## Reconfiguration Implementation Phase Agreement

Motorola, Inc. ("Motorola") and **Williamson County** ("Customer" or "Licensee"), whose main address is **321 West 8th Street, Georgetown, TX 78626**, enter into this Reconfiguration Implementation Phase Agreement ("Agreement"), pursuant to which Licensee will purchase and Motorola will sell the Reconfiguration Implementation Phase products and/or services described below, and the parties will perform their duties as described in this Agreement. Motorola and Licensee may be referred to individually as a "Party" and collectively as the "Parties." This Agreement is made with reference to the following recitals.

A. On August 6, 2004, the Federal Communications Commission ("FCC") issued a Report and Order FCC 04-168 that modified its rules governing the 800 MHz band to minimize harmful interference to public safety communications systems. On December 22, 2004, the FCC issued a Supplemental Order and Order on Reconsideration FCC 04-294. The August 6 and December 22, 2004 orders, and any supplemental orders issued by the FCC, are collectively referred to as the "Order."

B. Pursuant to the Order, certain licensees of 800 MHz channels used in public safety or other systems must relinquish their existing channels and relocate their systems to other licensed channels ("Replacement Channels"); and Nextel Communications, Inc. ("Nextel") must relinquish some of its existing channels and must provide and pay relocation funds ("Relocation Funds") to enable affected licensees (like Licensee) to relocate their systems onto Replacement Channels and reconfigure their systems so that they are "Comparable Facilities" (as defined below).

C. The FCC has appointed a Transition Administrator (the "TA") to ensure that the rebanding initiative proceeds on schedule and in a planned and coordinated manner so that disruption to a licensee's system is minimized. In the TA's published "Reconfiguration Handbook," the two major phases to accomplish the reconfiguration are described as the "Reconfiguration Planning Phase" and the "Reconfiguration Implementation Phase." This Agreement addresses only the Reconfiguration Implementation Phase. Licensee has selected Motorola to provide the Reconfiguration Implementation Phase Products and Services (as defined below).

D. The Parties acknowledge that additional products or services may be needed for Licensee to achieve Comparable Facilities, and these additional products may be provided by other vendors and these additional services may be performed by Licensee's own personnel or by its other contractors. This Agreement describes only the Reconfiguration Implementation Phase Products and Services (and, if applicable, Upgrades) that Motorola is providing to Licensee.

E. This Agreement is not intended to, and does not, apply to the delivery of any products or services that are not related to the Reconfiguration Implementation Phase activities. If Licensee desires to purchase from Motorola products or services that are not related to these reconfiguration activities, the Parties will document that transaction in another separate contract. However, Licensee may use this Agreement to purchase upgraded subscriber equipment. Upgrades will be paid with Licensee's own funds and not by Nextel.

F. In some transactions with licensees it will be appropriate to complete the Reconfiguration Implementation Phase activities in multiple phases, with the first phase being the delivery and deployment of subscriber equipment and the second phase being all other work. If Licensee and Motorola agree this multi-phase approach is appropriate, then Motorola's Proposal identified below as Exhibit C will address only specific subscriber equipment (including Upgrades, if applicable) and related services, and the Parties will amend this Agreement in the future to add one or more additional Proposals to address the remaining Reconfiguration Implementation Phase work.

For good and valuable consideration, the Parties agree as follows:

**Section 1 EXHIBITS**

The exhibits listed below are incorporated into and made a part of this Agreement. In interpreting this Agreement and resolving any ambiguities, the main body of this Agreement takes precedence over the exhibits and any inconsistency between the exhibits will be resolved in their listed order.

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| Exhibit A | Payment Milestone Schedule (Inapplicable to Subscriber Only Transactions) |
| Exhibit B | System Acceptance Certificate (Inapplicable to Subscriber Only, No Services Transactions) |
| Exhibit C | Motorola's Proposal dated **12/21/2007 (Revised 01/03/2008, 03/26/2008, 05/30/2008, 06/16/2008, 07/09/2008 & 07/22/2008)**, which includes all of the "Technical and Implementation Documents" such as (if applicable):<br>the "Reconfiguration Products List,"<br>the "Reconfiguration Services Statement of Work" or "SOW," including Benchmark Tests, if any,<br>the "Reconfiguration Acceptance Test Plan" or "ATP," and<br>the "Performance Schedule" |

**Section 2 DEFINITIONS**

In addition to the defined terms above, capitalized terms used in this Agreement have the following meanings:

2.1. "Acceptance Tests" means those tests described in the Reconfiguration ATP, the primary purpose of which is to verify that the Licensee's System has been relocated onto Replacement Channels and reconfigured consistently with this Agreement.

2.2. "Benchmark Tests" means the initial tests performed by Motorola on behalf of Licensee to determine the current condition, capability, and functionality of Licensee's System. Depending on the complexity and specific requirements of the reconfiguration efforts, the Benchmark Tests may include testing of some or all of the following: channel capacity, signaling capacity, baud rate and access time, geographic coverage, penetration, redundancy, and other functional and operational capabilities and limitations of Licensee's existing facilities. The precise requirements of the Benchmark Tests are described in the Reconfiguration Services Statement of Work. Qualified representatives of Licensee may observe the performance of the Benchmark Tests.

2.3. "Comparable Facilities" means, as more fully described at Section 90.699(d) of the FCC's Rules, 47 C.F.R.§90.699(d), and as interpreted by the FCC in its orders and rulings, the Licensee's System (including the subscriber radio equipment) have at least the same operational capabilities that existed before relocation, including (1) equivalent channel capacity; (2) equivalent signaling capacity, baud rate, and access time; (3) coextensive geographical coverage; and (4) equivalent operating costs.

2.4. "Confidential Information" means any information that is disclosed in written, graphic, verbal, or machine-recognizable form, and is marked, designated, labeled or identified at the time of disclosure as being confidential or its equivalent; or if the information is in verbal form, it is identified as confidential or proprietary at the time of disclosure and is confirmed in writing within thirty (30) days of the disclosure. Confidential Information does not include any information that: is or becomes publicly known through no wrongful or negligent act of the receiving party; is already known to the receiving party without restriction when it is disclosed; is, or subsequently becomes, rightfully and without breach of this Agreement, of any other agreement between the Parties or of any applicable protective or similar order, in the receiving party's possession without any obligation restricting disclosure; is independently developed by the receiving party without breach of this Agreement; is deemed public information pursuant to the Texas Public Information Act; or is explicitly approved for release by written authorization of the disclosing party.

2.5. "Contract Price" means the price for the Reconfiguration Implementation Phase Products and Services, whether set forth in one or multiple Proposals. The Contract Price excludes any applicable sales or similar taxes, and any Rebanding Radios, Non-Kit Accessories, and Flash Kits which will be invoiced directly to Nextel pursuant to Section 5.2.1.1.

2.6. "Cost Estimate" means the Licensee's certified estimate of costs as provided to Nextel and the TA submitted in conjunction with a request for Relocation Funds to provide Comparable Facilities.

2.7. "Licensee's Final Certification" means the Licensee's final certification to Nextel and the TA certifying that (i) the Acceptance Tests described in the Reconfiguration ATP have been satisfactorily completed, (ii) all necessary reconfiguration work has been satisfactorily completed to provide Licensee with Comparable Facilities, and (iii) Nextel and Licensee have agreed on the sum paid for such relocation of the Licensee's facilities.

2.8. "Customer Suitability Assessment" means the initial assessment services performed by Motorola to determine whether Licensee's System (infrastructure) is suitable for updating using the Motorola Software that has been especially modified for purposes of the 800 MHz band reconfiguration.

2.9. "Effective Date" means that date upon which all Parties have executed this Agreement.

2.10. "Field Services" means the reflashing and installation of a Flash Kit (as defined in Section 3.1.4), firmware, programming, creation of user templates and/or setting of local configurations or other on-site services in accordance with the FCC's 800MHz band plan on Licensee's System.

2.11. "Force Majeure" means a material event, circumstance, or act of a third party (including Nextel or the TA) that is beyond a Party's reasonable control. An act of God, the public enemy, a government entity, or another Party (including another Party's failure to comply with the 800 MHz Rules); strikes or other labor disturbances, general unavailability of necessary materials, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, and riots are examples of a Force Majeure.

2.12. "Infringement Claim" means a third-party claim alleging that the Reconfiguration Implementation Phase Products manufactured by Motorola or any Motorola Software infringes upon the third-party's United States patent or copyright.

2.13. "Motorola Software" means Software that Motorola or its affiliated company owns.

2.14. "Non-Motorola Software" means Software that a party other than Motorola or its affiliated company owns.

2.15. "Non-Kit Accessory" means an accessory that is used for subscriber radios but is not part of the radio kit.

2.16. "Products" means either the hardware, Software, or both, that are provided under this Agreement.

2.17. "Proprietary Rights" means the patents, patent applications, inventions, copyrights, trade secrets, trademarks, trade names, mask works, know-how, and other intellectual property rights in and to any documents delivered by Motorola under this Agreement or any Motorola Software or equipment.

2.18. "Rebanding Radio" means a Motorola manufactured rebanding subscriber radio product (mobile or portable), including the accessories in the radio kit, that is designed and manufactured specifically for the 800 MHz rebanding initiative and is designated by Motorola with an "RB" model number.

2.19. "Reconfiguration Implementation Phase Products" means those Products to be provided by Motorola under this Agreement.

2.20. "Reconfiguration Implementation Phase Services" means those implementation services to be provided by Motorola under this Agreement.

2.21. "Reconfiguration Implementation Phase Products and Services" means those Reconfiguration Implementation Phase Products and Reconfiguration Implementation Phase Services that Motorola sells under this Agreement.

2.22. "Software" means the Motorola and Non-Motorola Software in object code format that is furnished under this Agreement, including any releases or software kits to reprogram radios. This Agreement does not involve any source code.

2.23. "Specifications" means the functionality and performance requirements that are described in the Technical and Implementation Documents.

2.24. "System" means the hardware and software products that comprise the Licensee's existing 800 MHz radio communications system.

2.25. "System Acceptance" means the Acceptance Tests have been successfully completed.

2.26. "Trade-In Non-Kit Accessory" means a legacy accessory that is used for a Trade-In Radio but is not part of the radio kit, is owned and has been used by the Licensee, and which will be provided to Motorola as a trade-in in exchange for a Non-Kit Accessory on a one-for-one basis.

2.27. "Trade-In Radio" means a radio (whether manufactured by Motorola or any other manufacturer) that is owned and has been used by a Customer, and which will be provided to Motorola as a trade-in in exchange for a Rebanding Radio on a one-for-one basis.

2.28. "Upgrades" means upgraded features and functionalities to the Rebanding Radios that exceed what Licensee requires for Comparable Facilities. If applicable, the Upgrades are to be paid by Licensee with its own funds, and not by Nextel, and any portion of this transaction related to the Upgrades is not subject to the TA or Nextel oversight.

## Section 3 SCOPE OF AGREEMENT AND TERM

3.1. SCOPE OF WORK.

3.1.1. General. The Parties will perform their respective contractual responsibilities in accordance with this Agreement, including the Technical and Implementation Documents.

3.1.2. Licensee Responsibilities. Licensee is responsible for all activities that are reasonable, necessary and prudent to make the Licensee's System satisfy the Comparable Facilities standard. Licensee has selected Motorola to assist it in accomplishing these activities and has determined that the Reconfiguration Implementation Phase Products and Services to be provided by Motorola under this Agreement are necessary for Licensee's System to satisfy the Comparable Facilities standard.

3.1.2.1. Licensee will designate a project manager who will be Licensee's point of contact person. Licensee will employ reasonable efforts to assist Motorola in providing the Reconfiguration Implementation Phase Services, and will provide reasonable and timely access to Licensee's equipment, facilities, personnel and relevant information. However, Motorola recognizes that certain work sites will require security clearances, and Motorola will cooperate in the timely provision of information sufficient to enable security credentials to be issued.

3.1.2.2. Licensee has contracted with Nextel in a Frequency Reconfiguration Agreement ("FRA") which, among other things, contractually obligates Nextel to pay directly to Motorola the Contract Price per the Payment Milestone Schedule (Exhibit A). Promptly after execution of the FRA, Licensee will provide to Motorola a copy of those portions of the FRA that pertain to Motorola's services, products, pricing and payment, including Schedules C and D to the FRA (redacted if necessary to exclude information not pertaining to Motorola).

3.1.2.3. Licensee has submitted its Cost Estimate to Nextel and the TA, and will provide amended certified Cost Estimate(s) to Nextel and the TA if and when appropriate, including when any change order is requested by

either Party. For the limited purpose of assisting Nextel and the TA to evaluate Licensee's Cost Estimate, Motorola authorizes Licensee to and Licensee will provide to Nextel and the TA a copy of this Agreement, including the exhibits and pricing, but such information is and remains Motorola Confidential Information as provided below in Section 13 (and pursuant to Non-Disclosure Agreements Motorola has with Nextel and the TA). After the successful completion of the Acceptance Tests described in the Reconfiguration ATP, Licensee will perform any other tests necessary for it to verify that its System meets the Comparable Facilities standard; and upon that verification, will submit Licensee's Final Certification to Nextel and the TA.

3.1.2.4. For the limited purpose of assisting Nextel and the TA to verify consistency concerning the rebanding products and services approved in the FRA and the rebanding Products and services ordered by Licensee and provided to Licensee under this Agreement, either Motorola or Licensee may provide to Nextel and the TA records showing the rebanding Products ordered, shipped, delivered, etc. (or a written summary of these records), and the services performed, but such records shall remain the Confidential Information of the applicable Party as determined by Section 13 below and will be protected under any non-disclosure agreements the Party has with Nextel and the TA.

3.1.3. Motorola Responsibilities. Motorola will provide the Reconfiguration Implementation Phase Products, and perform the Reconfiguration Implementation Phase Services, all in accordance with this Agreement.

3.1.4. Reprogramming. *(Note: this section is not applicable to every customer system.)*
Motorola and Nextel have entered into an agreement (the "Development Services Agreement") to modify and test certain Motorola Software for rebanding because some customer systems have equipment that is capable of being reprogrammed rather than being replaced. The Development Services Agreement is confidential, and nothing in this Agreement is intended to reduce or nullify the confidential nature of the Development Services Agreement. As part of the Development Services Agreement and subject to various requirements, limitations and restrictions, Motorola has agreed to offer "Flash Kits" to appropriate customers so that their equipment may be reprogrammed. Concerning infrastructure equipment, Motorola will provide Flash Kits only if Motorola has performed a Customer Suitability Assessment and has determined that the customer's equipment is suitable for reprogramming. Concerning Motorola-manufactured subscriber equipment, Motorola will provide available Flash Kits without a suitability assessment, but Licensee acknowledges that not all Motorola subscriber models are capable of being reprogrammed. Even if a customer's system is of the type and model that is suitable for reprogramming, if Motorola determines that the customer's system is not on the last release of the Motorola Software, reprogramming might be infeasible or may require supplemental services, hardware, cabling, third party licensing fees, or other equipment to migrate the customer's system to the last supported version of the Motorola Software (referred to as "Direct Installation Services").

3.1.4.1. Based upon the results of the Customer Suitability Assessment, the Reconfiguration Services SOW should indicate if Direct Installation Services are known and needed and, if so, the scope of the Direct Installation Services; and the appropriate number and type of Flash Kits to be ordered from Motorola to match the requirements of Licensee's System and upgrade plan as indicated in the Customer Suitability Assessment; and whether Motorola proposes to perform the Field Services concerning the installation of the Flash Kits.

3.1.4.2. If Licensee (rather than Motorola) performs the inventory of System equipment, Licensee agrees that its inventory report will be accurate and sufficiently detailed so that Motorola may perform the Customer Suitability Assessment. If the inventory report contains inaccurate, erroneous, or incomplete inventory information, Motorola is not liable for an incorrect or incomplete Customer Suitability Assessment; and any reassessment or consequences caused by Licensee's inaccurate, erroneous, or incomplete inventory information will be the responsibility of Licensee.

3.1.4.3. Motorola is not obligated to (and does not intend to) offer, sell or provide to Licensee the Flash Kits for infrastructure equipment if Motorola does not perform the Customer Suitability Assessment and determines that Licensee's System is suitable. As described above in Section 3.1.4, Motorola will offer to provide Flash Kits for Motorola-manufactured subscriber radios without a suitability assessment. If Motorola performs the Customer

Suitability Assessment and determines that infrastructure equipment in Licensee's System is suitable, and if Motorola performs the Direct Installation Services, if needed, and if Licensee orders the Flash Kits, then Motorola will offer to perform the Field Services (the scope and price of the Field Services will be addressed by means of a change order). **To the extent applicable, Motorola's obligations to sell and provide Flash Kits, Direct Installation Services, and/or Field Services will be expressly described in the Reconfiguration Products List and Reconfiguration Services SOW. If they are not so described, then Section 3.1.4 is not applicable to this transaction. Nothing in this Agreement shall restrict or limit a qualified third party service provider selected by Licensee from performing Field Services, but if a party other than Motorola provides the Field Services, the warranty in Section 8.2.2 is inapplicable.**

3.2. CHANGE ORDERS.

3.2.1. General. Either Motorola or Licensee may request changes within the general scope of this Agreement which, if agreed, will be reflected in a written change order. A change order is not effective until it is executed by each of the Parties. The Parties will negotiate in good faith any requested change order.

3.2.2. Reconfiguration Implementation Phase Products and Services. If a requested change causes (or is likely to cause) an increase in the Contract Price: (1) Motorola will provide Licensee with its written estimate of: (a) the scope of the changes to the Products and Services, and (b) the increase in the Contract Price due to the requested change, and (2) Licensee will perform its own analysis of the impact of the requested change on the Contract Price and the necessity of the changes to achieve the Comparable Facilities standard, and (3) Licensee will submit to Nextel and the TA its modified Cost Estimate and proposed FRA change order. Licensee will provide to Motorola a copy of any approvals or rejections of modifications to the Cost Estimate and to the FRA by Nextel or the TA.

3.2.3. Change Orders Not Approved by Nextel and the TA. If the commencement of all or a portion of the changed work is authorized in writing by Licensee but the change order is: (i) not submitted by Licensee to Nextel and the TA, or (ii) submitted but not approved by Nextel and the TA, then the authorized change in the work and the Contract Price will automatically convert to a request for additional work to be paid by Licensee with its own funds and the conversion will be without prejudice to Licensee's right to submit or re-submit the change order to Nextel or the TA or to dispute the decision by Nextel or the TA refusing to approve the change order.

3.2.4. Emergency Change Orders. If the subject of a change order involves a total System failure or a critical failure that diminishes radio communications and causes a significant public safety risk, and if Motorola and Licensee reasonably conclude that remediation efforts must occur before Licensee obtains Nextel and TA approval, then the Parties will follow the change order process to the extent reasonably practical, Motorola will perform the remediation work described in the Emergency Change Order, Licensee will promptly request approval or ratification of the Emergency Change Order by Nextel and the TA, and the provisions of Section 3.2.3 will apply if Nextel or the TA withhold approval.

3.3. MAINTENANCE AND SUPPORT SERVICES. Other than the warranty services described in Section 8, this Agreement does not cover any warranty, maintenance and support services. If Licensee and Motorola wish to address maintenance and support services, they may do so in a separate agreement.

3.4. SOFTWARE. Motorola Software, including subsequent releases and Flash Kits, is licensed to Licensee in accordance with Motorola's applicable standard software license agreement (a copy of which will be provided to Licensee upon request and is incorporated herein by this reference). Non-Motorola Software is licensed to Licensee in accordance with the applicable standard software license agreement of the copyright owner on the Effective Date unless the copyright owner has granted to Motorola the right to sublicense the Non-Motorola Software pursuant to the applicable Motorola software license agreement, in which case it applies and the copyright owner will have all of Licensor's rights and protections under that Motorola software license agreement. Motorola makes no representations or warranties of any kind regarding Non-Motorola Software. Licensee hereby accepts and agrees to abide by all of the terms and restrictions of the applicable software license agreement.

3.5. REBANDING RADIOS AND TRADE-IN RADIOS. Licensee agrees that for each and every Rebanding Radio (and, as applicable, Non-Kit Accessory) that Motorola provides to Licensee under this Agreement (and for each and every upgraded radio that is provided in lieu of a Rebanding Radio by Motorola under any agreement), Licensee shall deliver to Motorola a Trade-In Radio (and, as applicable, Trade-In Non-Kit Accessory) on a one-for-one basis. Licensee will deliver the Trade-In Radios and Trade-In Non-Kit Accessories to Motorola as soon as practical after they are replaced by the Rebanding Radios and Non-Kit Accessories or at a different time mutually agreed by the Parties (but in no event later than 90 days after delivery of the Rebanding (or upgraded) Radio. Title to the Trade-In Radios and Trade-In Non-Kit Accessories shall pass from Licensee to Motorola upon delivery. For the purpose of determining when title to the Trade-In Radios or Trade-In Non-Kit Accessories passes from Licensee to Motorola under Section 3.5, the term 'delivery' means when Licensee has completely relinquished care and custody of the items and has physically delivered them to the exclusive care and custody of Motorola or its subcontractor who is performing the Field Services. Licensee acknowledges that Motorola intends to temporarily store the Trade-In Radios and Trade-In Non-Kit Accessories for inspection and inventory by Motorola and Nextel and to destroy them thereafter. Licensee shall be responsible to comply with its asset disposition policies and requirements concerning the Trade-In Radios and Trade-In Non-Kit Accessories.

3.5.1. Licensee's Failure to Deliver Trade-In Radios and/or Trade-In Non-Kit Accessories. If for any reason the number of Rebanding Radios (or upgraded radios) and/or the number of Non-Kit Accessories delivered by Motorola to Licensee exceeds the number of Trade-In Radios and/or the number of Trade-In Non-Kit Accessories delivered by Licensee to Motorola (the "Unmatched Equipment"), then Motorola will notify Licensee of this deficiency and Licensee will at its expense immediately return to Motorola the Unmatched Equipment in new condition. If Licensee fails to return the Unmatched Equipment to Motorola, then Motorola may charge Licensee for retaining the Unmatched Equipment and the unit price will be the full list price of the most similar non-rebanding Motorola radio and/or Non-Kit Accessory (or such lesser price as Motorola in its sole discretion may determine). Alternatively, Motorola may resort to any other available legal or equitable remedy, including specific performance. Licensee acknowledges that Nextel is not responsible to pay for Unmatched Equipment and Licensee agrees to pay Motorola for the Unmatched Equipment. If Licensee returns the Unmatched Equipment to Motorola but it is not in new condition, then Motorola may charge Licensee for the returned used Unmatched Equipment in an amount equal to the diminished value from new condition and Licensee agrees to pay this amount.

## Section 4 PERFORMANCE SCHEDULE

4.1. SCHEDULE. The Parties will perform their respective responsibilities in accordance with the Performance Schedule. As more fully described in the Statement of Work, the Parties will verify and, if necessary, modify the Performance Schedule after the project kick-off meeting by means of a mutually executed change order (which might require the approval of Nextel and the TA). In any Change Order, the Parties will determine whether (i) the work should be postponed pending Nextel and TA review and approval, and (ii) negotiation support concerning the Change Order is necessary. By executing this Agreement, Licensee represents that it has obtained all necessary approvals (including Nextel, the TA, and if necessary its legislative or governing authority) and authorizes Motorola to proceed with performance of this Agreement.

4.2. DELAYS. No Party will be liable for its non-performance or delayed performance if caused by a Force Majeure. A Party will notify the other Party if it becomes aware of a Force Majeure that will significantly delay performance. The notifying Party will give the notice promptly after it discovers the Force Majeure. If a Force Majeure occurs, the Parties will execute a change order to extend the Performance Schedule for a time period that is reasonable under the circumstances. If Licensee (including its other contractors), Nextel or the TA delays the Performance Schedule, the Parties will execute a change order to extend the Performance Schedule and, if requested, compensate Motorola for all reasonable charges incurred because of the delay. Delay charges may include costs incurred by Motorola or its subcontractors for additional freight, warehousing and handling of Equipment; extension of the warranties; travel; suspending and re-mobilizing the work; additional engineering, project management, and Waiting Time calculated at then current rates; and preparing and implementing an alternative implementation plan. However, any such delay for reasons other than Force Majeure, but which is outside of the control of the Licensee

could make the Licensee in breach of its contract with Nextel and potentially cause it to be subject to non-recoverability of some costs.

## Section 5 CONTRACT PRICE, PAYMENT AND INVOICING

### 5.1. CONTRACT PRICE.

5.1.1. Contract Price. The Contract Price for the Upgrades (if applicable) in U.S. dollars is **$0.00**. Licensee agrees to pay the Contract Price for Upgrades and any applicable taxes and acknowledges that Nextel is not obligated to pay for Upgrades and applicable taxes. Motorola will not disclose to Licensee the price for Rebanding Radios (or RB radio equivalents if they are upgraded), Non-Kit Accessories, and Flash Kits but those items are covered by Section 5.2.1.1 below. The Contract Price in U.S. dollars for all other Reconfiguration Implementation Phase Products and Services is **$1,266,959**, as set forth in the Pricing Summary sheets in the applicable Proposal. Licensee represents that (1) its Cost Estimate is sufficient to cover the Contract Price and any applicable sales or similar taxes; and (2) Nextel and the TA have reviewed and approved Licensee's Cost Estimate.

5.1.2. Payment from Nextel; Licensee Not Liable for Contract Price. Except for the Upgrades and applicable taxes, payment of the Contract Price and the price for Rebanding Radios (or RB radio equivalents if they are upgraded), Non-Kit Accessories, and Flash Kits is to come from Nextel and Licensee is not liable to pay Motorola these amounts. If Nextel fails to pay Motorola, Licensee shall not be liable to pay Motorola the Contract Price or applicable taxes. Notwithstanding the above, if Nextel pays any portion of this amount to Licensee rather than to Motorola, Licensee will immediately forward the payment to Motorola. Motorola agrees to accept direct payments from Nextel if Nextel clearly identifies the applicable Motorola invoice; Motorola further agrees to apply these direct payments from Nextel to the Contract Price.

