interference protection*”, and “*...if licensees were unable to make these significant investments, they would receive no interference protection and would have to accept even harmful levels of interference, which could significantly shrink their usable coverage areas.*”

19. The State continues to strongly object to setting any minimum desired signal level without defining the corresponding measurement process. A median desired signal level that is greater than -98 dBm within the affected area might be reasonable. However, if this level is measured at the 95<sup>th</sup> percentile within the affected area, then the median design level anywhere within the service area may need to be more than 12-dB higher.

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<sup>23</sup> Id.

As shown in foot note 21, this would effectively require a three-fold to five-fold increase in the number of required public safety transmitter locations, with corresponding fiscal and environmental impacts. Since the proposed “Consensus Plan” states that *"For either “existing” systems and “new or replacement systems,” the interference protection established here will be based on an area coverage probability of 95%<sup>24</sup>*, the implication seems to be that these measurements are at the 95<sup>th</sup> percentile - which is completely unacceptable. Without a solid measurement technique specified, these thresholds are completely ambiguous. We therefore ask that the Commission take no action on these thresholds until the parties to the Consensus Plan clarify this issue. Motorola has provided additional comment<sup>25</sup> on this, noting, *“Motorola agrees that a complete and repeatable measurement procedure to determine signal levels at spot locations must be addressed.”*

20. In closing we also note the burdens placed upon the Guard Band channels. For example UTC<sup>26</sup> commented, *“Further, interference protection is to be greatly reduced in the guard band under the PWC proposal. The plan calls for sliding interference protection between 859 MHz and 861 MHz, with the threshold increased by 33 dB closest to 861 MHz. 25 UTC members have calculated the differences against their systems, and noted that the average base station will lose 70-75 percent (70-75%) of its usable coverage area, making vital communications systems virtually useless.”*

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<sup>24</sup> "Consensus Plan" § Appendix F-2, 2.2.2 c

<sup>25</sup> Id.

<sup>26</sup> Section D, Comments of the United Telecom Council and the Edison Electric Institute on the Supplemental Comments, February 10, 2003

## Intermodulation and Receiver Overload

21. The State has been concerned that although interference from OOBE might be minimized under this consensus proposal, it is not clear that the Intermodulation (IM) or receiver overload issues are adequately resolved. In fact, many others have expressed similar concerns. Verizon<sup>27</sup> noted that unless other factors are addressed, such as lowering on-street levels of cellular and CMRS signals “...Receiver overload cannot be mitigated, even to a small degree...” and that “the proposed band realignment will not mitigate one of the most significant causes of interference to public safety operations - receiver overload.” With regard to overloads and intermodulation effects, a coalition<sup>28</sup> of major wireless providers added that the “...plan does not eliminate interference...”

22. Other commenting parties added comment on a need for reduction of power levels from commercial providers - since these overload and intermodulation effects are mainly due to high aggregate CMRS and cellular levels on the ground. The City and County of San Diego (also noted by the Public Safety Improvement Coalition at p.9) stated<sup>29</sup> that “What is more practical and beneficial to public safety is if the CMRS-type systems were required to reduce their power levels” and “There is no mention of commercial power reduction in Appendix F, despite the Commission’s call for comment on the tradeoffs among commercial and public safety signal levels, public safety receiver discrimination, number of public safety base stations, and other factors. This is a serious omission, and

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<sup>27</sup> Section A, Consensus Plan Comments, Verizon Wireless

<sup>28</sup> § I-B-, Consensus Plan Joint Comments of Alltel, Cingular, Sprint, AT&T Wireless, Southern LINC and United States Cellular Corporation, February 10, 2003

<sup>29</sup> <sup>29</sup> p7 and 8, Consensus Plan COMMENTS OF THE CITY AND COUNTY OF SAN DIEGO, February 10, 2003

*it cannot be answered simply by promises that commercial providers will reduce power upon complaint, after the fact.”*

### **Overall Push Toward Interference Limited Systems**

23. In closing these comments on interference mitigation, we must express concern that many of the concepts introduced by the proposed “Consensus Plan” have the implication that all 800 MHz services will need to migrate toward interference limited designs. The Commission must proceed carefully in matters such as this, which have severe environmental and financial impacts<sup>30</sup> with regard to Public Safety. Others have also noted the significant environmental, zoning, and economic burdens that can result from such a policy: Con Ed commented<sup>31</sup> that *“To qualify for the same amount of interference protection as it now has under the existing FCC rules, Con Edison would need to build additional base stations. This could be practically impossible or, at a minimum, extremely onerous and expensive because of the zoning and other site acquisition issues in the New York metropolitan area. Accordingly, Con Edison’s operations on the newly designated Guard Band frequencies will have insufficient interference protection under the Consensus Parties’ proposal.”* The City and County of San Diego stated<sup>32</sup> that *“Requiring public safety to design and build new networks with a minimum -95dBm signal level means that these networks are going to be more costly to build. It is also setting up a power war.”* The State of Florida added, *“While the costs for extra towers may be reimbursed (along with microwave, leased lines, generators, shelters, real estate,*

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<sup>30</sup> see footnote 21, *supra*.

