In the Matter of
City of Parma, Ohio
and Sprint Nextel Corporation
Mediation No. TAM-43195

MEMORANDUM OPINION AND ORDER

Adopted: September 27, 2010
Released: September 28, 2010

By the Deputy Chief, Policy Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. In this Memorandum Opinion and Order, we address a case referred to the Public Safety and Homeland Security Bureau (PSHSB or the Bureau) for de novo review from Wave 4, Stage 2 mediation by the 800 MHz Transition Administrator (TA). The case involves a dispute between the City of Parma, Ohio (Licensee or Parma) and Sprint Nextel Corporation (Sprint) (collectively, the Parties) over the adoption of a Frequency Reconfiguration Agreement (FRA). Based on our de novo review of the mediation record, the Recommended Resolution submitted by the TA-appointed mediator (TA Mediator or Mediator) in this case, and the Parties’ position statements, we resolve the Parties’ dispute in Sprint’s favor.

II. BACKGROUND

2. The 800 MHz Report and Order and subsequent orders in this docket require Sprint to negotiate a frequency relocation agreement (FRA) with each 800 MHz licensee that is subject to rebanding. Parma is the licensee of stations WNQL533 and WPPY843. Station WPPY843 operates on frequency pair 808.5625/853.5625 MHz and is not subject to rebanding. According to the Commission’s Universal Licensing System, Station WNQL533 operates at two locations, each using the identical ten frequencies, in the “old” NPSPAC band (821-824/866-869 MHz). Thus, the WNQL533 facilities must be relocated into the “new” NPSPAC band (806-809/851-854 MHz).

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1 Recommended Resolution filed April 22, 2010 (RR); 800 MHz Transition Administrator’s Transmittal of Record and Request for Confidential Treatment, TAM-43195, April 22, 2010 (TA Record).


3 Parma formerly held Special Temporary Authorization (STA), call sign WQJA317, which expired on June 13, 2010.

4 Frequency 808.5625/853.5625 MHz falls in the “new” NPSPAC band (806-809/851-854 MHz) and thus WPPY843 may remain on its current frequency.
3. On October 10, 2008, the Commission issued a Public Notice announcing the start of the negotiation period for rebanding in the U.S.-Canada border region. Sprint and Parma began rebanding negotiations on October 22, 2008. After several extensions of the negotiation period, a Planning Funding Agreement (PFA) was approved by the TA on February 25, 2009. Parma then provided a series of rebanding cost estimates to Sprint which, on July 27, 2009, eventually deemed the estimates sufficiently complete to serve as a basis for negotiation. On July 28, 2009, the TA Mediator directed the parties to begin negotiations. Although the Parties agreed on some aspects of Parma’s rebanding, they failed to agree on two issues: (1) methodology (and cost) of infrastructure retuning, and (2) whether Sprint was obligated to replace certain of Parma’s subscriber equipment. Accordingly, after an extended mediation period, the TA Mediator, on February 19, 2010, directed the Parties to submit Proposed Resolution Memoranda (PRM). Finding the information and arguments in the PRMs to be insufficient, the TA Mediator, on March 23, 2010, ordered the parties to submit supplemental PRMs. The TA Mediator issued its Recommended Resolution (RR) on April 22, 2010. Parma did not agree with the TA Mediator’s recommendation and initiated the de novo review process. The Parties filed Statements of Position with the Bureau on May 6, 2010.

III. DISCUSSION

A. Standard of Review

4. The Commission’s orders in this docket assign Parma the burden of proving that the funding it has requested is reasonable, prudent, and the “minimum necessary to provide facilities comparable to those presently in use” (Minimum Cost Standard). The Commission has clarified that the term “minimum necessary cost” does not mean the absolute lowest cost under any circumstances, but the “minimum cost necessary to accomplish rebanding in a reasonable, prudent, and timely manner.” The Minimum Cost Standard thus takes into account not only cost, but all of the objectives of the proceeding, including completing the rebanding process in a timely and efficient manner, minimizing the burden that rebanding imposes on public safety licensees, and facilitating a seamless transition that preserves public safety’s ability to operate during the transition. Sprint’s burden is to demonstrate that it is providing the rebanding licensee with “comparable facilities” on the new channels at the conclusion of the rebanding

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6 Notice of Commencement of Negotiation, October 21, 2008, TA Record, Appendix, Tab 3.