5.1.3. Motorola's Protections Concerning Payment by Nextel. If requested by Motorola, Licensee will execute necessary documents and take all such actions that are reasonable or necessary to promote the prompt payment by Nextel to Motorola, provided such actions do not require Licensee to participate in any litigation over non-payment by Nextel. The Parties will cooperate with each other and provide to each other, and to Nextel and the TA, such information (other than Confidential Information, which is governed by Section 13.1) as is reasonable or necessary to facilitate the prompt payment of the Contract Price to Motorola.

### 5.2. INVOICING AND PAYMENT.

5.2.1. Invoicing. Motorola will send to Licensee correct invoices for Upgrades upon shipment of the upgraded radio, and payment is due within thirty (30) days of receipt of invoice. Motorola will invoice Nextel for the Rebanding Radios (or RB radio equivalents if they are upgraded), Non-Kit Accessories, and Flash Kits upon shipment in accordance with a confidential agreement between Motorola and Nextel. As to the other Reconfiguration Implementation Phase Products and Services, Motorola will submit correct invoices to Licensee, with a copy to Nextel, in accordance with the pre-approved payment milestones set forth in Exhibit A. Licensee's contact person and address for invoice purposes are: Williamson County Emergency Communications, c/o: Ron Winch, 321 N. 8th Street, Georgetown, TX 78626. Licensee may change this contact person or address by written notice to Motorola. Upon receipt of an invoice, Licensee will promptly (but in no event longer than seven (7) calendar days) inspect the invoice, verify whether it correctly states the payment milestone, and, if correct, notify Nextel in writing (via facsimile or priority overnight carrier) that Licensee approves the invoice and accepts the milestone (the "Approval Notification"). Licensee will attach a copy of the invoice to the Approval Notification. When Licensee sends to Nextel the Approval Notification, Licensee will concurrently provide to Motorola's project manager a copy of the Approval Notification so that Motorola may know approximately when Nextel receives it. If for any reason Licensee disapproves the invoice, Licensee will promptly give written notice to both Motorola and Nextel; the disapproval notice will explain the reasons for Licensee's disapproval. Motorola will promptly correct any inaccurate invoice that Licensee disapproves, and resubmit the corrected invoice using the same process as described above in this paragraph. However, if disapproval of the invoice is a result of a deficiency in performance

of work, activity, meeting schedule or deliverable, then Motorola must correct the deficiency before a revised invoice can be submitted to the Licensee and the process within this section begins again.

5.2.1.1. Motorola will provide to Licensee only a bill of lading for Rebanding Radios, Non-Kit Accessories, and Flash Kits, and provide the applicable invoice directly to Nextel; or Motorola may provide to Licensee an invoice at the typical sales prices/values for these products or at zero dollars ($0) with a notation that reflects the fact that Nextel has paid (or will pay) for these products directly to Motorola. If Motorola presents to Licensee a bill of lading or an invoice as permitted by this Section 5.2.1.1, Licensee will follow the Approval Notification process as described above but may assume the invoice amount is correct (and has no liability for incorrect invoices).

5.2.2. Tax ID Number. Motorola's Federal Tax Identification Number is 36-1115800.

5.2.3. Audit of Licensee's Records. The Order provides that after the reconfiguration work is completed, the TA will perform an audit of Licensee's records and "true up" procedure, whereby the reconfiguration work actually performed will be examined relative to the reconfiguration work described in Licensee's Cost Estimate, and any payment adjustments will be calculated and made. During this true up procedure, Motorola and Licensee will work together in good faith and will act reasonably in order for Licensee to accurately account for the invoices from and payments to Motorola. If necessary, the Parties will execute a change order to conform the scope of the actual reconfigured work performed to the scope of the contracted reconfigured work; this change order may result in an increase or decrease to the Contract Price. Nothing in this Agreement grants Nextel, the TA, the FCC, any part of the U.S. federal government, or Licensee the right to audit Motorola's records concerning this firm, fixed price Agreement or any other matter.

5.3. FREIGHT, TITLE, AND RISK OF LOSS. Motorola will prepay and add all freight charges to the invoices. Title to the Products, excluding Software, will pass from Motorola to Licensee upon shipment. Software is governed by the applicable software license agreement. Risk of loss to Products will pass from Motorola to Licensee upon delivery. Motorola will pack and ship all Products in accordance with good commercial practices.

**Section 6 SITES AND SITE CONDITIONS (To the extent applicable.)**

6.1. ACCESS TO SITES. Licensee will provide any necessary construction and building permits, zoning variances, licenses, and any other approvals that are necessary to develop or use the sites or equipment; and access to the Licensee's work sites as reasonably requested by Motorola so that it may perform its duties in accordance with the Performance Schedule and Reconfiguration Services Statement of Work.

6.2. SITE CONDITIONS. Licensee will ensure that all work sites it provides will be safe, secure, and in compliance with all applicable OSHA and industry standards, including R-56. To the extent applicable, Licensee will ensure that these work sites have adequate physical space; air conditioning and other environmental conditions; electrical power outlets, distribution and equipment; and telephone or other communication lines (including modem access and adequate interfacing networking capabilities), all for the installation, use and maintenance of the System. Before installing the Products or performing services at a Licensee work site, Motorola will inspect the work site and advise Licensee of any apparent deficiencies or non-conformities with the requirements of this Section.

**Section 7 SYSTEM ACCEPTANCE (Inapplicable to Subscriber Only Transactions)**

7.1. COMMENCEMENT OF ACCEPTANCE TESTING. Motorola will provide to Licensee at least five (5) days notice before the Acceptance Tests commence. Acceptance testing will occur only in accordance with the Reconfiguration ATP.

7.2. SYSTEM ACCEPTANCE. System Acceptance will occur upon successful completion of the Acceptance Tests. Upon System Acceptance, Licensee and Motorola will memorialize this event by promptly executing the System Acceptance Certificate. If Licensee reasonably believes that the completed Acceptance Tests have failed,

Licensee will provide to Motorola a written notice that includes the specific details of the failure. If Licensee does not provide to Motorola the notice within thirty (30) days after completion of the Acceptance Tests, System Acceptance will be deemed to have occurred as of the completion of the Acceptance Tests. Minor omissions or variances in the System that do not materially impair the operation of the System as a whole will not postpone System Acceptance, but will be corrected according to a mutually agreed punch list schedule.

7.3. FINAL PROJECT ACCEPTANCE. Final Project Acceptance will occur after System Acceptance and when all Motorola deliverables have been delivered and all Motorola work as described in this Agreement has been completed. When Final Project Acceptance occurs, Licensee and Motorola will promptly memorialize this final event by so indicating in the appropriate place on the System Acceptance Certificate.

7.4. COPIES TO NEXTEL AND THE TRANSITION ADMINISTRATOR. Licensee will provide to both Nextel and the TA a copy of all executed System Acceptance Certificates.

**Section 8 REPRESENTATIONS AND WARRANTIES (To the extent applicable.)**

8.1. EQUIPMENT AND PARTS WARRANTY.

8.1.1. Equipment. For one (1) year from the date of System Acceptance or Beneficial Use, whichever occurs first, Motorola warrants that newly manufactured equipment it provides under this Agreement will be free from material defects in materials and workmanship under normal use and service. As used in Section 8, the term "Beneficial Use" means use for the intended purpose, excluding testing and training. This Agreement does not create or extend any warranties concerning equipment that was part of the System and was already in service at the Effective Date.

8.1.2. Parts. For ninety (90) days from the date of shipment to Licensee, Motorola warrants that component parts and boards that it provides under this Agreement will be free from material defects in materials and workmanship under normal use and service.

8.2. MOTOROLA SOFTWARE WARRANTY.

8.2.1. Standard Software Warranty in Newly Manufactured Equipment. For one (1) year from the date of System Acceptance or Beneficial Use, whichever occurs first, Motorola warrants the unmodified Motorola Software installed or embedded in newly manufactured equipment and delivered under this Agreement, when used properly and in accordance with the product documentation, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Motorola Software. Whether a defect occurs will be determined solely with reference to the published product documentation. Except as provided in Section 8.2.2, this Agreement does not create or extend any warranties concerning Software that was part of the System and was already in service at the Effective Date.

8.2.2. Special Motorola Software Warranty. This special Motorola Software warranty applies only to (i) Flash Kits for subscriber radios if Motorola receives Licensee's order for the appropriate number and type of Flash Kits and performs the Field Services concerning the subscriber radios; and to (ii) Flash Kits for infrastructure Equipment if Motorola performs the Customer Suitability Assessment, determines in writing that Licensee's System is suitable, performs the Direct Installation Services, if needed, receives Licensee's order for the appropriate number and type of Flash Kits, and performs the Field Services concerning the infrastructure equipment.

THE MOTOROLA SOFTWARE THAT IS MODIFIED UNDER THE DEVELOPMENT SERVICES AGREEMENT (EXCLUDING SPECIAL FEATURES AND OTHER SOFTWARE THAT IS OUTSIDE THE SCOPE OF THE DEVELOPMENT SERVICES AGREEMENT), WHEN INSTALLED BY MOTOROLA, WILL PERFORM IN ALL MATERIAL RESPECTS AND WILL INCLUDE MATERIALLY ALL FEATURES AND FUNCTIONALITY AS THE LAST MOTOROLA-SUPPORTED VERSION OF MOTOROLA SOFTWARE IN THE SYSTEM AND SUBSCRIBER EQUIPMENT

WHICH IS BEING UPDATED AND/OR REPLACED. TO FURTHER AND SPECIFICALLY CLARIFY, MOTOROLA IS MAKING CHANGES, UPDATES AND MODIFICATIONS TO THE LAST MOTOROLA-SUPPORTED VERSION OF THE MOTOROLA SOFTWARE, AND IT IS THOSE CHANGES (REBANDING CHANGES) THAT MOTOROLA WARRANTS WILL RESULT IN MATERIALLY THE SAME FEATURES AND FUNCTIONALITY VERSUS THE LAST MOTOROLA-SUPPORTED VERSION OF THE MOTOROLA SOFTWARE. THE PARTIES MUTUALLY UNDERSTAND THAT MOTOROLA IS NOT PROVIDING A WARRANTY FOR ANY CHANGES OR LOSS IN FEATURES AND FUNCTIONALITY ("GETTING TO THE BASELINE LAST RELEASE") THAT MIGHT RESULT FROM FIRST HAVING TO UPGRADE ANY EXISTING LEGACY SYSTEM OR EQUIPMENT TO THE LAST MOTOROLA-SUPPORTED VERSION OF THE MOTOROLA SOFTWARE (PRIOR TO MAKING THE REBANDING MODIFICATIONS THAT ARE THE SUBJECT OF THE DEVELOPMENT SERVICES AGREEMENT). LICENSEE WILL HAVE NINETY (90) DAYS FROM SYSTEM ACCEPTANCE OR BENEFICIAL USE OF THE MOTOROLA SOFTWARE, WHICHEVER OCCURS FIRST, TO NOTIFY MOTOROLA IN WRITING OF A SOFTWARE WARRANTY CLAIM AS PROVIDED IN THE PRECEDING TWO SENTENCES. AFTER RECEIPT OF THE NOTICE, MOTOROLA WILL MAKE A GOOD FAITH INVESTIGATION OF THE WARRANTY CLAIM; AND IF THIS INVESTIGATION CONFIRMS A VALID WARRANTY CLAIM, MOTOROLA WILL (AT ITS OPTION AND AS ITS SOLE OBLIGATION AND THE CUSTOMER'S EXCLUSIVE REMEDY) EITHER: (1) CORRECT THE SOFTWARE DEFECT WITHOUT FURTHER CHARGE TO NEXTEL OR LICENSEE; (2) ACCEPT A RETURN OF THE EQUIPMENT THAT CONTAINS THE DEFECTIVE SOFTWARE AND OFFER TO EXCHANGE AN EQUIVALENT PRODUCT PURSUANT TO THIS AGREEMENT AND PROVIDE A CREDIT AGAINST THE PURCHASE PRICE IN THE AMOUNT EQUAL TO THE DIMINUTION IN VALUE OF THE EQUIPMENT CONTAINING THE DEFECTIVE SOFTWARE; OR (3) PAY TO LICENSEE AN AMOUNT EQUAL TO THE DIMINUTION IN VALUE OF THE EQUIPMENT CONTAINING THE DEFECTIVE SOFTWARE. THIS ACTION WILL BE THE FULL EXTENT OF MOTOROLA'S LIABILITY FOR THIS SOFTWARE DEFECT WARRANTY CLAIM. IF MOTOROLA'S INVESTIGATION OF LICENSEE'S WARRANTY CLAIM INDICATES THE CLAIM IS INVALID, MOTOROLA WILL BE ENTITLED TO CHARGE LICENSEE FOR RESPONDING TO THE CLAIM ON A TIME AND MATERIALS BASIS USING MOTOROLA'S THEN APPLICABLE RATES.

8.2.3. Flash Kit Medium Warranty. For 120 days from the date of shipment to Licensee or until System Acceptance if Motorola is performing the Field Services, Motorola warrants that the Flash Kit medium (i.e., the disks and/or dongles) that it provides under this Agreement will be in usable condition. To assert a warranty claim under this Section 8.2.3, Licensee must notify Motorola in writing of the claim before the expiration of the warranty period. Upon receipt of this notice, Motorola will provide one replacement Flash Kit medium to Customer as its sole and exclusive remedy for a breach of this Flash Kit Medium warranty.

8.3. RECONFIGURATION SERVICES WARRANTY. Motorola is not providing any new or additional warranties or extensions concerning Licensee-owned equipment or previously installed Software that is modified by the Reconfiguration Implementation Phase Services (except as provided in Section 8.2.2, if applicable). However, if that equipment or Software is covered under a written warranty or a maintenance contract between Licensee and Motorola that was entered into prior to the Effective Date, this Agreement does not adversely affect those pre-existing rights of Licensee. For ninety (90) days from the date of System Acceptance, Motorola warrants that the Reconfiguration Implementation Phase Services were performed in a good and workmanlike manner. THIS RECONFIGURATION SERVICES WARRANTY DOES NOT COVER ANY SERVICES OR DUTIES PERFORMED OR OWED BY NEXTEL, LICENSEE, OR ANY OTHER CONTRACTOR HIRED BY THEM. MOTOROLA DOES NOT WARRANT THAT LICENSEE'S SYSTEM WILL BE COMPARABLE FACILITIES AFTER THE RECONFIGURATION WORK IS COMPLETED. IF LICENSEE BELIEVES ITS SYSTEM DOES NOT ACHIEVE COMPARABLE FACILITIES STATUS AFTER THE RECONFIGURATION WORK IS COMPLETED, IT MAY REQUEST FURTHER CHANGE ORDERS TO ACHIEVE COMPARABLE FACILITIES, THE CONTRACT PRICE WILL BE INCREASED ACCORDINGLY, AND ANY DISPUTE IN

THIS MATTER WILL BE SUBMITTED TO THE TRANSITION ADMINISTRATOR FOR NON-BINDING MEDIATION AND RESOLUTION.

8.4. EXCLUSIONS TO EXPRESS WARRANTIES. These warranties do not apply to: (i) defects or damage resulting from use of the Products in other than their normal, customary, and authorized manner; misuse, accident, liquids, neglect, or acts of God; testing, maintenance, disassembly, repair, installation, alteration, modification, or adjustment not provided or authorized in writing by Motorola; or Licensee's failure to comply with all applicable industry and OSHA standards; (ii) interoperability of Reconfigured Products with other subsystems (e.g., a CAD); (iii) breakage of or damage to antennas unless caused directly by defects in material or workmanship; (iv) batteries or other consumables; (v) freight costs to ship Equipment to the repair depot; (vi) scratches or other cosmetic damage to Equipment surfaces that does not affect the operation of the Equipment; and (vii) normal or customary wear and tear.

8.5. WARRANTY CLAIMS. To assert a warranty claim (other than concerning Section 8.2.2 or 8.2.3), Licensee must notify Motorola in writing of the claim before the date which is thirty (30) calendar days after the expiration of the warranty period. Upon receipt of this notice, Motorola will investigate the warranty claim. If this investigation confirms a valid warranty claim, Motorola will (at its option and at no additional charge to Licensee) repair the defective Product (or part), replace it with the same or equivalent Product (or part), or re-perform the Reconfiguration Services. This action will be the full extent of Motorola's liability hereunder and constitutes Licensee's sole remedy. If this investigation indicates the warranty claim is invalid or "out of scope," then Motorola may invoice Licensee for responding to the claim on a time and materials basis using Motorola's then current labor rates and for any new or replacement Products (or part) delivered to Licensee. Notwithstanding any reimbursement claim Licensee may have against the Relocation Funds, Licensee will pay the invoice within thirty (30) days from the invoice date. Repaired or replaced Product and parts are warranted for the balance of the original applicable warranty period. All replaced Products or parts will become the property of Motorola.

8.6. ORIGINAL LICENSEE IS COVERED. These express limited warranties are extended by Motorola to the original Licensee and are not assignable or transferable.

8.7. DISCLAIMER OF OTHER WARRANTIES. THESE WARRANTIES ARE THE COMPLETE WARRANTIES FOR THE PRODUCTS, EQUIPMENT, MOTOROLA SOFTWARE, AND RECONFIGURATION SERVICES PROVIDED UNDER THIS AGREEMENT AND ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES. EXCEPT FOR THE FOREGOING EXPRESS WARRANTIES, THE PRODUCTS, EQUIPMENT, MOTOROLA SOFTWARE, AND RECONFIGURATION SERVICES ARE PROVIDED "AS IS" AND MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. MOTOROLA DOES NOT WARRANT THAT LICENSEE'S USE OF THE MOTOROLA SOFTWARE OR PRODUCTS WILL BE UNINTERRUPTED OR ERROR-FREE OR THAT THE SOFTWARE OR THE PRODUCTS WILL MEET LICENSEE'S PARTICULAR REQUIREMENTS. MOTOROLA MAKES NO WARRANTIES CONCERNING NON-MOTOROLA SOFTWARE. LICENSEE IS RESPONSIBLE FOR, AND MOTOROLA MAKES NO WARRANTY CONCERNING, THE BACK-UP AND DISASTER RECOVERY PROCEDURES, FACILITIES AND EQUIPMENT, OR DATA ENTRY AND LOADING. MOTOROLA DOES NOT WARRANT THAT THE SYSTEM OR EQUIPMENT OR SOFTWARE IN THE SYSTEM THAT IS MODIFIED BY THE RECONFIGURATION SERVICES, OR ANY NEWLY PROVIDED EQUIPMENT OR SOFTWARE, WILL SATISFY THE COMPARABLE FACILITIES STANDARD; THAT DETERMINATION IS FOR LICENSEE TO MAKE. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS AGREEMENT.

**Section 9 DISPUTES**

9.1. SETTLEMENT PREFERRED. Except as otherwise required by the Order (e.g., Cost Estimate disputes) and except for a claim relating to intellectual property or breach of confidentiality provisions, the Parties, through their respective project or system managers, will attempt to settle any dispute arising from this Agreement through

consultation and good faith negotiation. The dispute will be escalated to appropriate higher level managers of the Parties, if necessary. If cooperative efforts fail, the dispute will be mediated by a mediator chosen by the Parties within thirty (30) days after notice by one of the Parties demanding non-binding mediation. The Parties will not unreasonably withhold their consent to the selection of a mediator and will share the cost of the mediation equally; may postpone mediation until they have completed some specified but limited discovery about the dispute; and may replace mediation with another form of non-binding alternative dispute resolution ("ADR").

9.2. LITIGATION. A Party may submit to a court of competent jurisdiction in the state in which the System is installed any claim relating to intellectual property or a breach of confidentiality provisions and any dispute that cannot be resolved between the Parties through negotiation or mediation within two (2) months after the date of the initial demand for non-binding mediation. Each Party consents to jurisdiction over it by that court. The use of ADR procedures will not be considered under the doctrine of laches, waiver, or estoppel to affect adversely the rights of either Party. Either Party may resort to the judicial proceedings described in this section before the expiration of the two-month ADR period if good faith efforts to resolve the dispute under these procedures have been unsuccessful; or interim relief from the court is necessary to prevent serious and irreparable injury to the Party.

## Section 10 DEFAULT AND TERMINATION

If a Party fails to perform a material obligation under this Agreement, the other Party to whom performance is due may consider the non-performing Party to be in default (unless a Force Majeure causes the failure) and may assert a default claim by giving the non-performing Party a written and detailed notice of default. The defaulting Party will have thirty (30) days after receipt of the notice of default to either cure the default or, if the default is not curable within thirty (30) days, to provide a written cure plan. The defaulting Party will begin implementing the cure plan immediately after receipt of notice by the other Party that it approves the cure plan. If Licensee is the defaulting Party, Motorola may stop work on the project until it approves the cure plan or receives payment. Motorola will not assert a default against Licensee due to Nextel's failure to pay the Contract Price or applicable taxes. If a defaulting Party fails to cure the default, unless otherwise agreed in writing, the non-defaulting Party may terminate any unfulfilled portion of this Agreement. In the event of termination for default, the defaulting Party will promptly return to the non-defaulting Parties any of its Confidential Information. Non-defaulting Parties will mitigate damages.

## Section 11 INDEMNIFICATION

11.1. POTENTIAL DAMAGE TO EXISTING EQUIPMENT. Licensee acknowledges that Motorola, Licensee's employees, or others might cause damage to equipment that is part of Licensee's System when performing the Reconfiguration Services, and that such damage may occur in the absence of negligence by any party. Motorola is not responsible for damage to equipment unless it is caused by Motorola's negligence or intentional wrongdoing, in which case Motorola at its option will repair or replace the damaged equipment or refund its fair market value. Before Licensee asserts a damage claim against Motorola under this section, it will first investigate the cause of the damage and the investigation must result in adequate proof that Motorola's negligence or intentional wrongdoing caused the damage. This provision does not diminish any rights Licensee might have under any pre-existing Motorola warranty or maintenance agreement.

11.2. INDEMNITY BY MOTOROLA. Motorola will defend at its expense and hold harmless Licensee against any claim, suit, demand, or cause of action brought by a third party against Licensee that is based on and to the extent it is caused by the negligence or willful misconduct of Motorola, its subcontractors, or their employees or agents, while performing their duties under this Agreement, and which results in personal injury, death, or direct damage to tangible property ("Motorola Claim"). Motorola will indemnify Licensee from any liability, judgment, awards and damages resulting from a Motorola Claim and pay all losses, expenses or direct damages incurred by Licensee and caused by the Motorola Claim. The foregoing indemnity is conditioned on (i) Licensee giving Motorola prompt, written notice of any Motorola Claim, and providing to Motorola cooperation (and, if requested, reasonable assistance) in the defense of the Motorola Claim; and (ii) Motorola having sole control in the defense of the Motorola Claim and all negotiations for its settlement or compromise. Motorola will have no indemnity liability

for the negligence or fault of Licensee, its other contractors, Nextel, or the TA, or any of their employees, agents or representatives. This section states the full extent of Motorola's general indemnification from liabilities that are in any way related to Motorola's performance under this Agreement. If a third party asserts a claim against both Parties, each Party will defend itself and will pay the claim to the extent of its percentage liability. For example, if the Parties have equal liability for the claim, they each will pay one-half of the amount plus their own defense costs.

11.3. PATENT AND COPYRIGHT INFRINGEMENT.

11.3.1. Motorola will defend at its expense any suit brought against Licensee to the extent that it is based on an Infringement Claim, and Motorola will indemnify Licensee for those costs and damages finally awarded against Licensee for an Infringement Claim. Motorola's duties to defend and indemnify are conditioned upon: Licensee promptly notifying Motorola in writing of the Infringement Claim; Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; Licensee providing to Motorola cooperation and, if requested, reasonable assistance in the defense of the Infringement Claim.

11.3.2. If an Infringement Claim occurs, or in Motorola's opinion is likely to occur, Motorola may at its option and expense procure for Licensee the right to continue using the Products, replace or modify them so that they become non-infringing while providing functionally equivalent performance, or grant Licensee a credit for the Products as depreciated and accept their return.

11.3.3. Motorola will have no duty to defend or indemnify for any Infringement Claim that is based upon the combination of the Products with any software, apparatus or device not furnished by Motorola; the use of ancillary equipment or software not furnished by Motorola and that is attached to or used in connection with the Products; any Product that is not Motorola's design or formula; a modification of the Motorola Software by a party other than Motorola; the failure by Licensee to install an enhancement release to the Motorola Software that is intended to correct the claimed infringement, or, to the extent that the Infringement Claim could have been avoided or losses diminished if Licensee implemented Motorola's new Products as part of the reconfiguration rather than modifying existing or used products. This section states the entire liability of Motorola for infringement of patents and copyrights by the Products or any parts thereof.