<sup>31</sup> §B-1, COMMENTS OF CONSOLIDATED EDISON COMPANY OF NEW YORK, INC., February 10, 2003

<sup>32</sup> p7, Consensus Plan COMMENTS OF THE CITY AND COUNTY OF SAN DIEGO, February 10, 2003

*and other associated costs), it will create additional costs for the affected public safety agency for additional ongoing maintenance after the relocation plan has been implemented.” And with regards to zoning and system planning Motorola added<sup>33</sup> that “...customers often encounter practical difficulties implementing additional sites even where funding is available. Given esthetic concerns and local regulations, it is a challenge today to obtain zoning approvals for new sites” and “implementing additional sites in a system would require the use of additional frequencies to prevent inter-system interference.”*

## **IV. LOGISTICS AND IMPLEMENTATION**

### **Phased Implementation**

24. The proposed “Consensus Plan” contained a very detailed outline of how the re-partitioning of the 800 MHz band will be accomplished. New York is very concerned that under this type of prioritization scheme, the three Regions<sup>34</sup> within New York would be dealt with at three different phases of implementation of the consensus plan. Since SWN is a statewide network, it would be very difficult, if not impossible, to manage the frequency relocations on differing schedules, while maintaining seamless multi-agency interoperability throughout the State. For this reason, we maintain that States who contain multiple NPSPAC Regions must have the option of requiring that all Regions within their State be relocated simultaneously. As an example, New York’s three

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<sup>33</sup> §III-A-1, Consensus Plan Comments of Motorola, February 10, 2003

<sup>34</sup> There are three NPSPAC planning regions within New York State, Region 30 (New York-Albany), Region 55 (New York-Buffalo), and Region 8 (Metro NY).

Regions would need to be simultaneously relocated according to the schedule of its highest priority region. This position is also supported by the Regional Planning Committees of the State of Texas, who noted *”Thus, in order to avoid such an undesirable result, the commentors request that, in any orders that may be made in this proceeding, the Commission order that all regions in the State of Texas be relocated concurrently”*<sup>35</sup>. Motorola has also expressed concern over this issue where they note *”For state-wide systems, a licensee’s service area may encompass multiple regions, including populated regions that may be planned near the beginning of the transition and less populated regions where planning would fall near the end of the transition period. All of these factors will likely create varying levels of uncertainty among public safety users, as well as the RCC, which may result in deployment delays unless all parties are clear on their priorities.”*<sup>36</sup>

## **Optimal Spectrum Utilization**

25. The State has always maintained<sup>37</sup> that the any plan that reconfigures the 800 MHz band would offer the opportunity to used advanced techniques to “repack and repool” the spectrum within the band, allowing for optimal spectrum efficiency, while reducing and eliminating interference within the band. It is clear that this type of approach would free additional spectrum for Public Safety, by pulling out the “slack<sup>38</sup>”, and allowing excess

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<sup>35</sup> Para. 10, *Joint Comments of the Six Texas NPSPAC Regional Review Committee Chairmen and the Texas Department of Public Safety to the Supplemental Comments of the Consensus Parties*, January 31, 2003

<sup>36</sup> §II-B, Consensus Plan Comments of Motorola, February 10, 2003

<sup>37</sup> §5.1, FCC Docket 02-55, COMMENTS OF: Statewide Wireless Network, New York State Office for Technology, May 2, 2002

<sup>38</sup> For example, in either NPSPAC (821-824/866-896 MHz) or “old block” (806-821/851-866 MHz), the 800 MHz Spectrum has been assigned over time based upon a gradually rising demand. Because of this, the process of assigning this spectrum has been inherently inefficient. It is clear that assigning the entire band at once could optimize the availability of the spectrum on a

spectrum to be “directed” into areas where it is most needed. However the proposed plan for moving the Phase I and Phase II channels is extremely spectrally inefficient. In this plan, the channels would most likely be simply shifted by frequency (i.e. NPSPAC) or would be examined on a Region-by-Region basis by the RCCs. In fact, if the NPSPAC spectrum was to be moved lower in frequency while maintaining all relative channel assignments<sup>39</sup>, this will have the effect of essentially propagating inefficiency - with no thought to spectrum optimization.