7 Order to Submit Revised Cost Estimate, July 16, 2009, TA Record, Appendix, Tab 17 (Cost Estimate Order).

8 RR at 2.

9 RR at 3.


12 800 MHz Report and Order, 19 FCC Rcd at 15074 ¶ 198; 800 MHz Supplemental Order, 19 FCC Rcd at 25152 ¶ 71 (2004).


14 Id. at 9820 ¶¶ 6, 8.
process.\textsuperscript{15} In addition, Sprint must provide the means to ensure a smooth transition, \textit{i.e.}, that the licensee has the ability to maintain its operations without interruption during the retuning process.\textsuperscript{16}

\section*{B. Issues in Dispute}

\subsection*{1. Backup System PSTN Interconnection}

5. Parma operates two primary trunked repeater systems, one a P25 system and the other an EDACS system, utilizing MASTR III base stations.\textsuperscript{17} The retuning of these two primary systems is not in dispute. In addition, Parma has a seven-channel backup system at one of its sites, which operates with EDACS technology using MASTR II base stations. The Parties disagree regarding the retuning of the backup system.

6. The backup system is approximately 20 years old. It is interconnected with the public switched telephone network (PSTN) through equipment known as a Repeater Interconnect Controller (RIC) and a Line Interconnect Crossbar (LIX). RIC/LIX devices became obsolete in the mid-1990s, and Harris Corporation, the current successor to the original manufacturer, Ericsson, no longer services or warrants such equipment.\textsuperscript{18} In order to maintain the backup system’s PSTN interconnection capability, Parma requests an upgrade to a MASTR III P25 system, equipped with compatible interconnect equipment currently offered by Harris.\textsuperscript{19} Sprint, however, rejects the upgrade proposal and offers two alternative solutions that it asserts would enable Parma to continue using its existing RIC/LIX equipment on the backup system: (1) retuning the backup system’s MASTR II base stations by replacing the frequency-determining crystal oscillators, leaving the existing RIC/LIX system in place, unmodified; or (2) providing Parma with EDACS MASTR III base stations (not the P25 MASTR III base stations Parma requests) and modifying the RIC/LIX equipment so that it is compatible with the EDACS MASTR III base stations. The Licensee rejects both alternatives “on the grounds that the proposals were too risky and would either damage the Licensee’s system or render it unstable.”\textsuperscript{20}

7. \textit{Sprint’s Position}. Sprint states that its engineers, utilizing documentation prepared by Ericsson, the original equipment manufacturer (in partnership with General Electric), successfully modified RIC/LIX equipment so that it operated successfully with an EDACS MASTR III base station in a test environment.\textsuperscript{21} Sprint notes Parma’s argument that neither Harris nor Parma’s contractor is willing to modify the RIC/LIX equipment, but disputes that modifying the equipment poses an undue risk. Sprint also argues that the modification would not void the equipment warranty, since the warranty

\begin{itemize}
\item \textsuperscript{15} The standards for comparable facilities are: (1) equivalent channel capacity; (2) equivalent signaling capability, baud rate and access time; (3) coextensive geographic coverage; and (4) comparable operating costs. \textit{800 MHz Report & Order}, 19 FCC Rcd at 15077 ¶ 201. \textit{See also} Amendment of Part 90 of the Commission’s Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, \textit{Second Report and Order}, 12 FCC Rcd 19079, 19112-13 ¶¶ 89-95 (1997) (defining comparable facilities in the context of Economic Area licensees’ relocation of incumbent site-based SMR licensees).
\item \textsuperscript{16} City of Houston, Texas Public Works Department and Sprint Nextel, \textit{Memorandum Opinion and Order}, 24 FCC Rcd 4655, 4659 (2009) ¶ 16 (\textit{Houston Order}).
\item \textsuperscript{17} Proposed Resolution Memorandum of Nextel Communications, Inc. dated March 1, 2010, at 2; TA Record, Appendix, Tab 38 (Sprint PRM). The first system operates with Project 25 technology using MASTR III base stations and has six operational channels and four standby channels. The second system operates with EDACS technology using MASTR III base stations with five operational channels and two standby channels.
\item \textsuperscript{18} RR at 5.
\item \textit{Id.}
\item \textsuperscript{19} RR at 4.
\item \textsuperscript{20} Proposed Resolution Memorandum of Nextel Communications, Inc. dated March 1, 2010 at 4-5, TA Record, Appendix, Tab 38 (Sprint PRM).
\end{itemize}
expired years ago. To assuage Parma’s concern about damage to the equipment during the modification process, Sprint has offered Parma “a pre-modified RIC for use in case of failure during retune.”