## Section 12 LIMITATION OF LIABILITY

Licensee acknowledges that the limitations set forth in this Section are integral to the prices being charged by Motorola under this Agreement, and that if Motorola assumed further liability other than as set forth in this Section 12, the prices would of necessity be set substantially higher. This limitation of liability provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision in this Agreement. Except for personal injury or death caused by newly manufactured Motorola Products, Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, indemnification, contribution, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the portion of the Contract Price that has actually been paid to Motorola. ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA (AND ITS OFFICERS, DIRECTORS, EMPLOYEES, SHAREHOLDERS, AGENTS AND REPRESENTATIVES) WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS; INCONVENIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS, OPPORTUNITIES OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT (REGARDLESS OF THE FORM OF ACTION), THE SALE OR USE OF THE PRODUCTS, EQUIPMENT OR SOFTWARE, OR THE PERFORMANCE OF SERVICES BY MOTOROLA PURSUANT TO THIS AGREEMENT. ALL CLAIMS BY A PARTY AGAINST ANOTHER PARTY, WHETHER IN TORT, CONTRACT, STRICT LIABILITY OR OTHERWISE, MUST BE BROUGHT WITHIN TWO YEARS FROM THE DATE THE CAUSE OF ACTION ACCRUES EXCEPT FOR MONEY DUE UPON AN OPEN ACCOUNT. Some states do not allow the exclusion or limitation of implied warranties or limitation of liability for incidental or consequential damages, so the above limitations or exclusions may not apply in those states. However, the Parties intend for this Section 12 to apply to the maximum extent allowed under applicable law.

## Section 13 CONFIDENTIALITY AND PROPRIETARY RIGHTS

13.1. CONFIDENTIAL INFORMATION. During the term of this Agreement, the Parties may provide each other with Confidential Information. Any inventory report or Customer Suitability Assessment concerning Licensee's System that Motorola prepares for and delivers to Licensee shall be the Confidential Information of Licensee unless otherwise agreed by the Parties in writing. Any other document concerning the reconfiguration of Licensee's System that Motorola prepares for and delivers to Licensee under this Agreement (collectively, "Documentary Deliverable") shall be the Confidential Information of Motorola unless otherwise agreed by the Parties in writing,

13.1.1. Non-Disclosure. Subject to applicable public records laws, each Party will: maintain the confidentiality of the other Party's Confidential Information and not disclose it to any third party, except as authorized by the disclosing Party in writing or as required by a court of competent jurisdiction; restrict disclosure of Confidential Information to its employees, attorneys, accountants and/or consultants who have a "need to know" and who have executed adequate non-disclosure agreements with Licensee; and not copy or reproduce the Confidential Information; take necessary and appropriate precautions to guard the confidentiality of the Confidential Information, including informing its employees, attorneys, accountants and/or consultants who have a need to know and who have access to it that it is confidential and not to be disclosed to others, but those precautions will be at least the same degree of care that the receiving Party applies to its own confidential information and will not be less than reasonable care. The confidentiality restrictions and obligations contained herein shall be in addition to any confidentiality restrictions or obligations contained in any other agreement (whether prior to, contemporaneous or subsequent to the date of this Agreement) between Motorola on the one hand and the TA, Nextel or Licensee on the other hand, as well any protective order or confidentiality restrictions or rules issued by the FCC or the TA.

13.1.2. Use. Unless otherwise provided in this Agreement, a Party may use the Confidential Information of the other Party only in furtherance of the performance of this Agreement or any other agreement between the Parties. Notwithstanding the preceding sentence, Motorola may use the information in any inventory report or Customer Suitability Assessment for its own business purposes or to assist Licensee or its other contractors or consultants in the overall effort to plan and reconfigure Licensee's System. Except for a Documentary Deliverable, Confidential Information is and will at all times remain the property of the disclosing Party, and no grant of any proprietary rights in the Confidential Information is hereby given or intended, including any express or implied license, other than the limited right of the recipient to use the Confidential Information in the manner and to the extent permitted by this Agreement or any other agreement between the Parties.

13.2. PRESERVATION OF MOTOROLA'S PROPRIETARY RIGHTS. Motorola, the third party manufacturer of any Equipment, and the owner of any Non-Motorola Software own and retain all of their respective Proprietary Rights in the Equipment and Software. Nothing in this Agreement is intended to restrict the Proprietary Rights of Motorola, any owner of Non-Motorola Software, or any third party manufacturer of Equipment. All intellectual property developed, originated, or prepared by Motorola in connection with providing to Licensee the Products or services remain vested exclusively in Motorola, and this Agreement does not grant to Licensee (or Nextel) any shared development rights of intellectual property.

Except as explicitly provided in the applicable Software License Agreement, Motorola does not grant to Licensee (or Nextel), either directly or by implication, estoppel, or otherwise, any right, title or interest in Motorola's Proprietary Rights. Licensee (and Nextel) will not modify, disassemble, peel components, decompile, otherwise reverse engineer or attempt to reverse engineer, derive source code or create derivative works from, adapt, translate, merge with other software, reproduce, distribute, sublicense, sell or export the Software, or permit or encourage any third party to do so. The preceding sentence will not apply to Open Source Software, if any, which is governed by the standard license of the copyright owner.

13.3. TEXAS PUBLIC INFORMATION ACT. To the extent, if any, that any provision in this Agreement is in conflict with Tex. Gov't Code 552.001 et seq., as amended (the "Public Information Act"), the same shall be of no force or effect. Furthermore, it is expressly understood and agreed that Licensee, its officers and employees may request advice, decisions and opinions of the Attorney General of the State of Texas in regard to the application of the Public Information Act to any items or data furnished to Licensee as to whether or not the same are available to the public. It is further understood that Licensee's officers and employees shall have the right to rely on the advice, decisions and opinions of the Attorney General, and that Licensee, its officers and employees shall have no liability or obligation to any party hereto for the disclosure to the public, or to any person or persons, of any items or data furnished to Licensee by a party hereto, in reliance of any advice, decision or opinion of the Attorney General of the State of Texas.

**Section 14 GENERAL**

14.1. TAXES. The Contract Price does not include any amount for taxes, assessments or duties, all of which will be paid by Nextel or by Licensee as to the Upgrades, except as exempt by law.

14.2. ASSIGNABILITY AND SUBCONTRACTING. No Party may assign this Agreement without the prior written consent of the other Party. Motorola may subcontract any portion of the work, but subcontracting will not relieve Motorola of its duties under this Agreement. Motorola will make reasonable commercial efforts to obtain Licensee's prior approval concerning any subcontractor who will perform work under this Agreement, but any authorized Motorola Service Shop shall be deemed approved. Licensee will not unreasonably withhold or delay its approval of any proposed subcontractor. All subcontractors' personnel having access to sites, system equipment or system data may be required to pass a security clearance prior to commencement of any subcontracted work, as required by the Licensee.

14.3 WAIVER. Failure or delay by a Party to exercise any right or power under this Agreement will not operate as a waiver of the right or power. For a waiver of a right or power to be effective, it must be in writing signed by the waiving Party. An effective waiver of a right or power will not be construed as either a future or continuing waiver of that same right or power, or the waiver of any other right or power.

14.4. SEVERABILITY. If a court of competent jurisdiction renders any provision of this Agreement (or portion of a provision) to be invalid or otherwise unenforceable, that provision or portion of the provision will be severed and the remainder of this Agreement will continue in full force and effect as if the invalid provision or portion of the provision were not part of this Agreement.

14.5. INDEPENDENT CONTRACTORS. Each Party is an independent contractor with respect to the other, and a Party and its personnel will not be considered to be employees or agents of the other Party. Nothing in this Agreement grants a Party the right or authority to make commitments of any kind for the other. This Agreement will not constitute, create, or in any way be interpreted as a joint venture, partnership or formal business organization of any kind.

14.6. HEADINGS AND SECTION REFERENCES. The section headings in this Agreement are inserted only for convenience and are not to be construed as part of this Agreement or as a limitation of the scope of the particular section to which the heading refers. This Agreement is an arm's length transaction and will be fairly interpreted in accordance with its terms and conditions and not for or against a Party.

14.7. GOVERNING LAW. This Agreement and the rights and duties of the parties will be governed by and interpreted in accordance with the laws of the State in which the System is installed.

14.8. ENTIRE AGREEMENT. This Agreement, including all Exhibits, constitutes the entire agreement of the Parties regarding the subject matter of this Agreement and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to that subject matter (but not any other product sales, software license, or maintenance and support agreements). This Agreement may be amended or modified only by a written

instrument signed by authorized representatives of the Parties. The preprinted terms and conditions found on any Licensee purchase order, acknowledgment or other form will not be considered an amendment or modification of this Agreement, even if a representative of each Party signs the document.

14.9. NOTICES. Notices required to be given by a Party to the others must be in writing and either delivered in person or sent to the address shown below by certified mail, return receipt requested and postage prepaid (or by a recognized courier service, such as Federal Express, UPS, or DHL), or by facsimile with correct answerback received, and will be effective upon receipt:

Licensee:

Williamson County Judge
Dan A. Gattis (or successor)
710 Main Street, Ste. 101
Georgetown, Texas 78626

with a copy to:

Alan S. Tilles, Esquire
Shulman Rogers Gandal Pordy & Ecker, P.A.
11921 Rockville Pike, Third Floor
Rockville, Maryland 20852

Motorola
Attn: George Springer, SI Lead
3517 Forrestridge Drive
Denton, TX 76210-5545

14.10. COMPLIANCE WITH APPLICABLE LAWS. Each Party will comply with all applicable federal, state, and local laws, regulations and rules concerning the performance of this Agreement or use of the System. Licensee will obtain and comply with all FCC licenses and authorizations required for the installation, operation and use of the System before the scheduled installation of the Equipment.

14.11. AUTHORITY TO EXECUTE AGREEMENT. Each Party represents to the other that it has obtained all necessary approvals, consents and authorizations to enter into this Agreement and to perform its duties under this Agreement; the person executing this Agreement on its behalf has the authority to do so; upon execution and delivery of this Agreement by the Parties, it is a valid and binding contract, enforceable in accordance with its terms; and the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law or any other governing authority of the Party.

14.12. VOLUNTARY AGREEMENT. Each Party represents and warrants that it is fully aware of the terms contained in this Agreement and has voluntarily entered into this Agreement, having had a full and fair opportunity to seek the advice of counsel and other professionals or consultants as it considers necessary.

14.13. NO LIENS. Motorola agrees not to lien Licensee's System to secure payment of the Contract Price.

14.14. SURVIVAL OF TERMS. The following provisions survive the expiration or termination of this Agreement for any reason: Section 3.4 (Software); Section 3.5 (Rebanding Radios and Trade-In Radios); if any payment obligations exist, Section 5 (Contract Price, Payment and Invoicing); to the extent applicable, Section 8 (Representations and Warranties); Section 9 (Disputes); Section 11 (Indemnification); Section 12 (Limitation of Liability); and Section 13 (Confidentiality and Proprietary Rights); and all of the General provisions in Section 14.

The Parties hereby enter into this Agreement as of the Effective Date.

| **Licensee** | **Motorola** |
|---|---|
| By: _____ | By: _____ |
| Name: _____ | Name: Gregory I. Pfaff |
| Title: _____ | Title: Nat'l Rebanding Mgr. |
| Date: _____ | Date: Sept 9, 2008 |

**Nextel Assigned Deal Number:** _____

**Exhibit A**

**Payment Milestone Schedule**

Depending on the Contract Price set forth in Section 5.1.1, the following payment milestones apply:

1. Contract Price < $300,000

| | |
|---|---|
| Mobilization (i.e., contract execution) | 50% |
| Motorola SOW Complete/System Acceptance | 50% |

2. Contract Price $300,000 to $1,000,000

| | |
|---|---|
| Mobilization (i.e., contract execution) | 35% |
| Complete Programming & Installation of Subscriber Equipment | 45% |
| Motorola SOW Complete/System Acceptance | 20% |

3. Contract Price > $1,000,000

| | |
|---|---|
| Mobilization (i.e., contract execution) | 35% |
| Shipment of Subscriber Equipment | 20% |
| Complete Programming & Installation of Subscriber Equipment | 15% |
| Complete Rebanding Infrastructure/Final Cutover | 15% |
| Motorola SOW Complete/System Acceptance | 15% |

**Exhibit B**

**System Acceptance Certificate**

**Licensee Name:** _____

**Project Name:** _____

This System Acceptance Certificate memorializes the occurrence of System Acceptance. Motorola and Licensee acknowledge that:

1. The Acceptance Tests set forth in the Acceptance Test Plan have been successfully completed.

2. The System is accepted.

| Licensee Representative: | Motorola Representative: |
|---|---|
| Signature: _____ | Signature: _____ |
| Print Name: _____ | Print Name: _____ |
| Title: _____ | Title: _____ |
| Date: _____ | Date: _____ |

**FINAL PROJECT ACCEPTANCE:**

Motorola has provided and Licensee has received all deliverables, and Motorola has performed all other work required for Final Project Acceptance.

| Licensee Representative: | Motorola Representative: |
|---|---|
| Signature: _____ | Signature: _____ |
| Print Name: _____ | Print Name: _____ |
| Title: _____ | Title: _____ |
| Date: _____ | Date: _____ |

**Exhibit C**

**Motorola's Proposal**
**Including the Technical and Implementation Documents**

# PLANNING PHASE DELIVERABLES AND RECONFIGURATION PROPOSAL

## TABLE OF CONTENTS

## *Exhibit C - Statement of Work*

MOTOROLA
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# RECONFIGURATION PROPOSAL INCLUDING PLANNING PHASE DELIVERABLES

# Williamson County
# Motorola SmartNet II Plus Analog System and Motorola ASTRO P25 7.2 Digital System

Note: This Revised FRA SOW 05/27/2008 Supersedes all previous FRA SOW Revisions and Addendum 1 Version 1 January 30, 2008. The changes addressed in Addendum 1 Version 1 are included in this revision

## EXECUTIVE OVERVIEW

This FRA SOW is being revised at the direction of Williamson County as a result of changes that were agreed during FRA negotiations with Sprint Nextel. This revision addresses methodology, scope and price changes to the Reconfiguration Implementation Proposal Dated: January 3, 2008 (and Addendum 1, dated January 30, 2008. The scope changes impact the Engineering time and the Subscriber Impact Table, the LOE (reduction) in programming subscribers.

This revision includes:

- The reduction in the number of subscribers being replaced (the 77 MaxTrac subscribers and the 5 STX subscribers are not being replaced by Sprint/Nextel – there is an agreement in place to have "loaner" subscribers available for the NPSPAC rebanding transition period) and
- The LOE reduction associated with the reduction in the number of subscribers being programmed,
- A reduction in the number of mobile subscribers being replaced in vehicles (to zero),
- The reduction in the cost of tower loading analysis (assuming no tower climb is necessary) and
- A reduction in Engineering Administrative hours associated with the NPSPAC back-to-back repeater design (from 160 hours to 0 hours)
- Pre Rebanding Baseline Test for the M. Comm. Center (reband site #6) had a typographical error; it was supposed to be the standard Motorola ST rate, not the MSS rate.

The changes to the subscriber assumptions is included along with the new subscriber impact table, the new rebanding order form for replacement subscribers' accessories, and a new equipment list to correct the number of antennas and other minor corrections. Any changes in text from the original submittal can be seen in ***red bold italics.***

## *1.0 INTRODUCTION*

Motorola is pleased to present this quotation to Williamson County for Rebanding Frequency Reconfiguration services. As your wireless critical communications partner we are committed to developing a comprehensive package, which will bring Williamson County's complex and critical private wireless trunking network into compliance with the 800 MHz Rebanding initiative, as dictated by current FCC guidelines.

To achieve this goal, Motorola has conducted on-site inventories to collect detailed system information. Motorola has also collected detailed system inventory data from authorized representatives and/or agents of Williamson County. The inventory data is essential to assessing the extent of system modifications necessary to adequately reband your system.

This proposal includes the information necessary to reband the SmartNet II Plus Analog System and the Motorola Astro P25 Digital System along with the analog and digital subscribers. There are two (2) channels of the 15 channels affected by the FCC rebanding order; all 15 channels need to be available for both systems. For example, if initially 12 of the 15 channels were in use by the Digital System and 3 by the Analog System, and a failure occurred on the digital system, all 15 channels would be needed and used on the Analog System. There is no automated backup and no manual backup procedure included as a part of this rebanding proposal.

Motorola considers the data it has collected from Williamson County, or those authorized by Williamson County to act on its behalf, to be accurate and up-to-date. Motorola believes that Williamson County has disclosed all system and system related components of Williamson County's digital and analog systems.

The descriptions that follow summarize the data Motorola has collected, highlights missing information and details any action(s) that will be taken to address the area(s) of concern. For the purposes of this proposal, data fields marked " insufficient", "unknown", or "unconfirmed" will be estimated as precisely as possible. Should any estimate prove not to be accurate, it shall be Williamson County's responsibility to correct any errors resulting from the faulty information.

This document provides the deliverables as described in the Reconfiguration Planning Statement of Work as well as the proposal to reconfigure the Williamson County radio communications systems.

## *2.0 SYSTEM DESCRIPTION*

The Williamson County 800 MHz radio systems consist of a digital simulcast trunking system, an analog simulcast trunking system, a command trailer, and the conventional National Public Safety Planning Advisory Committee (NPSPAC) Mutual Aid channels.

The digital trunking system is a 15-channel, 4-site simulcast system in the 806 MHz trunking band. The digital system is currently a Project 25, Motorola ASTRO 7.2 release platform. It is an expansion of the City of Austin/ Travis County Regional Radio System (RRS) system. The

four radio sites are Cedar Park, Liberty Hill, Twin Towers and Thrall. The Prime Site is co-located at Twin Towers. There are 2 of 15 trunking channels that require rebanding. The digital system has 1,113 portable radios, 1,111 mobile radios and 30 fixed radios.

Since the Williamson County Digital Radio System is a subsystem of the Austin / Travis County Regional Radio System (RRS), it is recommended that the Austin /Travis County radio system be rebanded first so that the new RRS rebanded frequencies can be included in the Williamson County subscriber rebanding.

The analog trunking system is a comparative system to the digital system. It shares the same sites and same frequencies. There are no antenna components that are shared between the two systems. It is expected that the analog system will remain a live system for an extended period of time. The analog system has 252 portable radios, 311 mobile radios and 6 fixed radios.

There are a total of ten NPSPAC Mutual Aid conventional repeaters located at four different sites and the command trailer. All of the conventional repeaters are using the antenna system for the analog system or are part of the command trailer.

Based on discussions with Williamson County, the following modifications are required for rebanding:

- Reband two trunked channels on the digital system.
- Retune or reprogram all of the digital subscribers. A second retune is required for all subscribers to remove the old NPSPAC conventional mutual aid channels.
- Install updated software on the digital R2625 service monitor to maintain the NPSPAC trunking feature.
- Reband two trunked channels on the analog system, which includes trunked controller code plugs, retuning of repeaters and transmit combiners. The impacted channels are the same frequencies that are impacted on the digital system.
- Retune/reprogram/replace all of the analog subscribers. A second retune is required for all subscribers to remove the old NPSPAC conventional mutual aid channels.
- Updated frequencies in the SIP management terminal used on the analog system.
- Per Williamson County, pre and post coverage tests are required for both the analog and digital systems.
- Install back-to-back repeaters for all conventional NPSPAC Band mutual channels at the sites; the four sites that have NPSPAC back-to-back repeaters installed will need a temporary antenna system installed as well.

## ASSUMPTIONS

This quotation to provide rebanding services to Williamson County is based upon information supplied by Williamson County or those authorized to act on its behalf. Motorola deems this information credible, accurate and current.

Any missing information should be provided to Motorola as soon as possible. Any unconfirmed information should be validated as soon as possible. Inaccurate information could alter or modify the terms of this quotation.

The Proposal is subject to the following key assumptions and understandings for subscribers:

- The inventory planning process did not allow for the gathering of sufficient detail to determine the options and configurations of the subscribers which must be replaced as relates to talkgroup capability (physical switch positions), encryption or display. Also, the process did not allow for the gathering of detailed inventory information on the accessories associated with these radios. In the absence of such inventory, it is likely that significant numbers of radios and associated accessories will be delivered that are unacceptable to the Licensee. The replacement radio equipment lists provided in this proposal is at this point only an estimate of the requirements and further investigation will be required.
- Interoperability requirements and planning for the system must be complete prior to template development and subscriber reconfiguration.
- Most digital subscribers on the Williamson County radio system have been shipped later than January 1, 2006, thus these subscribers already have the rebanding software included and only need to be retuned (as defined in the SAIR).
- Per Williamson County, all of the analog subscribers will require reprogramming or replacement because the ability to use new NPSPAC trunked channels is required.
- The Maxtrac and STX radios do not support the quantity of conventional channels during interim period and is the reason for the proposed replacements. (Note: there is an agreement for Nextel to provide "loaner" radios instead of replacing the Maxtrac and STX radios.)
- Fifteen (15) of the ASTRO Spectra mobiles are C9 trunked mounted
- Because the inventory did not include remotes for the control stations or handsets for the mobiles, a change order may be necessary.
- All subscriber templates will be approved by Williamson County prior to commencing any reprogramming.
- Subscriber programming will be accomplished Monday through Friday (excluding holidays) with one shift during normal day shift hours between 7:00 a.m. and 3:00 p.m. and the second shift between 3:00 p.m. and 11:00 p.m.
- Subscriber programming will be at designated Motorola Service Center locations or at a location agreed upon by Motorola and Williamson County which meets the requirements for space, safety, security, power available.
- The stated project duration assumes the mobile subscriber units are available for Programming at a rate of 16 mobile radios per shift (32 per day assuming two shifts and two teams with two technicians per shift).
- The stated project duration assumes the portable subscriber units are available for programming at a rate of 16 portable radios per shift (32 per day assuming two shifts and two teams with two technicians per shift).
- Subscriber inventory is accurate as provided by Williamson County and audited by Motorola (5% audit) as of 12/4/2007.
- Motorola understands from Williamson County that virtually all NPSPAC capable subscribers contain the conventional NPSPAC Band mutual aid channels, and that it is not possible for the users to do without the channels for any length of time during subscriber cutover.

- If necessary, Williamson County is able to reduce the number of Talkgroups in the MTS2000 model I subscribers to allow two sets of conventional NPSPAC Band mutual aid channels.
- *Williamson County has assumed the responsibility for programming "loaner radios" being provided by Nextel for the Maxtrac and STX radios that are not getting replaced; Motorola is not providing any services associated with the "loaner radios".*
- *Should Loaner Radio availability or operation impact the project schedule, the resulting change will be addressed via Change Order.*

The Proposal is subject to the following key assumptions and understandings for the FNE, Fixed Network Equipment:

- *It is assumed that the previous tower loading analysis can be updated by the engineering firm that conducted tower engineering study previously without visiting the tower sites and without a tower climb.*
- *Per Williamson County, it is assumed the antennas and associated transmission line installed at the sites will not be removed after the NPSPAC transition period is completed. No Antenna System Removal is included in this proposal.*
- The FCC license for the correct current frequencies in use by Williamson County, licensee and the FCC license for the correct new rebanded frequencies to be used by the Williamson County, licensee will be posted at the radio sites prior to any work being done on the Frequency Reconfiguration project.
- That Sprint Nextel will maintain all equipment that is provided by Sprint Nextel for rebanding, including performing periodic maintenance (PM) in accordance with manufacturer's recommendations.
- The technicians that maintain the equipment provided by Sprint/Nextel meet all requirements that any other technician working on the radio system is required to meet, including but not limited to passing the City of Austin security clearance, skill level and training requirements, safety training and insurance coverage.
- Any and all maintenance of the Sprint Nextel-provided equipment must be planned and coordinated with Williamson County.
- Because back-to-back repeaters are required for the conventional NPSPAC Band mutual aid channels at the sites and to avoid IM, temporary antennas systems will be installed at each conventional site. Pending tower loading analysis, a change order may be required to upgrade the towers to support new antennas. Previous tower loading analysis showed that the towers were near the maximum acceptable loading. Additional analysis is also required to determine if AC power, space, etc. are sufficient to support the additional repeaters and to determine the equipment that is necessary for the temporary antenna systems.
- The four-site NPSPAC back-to-back repeaters antenna systems will need to be designed by the engineer assigned to this rebanding project. Tower loading analysis will need to be done as a part of the design process at all four sites.
- The removal of the temporary repeaters and patch equipment will not be a basis for System Acceptance. The temporary repeaters and patch equipment will remain after the System Acceptance if all interoperability partners have not been rebanded.

- Per Williamson County, the analog system FNE will require the ability to use new NPSPAC trunked channels. The RF equipment that requires retuning or replacement are the 6809 trunked controls, SIP management terminal, transmit combiners, and Quantar repeaters.
- Per Williamson County, 3 of the command trailer conventional repeaters will be tuned to the new conventional NPSPAC Band mutual aid channels and 2 will remain on the old channels until interoperability partners are rebanded, at which time the remaining 2 repeaters will be retuned to the new channels. Because of potential Intermodulation issues, there will be no audio patch equipment provided to allow old and new channels to transmit at the same time.
- Per Williamson County, the analog trunked channels at the backup site will not be rebanded.
- It is assumed that the command trailer's WJD860-5S transmit combiner isolators will not fail during retuning.
- It is assumed that both systems will be active at the same time to perform coverage tests for both systems simultaneously.