26. New York is concerned that the opportunity to “repack and repool” the spectrum will be lost due to the widespread fear that the Consensus plan is already “too complicated”. The Commission must have the foresight to require that the spectrum be reallocated as efficiently as possible if this band is to undergo major renovation. The City of Philadelphia has expressed<sup>40</sup> similar concerns, stating “*Without giving the Regions time to negotiate more harmonious reallocations of spectrum to accommodate varied technologies, overall spectrum allocation will not be optimized. Accumulated inefficiencies will instead be transferred from one block of 800 MHz frequencies to another*” and offering that “*Currently, the regional planning process has resulted in a practice of relying on geographical buffers between facilities of licensees using different technologies. With different co-channel spacing criteria applicable to each different technology, much valuable spectrum is rendered unusable. There is now an opportunity*

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National basis. Techniques to do this are very powerful, and have already been applied (for example note how the generation of the 700 MHz Public Safety General Use Pool Channels was accomplished-See “Generation of Initial Pool Allotments for the 700MHz Pre-Coordination Database” presentation by Sean O’Hara (SRC) and Robert F. Schlieman (NYS Statewide Wireless Network) at the NCC General Meeting at Commission Headquarters September 20, 2002 and “Final 700MHz General Use Narrowband Allotment Pool” at the NCC Implementation Subcommittee meeting February 20, 2003 at Commission Headquarters, attached).

<sup>39</sup> “Consensus Plan”, §IV-C

*to cluster compatible uses within the NPSPAC portion of 800 MHz band to maximize spectrum efficiency” giving the example that “...in the most recent filing window under the regional planning process, both Philadelphia and the Commonwealth of Pennsylvania were allocated less spectrum than would have been available had spectrum been allocated more rationally, with full consideration given to the incompatibility of differing technologies. This situation is not uncommon.”*

### **Operational and Implementation Restrictions**

27. It is evident that any reconfiguration and de-interlacing of the 800 MHz band will coincide with some portion of SWN construction. The State again stresses that under no circumstances should the FCC take action that would delay the implementation or operation of the SWN, as it will be a critical component within this State (and Nation's) homeland defense efforts. This same concern has been noted by Motorola, who states that “...the RCC’s activities should neither create undue delays in the implementation of public safety systems already under development nor have a “chilling effect” on the design of new 800 MHz public safety systems”<sup>41</sup>, as well as by New York City, who “requires an ‘airtight’ assurance that public safety systems will remain 100 percent operational during the relocation process to endorse the Consensus Plan.”<sup>42</sup>

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<sup>40</sup> §3, COMMENTS OF THE CITY OF PHILADELPHIA ON THE SUPPLEMENTAL COMMENTS OF THE CONSENSUS PARTIES, February 10, 2003

<sup>41</sup> §II-B, Consensus Plan Comments of Motorola, February 10, 2003

<sup>42</sup> Page 6, Consensus Plan Comments of New York City

## V. 700 MHZ SOLUTIONS

28. There have again been many filings that claim that moving Public Safety to 700 MHz is the best option for mitigating 800 MHz interference issues, as opposed to de-interlacing the 800 MHz band. CTIA notes that this is the “...*best long term solution*...” and describes it as the “...*optimal solution ... is to redeploy their systems in the 700 MHz Band*”<sup>43</sup>. This was also noted within the joint comment of many of the major wireless and ESMR carriers, who referred to it “...*the long term answer is the 700 MHz solution*...”<sup>44</sup>.

29. In its Reply Comments on this Docket<sup>45</sup>, New York had described this approach as a possible long-term solution to the 800 MHz interference problems, and supports it as such. It could provide the most public safety spectrum out of all the proposed plans, and would consolidate much of Public Safety’s operations into one band. However, the success of this type of plan would be conditional upon both 700 MHz band harmonization in the international border regions, and domestic 700 MHz band clearing. Both of these are policy issues that remain to be addressed. In that filing, New York had also provided attachments that highlighted the difficulties that public safety would have in employing systems at 700 MHz, even given both the public safety and upper commercial allocations (TV channels 60 through 69). It was clear that without harmonization of the US and Canadian mobile allocations in TV channels 60 through 69

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<sup>43</sup> § III-2, Consensus Plan Comments of the Cellular Telecommunications & Internet Association, February 10, 2003

<sup>44</sup> § II, Consensus Plan Joint Comments of Alltel, Cingular, Sprint, AT&T Wireless, Southern LINC and United States Cellular Corporation, February 10, 2003

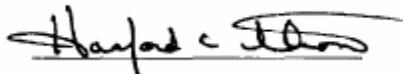
<sup>45</sup> § III-C, FCC Docket 02-55, REPLY COMMENTS OF New York State Office for Technology, Statewide Wireless Network, August 6, 2002

that there are areas where no 700 MHz Public Safety systems could be deployed - even given the flexibility afforded by augmenting the Public Safety allocation with the entire upper 700 MHz commercial allocation.

## VI. CONCLUSION

30. As indicated in these comments, the "Consensus Plan" as submitted on December 24, 2002, in our view has certain unresolved issues, as well as incomplete and ambiguous mitigation procedures. Once these are resolved we believe that this plan will be effective, and indeed imperative, to resolve the issues related to interference within the 800 MHz band. In this and previous filings the State has recommended actions that it believes will correct these conditions, and continues to believe that these actions are critical in order to successfully improve Public Safety Communications in the 800 MHz band. We thank the Commission for the opportunity to present these views and recommendations, and look forward to their inclusion in the final action to be taken by the Commission on this matter.

Respectfully Submitted,



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