8. As an alternative to RIC board modification, Sprint offered to replace the existing MASTR II Integrated Circuit Oscillator Modules (ICOM) with different modules equipped with crystals tuned to the new frequencies. Sprint indicates that this would accomplish re-tuning without the need to modify the existing RIC/LIX equipment. In response to Parma’s concern that MASTR II’s with new ICOMs would not meet the frequency stability requirements of Section 90.213 of the Commission’s rules, Sprint cites a statement from M/A-COM (a Harris predecessor) that re-crystalled MASTR II units, will meet “FCC R&O” requirements when used in any non-simulcast system or non-NPSPAC simulcast system. Sprint also produced a letter from the manufacturer of the crystals, International Crystal Manufacturing Company, which cites a return rate of less than 0.5% on crystals for any reason and states that there have been no known crystal malfunctions. Additionally, Sprint offered two sets of ICOMs as backups and offered to warrant the installed ICOMs for four years.

9. 
Licensee’s Position. Parma rejects both of Sprint’s proposed interconnection solutions. It claims that modifying the RIC boards could result in their failure. Specifically, Parma states:

[a]s was carefully explained to Sprint Nextel, the subject circuit boards are 20 years old. Over time due to temperature and age, circuit boards become brittle and handling of those boards becomes increasingly treacherous. Cutting circuit traces and re-rigging the boards with jumpers is simply an unsafe practice. By proposing this solution, Sprint Nextel would ask Parma to risk loss of one or more boards and the attendant interconnection capacity, or at least risk reducing dramatically the useful life of all boards, to accommodate rebanding. This is unacceptable. Parma is entitled to the same equipment life, dependability, and quality of hardware that it presently enjoys.

Parma states that Sprint’s offer of “back-up boards” is unsatisfactory because the modified backup boards – which have not been manufactured for over ten years – would have the same potential for failure as the existing system boards. Furthermore, Parma points out that the feasibility of modifying the existing system boards has not been independently verified and that neither Harris nor Parma’s local vendor, Cleveland Communications, Inc. (CCI), is willing to modify the boards.

10. Addressing Sprint’s proposal to provide re-crystalled ICOMs, Parma argues that the proposed replacement crystals will not provide the 1.0 parts per million (ppm) frequency stability at which the MASTR IIs were originally rated. Thus, Parma asserts, the MASTR II units would not

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22 Id.
23 Sprint PRM at 13-14. ICOM channel elements are standalone components that contain the crystals and circuitry that generate a target frequency. Supplying the MASTR IIs with ICOMs tuned to the new frequencies would avoid the interconnect issue by leaving the current RIC/LIX in place.
24 47 C.F.R. § 90.213.
26 Sprint Reply PRM at 4-6, Appendix 1 at 1-2 .
27 Sprint Nextel PRM at 5, 13, App. 5 at 72 (Record Tab 38).
28 See Parma, Ohio, Proposed Resolution Memorandum, March 5, 2010, at 7, TA Record, Appendix, Tab 39 (Parma PRM).
29 Id. at 7, n.6.
30 Parma PRM at 8.
conform to their original FCC equipment authorization, and would violate the frequency stability requirements of Section 90.213 of the Commission’s Rules. Because of the alleged lack of frequency stability of the re-crystalled Master IIs, Parma submits that it would be subject to adjacent channel interference post-rebanding. Further, Parma asserts that in other rebanding negotiations, Sprint has routinely agreed that MASTR II units should be replaced with MASTR IIIIs. This, Parma argues, is evidence that Sprint is aware that re-crystalled MASTR IIs do not perform satisfactorily. In sum, Parma argues that the only equipment that will provide it with comparable facilities is Project 25 MASTR III equipment, interfaced with Harris’ most recent VIDA PSTN interconnection equipment.