## FREQUENCIES

The following tables list the existing, original transmit and receive frequencies in MHz, and the corresponding post rebanding frequencies as assigned to Williamson County.

| **Trunking Frequencies** Cedar Park, Liberty Hill, Twin Towers and Thrall | | | | |
|---|---|---|---|---|
| Channel # | Original | | **After re-banding** | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 860.9625 | 815.9625 | **859.5875** | **814.5875** |
| 2 | 859.9625 | 814.9625 | 859.9625 | 814.9625 |
| 3 | 858.9625 | 813.9625 | 858.9625 | 813.9625 |
| 4 | 857.9625 | 812.9625 | 857.9625 | 812.9625 |
| 5 | 858.9875 | 813.9875 | 858.9875 | 813.9875 |
| 6 | 857.9875 | 812.9875 | 857.9875 | 812.9875 |
| 7 | 856.9625 | 811.9625 | 856.9625 | 811.9625 |
| 8 | 855.7125 | 810.7125 | 855.7125 | 810.7125 |
| 9 | 855.2125 | 810.2125 | 855.2125 | 810.2125 |
| 10 | 854.9875 | 809.9875 | 854.9875 | 809.9875 |
| 11 | 860.9875 | 815.9875 | **856.6875** | **811.6875** |
| 12 | 859.9875 | 814.9875 | 859.9875 | 814.9875 |
| 13 | 856.9875 | 811.9875 | 856.9875 | 811.9875 |
| 14 | 855.9875 | 810.9875 | 855.9875 | 810.9875 |
| 15 | 854.9625* | 809.9625 | 854.9625** | 809.9625 |

*Notes: Those frequencies impacted by rebanding are marked in **bold**.*
** Base Station Identifier pre-rebanding – this is not a control channel.*
***Base Station Identifier post rebanding – will not cause a change in the control channel list.*

One control channel is impacted by rebanding. The impacted control channel will not become a Base Station Identifier transmitter so it will remain a control channel.

| Conventional Frequencies Cedar Park | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 867.0125 | 822.0125 | **852.0125** | **807.0125** |

| Conventional Frequencies Liberty Hill | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 867.5125 | 822.5125 | **852.5125** | **807.5125** |

| Conventional Frequencies Thrall | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 868.0125 | 823.0125 | **853.0125** | **808.0125** |

| Conventional Frequencies Backup Site | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 866.0125 | 821.0125 | **851.0125** | **806.0125** |
| 2 | 866.5125 | 821.5125 | **851.5125** | **806.5125** |

| Conventional Frequencies Command Trailer | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 866.0125 | 821.0125 | **851.0125** | **806.0125** |
| 2 | 866.5125 | 821.5125 | **851.5125** | **806.5125** |
| 3 | 867.0125 | 822.0125 | **852.0125** | **807.0125** |
| 4 | 867.5125 | 822.5125 | **852.5125** | **807.5125** |
| 5 | 868.0125 | 823.0125 | **853.0125** | **808.0125** |

*Notes: Those frequencies impacted by rebanding are marked in **bold**.*

## FIXED NETWORK EQUIPMENT

Motorola collected detail on the fixed network equipment that might have been affected by rebanding. Highlights of the inventory gathered at each site are as follows:

Digital Simulcast System Prime Site (Twin Towers):

| | |
|---|---|
| Prime Simulcast Controllers | Astro 7.2 GCP 8000 |
| Voting Comparators | AstroTAC 9600 |

Digital Simulcast System Remote Sites (Cedar Park, Liberty Hill, Twin Towers and Thrall):

| | |
|---|---|
| Base Stations | GTR 8000 Base Simulcast Station |
| Transmit Combiners (Qty = 2) | RFS/Celwave WIJD86210S |
| Post Combiner Transmit Filter | Motorola Assembled Filter, built for GTR |
| Transmit Antennas (Qty = 2) | RFS/Celwave BCR12JxB1 |
| Receive Antennas (Qty = 2) | RFS/Celwave BMR12JxB1 |
| Tower Amplifier/Rx Multicoupler | TxRx TTA Auto Quad 792-824 MHz |
| Bottom End Preselector | TxRx Preselector Folded 806-824 |

Analog Simulcast System Prime Site (Twin Towers):

| | |
|---|---|
| Main Simulcast Controller | SmartNet II Plus 6809 |
| Alternate Simulcast Controller | SmartNet II Plus 6809 |
| Voting Comparators | Digitac |

Analog Simulcast System Remote Sites (Cedar Park, Liberty Hill, Twin Towers and Thrall):

| | |
|---|---|
| Base Stations | Quantar Simulcast Station |
| Transmit Combiners (Qty = 2) | RFS/Celwave WIJD861-10S71F |
| Transmit Antennas (Qty = 2) | RFS/Celwave BCR12JxB1 |
| Receive Antennas (Qty = 2) | RFS/Celwave BMR12JxB1 |
| Tower Amplifier/Rx Multicoupler | TxRx DDF1002A |

Conventional Sites (Backup Site, Cedar Park, Liberty Hill and Thrall):

| | |
|---|---|
| Base Station | Quantar Analog Station |
| Transmit Combiners | RFS/Celwave WIJD861-10S71F |
| Transmit Antennas | RFS/Celwave BCR12JxB1 |
| Receive Antennas | RFS/Celwave BMR12JxB1 |
| Tower Amplifier/Rx Multicoupler | TxRx DDF1002A |

Command Trailer:

| | |
|---|---|
| Base Station | Quantar Analog Station |
| Transmit Combiner | WJD860-5S |
| Transmit Antennas | RFS/Celwave CEL-1A |
| Receive Antennas | RFS/Celwave CEL-1A |
| Tower Amplifier/Rx Multicoupler | TxRx DDF1002A |

## *3.0 INTERFERENCE STUDIES*

### INTERMODULATION INTEFERENCE IMPACT

Intermodulation (IM) interference products are generated whenever two or more transmit frequencies mix together. If there is more than one transmitting frequency within the same band at a site, an IM analysis is necessary to check for possible IM interference problems. The IM study has been performed to predict IM products that could be generated as a specific result of changing the stations to the newly proposed frequencies as listed in section 2.0 above, to the existing sites. Only 800 MHz channels were included in the IM studies. Please see the complete *Intermodulation Interference Study*; Attachment A.

### CHANNEL 69 INTERFERENCE IMPACT

All television channel 69 transmitters in the state of Texas, Arkansas, Louisiana, and Oklahoma were evaluated based on their proximity to the Williamson County sites, the channel frequencies used at the sites, and Effective Radiated Power (ERP) of the channel 69 transmitters. Motorola believes that there will be no interference to the Williamson County System from channel 69 transmitters. Please see the *Channel 69 Interference Impact Report* in Attachment B.

## *4.0 SYSTEM INVENTORY AND SUITABILITY ASSESSMENT*

Motorola completed detailed audits of the customer's Fixed Network Equipment (FNE) system inventory and a 5% audit for the subscriber inventory. A *Suitability Assessment Impact Report* (*SAIR*) has been produced based on that data collection. The proposed rebanding operation is based on specific impacts anticipated for this system and all of its components. Specifically the report indicates whether each of these system components may be easily retuned, whether they first require reprogramming to allow retuning, or whether they must be replaced to accomplish the migration to the new frequencies prescribed in the FCC order. Please review the *Suitability Assessment Impact Report*; Attachment C or refer to the Implementation Plan below in Section 6.0, to see a summarized version of the impact to the equipment.

### Coverage Services

Per instructions from Williamson County, Motorola will provide coverage baseline and verification services. No antennas are expected to be replaced, but Williamson County wishes to verify coverage has not changed because of rebanding and because the system is a simulcast system that will require re-optimization of impacted channels. Motorola plans to incorporate signal strength measurements for the analog system and BER (Bit Error Rate) tests for the digital system in its testing pre and post rebanding of the trunked sites, see *Coverage Acceptance Test Plan*; Attachment D.

## *5.0 INTEROPERABILITY*

Williamson County has interoperability requirements with the City of Austin/Travis County. In some cases, Williamson County subscribers have these other Agencies' systems and frequencies programmed into their radios. If any of the interoperability partners are rebanding and their new rebanding frequencies are known prior to programming Williamson County's radios, that information will be included in the templates. However, if the other Agencies' information is not known prior to programming, this proposal does not include reprogramming any Williamson

County radios for the sole purpose of adding interoperability Agencies rebanding frequencies. This proposal does not include reprogramming any of the interoperability Agencies radios.

## *6.0 HIGH LEVEL IMPLEMENTATION PLAN FOR SYSTEM RECONFIGURATION*

The following information provides an overview of how the Williamson County system rebanding plan will be implemented and how those activities will impact the fixed network equipment and subscriber units. Additional details on specific equipment components may also be found in *the Suitability Assessment Impact Report* in Attachment C.

Motorola has produced both hardware and functional performance tests to demonstrate comparable operation before and after rebanding. Please see the attached *RF Hardware and Functional Acceptance Test Plan* in Attachment D.

Motorola has produced a more detailed *Implementation and Cutover Plan* in Attachment F which goes into the details about the cutover, testing and fallback procedures and deliverables. The attached *Implementation and Cutover Plan* is a significant part of the foundation used during the implementation phase to produce the final schedule, user impact time line, and finalized Implementation procedures. The *Implementation and Cutover Plan* outlines the transition from the current frequencies to the new ones, which ensures minimum interruption to system functionality throughout the rebanding reconfiguration.

## IMPACT ON SUBSCRIBERS

Motorola has carefully analyzed the Subscriber inventory data. The Suitability Assessment results dictate the following actions taken with regard to subscribers:

| Subscribers Impact | | | |
|---|---|---|---|
| Subscriber Model | Action | Qty | Replacement Radio |
| XTS2500 (digital) | Reprogram | 140 | N/A |
| XTS5000 (digital) | Reprogram | 973 | N/A |
| XTL1500 (digital) | Reprogram | 15 | N/A |
| XTL2500 (digital) | Reprogram | 994 | N/A |
| XTL5000 (digital) | Reprogram | 130 | N/A |
| ASTRO Spectra Plus (digital) | Reprogram | 2 | N/A |
| MCS2000 (analog) | Reprogram | 47 | N/A |
| MTS2000 Model I (analog) | Reprogram | 246 | N/A |
| STX821 (analog) | Replace | 1 | XTS2500RB |
| ASTRO Spectra (512 KByte) (analog, Trunk, C9) | Replace | 15 | XTL5000 |
| ASTRO Spectra (512 KByte) (analog, Dash, W5/C5) | Replace | 118 | XTL2500RB |
| ASTRO Spectra Consolette (analog) | Replace | 6 | XTL5000 Consolette |
| LCS2000 (analog) | Replace | 54 | XTL2500RB |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| Total Subscribers | | 2825 | |

Note1 : Per agreement between Sprint Nextel and Williamson County

| Subscriber Definitions | |
|---|---|
| ***Retune:*** | Update the channel frequencies via the Customer Programming Software/Radio Service Software programming software. |
| ***Replace:*** | Cannot be updated to support new frequencies or band plans. New Radio. |
| ***Reprogram:*** | Update operating software via software FLASH with new frequencies & ban plan. Any reprogramming activity requires flashing. After flash has been applied, program radio with the new frequency. |

Motorola will apply its new rebanding software to the subscribers that will be reprogrammed. An authorized Motorola technician must interface to the subscriber's programming port with a computer running the proper Radio Service Software (CPS/RSS), replacing the old frequencies with the new frequencies.

All subscribers will need a "second touch" or retune to remove the old Simplex and the conventional mutual aid channels from the scan list after all interoperability partners have rebanded. Thus, all 2,831 subscribers will require retuning.

Williamson County estimates that there are an additional 142 (5% of the total 2,831 radios) spare/undiscovered radios not presently registered in the database. Motorola will provide rebanding software or replacements for these units, making an estimation of unit type based on recommendations from Williamson County. Williamson County also estimates that approximately 142 (5% of the total 2,831 radios) will be added to the system by the time rebanding deployment begins.

The Proposal is subject to the following key assumptions and understandings for subscribers:

- The "5% inventory audit" process did not include the options and configurations of the subscribers which must be replaced, i.e. the talkgroup capability (physical switch positions), encryption or display. Also, the accessories associated with these radios were not included in the audit. Thus, the replacement radio equipment lists provided in this proposal is an estimate. Prior to ordering replacement radios, additional information will be needed from Williamson County regarding subscriber options, configurations, and accessories.
- Interoperability requirements and planning for the system must be complete prior to template development and subscriber reconfiguration.
- Most digital subscribers on the Williamson County radio system have been shipped later than January 1, 2006, thus these subscribers already have the rebanding software included and only need to be retuned (as defined in the SAIR).
- Per Williamson County, all of the analog subscribers will require reprogramming or replacement because the ability to use new NPSPAC trunked channels is required.
- The Maxtrac radios do not support the quantity of conventional channels during interim period and is the reason for the proposed replacements.
- It is assumed that all STX radios are NPSPAC capable.
- Because the inventory did not include remotes for the control stations or handsets for the mobiles, a change order may be necessary.
- All subscriber templates will be approved by Williamson County prior to commencing any reprogramming.
- Subscriber programming will be accomplished Monday through Friday (excluding holidays) with one shift during normal day shift hours between 7:00 a.m. and 3:00 p.m. and the second shift between 3:00 p.m. and 11:00 p.m.
- Subscriber programming will be at designated Motorola Service Center locations or at a location agreed upon by Motorola and Williamson County which meets the requirements for space, safety, security, power available.

- The stated project duration assumes the mobile subscriber units are available for Programming at a rate of 16 mobile radios per shift (32 per day assuming two shifts and two teams with two technicians per shift).
- The stated project duration assumes the portable subscriber units are available for programming at a rate of 16 portable radios per shift (32 per day assuming two shifts and two teams with two technicians per shift).
- Subscriber inventory is accurate as provided by Williamson County and audited by Motorola (5% audit) as of 12/4/2007.
- Motorola understands from Williamson County that virtually all NPSPAC capable subscribers contain the conventional NPSPAC Band mutual aid channels, and that it is not possible for the users to do without the channels for any length of time during subscriber cutover.
- If necessary, Williamson County is able to reduce the number of Talkgroups in the MTS2000 model I subscribers to allow two sets of conventional NPSPAC Band mutual aid channels.

**Simplex Channels**

Williamson County presently uses the five national/state NPSPAC Band mutual aid Simplex channels for incident communications. Motorola understands from Williamson County that all subscribers contain these channels, and that it is not possible for the users to do without the channels for any length of time during subscriber cutover. For that reason, the Williamson County has specified that Motorola will program the entire fleet of subscribers twice. The first reprogram will add the new, rebanded Simplex channels while retaining the existing channels as well, which may require a reduction in Talkgroups. When all subscribers are reprogrammed, Motorola will retune the subscriber fleet again, removing the pre-rebanding Simplex frequencies and installing any Talkgroups that were removed during the first reprogram to support two sets of Simplex channels. The channels are:

- NPSPAC Mutual Aid– 866.0125 MHz/821.0125 MHz
- NPSPAC Mutual Aid – 866.5125 MHz/821.5125 MHz
- NPSPAC Mutual Aid – 867.0125 MHz/822.0125 MHz
- NPSPAC Mutual Aid – 867.5125 MHz/822.5125 MHz
- NPSPAC Mutual Aid – 868.0125 MHz/823.0125 MHz

**Templates**

Template changes are required to change the impacted control channel, impacted Failsoft channel frequencies and to support the dual receiver repeaters. There will also be template changes required due to rebanding of interoperability partners. There are approximately 137 templates used in the Williamson County digital system and approximately 25 templates use for the analog system. Because the radios must be programmed twice, 2 times 162 (324) templates are required.

"Dummy" templates are required to remove system specific information from subscribers that require replacement prior to shipping the radios to Motorola. One "dummy" template is required for each of the 7 types of radios requiring replacement; therefore, Motorola will provide 7 "dummy" templates.

**Advanced System Key (ASK)**
Williamson County uses Advanced System Keys to limit access to reprogramming of the subscribers that use the digital system, City of Austin/ Travis County Regional Radio System (RRS) system. Williamson County is responsible for programming the Hardware Keys needed for reconfiguration. The radio shop that is reprogramming the subscribers requires 15 USB Key Adaptors (I Readers), and 15 Hardware Keys (I Buttons) for reconfiguration. The I Buttons will be returned to Williamson County at the end of reconfiguration.

## IMPACT ON FIXED NETWORK EQUIPMENT

The Proposal is subject to the following key assumptions and understandings for the FNE, Fixed Network Equipment:

- The FCC license for the current frequencies in use by Williamson County, licensee and the FCC license for the new rebanded frequencies to be used by the Williamson County, licensee, will be posted at the radio sites prior to any work being done on the Frequency Reconfiguration project.
- Because back-to-back repeaters are required for the conventional NPSPAC Band mutual aid channels at the sites and to avoid IM, temporary antennas systems will be installed at each conventional site. Pending tower loading analysis, a change order may be required to upgrade the towers to support new antennas. Previous tower loading analysis showed that the towers were near the maximum acceptable loading. Additional analysis is also required to determine if AC power, space, etc. are sufficient to support the additional repeaters and to determine the equipment that is necessary for the temporary antenna systems. Any tower reinforcements, temporary equipment shelters, additional power connections would be addressed via a change order.
- Per Williamson County, 3 of the command trailer conventional repeaters will be tuned to the new conventional NPSPAC Band mutual aid channels and 2 will remain on the old channels until interoperability partners are rebanded, at which time the remaining 2 repeaters will be retuned to the new channels. Because of potential Intermodulation issues, there will be no audio patch equipment provided to allow old and new channels to transmit at the same time.
- Per Williamson County, the analog system FNE will require the ability to use new NPSPAC trunked channels. The RF equipment that requires retuning or replacement are the 6809 trunked controls, SIP management terminal, transmit combiners, and Quantar repeaters.
- Per Williamson County, the analog trunked channels at the backup site will not be rebanded.
- It is assumed that the command trailer's WJD860-5S transmit combiner isolators will not fail during retuning. A 5 port transmit combiner is included in contingency in case of failure.
- It is assumed that both systems will be active at the same time to perform coverage tests for both systems simultaneously.

Digital System Impact

**Zone Controllers** – Motorola has determined the current version of software installed in the ASTRO P25 7.2 zone controller is sufficient to meet the operational needs required for rebanding.

**Central Controllers** – Motorola has determined the current version of software installed in the Astro 7.2 GCP 8000 central controllers is sufficient to meet the operational needs required for rebanding.

**GTR 8000 Base Simulcast Station** – Motorola will interface each station's programming port with a computer running the proper Radio Service Software (CPS/RSS), replacing the old transmit/receive frequencies with the new frequencies.

**RFS/Celwave WIJD86210S** – Motorola will retune the RFS/Celwave transmit combiners to the new frequencies.

**RFS/Celwave Transmit Antennas BCR12JxB1** - Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to this antenna system.

**RFS/Celwave Receive BMR12JxB1** – Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to this antenna system.

**TxRx Tower Top Amplifier** – Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to the amplifier.

**TxRx Receive Multicoupler** – Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to the multicoupler.

**Centracom II Gold Elite Console** – No changes are necessary.

Analog System Impact

**Simulcast Central Controllers 6809** - Motorola will replace its code plug to include the rebanding replacement frequencies, remove original frequencies, and upgrade CSC/TSC/DCB/TCI software.

**Remote Controllers 6809** - Motorola has determined that the electrical characteristics of this device are sufficient to meet the operational needs required for rebanding.

**Quantar non-IR Base Stations** - Motorola will interface each station's programming port with a computer running the proper Radio Service Software (CPS/RSS), replacing the old transmit/receive frequencies with the new frequencies.

**RFS/Celwave WIJD861-10S71F and WJD860-5S** – Motorola will retune the RFS/Celwave transmit combiners to the new frequencies.

**RFS/Celwave Transmit Antennas BCR12JxB1** - Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to this antenna system.

**RFS/Celwave Receive BMR12JxB1** – Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to this antenna system.

**RFS/Celwave Transmit/Receive Antennas CEL-1A** - Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to this antenna system.

**TxRx Tower Top Amplifier/Multicoupler DDF1002A** – Motorola has determined that the electrical characteristics of these devices are sufficient to meet the operational needs required for rebanding. Motorola shall not perform any modifications to the amplifier.

**SIP** - Program new frequency list into the SIP database via the frequency configuration screens. Retune the RF Modem with the appropriate RSS/CPS software. Inventory was not provided to allow a suitability assessment to be made. To support the new trunked NPSPAC Band channels, this management terminal may require replacement.

**Bi-Directional Amplifiers**
At the time of this proposal, there were no Bi-Directional Amplifiers (BDA) systems in use for the Williamson County 800 MHz radio systems.

**Service Monitor**
The General Dynamics R2625 service monitor does have the P25 digital trunking feature. The 68K software version for this model is flash-upgradeable and the updated trunked NPSPAC Band Plan option will be enabled. Because General Dynamics does not currently have the software available for the service monitor, the software/firmware update is included in contingency.

**NPSPAC ITAC/ICALL Repeaters**
Williamson County system uses conventional ICALL/ITAC repeaters for interoperation among agencies at all of their voice sites. These must be rebanded. Multiple versions of ICALL/ITAC channels would lead to confusion in the field during emergency situations. To alleviate this problem, Motorola will reband each of the ICALL/ITAC repeaters. Before doing so, Motorola will install a second, temporary repeater on the old frequency at each location. To avoid IM issues, a temporary antenna system will be installed at each conventional site. This repeater will be patched to the existing ITAC/ICALL repeater such that any traffic received on either the old or new channel is transmitted on both transmit channels. Two visits to the conventional repeater site are required. Motorola will provide whatever configuration is necessary to attach the new repeater to the new antenna system. Sprint Nextel will provide the 5 conventional analog

Quantar repeaters and Motorola will provide the patch equipment. This arrangement will be active until all the subscribers have been rebanded, as well as subscribers for adjacent agencies who interoperate with Williamson County.

Due to rack space limitation and power supply requirements, the 5 conventional ICALL/ITAC repeaters in the command trailer will be configured to allow 3 to use the new conventional NPSPAC Band mutual aid channels and 2 to remain on the old channels.

The removal of the temporary repeaters and patch equipment will not be a basis for System Acceptance. The temporary repeaters and patch equipment will remain after *System Acceptance* if all interoperability partners have not been rebanded.

## *7.0 MOTOROLA PROFESSIONAL SERVICES*

### MOTOROLA PROJECT MANAGER (PM):

The Motorola PM will oversee the activities for each stage of the rebanding effort to ensure a smooth execution of all deliverables and that the requirements of the Williamson County system are fully met. The Project Manager will coordinate with the Williamson County System Manager and any subcontractor or other third-party organization participating in this work; to keep this effort within the schedule to be agreed upon and finalized at the kick-off meeting.

The Williamson County System is a mission-critical communication system. Thus, any activities or tasks that would require the system to be at reduced functionality will be performed during weekends or evenings as specified in the cutover plan. All activities associated with cutover will be carefully planned in advance and executed with the Williamson County's approval. Activities that do not affect operation of the mission-critical communication system will be performed during normal work hours. During the rebanding of all affected equipment, a representative from the Williamson County will serve as a single point of contact for Motorola. Assuming no unanticipated delays, the project is estimated to be completed 309 work days from Notice to Proceed. A work day is defined as 8:00 a.m. to 5:00 p.m., Monday through Friday unless specified above.

**Motorola Program Manager - Project Administration Activities:**

1. Generate final Project Schedule
2. Provide Project Schedule status updates
3. Manage project SOW and change orders
4. Reconcile Equipment Lists to the contract
5. Arrange equipment inventory process and logistics
6. Provide contract administration
7. Provide project resource management
8. Assure proper archiving of project information
9. Provide Customer and project team communications management
10. Assure project level deliverables
11. Coordinate and chair customer meetings
12. Generate written reports as required
13. Maintain and facilitate resolution of general system punch list items

**Motorola Program Manager – Infrastructure**

1. Coordinate and direct internal and external project resources including subcontractors
2. Manage infrastructure equipment rebanding and assure documentation of deliverables
3. Maintain and facilitate resolution of infrastructure punch list items

**Motorola Program Manager – Infrastructure Test Plans**

1. Manage overall infrastructure test plans and execution
2. Manage punch list of issues to be resolved
3. Facilitate acceptance test plan completion and documentation

Note: a second Motorola project manager will be needed to manage the parallel activities of the subscriber programming effort.