11. **TA Mediator’s Recommendation.** The TA Mediator recommends that the Commission find that either re-tuning solution offered by Sprint would provide Parma with comparable facilities. The TA Mediator notes that the comparable facilities standard does not require Sprint to replace a 20-year old MASTR II system with a state-of-the-art Project 25 MASTR III system. The TA Mediator acknowledges that the RIC boards may be old, brittle, and possibly prone to breakage. However, the TA Mediator notes that the RIC board modification “comes directly from the manufacturer of the Licensee’s equipment,” and that the possibility of damage arises only because Parma’s existing system “consists of old, outdated equipment with a limited remaining life.” The TA Mediator recognizes that performance of the modified RIC boards has not been verified except in Sprint’s lab but does not find this dispositive. Because Parma failed to either dispute the test’s validity or conduct its own test, the TA Mediator finds Parma’s concerns about damage to the RIC boards to be merely speculative. As to the local vendor’s unwillingness to perform the modifications, the TA Mediator finds that the unwillingness likely is due to liability concerns that could be addressed contractually. With respect to Sprint’s alternate proposal – replacement MASTR II ICOMs with new crystals – the TA Mediator does not find Harris’ refusal to warrant the re-crystalled units significant, observing that “Harris has not taken the position that its MASTR IIs cannot be recrystalled, only that it will not warrant them after they are recrystalled.”

12. **Decision.** We agree with the TA Mediator that either of Sprint’s options would provide Parma with comparable facilities. Parma has failed to meet its burden of showing that its proposal – replacing the existing equipment with new Project 25 MASTR III infrastructure – meets the Commission’s minimum reasonable rebanding cost standard. We find Parma’s claim that modifying the RIC boards will damage them to be speculative and undocumented, especially in light of Sprint’s

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31 47 C.F.R. § 90.213. Id. at 3.
32 Parma PRM at 4.
33 Parma does not contend, however, that Sprint previously has replaced EDACS MASTR II systems with P25 MASTR III systems – the version of the MASTR III system that Parma prefers.
34 Id. at 5.
35 Id. at 9. It appears that there were instances during the negotiations where it was unclear whether Parma was seeking MASTR III or MASTR V equipment. See infra ¶20. However, Parma ultimately indicated that “it repeatedly stated that it will accept MASTR III equipment.” See Parma, Ohio, Statement of Position, May 6, 2010, at 6 (Parma SOP).
36 RR at 10.
37 Id. at 10-11.
38 Id.
39 Id. at 11.
40 Id.
41 See supra ¶4.
successful modification and testing of the boards using a procedure recommended by the manufacturer. Should any board be damaged during modification, Sprint stands ready to provide a tested replacement. We are not persuaded by Parma’s contention that MASTR II units, equipped with new ICOMs, will not meet the Commission’s frequency stability requirements and thus submit Parma to adjacent-channel interference. Nonetheless, if Parma elects to use the MASTR II units, Parma may monitor the channel frequencies post-reconfiguration over a two-month period. If Parma documents that the frequency stability of any ICOM unit does not comply with Section 90.213(a) of the Commission’s rules, Sprint must replace the ICOM with a compliant unit.\(^{42}\)

2. MTD Radios

13. The second issue in dispute is whether Sprint must replace 46 Harris MTD radios currently used by Parma that do not meet the Commission’s requirements for frequency stability. Section 90.213 of the Commission’s rules provides that radios operating on NPSPAC channels must have a minimum frequency stability of 1.5 ppm.\(^{43}\) Parma’s MTD radios, however, are only specified to operate with a frequency stability of 2.5 ppm across the entire band.\(^{44}\) Hence, the MTD radios did not comply with the Commission’s rules for the old NPSPAC band, nor are they compliant in the new NPSPAC band, which is subject to the same 1.5 ppm frequency stability requirement. Parma, however, submits that Sprint must pay for replacement radios that will meet the 1.5 ppm standard in the new NPSPAC band.\(^{45}\)