**Motorola Program Manager - Subscriber Programming Activities:**

1. Facilitate Customer meetings to determine information for programming templates
2. Obtain Customer / Agency Approval of programming templates prior to initiating programming
3. Plan and manage delivery of reprogrammed subscriber units for all required departments and agencies
4. Manage subscriber equipment rebanding and ensure accurate and complete documentation of deliverables
5. Update subscriber database with serial number of each unit as they are programmed
6. Maintain and facilitate resolution of subscriber punch list items

**MOTOROLA SYSTEMS ENGINEER:**

The Motorola Systems Engineer has the responsibility for system design and technical performance. The Motorola Engineer will be responsible for pre-rebanding coverage evaluation, post rebanding comparative analysis, order write up, Acceptance Test Plan development finalized, and system programming parameters. The Motorola Systems Engineer will perform the following activities:

**Motorola System Engineer - Project Administration Activities:**

1. Validate system design specifications in accordance with customer needs
2. Validate and obtain customer approval for a final Implementation and Cutover Plan
3. Develop and obtain customer approval for the Impact Time Line
4. Validate and obtain customer approval for a final Acceptance Test Plans
5. Validate final equipment lists
6. Validate equipment orders for Motorola and 3rd party equipment to accommodate inventory shipping schedules
7. Validate equipment lists by model, versions, options
8. Validate the execution and documentation of the Acceptance Tests

**Motorola System Engineer – Infrastructure**

1. Provide technical design for 3rd party interfaces

**Motorola System Engineer - Subscriber Programming Activities:**

1. Assist the Williamson County, as necessary, to assess equipment/template suitability and resolve issues

**MOTOROLA SYSTEMS TECHNOLOGIST:**

The Motorola Systems Technologist is highly experienced and trained, specializing in the optimization and trouble shooting of two-way RF communication systems. The Systems Technologist will perform the optimization process working with service technicians. Additionally, this individual will work with the Motorola Systems Engineer and the Williamson County representative to determine the best configuration and programming of, the system parameters. The Motorola Systems Technologist will perform the following activities:

**Motorola Systems Technologist – Infrastructure**

1. Confirm system configuration and software compatibility to the existing system
2. Execute antenna network compatibility checks/optimization
3. Load rebanding information into the trunking system components
4. Complete the reprogramming of all RF equipment
5. Perform upgrades to affected 3rd party FNE
6. Perform RF optimization to meet design specifications

**Motorola Systems Technologist – Infrastructure Test Plans**

1. Conduct site and system level testing
2. Test and validate system software and features
3. Execute functional testing of standard system features

**Motorola Systems Technologist - Subscriber Programming Activities:**

1. Program approved templates into a radio programming template tool
2. Program sample radios with approved templates and deliver for Customer evaluation
3. Maintain template documentation
4. Provide ownership of technical issues

**Motorola Responsibilities**

Motorola will:

1. Schedule a project kick off meeting with the Williamson County at the project's start.
2. Execute the project contract deliverables and coordinate ensuing project activities with appropriate Motorola and the Williamson County resources.
3. After project kick-off, Motorola will provide the Williamson County with the final schedule and progress updates (see *Reconfiguration Project Schedule;* Attachment G), Impact Time Line and final Implementation and Cutover Plan. The schedule and timeline will outline a cutover plan used during the reconfiguration process to ensure disruptions are minimized. The schedule should reflect the following:
   a. Timeline of events
   b. Identified deliverables

**Williamson County Responsibilities**

Williamson County will:

1. Provide a signatory who has authority to sign all appropriate project documents required for this project and any other agreements required.
2. Before or at the Licensee/Motorola kick-off meeting and prior to any reconfiguration work being performed, confirm the following two documents have been received:
   - o FCC Licenses: All rebanding impacted radio transmitters are licensed properly on their new rebanding frequencies and Licensee has received their new FCC licenses.
   - o Sprint Nextel Authorization to Move: The Licensee has received a separate Sprint Nextel letter (sent via FedEx) authorizing the Licensee to move to the new frequencies.
3. Provide site access to the Williamson County owned and controlled sites for Motorola personnel and Motorola's subcontractors for the purpose of reconfiguring the equipment located at that site.
4. Revise all existing subscriber templates to add the new rebanded conventional Mutual Aid repeater and direct channels and any Interoperability Partner system rebanding control channel information. Motorola will be adding all the Williamson County trunking rebanded control channels and failsoft assignments.
5. Provide written approval of final templates prior to subscriber programming.
6. Provide the Programming Access Key (PAK) for each system that has to be programmed into this licensee's subscriber units.
7. Provide the subscriber radios and fleet coordination to ensure on-time project completion.
8. Provide all spare units identified in preliminary inventory, if any at the beginning of the project.
9. Collaborate with Motorola as they work to complete the Final Implementation and Cutover Plan and Impact Time Line. Many of the details have been determined and are presented in this proposal. However, there will be a significant amount of refining and added implementation details that starts with the Kickoff Meeting.
10. Not unreasonably delay the execution of work by Motorola and will extend the timeline of the project when delays caused by the Williamson County are experienced.
11. For the trunking coverage test, provide vehicles and drivers and portable radios (if necessary).
12. Identify any outstanding Motorola deliverables and formally request their completion through the mutual development of a project punch list.
13. Grant final acceptance upon completion of the Williamson County system reconfiguration.

## *8.0 LOCAL SERVICE SUPPORT*

Motorola will utilize its authorized service center network and/or approved third party contractors to perform portions of the reconfiguration of the equipment.

## *9.0 NOTIFICATION AND CONDITIONS FOR WORK*

Motorola will notify the Williamson County assigned point of contact a minimum of five (5) business days prior to starting any work on the system. Motorola will commence work at the designated location only after the Williamson County has notified Motorola with instructions to proceed. Whenever possible, prior notification of at least 24 hours will be given when expected disruptions are to occur.

## *10.0 LICENSING*

Williamson County is responsible for updating, filing, and coordinating the frequency changes that become a part of this Rebanding program with the FCC. As a note, all radio transmitters must be properly licensed by the FCC.

## *11.0 RISKS*

Motorola is committed to mitigating all known risks and will engage the Williamson County whenever situations are identified in which a risk situation presents itself. Any event or occurrence that affects the project schedule is to be immediately reported to the Project Managers. A decision will be jointly made between Motorola and the Williamson County to consider the options and develop a mutually agreed-to solution.

Some risks are identified and mitigated by including them in the contingency list in Section 14 of this document.

At the time of this FRA development it is not anticipated that any trunked system antennas will be needed. However, by the time that a contract is signed and the project implementation has started changes could occur in the IM environment at a communications site co-located with multiple systems which would necessitate a requirement for the antenna(s) to be purchased and installed. Prior to installing an antenna system the engineering analysis must be conducted on a tower to confirm that it can safely handle the loading. These antenna contingency costs are based on an actual quote by a professional tower services subcontractor and their professional engineering associates.

During the subscriber "second touch" programming, changes in the interoperability requirements or other changes that affect the templates could necessitate additional work to implement the changes to the templates that were set up for the "second touch" subscriber programming. In order to cover this event, a line item was added for more work on the templates based on the number of templates affected being 10% of the 162 templates and with the level of effort (LOE) matching the Transition Administrators SED form, 2.5 hours per template.

There are risks associated with the work that needs to be performed on each piece of equipment. It is conceivable that a particular piece of equipment can be functional at the time of inventory but when rebanded, failures may occur when re-initializing the unit. Motorola will make every effort to ensure that any failure occurring in this situation be rectified immediately. In some cases adequate spares may not be available and could lead to a prolonged outage of equipment while obtaining replacement parts. If the failed component in question is currently under a direct service agreement with Motorola, any resolution to correct the failure will be covered under the

agreement. If the equipment involved is not covered under a direct Motorola Service Agreement, resolution may require reimbursement for material and labor to correct the failure and restore the defective equipment from Sprint Nextel.

## *12.0 MEDIATION*

Where applicable, Motorola has provided at the Licensee request, support for Alternate Dispute Resolution or Mediation. Per the TA guidelines these costs are reimbursable and therefore included in this quote as a line item. Motorola is not a party to the Mediation itself, however has supported the proposal for the reconfiguration for technical or other content as it relates the Mediation. These Mediation support charges may apply to the Planning phase as well as Implementation phase, depending on whether the mediation covers both phases. This work supporting or participating in Mediations and disputes is not considered normal proposal or bid activities.

Where mediation charges apply, refer to the Proposal Pricing Summary Table for listed mediation charges and the attached Motorola Mediation Tracking Detail (date and time of activities by resource to support the mediation).

## *13.0 SYSTEM ACCEPTANCE*

Upon completion of the work for the Williamson County, a System Acceptance Certificate will be provided for customer signature (see *Reconfiguration Implementation Phase Agreement, Terms and Conditions*, Exhibit B). This certificate acknowledges that all of the effort necessary to reconfigure the Williamson County's system has been completed.

The removal of the temporary repeaters and patch equipment will not be a basis for System Acceptance. The temporary repeaters and patch equipment will remain after the System Acceptance if all interoperability partners have not been rebanded.

# *14. RECONFIGURATION PRICING*
## PRICING SUMMARY

**Williamson County Reconfiguration Services Quote**

**Infrastructure**

| Service | Resource | Qty-Units | Total-Hours | Rate | Price |
|---|---|---|---|---|---|
| Twin Towers | | | 41 | | $6,896 |
| Controllers - Analog System | MSS | 2 | 6 | $ 144.00 | |
| Repeaters - Analog System | MSS | 2 | 3 | $ 144.00 | |
| Controllers - Digital System | ST | 2 | 0 | $ 175.00 | |
| Repeaters - Digital System | ST | 2 | 0 | $ 175.00 | |
| Retune Combiners & Duplexer | ST | 4 | 16 | $ 175.00 | |
| Pre and Post Rebanding System Baseline Testing | ST | 8 | 16 | $ 175.00 | |
| Cedar Park | | | 55 | | $22,134 |
| Tower Loading Analysis and Antenna Installation | TWR | 1 | 1 | $ 13,242.00 | |
| Repeaters - Analog System | MSS | 2 | 8 | $ 144.00 | |
| Repeaters- Digital System | ST | 2 | 0 | $ 175.00 | |
| Install and configure temporary NPSPAC repeater | MSS | 1 | 10 | $ 144.00 | |
| Retune Combiners & Duplexer | ST | 4 | 16 | $ 175.00 | |
| Pre and Post Rebanding System Baseline Testing | ST | 8 | 20 | $ 175.00 | |
| Liberty Hill | | | 55 | | $22,134 |
| Tower Loading Analysis and Antenna Installation | TWR | 1 | 1 | $ 13,242.00 | |
| Repeaters - Analog System | MSS | 2 | 8 | $ 144.00 | |
| Repeaters- Digital System | ST | 2 | 0 | $ 175.00 | |
| Install and configure temporary NPSPAC repeater | MSS | 1 | 10 | $ 144.00 | |
| Retune Combiners & Duplexer | ST | 4 | 16 | $ 175.00 | |
| Pre and Post Rebanding System Baseline Testing | ST | 8 | 20 | $ 175.00 | |
| Thrall | | | 55 | | $22,134 |
| Tower Loading Analysis and Antenna Installation | TWR | 1 | 1 | $ 13,242.00 | |
| Repeaters - Analog System | MSS | 2 | 8 | $ 144.00 | |
| Repeaters- Digital System | ST | 2 | 0 | $ 175.00 | |
| Install and configure temporary NPSPAC repeater | MSS | 1 | 10 | $ 144.00 | |
| Retune Combiners & Duplexer | ST | 4 | 16 | $ 175.00 | |
| Pre and Post Rebanding System Baseline Testing | ST | 8 | 20 | $ 175.00 | |
| BU site (NPSPAC) | | | 23 | | $16,658 |
| Tower Loading Analysis and Antenna Installation | TWR | 1 | 1 | $ 13,242.00 | |
| Install and configure 2 temporary NPSPAC repeaters | MSS | 2 | 14 | $ 144.00 | |
| Pre and Post Rebanding System Baseline Testing | ST | 2 | 8 | $ 175.00 | |
| M. Comm. Center | | | 55 | | $9,408 |
| Controllers | | 0 | 0 | | |
| Repeaters | MSS | 5 | 7 | $ 144.00 | |
| Retune Combiners & Duplexer | ST | 1 | 8 | $ 175.00 | |
| Pre Rebanding Baseline Test | ST | 5 | 20 | $ 175.00 | |
| Post Rebanding Baseline Test | ST | 5 | 20 | $ 175.00 | |
| System Watch ,Site Lens (Reconfig. SIP terminal) | MSS | 4 | Hours | $144.00 | $576 |
| MSS to assist with functional tests / ATP | MSS | 10 | Hours | $144.00 | $1,440 |
| Add back to back NPSPAC channels to console | MSS | 10 | Hours | $144.00 | $1,440 |
| Re-tune 10 Dispatch backup control stations | MSS | 10 | Hours | $144.00 | $1,440 |
| Project Manager | PM | 156 | Hours | $175.00 | $27,300 |
| System Engineer | SE | 56 | Hours | $175.00 | $9,800 |
| System Technologist | ST | 88 | Hours | $175.00 | $15,400 |
| Upgrade Operations Support (per quote) | ENG | 0 | Hours | $175.00 | $0 |
| Uninstall S/N-provided equipment (repeaters, dir. couplers), pkg. and ship | MSS | 1 | Hours | $4,439.00 | $4,439 |
| misc installation cables, connectors and eng materials - RZ comm | MSS | 1 | Expense | $11,363.64 | $11,364 |
| | | Infrastructure Total | | | $172,563 |

**Subscribers**

| Service | Resource | Total Units | | Rate | Extended Price |
|---|---|---|---|---|---|
| Mobiles Total ** | MSS | 1,247 | | | $126,820 |
| Portables Total ** | MSS | 1,410 | | | $110,955 |
| Templates Total ** | ST | 162 | | | $77,700 |
| Replacement of dash mount radios ** | MSS | 0 | | | $0 |
| Replacement of remote mount radios ** | MSS | 0 | | | $0 |
| 2nd. Programming of Subscribers (remove old freqs.) Mobiles ** | MSS | 1,247 | | | $126,830 |
| 2nd. Programming of Subscribers (remove old freqs.) Portables ** | MSS | 1,410 | | | $111,531 |
| Template Development for 2nd programming (remove freq.) | ST | 162 | Each | $175.00 | $28,350 |
| <Additional subscribers activity> | 0 | 0 | 0 | $0.00 | $0 |
| Project Manager On-site Management (for both 1st and 2nd touch) | PM | 992 | Hours | $175.00 | $173,600 |
| Project Manager-Replacement Subscribers & Accessories List Validation | PM | 20 | Hours | $175.00 | $3,500 |
| ST Templates & procedures supervision and approvals | ST | 48 | Hours | $175.00 | $8,400 |
| SE Subscribers Support | SE | 0 | Hours | $175.00 | $0 |
| ** *See details on attached "Subsc.Details Forms"* | | Subscriber Total | | | $767,676 |

| Testing | | | | | |
|---|---|---|---|---|---|
| Service | Resource | Quantity | Unit | Rate | Extended Price |
| Pre Rebanding Benchmark Testing | MSS | 0 | Hours | $ - | $0 |
| Post Rebanding Acceptance Testing | MSS | 0 | Hours | $ - | $0 |
| Functional Testing | MSS | 0 | Hours | $ - | $0 |
| Method (II or III) Drive Test (if applicable) | ST | 166 | Hours | $ 175.00 | $29,050 |
| Voyager and Drive Test Equipment rental | Expense | 1 | Each | $ 7,800.00 | $7,800 |
| Project Manager | PM | 64 | Hours | $ 175.00 | $11,200 |
| System Engineer | SE | 0 | Hours | $ 175.00 | $0 |
| System Technologist | ST | 52 | Hours | $ 175.00 | $9,100 |
| | | Testing Total | | | $57,150 |
| *Project Administration Services* | | | | | |
| *Kick off & Status Meetings, On Site Coordination, Subcontracting, Close out* | | | | | |
| Service | Resource | Quantity | Unit | Rate | Extended Price |
| Project Manager | PM | 408 | Hours | $175.00 | $71,400 |
| System Engineer | SE | 144 | Hours | $175.00 | $25,200 |
| System Technologist | ST | 144 | Hours | $175.00 | $25,200 |
| Mediation (#) | PM | 0 | Hours | $175.00 | $0 |
| Travel Expenses | TE | | | | $114,323 |
| *# See SOW & attached tracking sheet for details* | | Project Administration Activities Total | | | $236,123 |
| *Equipment* | | | | | |
| Reconfiguration Equipment | Motorola | 1 | Each | $31,747.50 | $31,748 |
| Directional Couplers | Motorola | 16 | Each | Provided and Paid by Sprint Nextel | |
| ** See attached table for details* | | Equipment Total | | | $31,748 |
| | | | | | |
| *Total Reconfiguration Price* | | | | | $1,265,259 |
| | | | | | |
| *Contingency Price* | | | | | $443,238 |
| | | | | | |
| *Total Reconfiguration Price with Contingency* | | | | | $1,708,497 |

## Pricing Validity:

If Motorola delivers Products or performs Reconfiguration Implementation Phase Services after December 31, 2008, it reserves the right to increase the pricing for such Products and Reconfiguration Implementation Phase Services in a manner that is consistent with its confidential Master Purchase Agreement with Sprint Nextel. In addition, for Products that are priced based upon a discount from Motorola's published list prices, price adjustments will occur if and when Motorola's published list prices are modified and the adjusted prices will apply to any Products that are delivered after the modification to the published list prices. Subcontractor quotations are normally valid for a limited time period; if Motorola subcontractor increases its subcontract price, then Motorola may increase its prime contract price for subcontracted work that is performed at the increased subcontract price. In all of these situations, any increase in the Contract Price will be reflected in a change order.

# SERVICES DETAIL

**Date:** 5/21/2008

**Project:** Williamson County 800 MHz Rebanding

**Duration:**
309 Work Days
15 Work Months
62 Work Weeks

## *Professional Services*

| | Project Manager | | System Engineer | | System Technologist | |
|---|---|---|---|---|---|---|
| **Project Administration Activities** | *Manhours* | *Days* | *Manhours* | *Days* | *Manhours* | *Days* |
| **Project Summary 309 days** | | | | | | |
| Customer Status Meetings and Project Administration | 330 | 41 | 120 | 15.0 | 80 | 10.0 |
| **Project Kickoff - 3 days** | | | | | | |
| Preplanning and Coordination Meeting/Order processing | 24 | 3 | 24 | 3.0 | 24 | 3.0 |
| NPSPAC B2B & Antenna System Design (4 sites) | 16 | 2 | 0 | 0.0 | | |
| **Project Close-Out - 5 days** | | | | | | |
| Punch List resolution | 30 | 4 | 0 | 0.0 | 40 | 5.0 |
| Final Acceptance | 8 | 1 | 0 | 0.0 | 0 | 0.0 |
| **Total hours for Project Administration Activities** | **408** | **51** | **144** | **18.0** | **144** | **18.0** |
| **FNE Reconfiguration - 207 days** | | | | | | |
| FNE | | | | | | |
| Preplanning and Coordination Meeting | 8 | 1 | 8 | 1.0 | 8 | 1.0 |
| Tower reinforcment and temporary NPSPAC antenna installation | 60 | 8 | 0 | 0.0 | 40 | 5.0 |
| FNE Reconfiguration - Optimization | 88 | 11 | 48 | 6.0 | 40 | 5.0 |
| **Total hours for Infrastructure** | **156** | **20** | **56** | **7.0** | **88** | **11.0** |
| Upgrade Operations *(Where applicable - ENG time only)* | | | | | | |
| Upgrade Operations Support *(per quote)* | | | 0 | 0.0 | | |
| **Total UO hours** | | | **0** | **0.0** | | |
| Testing | | | | | | |
| Conduct Pre Rebanding Verification Test(s) | 8 | 1 | 0 | 0.0 | 4 | 0.5 |
| Conduct Post Rebanding Verification Test(s) | 8 | 1 | 0 | 0.0 | 4 | 0.5 |
| Funtional Acceptance Testing | 8 | 1 | 0 | 0.0 | 4 | 0.5 |
| *Method (II or III) Drive Coverage Testing* | 40 | 5 | 166 | 20.8 | 40 | 5.0 |
| **Total hours for Testing** | **64** | **8** | **166** | **20.8** | **52** | **6.5** |
| **Subscriber Reconfiguration - 78 days** | | | | | | |
| Preplanning and Coordination Meeting | 4 | 1 | 0 | 0.0 | 8 | 1.0 |
| Subscriber Coordination (40 hrs/wk) for 8 weeks | 477 | 60 | 0 | 0.0 | 8 | 1.0 |
| Template & flash/program procedures | 4 | 1 | 0 | 0.0 | 8 | 1.0 |
| | 485 | 61 | 0 | 0.0 | 24 | 3.0 |
| **Subscriber Reconfiguration - 69 days** *(Second touch, if required)* | | | | | | |
| Preplanning and Coordination Meeting | 4 | 1 | 0 | 0.0 | 8 | 1.0 |
| Subscriber Coordination & record keeping (40 hrs/wk) for 7 weeks | 499 | 62 | 0 | 0.0 | 8 | 1.0 |
| Template & flash/program procedures | 4 | 1 | 0 | 0.0 | 8 | 1.0 |
| | 507 | 63 | 0 | 0.0 | 24 | 3.0 |
| **Total time for Subscribers Reconfiguration** | **992** | **124** | **0** | **0.0** | **48** | **6.0** |
| **Subscribers Validation** *(PM only & if required)* | | | | | | |
| Replacement Subscribers Configurations List Validation | 20 | 3 | | | | |
| **Total Subscribers Validation Hours** | **20** | **124** | | | | |
| **TOTAL PROFESSIONAL SERVICES TIME** | **1640** | **266** | **366** | **45.8** | **332** | **35.5** |

## *Travel Detail*

| | | | | | 0.00 of miles @ $0.485 | Per diem | Air fare | Car rental | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Labor Category | Project Phase | Number of Resources | Number of Trips | Days on Project | Mileage | $200.00 | $1,000.00 | $225.00 | Total | Project Totals | Agency 5% Markup |
| Project Manager | Infrastructure | 1 | 2 | 3 | $0.00 | $200.00 | $1,000.00 | $225.00 | $1,825.00 | $3,650.00 | $3,833.00 |
| | Subscribers | 2 | 6 | 4 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,025.00 | $24,300.00 | $25,515.00 |
| | Testing | 1 | 2 | 4 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,025.00 | $4,050.00 | $4,253.00 |
| | Overall Project | 1 | 5 | 4 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,025.00 | $10,125.00 | $10,632.00 |
| Systems Engineer | Infrastructure | 1 | 2 | 5 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,225.00 | $4,450.00 | $4,673.00 |
| | Subscribers | 0 | 0 | 0 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| | Testing | 2 | 3 | 5 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,225.00 | $13,350.00 | $14,018.00 |
| | Overall Project Support | 1 | 2 | 5 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,225.00 | $4,450.00 | $4,673.00 |
| Systems Technologist | Infrastructure | 2 | 2 | 5 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,225.00 | $8,900.00 | $9,345.00 |
| | Subscribers | 1 | 6 | 5 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,225.00 | $13,350.00 | $14,018.00 |
| | Testing | 2 | 4 | 5 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,225.00 | $17,800.00 | $18,690.00 |
| | Overall Project | 1 | 2 | 5 | $0.00 | $200.00 | $1,000.00 | $225.00 | $2,225.00 | $4,450.00 | $4,673.00 |
| Third Party Coordinator | Infrastructure | 0 | 0 | 0 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| | Subscribers | 0 | 0 | 0 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| | | | | | | | Estimated Total Travel Expenses | | | | $109,025.00 |

*Note: Expenses shown are estimates based on the Scope of Work and required travel for completing the Reconfiguration Design.*
*Sprint/Nextel will be billed actual expenses plus 5% markup.*

## *Contingency Detail*

| Project Area | Risk Description | Resource Description | Unit | Qty | Rate | Amount |
|---|---|---|---|---|---|---|
| Undiscovered Inventory of Subscriber units | Additional units to reband (estimated 10% of the 2,823) | Tech-Shop | Hours | 288 | $ 113.00 | $ 31,979.00 |
| Additional Travel Expenses for subscribers and template work (ST/Shop) | Delay of project due to licensee issues (based on Motorola/Shop "blended rate") | ST/Shop | Each | 40 | $ 167.00 | $ 6,680.00 |
| Subscribers Availability | Project delay caused by the Licensee making insufficient number of subscribers available during reconfiguration. It will require additional PM hours to coordinate and schedule subscriber reconfiguration. | PM | Hours | 40 | $ 175.00 | $ 7,000.00 |
| Subscribers | Additional subscriber units to be rebanded on site - quote is based on subscribers reconfiguration being performed at the shop | Tech-Shop | Hours | 80 | $ 113.00 | $ 9,040.00 |
| Interoperability (System Engineer Hours) | Project delay in order to allow other licensees to reconfigure their systems so that interoperability is not sacrificed during reconfiguration. Interoperability issues or cutover issues arise that require a change in the design which affects the templates. | SE | Hours | 30 | $ 175.00 | $ 5,250.00 |
| Project Kickoff Slippage | Delay of project and committed resources | ST | Hours | 40 | $ 175.00 | $ 7,000.00 |
| Simulcast Smartzone 7.2 cutover | Complex multi-layer Smartzone 7.2 system reconfiguration and cutover - may require additional travel time and ST hours | ST | Hours | 40 | $ 175.00 | $ 7,000.00 |
| Network Analyzer Test Equipment rental | Additional tool rental time needed | Expenses | Each | 4 | $ 3,030.00 | $ 12,120.00 |
| Infrastructure Failure due to age / Condition | Delay of project | PM/SE | Hours | 40 | $ 175.00 | $ 7,000.00 |
| Combiner failure | Replacement transmit combiner for the WJD860, which could fail during retuning. COMB WAV-G 851-869 6CH 7/16 ANT, 150 KHZ MIN SEP between channels; Model # DSWIJD86205S | Expenses | Each | 1 | $ 10,279.00 | $ 10,279.00 |
| Rebanding Software Upgrade for Service Monitor (customer owned) | If a software upgrade for rebanding is available from General Dynamics, the Williamson County Service Monitor will need to be upgraded. | Shop | Each | 1 | $ 1,750.00 | $ 1,750.00 |
| Additional Travel Expenses | Additional travel for SE | PM/SE | Each | 8 | $ 1,500.00 | $ 12,000.00 |
| Expanded Antenna Requirements | Changes in RF environment and sites IM survey or other reason requires new antenna equipment | Expenses | Each | 4 | $ 1,244.00 | $ 4,976.00 |
| Expanded Antenna Requirements | Tower Loading Analysis | SE/Shop | Each | 4 | $ 9,454.00 | $ 37,816.00 |
| Expanded Antenna Requirements | Antenna and transmission line install and test | SE/Shop | Each | 4 | $ 8,712.00 | $ 34,848.00 |
| Tower loading requires reinforcement | Tower Loading Analysis determines tower reinforcement needed (4 sites) | Expenses | Each | 4 | $ 53,000.00 | $ 212,000.00 |
| Additional Equipment | Engineering Materials: Additional Test Equipment or fixtures or cabling / connectors needed. | Expenses | Each | 6 | $ 3,750.00 | $ 22,500.00 |
| Interoperability - 162 Templates | Additional template work required to address unanticipated interoperability or other rebanding issues (10 % of templates = 16 * 2.5 hours ea. = 40 hrs.) | ST | Hours | 40 | $ 175.00 | $ 7,000.00 |
| Interoperability - project delay (PM Hours) | Project delay in order to allow other licensees to reconfigure their systems so no interoperability is sacrificed during reconfiguration. | PM | Hours | 40 | $ 175.00 | $ 7,000.00 |
| | | | | Total Contingency | | $ 414,238.00 |

## Rebanding Flashkits

| Select the Generic Radio Model | Press button below to select the item or flashkit type required | Enter total QTY Flashes Required per kit | T Model | Flashcode | Option | |
|---|---|---|---|---|---|---|
| Astro Spectra Plus (W5) | 3600 IMBE/Analog & P25 | 2 | T6769 | 100008-000000-0 | G880AA | Paid by Sprint/Nextel |
| MCS2000 | 3600 Analog (Type II / TYPE III) | 47 | H1628A | 000008-000000-2 | G880AD | Paid by Sprint/Nextel |
| MTS2000 | 3600 Analog (Type II / TYPE III) | 50 | N1706 | 000008-000000-2 | Q880AF | Paid by Sprint/Nextel |
| MTS2000 | 3600 Analog (Type II / TYPE III) | 50 | N1706 | 000008-000000-2 | Q880AF | Paid by Sprint/Nextel |
| MTS2000 | 3600 Analog (Type II / TYPE III) | 50 | N1706 | 000008-000000-2 | Q880AF | Paid by Sprint/Nextel |
| MTS2000 | 3600 Analog (Type II / TYPE III) | 50 | N1706 | 000008-000000-2 | Q880AF | Paid by Sprint/Nextel |
| MTS2000 | 3600 Analog (Type II / TYPE III) | 46 | N1706 | 000008-000000-2 | Q880AF | Paid by Sprint/Nextel |
| | | 7 | Total Flash Kits | | | |
| | | 295 | Total Flashes | | | |

# EQUIPMENT DETAIL

## Reconfiguration Equipment List

| Qty. | Model | Description | Unit Price | Total Price |
|---|---|---|---|---|
| 2 | RVN4175 | MCS2000 CPS Software | [illegible] | [illegible] |
| 4 | RVN4176 | MTS2000 CPS Software | [illegible] | [illegible] |
| 1 | DQ40100A4082044X | Raven Audio Bridge (2 4-Wire Bridge) | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 3 | DQ40100A4082040X | Raven Audio Bridge (1 4-Wire Bridge) | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 3 | DVN4049 | IBUTTONS (5 units each) | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 3 | DVN4050 | IBUTTON Readers (5 units each) | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 5 | T5365 | QUANTAR (Receivers for dual-receiver solutions) | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 5 | X750 | 800 MHz 100 WATTS | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 5 | X597 A | CONVENTIONAL ANALOG | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 5 | X580 | REPEATER OPERATION | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 5 | X233 | WILDCARD OPERATION | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 5 | X153 | ADD: HARDWARE, RACKMOUNT | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 0 | X113 | ALT: DC ONLY OP. DC TO DC CONVERTER | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 0 | DQSP4KCDPD50B1 | 50 AMP BREAKER FOR TYPE CDPD | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 3 | DQ4383D07280A | CSC W/DUPLEXER, 2-CH DUAL PORT DIN | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 1 | PS-8602-BNC | 2 port Rx splitter BNC connectors | [illegible] | [illegible] |
| 1 | TDF6850 | TRANSMITTER COMBINER 2 CHANNEL 800MHZ | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 200 | L1702 | 1/2" SUPERFLEX POLY JKT PER FOOT | [illegible] | [illegible] |
| 21 | CDN6579 | 1/2" N MALE PLATED CONNECTOR | [illegible] | [illegible] |
| 4 | DSF4PDMV2C | 1/2" 7/16 DIN MALE CONN SFLEX | [illegible] | [illegible] |
| 4 | TRN7342 | SEVEN FOOT RACK | [illegible] | [illegible] |
| 4 | DSCBIS14.62572MOT | VERTICAL MOUNTED COPPER CONDUCTOR B | [illegible] | [illegible] |
| 1 | DSPD100173 | ANTENNA 845.5 - 880.5 | [illegible] | [illegible] |
| 15 | L1705 | 1/2" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04967AA | ADD: CONNECTOR ATTACHMENT LDF4 | [illegible] | [illegible] |
| 1 | TT05061AA | ADD: N MALE, PS, ANTENNA END | [illegible] | [illegible] |
| 1 | DSL4TDMPS | 7 - 16 DIN MALE POSITIVE STOP FOR 1 | [illegible] | [illegible] |
| 380 | L1713 | 1-1/4" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04970AA | ADD: CONNECTOR ATTACHMENT LDF8 | [illegible] | [illegible] |
| 1 | TT05071AA | ADD:7-16 DIN FEMALE, PS,ANTENNA END | [illegible] | [illegible] |
| 1 | DSL6TDFPS | DIN FEMALE TRIMETAL CONNECTOR - POS | [illegible] | [illegible] |
| 7 | TDN7547 | 1-1/4" CABLE GROUND CLAMP KIT | [illegible] | [illegible] |
| 2 | DSL6SGRIP | 1-1/4" SUPPORT HOIST GRIP | [illegible] | [illegible] |
| 2 | TDN9289 | CABLE WRAP WEATHERPROOFING | [illegible] | [illegible] |
| 1 | DSDSXLDMA | LIGHTNING ARRESTOR, 7-16DIN MALE/FE | [illegible] | [illegible] |
| 1 | DQ7005A890 | Vswr alarm sensor | Provided by Sprint/Nextel | Provided by Sprint/Nextel |
| 1 | DSPD100173 | ANTENNA 845.5 - 880.5 | [illegible] | [illegible] |

| Reconfiguration Equipment List (Continued) | | | | |
|---|---|---|---|---|
| Qty. | Model | Description | Unit Price | Total Price |
| 15 | L1705 | 1/2" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04967AA | ADD: CONNECTOR ATTACHMENT LDF4 | [illegible] | [illegible] |
| 1 | TT05061AA | ADD: N MALE, PS, ANTENNA END | [illegible] | [illegible] |
| 1 | DSL4TDMPS | 7 - 16 DIN MALE POSITIVE STOP FOR 1 | [illegible] | [illegible] |
| 380 | L1713 | 1-1/4" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04970AA | ADD: CONNECTOR ATTACHMENT LDF6 | [illegible] | [illegible] |
| 1 | TT05071AA | ADD:7-16 DIN FEMALE, PS,ANTENNA END | [illegible] | [illegible] |
| 1 | DSL6TDFPS | DIN FEMALE TRIMETAL CONNECTOR - POS | [illegible] | [illegible] |
| 7 | TDN7547 | 1-1/4" CABLE GROUND CLAMP KIT | [illegible] | [illegible] |
| 2 | DSL6SGRIP | 1-1/4" SUPPORT HOIST GRIP | [illegible] | [illegible] |
| 2 | TDN9289 | CABLE WRAP WEATHERPROOFING | [illegible] | [illegible] |
| 1 | DSDSXLDMA | LIGHTNING ARRESTOR, 7-16DIN MALE/FE | [illegible] | [illegible] |
| 1 | DQ7005A890 | Vswr alarm sensor | [illegible] | [illegible] |
| 1 | DSPD100173 | ANTENNA 845.5 - 880.5 | [illegible] | [illegible] |
| 15 | L1705 | 1/2" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04967AA | ADD: CONNECTOR ATTACHMENT LDF4 | [illegible] | [illegible] |
| 1 | TT05061AA | ADD: N MALE, PS, ANTENNA END | [illegible] | [illegible] |
| 1 | DSL4TDMPS | 7 - 16 DIN MALE POSITIVE STOP FOR 1 | [illegible] | [illegible] |
| 380 | L1713 | 1-1/4" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04970AA | ADD: CONNECTOR ATTACHMENT LDF6 | [illegible] | [illegible] |
| 1 | TT05071AA | ADD:7-16 DIN FEMALE, PS,ANTENNA END | [illegible] | [illegible] |
| 1 | DSL6TDFPS | DIN FEMALE TRIMETAL CONNECTOR - POS | [illegible] | [illegible] |
| 7 | TDN7547 | 1-1/4" CABLE GROUND CLAMP KIT | [illegible] | [illegible] |
| 2 | DSL6SGRIP | 1-1/4" SUPPORT HOIST GRIP | [illegible] | [illegible] |
| 2 | TDN9289 | CABLE WRAP WEATHERPROOFING | [illegible] | [illegible] |
| 1 | DSDSXLDMA | LIGHTNING ARRESTOR, 7-16DIN MALE/FE | [illegible] | [illegible] |
| 1 | DQ7005A890 | Vswr alarm sensor | [illegible] | [illegible] |
| 480 | L1713 | 1-1/4" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04970AA | ADD: CONNECTOR ATTACHMENT LDF6 | [illegible] | [illegible] |
| 1 | TT05071AA | ADD:7-16 DIN FEMALE, PS,ANTENNA END | [illegible] | [illegible] |
| 1 | DSL6TDFPS | DIN FEMALE TRIMETAL CONNECTOR - POS | [illegible] | [illegible] |
| 7 | TDN7547 | 1-1/4" CABLE GROUND CLAMP KIT | [illegible] | [illegible] |
| 2 | DSL6SGRIP | 1-1/4" SUPPORT HOIST GRIP | [illegible] | [illegible] |
| 2 | TDN9289 | CABLE WRAP WEATHERPROOFING | [illegible] | [illegible] |
| 1 | DSDSXLDMA | LIGHTNING ARRESTOR, 7-16DIN MALE/FE | [illegible] | [illegible] |
| 1 | DQ7005A890 | Vswr alarm sensor | [illegible] | [illegible] |
| 1 | DSPD100173 | ANTENNA 845.5 - 880.5 | [illegible] | [illegible] |
| 15 | L1705 | 1/2" LDF HELIAX POLY JKT PER FT | [illegible] | [illegible] |
| 1 | TT04967AA | ADD: CONNECTOR ATTACHMENT LDF4 | [illegible] | [illegible] |
| 1 | TT05061AA | ADD: N MALE, PS, ANTENNA END | [illegible] | [illegible] |
| 1 | DSL4TDMPS | 7 - 16 DIN MALE POSITIVE STOP FOR 1 | [illegible] | [illegible] |
| 4 | DQDSP223 | Vega Tone Decoder Box for Rptr Set up/Knockdown | [illegible] | [illegible] |
| 2 | UOST-0001 | 6809 28 Ch Controller Code Plug | [illegible] | [illegible] |
| 2 | UOST-0004 | CSC Software | [illegible] | [illegible] |
| 2 | UOST-0008 | TSC Software | [illegible] | [illegible] |
| 2 | UOST-0010 | Simulcast DCB Software | [illegible] | [illegible] |
| 2 | UOST-0018 | TCI Software | [illegible] | [illegible] |
| | | Equipment Total | | $31,747.50 |

## SUBSCRIBER EQUIPMENT DETAIL

Williamson County is entitled to a total of 194 replacement radios. Agreement has been reached that Williamson County will accept a lesser quantity of 110 replacement radio but these units will be upgraded to include P25 capability. This lesser quantity with the P25 upgrade represents the same value and will be at no cost to Williamson County. Williamson County will trade in all 194 units as provided in Sections 3.5 and 3.5.1 of the contract terms and conditions. The following table represents the P25 Upgraded Radios that will be provided to Williamson County.

The following Replacement Radio table represents the "**SUBSCRIBER IMPACT**" table for the subscriber unit entitled to be replaced.

| RBP03 - XTS2500 | | | |
|---|---|---|---|
| QTY | Model | Item | |
| 1 | H46UCH9PW2BN | XTS2500 Rebanding Portable Radio Model 3 | Paid by Sprint/Nextel |
| | | Included Std Whip Antenna | Paid by Sprint/Nextel |
| | | Included Std Belt Clip | Paid by Sprint/Nextel |
| | | Included Standard Battery | Paid by Sprint/Nextel |
| 1 | QA00354AA | Analog Smartnet | Paid by Sprint/Nextel |
| 1 | H43 | Remote Monitor - H43 | Paid by Sprint/Nextel |
| 1 | NTN9815 | Spare Battery - NTN9815 | Paid by Sprint/Nextel |
| 1 | NTN1873 | Single Unit Rapid Charger - NTN1873 | Paid by Sprint/Nextel |
| 1 | RVN4181 | Programming Software - Portable Radios | Paid by Sprint/Nextel |
| **RBM03 - XTL2500** | | | |
| QTY | Model | Item | |
| 172 | M21URM9PW2AN | XTL2500 Rebanding Mobile Radio | Paid by Sprint/Nextel |
| 172 | G89 | No Antenna Required - G89 | Paid by Sprint/Nextel |
| 172 | W22 | Palm Microphone - W22 | Paid by Sprint/Nextel |
| 172 | B18 | 7.5W Speaker - B18 | Paid by Sprint/Nextel |
| 172 | G442 | Control Head - G442 | Paid by Sprint/Nextel |
| 172 | G444 | Control Head software - G444 | Paid by Sprint/Nextel |
| 172 | G66 | Mounting Kit G66 or G67 included in base. | Paid by Sprint/Nextel |
| 172 | G241 | Analog operation | Paid by Sprint/Nextel |
| 172 | GA00008AA | Software SmartNet/singletone | Paid by Sprint/Nextel |
| 172 | G114 | Enh ID Display - G114 | Paid by Sprint/Nextel |
| 172 | G170 | Radio Trace - G170 | Paid by Sprint/Nextel |
| 172 | G683 | One Touch – G683 | Paid by Sprint/Nextel |
| 5 | RVN4185 | Programming Software - Mobile Radios | Paid by Sprint/Nextel |
| **XTL5000** | | | |
| QTY | Model | Item | |
| 15 | M20URS9PW1AN | XTL5000 Mobile Radio 800 MHz | Paid by Sprint/Nextel |
| 6 | L20URS9PW1AN | XTL5000 Consolette 800MHz | Paid by Sprint/Nextel |
| 15 | G89 | Omit Antenna | Paid by Sprint/Nextel |
| 15 | G90 | No Microphone Needed | Paid by Sprint/Nextel |
| 21 | L73 | Consolette - No Microphone Needed | Paid by Sprint/Nextel |
| 15 | G72 | O3 Control Head Hand Held | Paid by Sprint/Nextel |
| 15 | G444 | O3 Control Head Software | Paid by Sprint/Nextel |
| 15 | G67 | Remote Mount | Paid by Sprint/Nextel |
| 15 | B18 | Loud Speaker - 7.5 Watt | Paid by Sprint/Nextel |
| 21 | G241 | Analog Operation | Paid by Sprint/Nextel |
| 21 | G50 | SmartNet Operation | Paid by Sprint/Nextel |
| 21 | G114 | Enh ID Display - G114 | Paid by Sprint/Nextel |
| 6 | G88 | No Control Head Needed | Paid by Sprint/Nextel |
| | | Additional Options Available | |
| 6 | L791 | Basic Audio Control Interface Board | Paid by Sprint/Nextel |
| 1 | RVN4185 | Programming Software - Mobile Radios | Paid by Sprint/Nextel |
| 194 | Total Replacement Subscribers | | |

Based upon the subscriber inventory and the Customer Suitability Assessment that were performed in the Reconfiguration Planning Phase, Licensee has determined that it has subscriber units requiring replacement. Because this Reconfiguration Planning Phase work was primarily focused on determining what subscriber equipment by models and families are suitable for re-flashing and reprogramming rather than replacing, the work was not expected to and did not allow the parties to gather subscriber inventory information at a sufficiently detailed level to actually implement the replacements in an effective manner. If in the Planning Phase the parties performed a detailed inventory for Licensee's entire fleet of subscribers, the costs to be paid by Sprint Nextel would be unnecessarily inflated because the detailed inventory information is needed only with respect to the subscriber units being replaced and not to those which are not being replaced. Therefore, to minimize the costs to be paid by Sprint Nextel, a high level inventory was performed in the Reconfiguration Planning Phase but more detailed information about the replacement units must be gathered in the Reconfiguration Implementation Phase. This inventory methodology has for a long time been known to and approved by Sprint Nextel's management for the rebanding program.

To provide more specific examples of the additional work to be performed in the Reconfiguration Implementation Phase, more detailed information is needed and must be gathered concerning replacement radio options and configurations as they relate to talk group capability (physical switch positions), encryption and displays, as well as the accessories associated with these radios. Portable radio accessories must detail for *each* subscriber such information as battery capacity, spare batteries, battery chargers, type of carrying cases, and type of speaker microphones, belt loop size, speaker microphone and type of antenna. Mobile radios must detail for each unit items such as type of mounting, mobile foot switches, mobile control and power cable lengths, mobile speakers, antenna type, control head configuration, mobile escutcheon, and many accessories with which the existing radios may be equipped. In addition, Licensee may have many user groups requiring potentially a variety of radio configurations and differing accessories.

In developing the Reconfiguration Implementation Phase Statement of Work, Motorola has made some attempt to verify the product descriptions and quantities of the replacement radios and associated accessories based upon the inventory information generated from the Reconfiguration Planning Phase. However, because the level of detail of this information is insufficient as described above, a more detailed evaluation of the replacement radios was anticipated and is needed. Motorola has identified in its proposal price summary page the additional hours of work required to perform this more detailed evaluation of the radios to be replaced and their associated accessories. By performing this additional evaluation work, a more accurate inventory of replacement radios and associated accessories will be delivered to the Licensee. It will also help avoid operational disruption, project delays, and unnecessary additional costs for Sprint Nextel caused by excessive product returns, shipping expense, and rework.

## Level of Effort

Level of Effort (LOE) lists the time the TA presumes reasonable for each task, measured in man-hours. Licensees must list only the minimum time necessary to complete the task. If the LOE required is greater than that listed the last column, the licensee must attach justification. You may insert rows in the installation sections to list different special vehicle types. You may use separate sheets for multiple agencies/departments.

### Replacement of Dash Mount Radios

| Task | Description | Per Unit Time In Hrs | Quantity | Total Time Hrs | Rate $ | Total $ | LOE for a task on a per unit basis in man-hours |
|---|---|---|---|---|---|---|---|
| 1 | • Load programming template into new radio<br>• De-install & install of new dash mount radio<br>• No antenna cable or mount install<br>• Installation of new antenna rod only<br>• Install new radio power cable(s)<br>• Functional post test<br>• Unpackage & Repackage Radios/Ship<br>• Includes up to 30 miles travel for installer | | | | | | |
| 1a | De-install & install for standard sedan or light/medium truck with unit installed under the dash and no obstructions or special installation requirements. Includes subtasks above | 0.0 | 0 | 0.0 | $0.00 | $ - | 2.4 |
| 1b | De-install & install into Police sedan/cruiser (Center control console). | 3.3 | 0 | 0.0 | $113.00 | $ - | 3.3 |
| 1c | De-install & install into Fire Truck | 0.0 | 0 | 0.0 | $0.00 | $ - | 3.8 |
| 1d | De-install & install into special vehicle (insert hours and describe below). | 0.0 | 0 | 0.0 | $0.00 | $ - | By quote |
| | Describe the special vehicle De-install & install in this cell. | | | | | | See instructions for Submitting a Subscriber Equipment Deployment Request for additional guidance. |
| 1e | Add time for special install conditions in cell to right: (Extra Travel, Time due to custom install, install of new antenna cable and mount, and etc.) | 0.0 | 0 | 0.0 | $0.00 | $ - | By quote |
| | Describe the special conditions in this cell. | | | | | | See instructions for Submitting a Subscriber Equipment Deployment Request for additional guidance |
| | Special Materials if required: (List items in this box - Price to right) | | | | | $ - | By quote |
| 1f | Interface of siren unit | 0.0 | 0 | 0.0 | $0.00 | $ - | 1.9 |
| 1g | Time to fabricate special bezel as required | 0.0 | 0 | 0.0 | $0.00 | $ - | 1.2 |
| | Total Labor Cost for Replacement of Dash Mount Radios (TOTAL) | | | | | $ - | |

## Level of Effort (Continued)

### Replacement of Remote Mount Radios

| Task | Description | Per Unit Time In Hrs | Quantity | Total Time Hrs | Rate $ | Total $ | LOE for a task on a per unit basis in man-hours |
|---|---|---|---|---|---|---|---|
| 2 | • Load programming template into new radio<br>• De-install & install of new trunk mount radio<br>• No antenna cable or mount install<br>• Installation of new antenna rod only<br>• Install new radio power cables<br>• Functional post test<br>• Unpackage & Repackage Radios/Ship<br>• Includes up to 30 miles travel | | | | | | |
| 2a | De-install & install for standard sedan or light/medium truck with no obstructions or special installation requirements. Includes subtasks above | 0.0 | 0 | 0.0 | $0.00 | $ - | 3.3 |
| 2b | De-install & install into Police sedan/cruiser (Center control console). | 0.0 | 0 | 0.0 | $0.00 | $ - | 3.8 |
| 2c | De-install & install into Fire Truck | 0.0 | 0 | 0.0 | $0.00 | $ - | 4.7 |
| 2d | De-install & install into special vehicle (insert hours and describe below). | 0.0 | 0 | 0.0 | $0.00 | $ - | By quote |
| | Describe the special vehicle De-install & install in this cell. | | | | | | See instructions for Submitting a Subscriber Equipment Deployment Request for additional guidance |
| 2e | Add time for special install conditions in cell to right. (Extra Travel, Time due to custom install, install of new antenna and mount, and etc.) | 0.0 | 0 | 0.0 | $0.00 | $ - | By quote |
| | Describe the special conditions in this cell | | | | | | See instructions for Submitting a Subscriber Equipment Deployment Request for additional guidance |
| | Special Materials if required: (List items in this box - Price to right) | | | | | $ - | By quote |
| 2f | Installation of dual control head | 0.0 | 0 | 0.0 | $0.00 | $ - | 2.8 |
| 2g | Interface of siren unit | 0.0 | 0 | 0.0 | $0.00 | $ - | 1.9 |
| 2h | Time to fabricate special bezel as required | 0.0 | 0 | 0.0 | $0.00 | $ - | 1.1 |
| 2i | De-install & install of control Head Cable | 0.0 | 0 | 0.0 | $0.00 | $ - | 1.0 |
| | Total Labor Cost for Replacement of Remote Mount Radios (TOTAL) | | | | | $ - | |

**Level of Effort (Continued)**

**Retune Existing Mobile Radios**

| Task | Description | Per Unit Time In Hrs | Quantity | Total Time Hrs | Rate $ | Total $ | LOE for a task on a per unit basis in man-hours |
|---|---|---|---|---|---|---|---|
| 3 | • Functional Pre-Test of existing radio - Talk group call on system<br>• Retune existing radio (no obstruction to retuning of radio)<br>• Functional post test of existing radio - Talk group call on system | 0.9 | 1190 | 1071.0 | $113.00 | $ 121,023.00 | 0.9 |
| 3a | Removal and re-install of existing mobile radio if radio cannot be programmed in the vehicle due to obstruction to programming port. | 0.0 | 0 | 0.0 | $0.00 | $ - | 1.0 |

**Flashing and Retuning Existing Mobiles**

| Item | Description | Per Unit Time In Hrs | Quantity | Total Time Hrs | Rate $ | Total $ | LOE for a task on a per unit basis in man-hours |
|---|---|---|---|---|---|---|---|
| 4 | • Functional Pre-Test of existing radio - Talk group call on system<br>• Flash existing radio with Rebanding software<br>• Load programming template into existing radio (no obstruction to programming port of radio and radio is to be flashed and programmed in the vehicle)<br>• Functional post test of existing radio - Talk group call on system | 0.9 | 57 | 51.3 | $113.00 | $ 5,796.90 | 0.9 |
| 4a | Removal and re-install of existing mobile radio if radio cannot be programmed in the vehicle due to obstruction to programming port. | 0.0 | 0 | 0.0 | $0.00 | $ - | 1.0 |
| | **TOTAL MOBILE RADIOS** | | | | | $ 260,819.90 | |

**Portable Radios**

| Task | Description | Per Unit Time In Hrs | Quantity | Total Time Hrs | Rate $ | Total $ | LOE for a task on a per unit basis in man-hours |
|---|---|---|---|---|---|---|---|
| 5 | Retune Existing Portable<br>• Functional Pre-Test of existing radio - Talk group call on system<br>• Retune existing radio (no obstruction to retuning of radio)<br>• Functional post test of existing radio - Talk group call on system | 0.7 | 1113 | 779.1 | $113.00 | $ 88,038.30 | 0.7 |
| 5a | Flashing and Retuning of Existing Portable Radio<br>• Functional Pre-Test of existing radio - Talk group call on system<br>• Flash existing radio with Rebanding software<br>• Load programming template into existing radio<br>• Functional post test of existing radio - | 0.7 | 246 | 172.2 | $113.00 | $ 19,458.60 | 0.7 |
| 5b | Replacement of Existing Portable Radio<br>• Load programming template into new radio<br>• Functional post test of new radio - Talk group call on system<br>•Unpackage & Repackage Radios | 0.6 | 51 | 30.6 | $113.00 | $ 3,457.80 | 0.6 |
| | **TOTAL PORTABLES RADIOS** | | | | | $ 111,954.70 | |

**Level of Effort (Continued)**

**Radio Templates (Masks)**

| Task | Description | Per Unit Time In Hrs | Quantity | Total Time Hrs | Rate $ | Total $ | LOE for a task on a per unit basis in man-hours |
|---|---|---|---|---|---|---|---|
| 6 | Modify Radio Templates (Masks) for Replaced Units | 4.0 | 26 | 104.0 | $175.00 | $ 18,200.00 | 4.0 |
| 6a | Modify Radio Templates (Masks) for Flashed Units | 2.5 | 136 | 340.0 | $175.00 | $ 59,500.00 | 2.5 |
| | **TEMPLATES TOTAL** | | | | | $ 77,700.00 | |

**Other Tasks**

| Task | Description | Per Unit Time In Hrs | Quantity | Total Time Hrs | Rate $ | Total $ | LOE for a task on a per unit basis in man-hours |
|---|---|---|---|---|---|---|---|
| 7 | Second programming of subscribers (remove old freqs.) Mobiles | 0.9 | 1247 | 1122.3 | $113.00 | $ 126,819.90 | By Quote |
| 7a | Second programming of subscribers (remove old freqs.) Portables | 0.7 | 1410 | 987.0 | $113.00 | $ 111,531.00 | By Quote |

| Grand Total | $ 553,625.50 | |
|---|---|---|

# PLANNING PHASE DELIVERABLES AND RECONFIGURATION PROPOSAL

## TABLE OF CONTENTS

## *Attachments*

# Attachment A

# Intermodulation Study

MOTOROLA

# 800 MHz Re-banding
# Twin Towers, Cedar Park, Liberty Hill, Thrall, Backup Sites:
# Williamson County, TX
# Intermodulation Analysis

## Network & Enterprise

## Version D01.00.01

## Intermodulation Summary:

During rebanding, 2 channels of the Trunked 800 MHz frequencies used at the Twin Towers, Cedar Park, Liberty Hill, Thrall, and Backup Sites that comprise the Williamson County, TX Public Safety simulcast system will move to the lower 809 MHz sub-band. Four additional conventional ICALL/ITAC frequencies used at the various sites will move from the 821 MHz sub-band to the 806 MHz sub-band. There are 15 total channels of 800MHz owned by Williamson County at each site and an additional 5 channels of 800 MHz owned by Cedar Park at only the Cedar Park site, 1 of which will be rebanded.