14. **Sprint’s Position.** Sprint argues that it should not be required to provide replacement radios to eliminate a pre-existing rule violation unrelated to rebanding. Sprint has offered to pay Parma an amount equal to that which would be required to retune the MTD radios from the old to the new NPSPAC band, but contends that replacing the MTD radios with rule-compliant radios would constitute an impermissible upgrade.\(^{46}\)

15. **Licensee’s Position.** Although it continues to maintain that its legal case for replacement radios is correct, Parma has indicated that, “[i]n the interest of good faith compromise,” it would accept Sprint’s offer to pay the equivalent cost of retuning the MTD radios.\(^{47}\)

16. **TA Mediator’s Recommendation.** The TA Mediator recommends that Sprint be held responsible only for the equivalent cost of retuning the MTD radios to the new NPSPAC band. The TA Mediator agrees with Sprint that the MTD radios cannot lawfully operate on the new NPSPAC channels because of their inferior frequency stability. Accordingly, the TA Mediator states that if the Parma were to use the MTD radios in the new NPSPAC band, it would be required to obtain a waiver from the Commission. Alternatively, absent grant of such a waiver, the TA Mediator recommends that we direct Sprint to pay Parma an amount equivalent to the cost of retuning the MTD radios to the new NPSPAC band. Parma could then use the proceeds toward purchase of new, rule-compliant, radios.\(^{48}\)

17. **Decision.** We accept the Parties’ agreement that Sprint pay costs equivalent to returning the MTD radios. In no event, however, may Parma operate the MTD radios in the new NPSPAC band.

\(^{42}\) In the unlikely event that the ICOM units – as a whole – prove incapable of maintaining 1 ppm frequency stability, Sprint shall supply Parma with EDACS MASTR III units and modified RIC/LIX units.

\(^{43}\) 47 C.F.R. § 90.213(a).

\(^{44}\) RR at 12.

\(^{45}\) RR at 4.

\(^{46}\) Sprint SOP at 10-12.

\(^{47}\) Parma SOP at 6.

\(^{48}\) RR at 15.
absent a waiver of Section 90.213(a) of the Commission’s rules. In that regard, we note that the Commission has not previously waived the frequency stability requirements of Section 90.213(a) relative to the NPSPAC band.

3. Costs

18. Because the Parties disagree on what constitutes comparable facilities, they also disagree on the total cost of rebanding Parma’s system. Parma submits that it is entitled to $483,216 for rebanding. Sprint contends that $339,852 is sufficient.

19. **Sprint’s Position.** Sprint asserts that Parma has been “…changing its estimates with every submission, with little or no explanation.” As an example of alleged inconsistencies, Sprint states that “…what was originally listed as a MASTR III EDACS replacement set of equipment for the backup system became a request for a P25/MASTR III configuration. By the Reply PRM stage, that equipment request had morphed yet again to a P25/MASTR V reconfiguration.” Sprint also claims that the number of subscriber units has also varied significantly throughout the proceedings, and that Parma should have been able to provide an accurate count of subscriber units because, prior to the start of negotiations, Sprint “…paid approximately $11,500 for Parma to perform subscriber and infrastructure inventory, which was supposed to prevent just this sort of moving target or lack of clarity during Frequency Reconfiguration Agreement negotiations.” Ultimately, Sprint argues that the Commission should order Parma to accept Sprint’s $339,852 offer made in February, 2010. This offer was based upon the RIC board modification interconnectivity solution (which Sprint has stated is the more expensive of the two solutions offered), retuning the originally inventoried 869 subscriber units, the equivalent retuning cost of the MTD radios, and $16,000 in legal fees.

20. **Licensee’s Position.** Parma’s cost estimate of $483,216 includes upgrading the backup system to Project 25 MASTR III base stations equipped with Harris VIDA PSTN interconnect equipment, and replacement of the MTD radios. Its estimate was based on 1,173 subscriber units. In a supplemental filing, however, Parma asserts that it has 1,267 subscriber units, and that the repeater count has increased from 24 to 27. It also claims in its supplemental filing that its legal costs have increased from $16,000 to $50,000, which includes the costs of preparing and filing license applications.

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49 The Commission intended that the pre-rebanding standards for NPSPAC channels would apply on the new post-rebanding channels. As was clearly stated in the 800 MHz Supplemental Order, the standards set forth in Section 90.213(a) are intended “to reflect the band plan we adopted after reconfiguration of the 800 MHz band” and that “during the transition to a reconfigured 800 MHz band, licensees will continue to operate in accordance with the prior band plan.” 800 MHz Supplemental Order, 19 FCC Rcd at 25159 ¶89.

50 We also observe that Parma’s continued operation of the MTD radios in the old NPSPAC band could subject Parma to enforcement action for violation of Section 90.213(a) of the rules.

51 *See* Comments of Nextel Communications, Inc. on the TA’s Metrics Analysis dated April 12, 2010 at 13, TA Record, Appendix, Tab 50.

52 *Id.*

53 *See* Sprint SOP at 14.

54 Cost Comparison Worksheet – V5.6 Parma, City of, OH – DL8910428280 (TAM-43195); Sprint Nextel Offer submitted April 5, 2010, TA Record, Appendix, Tab 48.

55 Parma PRM, Appendix at 25, TA Record, Appendix, Tab 39.

21. **TA Mediator’s Recommendation.** The TA Mediator recommends that we accept Sprint’s cost estimate of $339,852 and direct the Parties to resolve the inconsistency in the number of subscriber units and repeaters through the Change Notice process or further negotiations.\(^{57}\)

22. **Decision.** Under the Commission’s Minimum Cost Standard, a licensee has the burden of showing that the funding it requests is the minimum necessary to ensure comparable facilities. Sprint has the burden of showing that the costs it proposes are sufficient to provide the licensee with comparable facilities.\(^{58}\) Here, as discussed above, Sprint has met its burden and Parma has not with respect to the PSTN interconnection solution and the MTD radio issue. In addition, Parma’s claim that its allowable legal fees have increased by 212\% over its initial estimate is supported only by the need to file license applications – something that should have been anticipated in the original estimate.

23. To the extent, however, that Parma can demonstrate unanticipated changes in the number of subscriber units or base stations since Parma’s initial inventory, or that Parma has incurred increased legal fees that could not have been anticipated, Parma may seek relief via the Change Notice process after it has concluded an FRA with Sprint.

IV. **CONCLUSION**

24. Our decision today follows the Commission’s mandate that 800 MHz band reconfiguration must be accomplished at the minimum necessary cost consistent with providing licensees with comparable facilities.\(^{59}\) We direct the Transition Administrator to convene a meeting between the Licensee and Sprint within seven days of the release date hereof to conclude an FRA consistent with this Memorandum Opinion and Order.

V. **ORDERING CLAUSES**

25. Accordingly, pursuant to the authority of Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i) and Section 90.677 of the Commission’s Rules, 47 C.F.R. § 90.677, IT IS ORDERED that the issues submitted by the Transition Administrator are resolved as discussed above.

26. IT IS FURTHER ORDERED that the Transition Administrator shall convene a meeting of the parties within seven business days of the date of this Memorandum Opinion and Order for the purpose of negotiating a Frequency Reconfiguration Agreement consistent with the resolution of issues set forth herein.

27. This action is taken under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission’s rules, 47 C.F.R. §§ 0.191, 0.392.

**FEDERAL COMMUNICATIONS COMMISSION**

Michael J. Wilhelm
Deputy Chief - Policy Division
Public Safety and Homeland Security Bureau

\(^{57}\) RR at 19.

\(^{58}\) *800 MHz Report and Order*, 19 FCC Rcd at 15074 ¶198; *800 MHz Supplemental Order*, 19 FCC Rcd at 25152 ¶71.

\(^{59}\) *Id.*