This intermodulation (IM) study indicates no $3^{rd}$, $5^{th}$, or $7^{th}$ order intermodulation products being received by the newly proposed 800 MHz rebanded frequencies used at the Twin Towers, Cedar Park, Liberty Hill, Thrall, and Backup Sites.

The detailed intermodulation analysis is included in the following sections.

## Analysis Introduction:

Intermodulation (IM) products are generated whenever two or more transmit frequencies mix together. If there is more than one transmit frequency at a site an IM analysis is necessary to check for possible IM interference problems. There are three basic categories of Intermodulation (IM) interference. They are receiver produced, transmitter produced, and "other" radiated IM. Transmitter produced IM is the result of one or more transmitters impressing a signal in the non-linear final output stage circuitry of another transmitter, usually via antenna coupling. The IM product frequency is then re-radiated from the transmitter's antenna. Receiver produced IM is the result of two or more transmitter signals mixing in a receiver RF amplifier or mixer stage when operating in a non-linear range. "Other" radiated IM is the result of transmitter signals mixing in other non-linear junctions. These junctions are usually metallic, such as rusty bolts on a tower, dissimilar metallic junctions, or other non-linear metallic junctions in the area. IM products can also be caused by non-linearity in the transmission system such as antenna, transmission line, or connectors.

This IM study has been performed to predict IM products that could be generated by the potential new frequencies as they are used at the Twin Towers, Cedar Park, Liberty Hill, Thrall, and Backup Sites after rebanding. The Twin Towers, Cedar Park, Liberty Hill, Thrall, and Backup Sites are all of the sites used in the Williamson County, TX project. During rebanding, 2 channels of the Trunked 800 MHz frequencies used at the Twin Towers, Cedar Park, Liberty Hill, Thrall, and Backup Sites will move to the lower 809 MHz sub-band. Four additional conventional ICALL/ITAC frequencies used at the various sites will move from the 821 MHz sub-band to the 806 MHz sub-band. Cellular providers often license a range of frequencies to a site. These frequencies may or may not be in use at any given time. Therefore, the intermodulation study as provided is based on frequencies at the site which do not belong to a cellular service provider. The cellular frequencies included in this intermodulation study are a result of information provided to Motorola during

data collection exercise. Therefore any data intermodulation data which includes cellular frequencies is presented within this report for informational purpose only.

## Analysis Factors:

Following are the frequencies used in generating the Twin Towers, Cedar Park, Liberty Hill, Thrall, Backup Site IM report: Red frequencies in the table are new rebanding frequencies at the site. Blue frequencies in the table are frequencies at the site that did not change due to rebanding.

| | Transmit Frequency: | Receive Frequency: | Owner |
|---|---|---|---|
| 1 | 859.9875 | 814.9875 | Williamson County |
| 2 | 859.9625 | 814.9625 | Williamson County |
| 3 | 859.5875 | 814.5875 | Williamson County |
| 4 | 858.9875 | 813.9875 | Williamson County |
| 5 | 858.9625 | 813.9625 | Williamson County |
| 6 | 857.9875 | 812.9875 | Williamson County |
| 7 | 857.9625 | 812.9625 | Williamson County |
| 8 | 856.9875 | 811.9875 | Williamson County |
| 9 | 856.9625 | 811.9625 | Williamson County |
| 10 | 856.6875 | 811.6875 | Williamson County |
| 11 | 855.9875 | 810.9875 | Williamson County |
| 12 | 855.7125 | 810.7125 | Williamson County |
| 13 | 855.2125 | 810.2125 | Williamson County |
| 14 | 854.9875 | 809.9875 | Williamson County |
| 15 | 854.9625 | 809.9625 | Williamson County |
| 16 | 852.0125 | 807.0125 | ITAC 2 |
| 17 | 859.9375 | 814.9375 | Cedar Park |
| 18 | 858.7625 | 813.7625 | Cedar Park |
| 19 | 857.7375 | 812.7375 | Cedar Park |
| 20 | 856.7625 | 811.7625 | Cedar Park |
| 21 | 854.0625 | 809.0625 | Cedar Park |
| 22 | 852.5125 | 807.5125 | ITAC 3 |
| 23 | 853.0125 | 808.0125 | ITAC 4 |
| 24 | 851.0125 | 806.0125 | ICALL |
| 25 | 851.5125 | 806.5125 | ITAC 1 |

The analysis calculates possible IM product frequencies through the seventh ($7^{th}$) order that could potentially interfere with receivers at the communications site based on each receiver's individual bandwidth. The results can be used to develop an IM mitigation strategy. The parameters that affect the IM product calculations are: Order of IM products, the number of transmitters, the number of harmonics, and the half

window (bandwidth) of the receiver. Following are the parameters used for the Twin Towers, Cedar Park, Liberty Hill, Thrall, Backup Site IM analysis:

Minimum Product Order = 2
Maximum Product Order = 7
Minimum Number of Transmitters = 2
Maximum Number of Transmitters = 7
Minimum Harmonic = 1
Maximum Harmonic = 6
Half Window = 13 kHz

The product order is equal to the harmonic multiples of the transmitter frequencies added together. For this IM analysis, 3rd, 5th and 7th order IM study reports were created. There is a possibility of higher order IM product interference. As the product order increases, the magnitude of the interfering signal decreases. Once the magnitude of the signal drops below the sensitivity of the target receiver, it is considered a minimal threat. For this reason 7th order is the maximum product order considered in this analysis. To generate 7th order IM products, the maximum of 7 transmitters are required to broadcast simultaneously, or a combination sum of the harmonic factors of the transmitters is equal to 7(e.g. 3A+4B or 3A-4B).

Harmonic represents the multiple of the original transmitter's carrier frequency. The greater the harmonic multiple of a transmitter signal, the lower the power will be relative to the transmitter signal and therefore, the smaller the level of the interfering signal. For the 7th order IM products, the maximum harmonic required is 6 for minimum two transmit frequency assuming that one transmitter alone will not create IM interference.

Half window of the receiver is the most critical parameter which takes into consideration the receiver bandwidth. During calculation, Hydra checks IM products within (+/- (Half window) KHz) of all Rx frequencies. For this analysis 13 KHz was used as receiver half bandwidth.

## Analysis Results:

Hydra was used to generate 3rd , 5th and 7th order IM report.

---

```
Intermod Hits Summary
RX ID   RX Frequency   Total Hits     Direct Hits
-----------------------------------------------------

Intermod Hits By Order
RX ID   RX Frequency
----------------------
```

```
Intermod Hits By Number of Transmitters

RX ID   RX Frequency
----------------------

**********************************************************************

          ********** NO INTERMOD HITS DETECTED **********
```

As seen in the report, the Intermodulation (IM) study indicates no 3rd, 5th or 7th order IM products generated or received by the newly rebanded frequencies. Any even order IM products are prevented by the equipment design of the system.

These results were generated assuming the presence of only the frequencies mentioned in Analysis Factor section. If there is a change in the frequencies used at the site, another IM analysis should be done to re-evaluate the impact of intermodulation.

## Recommendations:

1. Avoid using frequencies that have 3rd order IM direct hits or create 3rd order IM direct hits.
2. Not all of the mixing possibilities are significant in creating interference signals. Higher order IM products are usually weaker in signal strength. Also, the interference depends on the power level of the mixing signal. Impact of higher order IM products can be mitigated by controlling the power level of the mixing signal.
3. Provide separate transmit and receive cables. This would move the mixing point far from both the transmitters and receivers resulting in less probability of an IM problem.
4. Replace all connectors in the system with premium grade connectors where UHF and 800MHz frequencies are present.
5. In addition to the connectors, quality components should be used throughout the system, such as power dividers and cross-band couplers. The installation must always be of the highest quality. A premium component will cause problems if not installed properly.
6. Direct hits are more significant than indirect hits. The impact of indirect hit will depend on signal level and how far apart is the IM product from the receiver frequency.

## Disclaimer:

Intermodulation distortion products (IM) are always present where two or more collocated transmitters are operating simultaneously. Managing the power levels of the IM signals developed through proper system design will determine whether they cause harmful interference to communications.

The IM analysis is simply one of the tools used to guide proper design and must be used by a trained technical person competent to understand its meaning and limitations. The appearance of an IM product in the analysis does not mean such a product will cause harmful interference, or indeed even be present. It simply indicates the mathematical possibility of a product being produced.

# Attachment B

# Channel 69 Interference Report

# CHANNEL 69 INTERFERENCE IMPACT

*for:*

# Williamson County

Prepared by:

MOTOROLA
*intelligence everywhere™*

TV channel 69 operates in the 800-806 MHz slot and may impact Motorola infrastructure receive sites. The infrastructure receive channels will be in the 806.0125 to 809.9875 MHz slot. The carriers for TV channel 69 are: Picture 801.25 MHz, Color 804.83 MHz, and Sound 805.75 MHz. The sidebands from these stations may impinge in the 806 to 809 MHz area and the impact will be a function of the distance the receive site is from one of these TV transmitters. The greater the TV transmitter power the farther the local sites need to be to have acceptable effective receive sensitivity.

There are 6 television channel 69 transmitter sites in the state of Texas. These sites are:

| ERP(kW) | Licensee | County | LAT / LONG |
|---|---|---|---|
| 0.980 | J. B. Salazar | Uvalde, TX | N 29 15 38 / W 99 44 46 |
| 6.340 | Far Eastern Telecasters | Clear Lake, TX | N 29 35 36 / W 95 3 13 |
| 0.102 | Faith Pleases God Church Corporation | Mcallen, TX | N 26 15 24 / W 98 13 50 |
| 150.0 | Gerald Benavides | Gainesville, TX | N 33 19 42 / W 97 3 56 |
| 13.6 | Michael Mintz | Amarillo, TX | N 35 15 41 / W 101 52 52 |
| 15.0 | Lawrence Howard Mintz | Lubbock, TX | N 33 30 56 / W 101 50 54 |

**Table 1. TV Channel 69 Transmitters in Texas**

The lowest frequency used at the Williamson County sites is the rebanded ICALL frequency of 806.0125 MHz. The closest television channel 69 transmitter to the Williamson County sites is the J. B. Salazar site that is 143 miles from the Cedar Park site and the second closest is the Far Eastern Telecasters site that is 150 miles from the Thrall site. All television channel 69 transmitters in the state of Texas were evaluated based on their proximity to Williamson County sites, the channel frequencies used at the Williamson County sites, and Effective Radiated Power (ERP) of the channel 69 transmitters, as shown in Figure 1. Motorola believes that there will not be a channel 69 transmitter interference issue at the Williamson County sites.

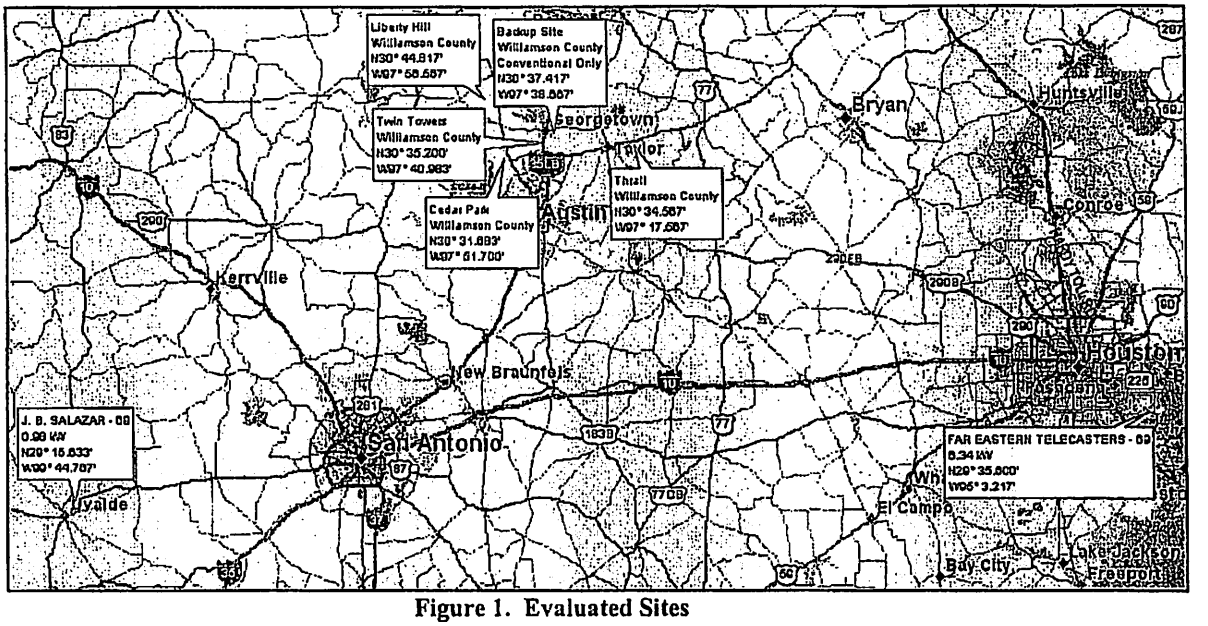



**Figure 1. Evaluated Sites**

# Attachment C

# Suitability Assessment Impact Report

MOTOROLA

# Suitability Assessment Impact Report

Licensee Name: WILLIAMSON, COUNTY OF- TX

Customer Name: WILLIAMSON, COUNTY OF- TX

Submitted by: Motorola Inc.

System Type: Simulcast

***The content of this report is dependent upon the data entered into the Inventory workbook as supplied by the Customer or the Customer's agent***

***Concerning the Suitability Assessment Process, Motorola has completed its preliminary evaluation and has determined that the products listed in the Inventory you provided will be impacted as described in the following text. However, Motorola may perform additional regression tests as required on these products. In the unlikely event the regression testing indicates the above information is incorrect, Motorola will gladly provide corrected information to you and advise you of the effects of rebanding; further, if it is appropriate, Motorola will provide to you a quote for software, hardware or services to address the effects of rebanding.***

## Impact to Base Stations or Repeaters

Retune the Non-IR Quantar base station new frequency with existing Quantar RSS

Conventional Base Station - Retune the Non-IR Quantar base station new frequency with existing Quantar RSS

## Impact to System Controllers

Open an Upgrade Operations CASE to order new 6809 rebanding codeplug(s) with Type II only fleet map for the Prime Site Controller. Rebanding software does not support Type I fleets.

Replace the 6809 Central Site Controller (CSC) firmware with version R36.20.03

Open an upgrade Operations CASE to order new Rebanding 6809 CSC firmware R36.20.03 for the prime site controller(s).

Replace the 6809 Transmitter Site Controller (TSC) firmware with version R6.40.00

Replace the 6809 Data Concentrator Board (DCB) firmware with version R7.04

Replace the 6809 Trunked Console Interface (TCI) board firmware with version R10.01.05

## Impact to Management Terminals

Program new frequency list into the SIP database via the frequency configuration screens.

Retune the RF Modem with the appropriate RSS/CPS software

## Impact to Subscribers

XTS2500 radios shipped after Jan. 2006 retune with new RVN4181T CPS software.

XTS5000 radios shipped after Jan. 2006 retune with new RVN4181T CPS software.

XTL1500 radios shipped after Jan. 2006 retune with new RVN4185T CPS software.

XTL2500 radios shipped after Jan. 2006 retune with new RVN4185T CPS software.

XTL5000 radios shipped after Jan. 2006 retune with new RVN4185T CPS software.

Flash the ASTRO Spectra Plus radio with rebanding software and retune the radio with new rebanding CPS.

Retune the STX portable with existing RSS programming software unless there are system migration issues or the STX is only capable of Type I fleets and the system is getting Rebanding software. If replacement is suggested replace the STX with XTS1500RB or XTS 2500RB for units with more than 48 modes, display, or encryption then tune with new rebanding RVN4181T CPS.

Retune the MAXTRAC radio unless there are system migration concerns or the MAXTRAC is only capable of Type I fleets and Rebanding software is being applied to the system. .If replacement is suggested replace the MAXTRAC with XTL1500RB or XTL 2500RB for units having handset and order Handset/Hang-up Cup HLN1457, then tune with new rebanding RVN4185T CPS

Flash the MCS2000 mobile with rebanding firmware then retune with new RVN 4175T CPS software

Replace the LCS2000 mobile with XTL2500RB then retune with new Rebanding RVN4185T CPS

For MTS2000 radio with 512 Kbyte memory and codeplug size less than 13.5 Kbyte flash with rebanding firmware then retune with new RVN4176S CPS software

Replace ASTRO Spectras with 512 KByte memory or codeplug size greater than 28K with XTL2500RB including dual control head. For (W9/C9 remote mount, or Motorcycle installations) replace with XTL5000 retune with new rebanding CPS RVN4185T. If the Customer requires equivalent form factor for C7/W7 replace with XTL5000.

Replace ASTRO Spectra Consolettes with 512 KByte memory or codeplug size greater than 28K with XTL5000 Consolette and retune with new rebanding CPS RVN4185T

## Impact to RF Antenna Site Equipment

Retune each port of the RFS/Celwave transmitter combiner for the new frequency

No action required for the receive antenna

No action required for the receive antenna

No action required for the transmit antenna

## Impact to Dispatch Console Systems

The console product listed in the inventory could not be located in the database. Please contact Motorola to determine the rebanding requirements.

## Impact to MOSCAD Sub-Systems

No MOSCAD Inventory Input Provided

# Attachment D

# Functional Acceptance Test Plan

# VERIFICATION TEST PROCEDURES

# Rebanding Functional & Acceptance

# Williamson County Systems

Prepared by:

MOTOROLA
*intelligence everywhere™*

# Wide Area SmartZone Trunking Features

## Digital System

### Talkgroup Call

### 1. DESCRIPTION

The Talkgroup is the primary level of organization for communications on a trunked radio system. Radios with Talkgroup Call capability will be able to communicate with other members of the same Talkgroup. This provides the effect of a private channel down to the Talkgroup level. This test will demonstrate that a Talkgroup transmission initiated by a radio user will only be heard by system users who have the same Talkgroup selected. As with other types of calls, Talkgroup Calls can take place from anywhere in the system.

### SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - SITE 2
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - SITE 1
RADIO-4 - TALKGROUP 2
RADIO-4 - SITE - SITE 2

**VERSION #1.06**

### 2. TEST

Step 1. Initiate a wide area call with RADIO-1 in TALKGROUP 1.

Step 2. Observe that only RADIO-2 will be able to monitor and respond to the call.

Step 3. Initiate a wide area call with RADIO-3 in TALKGROUP 2.

Step 4. Observe that only RADIO-4 will be able to monitor and respond to the call.

**Pass____ Fail____**

## Elite Console Features

### Digital System

**Talkgroup Selection and Call**

### 1. DESCRIPTION

The Talkgroup Call is the primary level of organization for communications on a trunked radio system. Dispatchers with Talkgroup Call capability will be able to communicate with other members of the same talkgroup. This provides the effect of an assigned channel down to the talkgroup level. When a Talkgroup Call is initiated from a subscriber unit, the call is indicated on each dispatch operator position that has a channel control resource associated with the unit's channel/talkgroup.

### SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 2
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 1
RADIO-3 - SITE - SITE 2
RADIO-4 - TALKGROUP 2
RADIO-4 - SITE - SITE 2

### VERSION #1.02

### 2. TEST

Step 1. Initiate a wide area call from any operator position on TALKGROUP 1.

Step 2. Observe that RADIO-1 and RADIO-3 will be able to monitor the call. Dekey the console and have either radio respond to the call.

Step 3. Observe that all Consoles with TALKGROUP 1 can monitor both sides of the conversation.

Step 4. Initiate a wide area call from any operator position on TALKGROUP 2.

Step 5. Observe that RADIO-2 and RADIO-4 will be able to monitor the call. Dekey the console and have either radio respond to the call.

Step 6. Observe that all Consoles with TALKGROUP 2 can monitor both sides of the conversation.

**Pass____ Fail____**

## SmartNet Trunking Features

### Analog System

Talkgroup Call

### 1. DESCRIPTION

The Talkgroup Call is the primary level of organization for communications on a trunked radio system. Radios with talkgroup call capability will be able to communicate with other members of the same talkgroup.

Radio users can select between the different talkgroups that are programmed in the radio using a manual switch or keypad.

### SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 1

### VERSION #1.03

### 2. TEST

Step 1. Initiate a clear talkgroup call with RADIO-1.

Step 2. Verify the ISW is decoded by the MTC 3600.

Step 3. Verify communication with RADIO-2.

**Pass____ Fail____**

# Punch-list

**Brief Description** **Owner (Required)**
**Target Date**

# Attachment E

# RF Performance Verification Plan

# VERIFICATION TEST PROCEDURES

# RF Performance

# Williamson County Systems

Prepared by:

MOTOROLA
*intelligence everywhere™*

**Williamson County RF Equipment Baseline**
The Williamson County 800 MHz radio systems consist of a digital simulcast trunking system, an analog simulcast trunking system, a command trailer, and the conventional NPSPAC Mutual Aid channels.

The digital trunking system is a 15-channel, 4-site simulcast system in the 806 MHz trunking band. The digital system is currently a Project 25, Motorola Astro7.2 release platform. It is part of the City of Austin/ Travis County Regional Radio System (RRS) system. The four radio sites are Cedar Park, Liberty Hill, Twin Towers and Thrall. The Prime Site is co-located at Twin Towers. There are 2 of 15 trunking channels that require rebanding. The digital system has 1,112 portable radios, 1,111 mobile radios and 7 fixed radios.

The analog trunking system is a comparative system to the digital system. It shares the same sites and same frequencies. There are no antenna components that are shared between the two systems. It is expected that the analog system will remain a live system for an extended period of time. The analog system has 252 portable radios, 311 mobile radios and 6 fixed radios.

During the re-banding process each base station, transmit combiner, duplexer, tower mounted amplifier/multicoupler, and antenna in the system will be either retuned or checked. Before each device is migrated a check of its performance will be done so any defect can be identified, reported and corrected through normal service channels prior the completion of re-banding. This baseline is necessary so no failure of equipment will negatively impact the re-banding process.

The "Baseline Check" will be performed as described below before and after retuning stations. These procedures will be performed prior to changing any frequencies.

RF performance verification procedures for systems of this type are defined by the Transition Administrator as follows:

**Method 1 – Repeater Site Measurements**
This method is appropriate for sites where reconfiguration does not require substantial changes to the antenna or coax feed line. This method can be used if other transmission elements such as transmitter combiners, or filtering devices change, if those changes do not result in a change to the transmit power into the feed line. For those systems where the transmit power to the feed line does not change, it is sufficient to make a series of measurements at the repeater site.

This method assumes all existing equipment is specified to operate with comparable losses for the new channels compared to the existing channels. If the antenna bandwidth specifications include the new channels, then the radiated pattern and signal strength should not change assuming that equivalent transmit power is delivered to the antenna. Prior to reconfiguring the site, measured losses for each component are recorded including the transmit power entering the transmission line. The measurements should

include the return loss of the transmission line and antenna. After reconfiguration, the same measurements are made and compared to the prior measurements. If the two sets of measurements are comparable, then coverage will be comparable.

The coverage performance verification plan that follows has been designed to closely align with the Transition Administrator's guidance.

**RF Performance Verification Plan**

Before a device is rebanded, it will be inspected for any preexisting defects that may impede the rebanding process. Motorola will report all identifiable defects to the Williamson County Systems. It will be Williamson County's responsibility to correct these issues through its normal service channels prior to rebanding.

**RF Performance Verification Procedure**

These checks will be performed on each applicable data base station prior to changing the frequency.

**Transmitter:**

Frequency
Transmit RF power output
Transmit reflected power from the combiner port
Transmitter Modulation

**Receiver:**

Frequency
Effective receiver sensitivity
Squelch setting

These checks will be performed on each applicable transmit combiner component prior to changing the frequency:

- Transmit RF power into each applicable port of the combiner or the input of the station multicoupler
- Transmit RF power out of the transmit combiner for each applicable channel
- Reflected RF power from the antenna

These checks will be performed on each applicable tower mounted amplifier/multicoupler prior to changing the frequency:

- System gain
- Bandwidth of filters
- Noise floor in the pass-band

Once these tests are completed, the trunking system will be rebanded and the tests repeated. The results of both exercises will be compared and the findings presented to Williamson County for approval. Rebanding the Williamson County's radio infrastructure will involve re-optimization of simulcast channels that could impact radio system coverage. Before and after rebanding activities on the site, Motorola will also gather coverage data to determine the system performance.

# Attachment F

# Cutover & Fallback Plan

# CUTOVER AND FALLBACK PLAN

# Williamson County Systems

Prepared by:

MOTOROLA
intelligence everywhere™

## Rebanding Cutover and Fallback Plans

### Overview

The Williamson County 800 MHz radio systems consist of a digital simulcast trunking system, an analog simulcast trunking system, a command trailer, and the conventional NPSPAC Mutual Aid channels.

The digital trunking system is a 15-channel 4-site simulcast system in the 806 MHz trunking band. The digital system is currently a Project 25, Motorola ASTRO7.2 release platform. It is part of the City of Austin/ Travis County Regional Radio System (RRS) system. The four radio sites are Cedar Park, Liberty Hill, Twin Towers and Thrall. The Prime Site is co-located at Twin Towers. There are 2 of 15 trunking channels that require rebanding. The digital system has 1,113 portable radios, 1,111 mobile radios and 30 fixed radios.

The analog trunking system is a comparative system to the digital system. It shares the same sites and same frequencies. There are no antenna components that are shared between the two systems. It is expected that the analog system will remain a live system for an extended period of time. The analog system has 252 portable radios, 311 mobile radios and 6 fixed radios.

This proposal includes the information necessary to reband the SmartNet II Plus Analog (Backup) System and the Motorola Astro P25 Digital System as well as the analog and digital subscribers. There are two (2) channels of the 15 channels affected by the FCC rebanding order; all 15 channels need to be available for both systems but only in use by one system at one time.

There are a total of ten NPSPAC Mutual Aid conventional repeaters located at four different sites and the command trailer. All of the conventional repeaters are using the antenna system for the analog system.

Based on discussions with Williamson County, the following modifications are required for rebanding:

- Reband two trunked channels on the digital system.
- Retune or reprogram all of the digital subscribers. A second retune is required for all subscribers to remove the old NPSPAC conventional mutual aid channels.
- Install updated software on the digital R2625 service monitor to maintain the NPSPAC trunking feature.
- Reband two trunked channels on the analog system, which includes trunked controller code plugs, retuning of repeaters and transmit combiners. The impacted channels are the same frequencies that are impacted on the digital system.
- Retune/reprogram/replace all of the analog subscribers. A second retune is required for all subscribers to remove the old NPSPAC conventional mutual aid channels.

- Updated frequencies in the SIP management terminal used on the analog system.
- Per Williamson County, pre and post coverage tests are required for both the analog and digital systems.
- Install back-to-back repeaters for all conventional NPSPAC Band mutual channels at the sites.

The cutover plan must start with ensuring the current system configuration is operating as expected. This is accomplished by performing basic functionality tests to verify that all modes of operation are working to the expected level. If an issue is found then the issue is resolved prior to engaging the reconfiguration process. Refer to the functional ATP processes to understand what tests will be required to verify system operation.

Before an effective cutover plan is possible the current system configuration, programming, database files, and etc must be retrieved and archived in case they are needed to recover from a failure in the reconfiguration process. Furthermore each subsystem impacted or not impacted by reconfiguration must be studied to determine how it operates within the overall system and what changes in each subsystem will impact others. Understanding what parts or subsystems can be changed without impact to other subsystems or the overall system performance is required.

The fallback plan is directly related to the system cutover plan. Each step or group of steps in the cutover plan will have a recovery process. The first step in the development of a fallback plan is to fully understand each step in the cutover plan and how it impacts the system. The fallback plan will match the cutover plan process, just in reverse.

The following description details the work to be performed on the subscriber and infrastructure equipment.

This cutover-fallback plan incorporates both the cutover process and fallback plan into one integrated document. The fallback portion provides plans to recover system operation in case an issue occurs during the reconfiguration process. Each functional change during the reconfiguration will have its set of fallback steps so reconfiguring the system to its original state will not be necessary. This will allow for quicker recovery in the event an issue arises during system reconfiguration. The fallback processes will be shown in **bold and underlined** text. This process does not take into consideration such items as travel, logistics of getting access to radio units, time of day, or etc. These items will be defined and scheduled in detail based on operations and agency requirements at the project kick-off and the time frame of the implementation. The intent of this section is to describe the step by step process to actually make the changes in the system equipment.

There are five phases for Williamson County System rebanding project. The first phase consists of the installation of back-to-back repeaters for the five conventional mutual aid channels at the conventional sites. Three of the five conventional mutual aid repeaters in the command trailer will be retuned to the rebanded frequencies and the remaining two repeaters will be tuned at the conclusion of the final phase. The second phase is the first programming of the subscriber, which doubles the impacted control channels, doubles the

impacted Failsoft channels, and adds the new simplex channels. Coverage tests will be performed before and after rebanding the FNE. The third phase is the rebanding of the infrastructure, which includes analog simulcast system and the digital simulcast sub-cell. The digital simulcast sub-cell will be rebanded before the analog system. The fourth phase is the second touch of the subscribers to remove the old simplex channels. The final phase is the removal of the back-to-back repeaters and retuning of the two of the conventional repeaters in the command trailer, which should not be done until all potential interoperability partners have rebanded their systems.

Since the Williamson County Digital Radio System is a subsystem of the Austin / Travis County Regional Radio System (RRS), it is recommended that the Austin /Travis County radio system be rebanded first so that the new RRS rebanded frequencies can be included in the Williamson County subscriber rebanding.

**BACK-TO-BACK REPEATERS PLAN**

The subscriber fleet migration will occur over a period of time. As a result, some units will have the new rebanded channels while others yet to be rebanded will be on the old ICALL/ITAC mutual aid channels. In this scenario the two sets of subscribers will be unable to communicate with each other.

The recommended solution is to utilize back-to-back repeaters with one operating on the old mutual aid channel and the other operating on the new channel. This will provide a means to cross communicate between the two sets of subscribers. With audio bridging techniques, the consoles presently connected to ICALL/ITAC repeaters will also have access to the repeaters. The back-to-back repeater configuration will consist of an additional repeaters and audio bridge. Both transmitters will transmit at the same time.

Back-to-back ICALL/ITAC repeaters will be installed at all ICALL/ITAC sites prior to rebanding any subscribers, except for the command trailer. This will not prevent touching the subscribers twice because of the old and new Simplex channels and a reducing in the number of Talkgroups for some subscribers. Installation of back-to-back ICALL/ITAC repeaters must be completed before rebanding of the subscribers begins. This prevents lose of ICALL/ITAC channels during rebanding of the subscribers.

The back-to-back repeaters are removed once rebanding activities are completed, including interoperability partners rebanding activities. This activity will require an additional visit to the affected sites. A total of two visits to the conventional site are required, one to install the back-to-back repeaters, and one trip to remove the repeaters. The loaned repeaters must be returned to Sprint/Nextel.

| Conventional Frequencies Cedar Park | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 867.0125 | 822.0125 | **852.0125** | **807.0125** |

| Conventional Frequencies Liberty Hill | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 867.5125 | 822.5125 | **852.5125** | **807.5125** |

| Conventional Frequencies Thrall | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 868.0125 | 823.0125 | **853.0125** | **808.0125** |

| Conventional Frequencies Backup Site | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 866.0125 | 821.0125 | **851.0125** | **806.0125** |
| 2 | 866.5125 | 821.5125 | **851.5125** | **806.5125** |

| Conventional Frequencies Command Trailer | | | | |
|---|---|---|---|---|
| Channel # | Original | | After re-banding | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 866.0125 | 821.0125 | **851.0125** | **806.0125** |
| 2 | 866.5125 | 821.5125 | **851.5125** | **806.5125** |
| 3 | 867.0125 | 822.0125 | **852.0125** | **807.0125** |
| 4 | 867.5125 | 822.5125 | **852.5125** | **807.5125** |
| 5 | 868.0125 | 823.0125 | **853.0125** | **808.0125** |

*Notes: Those frequencies impacted by rebanding are marked in* ***bold.***

**Pre-Rebanding Configuration**: Single repeater with transmit combiner and receive multicoupler.

Cutover Plan

1. Program the temporary second repeater for the old frequency and test.
2. Connect the temporary second repeater wireline circuits to a four way four wire bridge. For the command trailer, connect the temporary second receiver wireline to the existing repeater wireline transmit. Connect the Rx Activity (COR) to the repeater's External wire-line PTT.
3. Install the temporary antenna system, which includes a duplexer for sites with one conventional mutual aid channel and a transmit combiner for the site with two conventional mutual aid channels.
4. Connect the temporary repeater to the new duplexer (or transmit combiner) and RF splitter.
5. Notify Williamson County the repeater will be taken out of service for configuration. Proceed when approved.
6. Test the existing repeater and combiner. Log the results.
7. Reprogram the existing repeater receiver to the new frequency, test, and log the results
8. Connect the existing repeater wireline circuits to the four-way four wire bridge (if used).
9. Connect a third port of the four-way four wire bridge to the console wireline circuit (if used).
10. Test the back-to-back repeater configuration.
11. Notify Williamson County that the back-to-back repeater configuration is on line.
12. The subscribers can be programmed in several ways depending on Williamson County's operation.
13. Wait until the subscribers of any interoperability partners have been similarly reconfigured.
14. Notify Williamson County the final repeater configuration is needed and the repeater will be removed from service. Proceed when approved.
15. Remove the temporary repeaters, temporary antenna system and four way four wire bridge if used.
16. Perform a final test of the existing repeater.
17. Notify Williamson County the repeater is returned to service.

## SUBSCRIBER PLAN

All Motorola subscribers will be rebanded or replaced as described in the System Description. All subscribers requiring reprogramming will be flashed prior to rebanding any of the sites. All subscribers will be retuned. All subscribers that are being replaced will have a dummy template installed to remove confidential system information from the subscribers prior to shipping them to Motorola.

Motorola will provide the required templates, which include old and new control channels, double Failsoft channels, and new simplex channels. When subscribers are programmed a second time, the old NPSPAC Band conventional mutual aid simplex channels will be removed.

The steps for rebanding a typical subscriber are:

- Verify template type
- Install software flash
- Install new template
- Test template
- Test any interoperability features
- Update inventory sheet and test document

**Installation of Final Templates**

Because all subscribers potentially can use the five (5) statewide NPSPAC Band Simplex channels to communicate from radio to radio, the final templates remove the old Simplex channels from the subscribers. The final templates also remove the scanned frequencies and, if necessary, reinstall the Talkgroups that were removed to support two sets of Simplex channels.

**Replacement Radio Process**

1. Read the existing radio, to be replaced, with the current RSS/CPS (Radio Service Software/Customer Programming Software).
2. Save this radio programming file to the computer.
3. Either print out the archive or keep the file open for reference.
4. Read the replacement radio, prior to programming, with the latest CPS software.
5. Use the information from the original radio to program Williamson County configuration into the new radio with the CPS. If the original radio was programmed with Windows based CPS and not DOS based RSS software then a drag and drop method can be used to transfer the radio programming into the new radio.
6. Program the new control channel and failsoft frequencies into the new radio programming template.
7. Save this new programming template into the computer.
8. Program the new radio with the template developed in steps 5 through 6 above.
9. Test this radio on the system to ensure all talkgroups and functions perform as desired.
    a. **If a problem is discovered in the radio operation, review and correct any programming issues. Re-Test the radio.**
10. Use the template created in steps 5 and 6 to "clone" radios of the same configuration.
11. Test each radio after programming.

a. **If any radio fails to operate with the tested template from above, submit the radio for warranty service procedures.**

12. Select the next set of radios and perform steps 1 through 10 as above.

**Subscriber Flashing Process**

1. Select an existing radio to be flashed and programmed for Rebanding.
2. Perform a quick test of the radio to ensure it is working properly.
   a. **If the radio does not work properly submit it for repair under the repair procedures defined by Williamson County contract or agreement with the assigned servicer prior to proceeding with this unit.**
3. Read the radio with the new CPS software.
4. Save the radio programming template to the computer.
5. Flash the radio with Rebanding firmware using the radio flashing procedure defined in the CPS software documentation.
6. Program the new control channel and failsoft channel frequencies into the radio programming template.
7. Save this newly modified template to the computer.
8. Program the radio with the newly modified template.
9. Test the radio to ensure it operates properly on the system.
   a. **If the radio fails to operate properly review the programming template for errors and correct. Re-program and re-test the radio.**
10. Select the next radio in this group and flash the radio with Rebanding firmware.
11. Clone the radio with the template saved in step 7 above.
12. Test the radio.
13. If a radio of the same configuration is not available proceed with another unit and perform steps 1 through 9 above for the next radio configuration. Use the saved radio programming template to "clone" the next radio of this configuration as it comes available.

## INFRASTRUCTURE PLAN

### Coverage Performance Testing

A coverage performance acceptance test will be performed before and after rebanding both the digital and analog trunking systems. The coverage test results from each test will be compared to determine if the rebanding process did not degrade coverage for radio users. The pre-rebanding coverage tests will be done before any work begins on the trunking systems and the post-rebanding coverage tests will be done after each of the trunking systems have been rebanded. Coverage performance testing will not be completed for the five conventional Mutual Aid channels.

**Proposed Transition Procedures**
Rebanding of this system requires the following actions to be completed in the following order.

Pre-configuration
Rebanding work will take place during working hours or off hours as established and agreed to at the kickoff meeting with Williamson County. During the implementation phase, a detailed Impact Time Line will be developed in cooperation with Williamson County. The Impact Time Line will describe exactly what date and time periods users will be impacted. Outage and impact times in this proposal are best estimates, and will be refined after the kickoff meeting.

Once the rebanding work begins, Motorola will remain in constant communication with Williamson County, to make sure changes are not required to the schedule, due to unforeseen events or unexpected user peak hours. Reconfiguration will be done in one channel at a time for the simulcast sub-cell of the digital system. Both channels will be rebanded at the same time for the analog system.

The field team should locate and ensure that there is a working set of base station spares. If not, Motorola will get agreement from Williamson County that a certain number of channels can be down until repairs are made.

## CUTOVER PLAN

### ASTRO 7.2 Simulcast

1. Notify System Support Center that reconfiguration work is beginning on Williamson County system by referring to the Upgrade Operations (UO) CASE that was opened when the reconfiguration project was started.
2. Back up the zone controller data base and mark the media appropriately. Keep close by in case needed to recover from a failure.
3. Coordinate with the rebanding team to disable first two channels and change appropriate frequencies in the Zone Configuration Manager.
4. Inform Williamson County that the first new frequencies are ready to be reconfigured in the Zone Controller Database Server. Get approval from Williamson County to proceed.
5. Install direction couplers.
6. Disable the first channel to be reconfigured. This is determined by agreement with Williamson County.
7. Test the base stations and log the results in the log sheet provided by Motorola. This is to be done at all four RF sites: Cedar Park, Liberty Hill, Twin Towers and Thrall.

**If a station is not fully functional submit a request for service using the established service procedures defined by Williamson County**

8. Retune the base stations to their new frequencies.

9. Test the base stations and log the results in the log sheet provided by Motorola. This is to be done at all four RF sites: Cedar Park, Liberty Hill, Twin Towers and Thrall.

**If a station is not fully functional; repair the station and keep track of the time and costs of repair so these costs can be added to the final Rebanding cost as part of the "true up process".**

10. Test the transmit combiner port for loss and record the results in the log sheet provided by Motorola.

**If the transmit combiner port is not working properly submit a request for service using the established service procedures defined by Williamson County.**

11. Retune the appropriate transmit combiner port to the new frequency.
12. Re-test the transmit combiner port logging the results in the provided log worksheet.

**If the transmit combiner port is not fully functional; repair the combiner and keep track of the time and costs of repair so these costs can be added to the final Rebanding cost as part of the "true up process".**

13. After the station on the first channel is reconfigured at all RF sites, re-optimize the simulcast channel.
14. Reactivate the first disabled channel
15. Monitor the system to ensure proper communications are taking place.

**If not, capture the controller diagnostics and switch back to the previous controller. Call Motorola SSC for support.**

16. Repeat 5-15 for the last channel, which is also the second channel.
17. Remove the directional couplers.

| **Trunking Frequencies** Cedar Park, Liberty Hill, Twin Towers and Thrall | | | | |
|---|---|---|---|---|
| Channel # | Original | | **After re-banding** | |
| | Transmit frequency, MHz | Receive frequency, MHz | Transmit frequency, MHz | Receive frequency, MHz |
| 1 | 860.9625 | 815.9625 | **859.5875** | **814.5875** |
| 2 | 859.9625 | 814.9625 | 859.9625 | 814.9625 |
| 3 | 858.9625 | 813.9625 | 858.9625 | 813.9625 |
| 4 | 857.9625 | 812.9625 | 857.9625 | 812.9625 |
| 5 | 858.9875 | 813.9875 | 858.9875 | 813.9875 |
| 6 | 857.9875 | 812.9875 | 857.9875 | 812.9875 |
| 7 | 856.9625 | 811.9625 | 856.9625 | 811.9625 |
| 8 | 855.7125 | 810.7125 | 855.7125 | 810.7125 |
| 9 | 855.2125 | 810.2125 | 855.2125 | 810.2125 |
| 10 | 854.9875 | 809.9875 | 854.9875 | 809.9875 |
| 11 | 860.9875 | 815.9875 | **856.6875** | **811.6875** |
| 12 | 859.9875 | 814.9875 | 859.9875 | 814.9875 |
| 13 | 856.9875 | 811.9875 | 856.9875 | 811.9875 |
| 14 | 855.9875 | 810.9875 | 855.9875 | 810.9875 |
| 15 | 854.9625* | 809.9625 | 854.9625** | 809.9625 |

*Notes: Those frequencies impacted by rebanding are marked in **bold**.*
** Base Station Identifier pre-rebanding – this is not a control channel.*
***Base Station Identifier post rebanding – will not cause a change in the control channel list.*

**Smartnet II Plus Analog Simulcast System**

1. Back up the SAC and MCB records of the Trunked controller and mark the media accordingly. Keep the backup at hand in case it's needed.
2. Inform Williamson County that the simulcast sub-cell is about to be reconfigured. Once approved proceed.
3. Disable the two channels to be reconfigured.
4. Install directional couplers.
5. Test the base stations and log the results in the log sheet provided by Motorola. This is to be done at all RF sites for the simulcast sub-cell. **If the station is not fully functional submit a request for service using the established service procedures defined by Williamson County.**
6. Test the transmit combiner ports at all sites for loss and record the results in the log sheet provided by Motorola. **If the transmit combiner port is not working properly submit a request for service using the established service procedures defined by Williamson County.**
7. Retune the base stations to the new frequency and re-align as required.
8. Test the base stations and log the results in the log sheet provided by Motorola. This is to be done at all RF sites. **If the station is not fully functional; repair the station and keep track of the time and costs of repair so these costs can be added to the final Rebanding cost as part of the "true up process".**
9. Retune the transmit combiner ports at all sites to the new frequency.
10. Re-test the transmit combiner port sat all sites logging the results in the provided log worksheet. **If the transmit combiner port is not fully functional; repair the combiner and keep track of the time and costs of repair so these costs can be added to the final Rebanding cost as part of the "true up process".**
11. Remove power from the trunked off-line controller and replace the controller codeplug in the controller CSC card and upgrade the CSC/TSC/DCB/TCI software.
12. Inform Williamson County that there will be a short interruption in service as the controllers are switched. Once approved continue to step 11.
13. Switch controllers so that the controller with the new codeplug is active.
14. After the stations on the channel are reconfigured, re-optimize the simulcast channel.
15. Monitor the system to ensure proper communications are taking place on the non-Rebanded channels. **If not, capture the controller diagnostics and switch back to the previous controller and disable the channels just reconfigured. Call Motorola SSC for support.**
16. Enable the channels that were just reconfigured and ensure that voice calls are being successfully assigned.

17. Inform Williamson County that there will be a short interruption in service as the controllers are switched. Once approved continue to step 16.
18. Remove power from the trunked off-line controller and replace the controller codeplug in the controller CSC card.
19. Return power to the trunked controller, make this controller active, and test the system functionality.
20. Remove the directional couplers.
21. Inform Williamson County that the system has been reconfigured and is fully operational.

**Service Monitor**

The General Dynamics R2625 service monitor does have the P25 digital trunking feature. The 68K software version for this model is flash-upgradeable and the updated trunked NPSPAC Band Plan option will be enabled. Because General Dynamics does not currently have the software available for the service monitor, the software/firmware update is included in contingency.

## DISPATCH MANAGMENT PLAN

The following changes are required:

- Centracom II Gold (Elite) consoles – No changes necessary.
- Control Stations – Retuned or reprogrammed depending on inventory results.
- SIP - Program new frequency list into the SIP database via the frequency configuration screens. Retune the RF Modem with the appropriate RSS/CPS software. Inventory was not provided to allow a suitability assessment to be made. To support the new trunked NPSPAC Band channels, this management terminal may require replacement.

## FALLBACK PLAN

1. Disable the reconfigured stations that do not operate properly.
2. Fully characterize the failure modes so it can be reported to Motorola.
3. Reinstall the original software and firmware.
4. Reinstall any pre-reconfiguration controller cards if necessary.
5. Reprogram the base stations with the archive previously saved.
6. Retune the transmit combiner ports to the original frequency.
7. Open a sub-CASE to the original project CASE with the SSC to get assistance in resolving the issue.

## SYSTEM IMPACT

This section describes the system impact and downtime that may occur for those tasks that require system interruption.

Digital System:

1. Base Stations and Tx combiners – Reconfiguring one channel at a time will impact the available channels by a reduction of one from the current operation. The system will still be communicating on the remaining active

channels. When the combiner is retuned, one channel at a time will be unavailable to the system.

2. When the directional couplers are being installed and removed, all channels utilizing the transit combiner will be briefly down. This will affect at most eight trunked channels at a time.

Analog System:

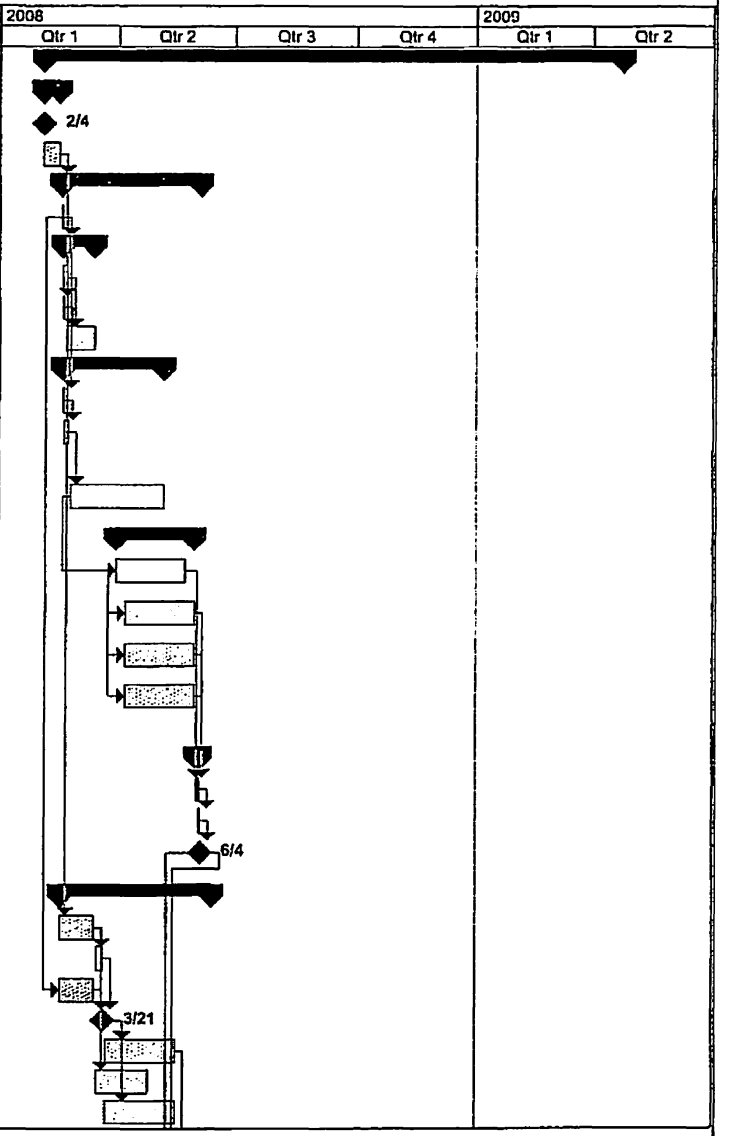
1. 6809 Prime Site Controllers – The system will experience a short interruption as the codeplugs are installed in the CSC card and the controllers are switched.
2. Base Stations and Tx combiners – Reconfiguring both channels at the same time will impact the available channels by a reduction of two from the current operation. The system will still be communicating on the remaining active channels. When the combiner is retuned, two channels will be unavailable to the system.
3. When the directional couplers are being installed and removed, all channels utilizing the transit combiner will be briefly down. This will affect at most eight trunked channels at a time.

# Attachment G

# Reconfiguration Project Schedule

# Williamson County Radio System Rebanding Project

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 1 | **Williamson County 800 MHz Rebanding Project** | 309 days | Mon 2/4/08 | Thu 4/23/09 |
| 2 | **Project Startup Tasks and Kickoff** | 10 days | Mon 2/4/08 | Fri 2/15/08 |
| 3 | Customer Contract Signed | 0 days | Mon 2/4/08 | Mon 2/4/08 |
| 4 | Contract Admin - Resource Assignment | 2 wks | Mon 2/4/08 | Fri 2/15/08 |
| 5 | **Subscriber Programming Subproject** | 78 days | Mon 2/18/08 | Wed 6/4/08 |
| 6 | Kick-Off Meeting and Initial Planning Session | 1 day | Mon 2/18/08 | Mon 2/18/08 |
| 7 | **Equipment Order** | 18 days | Tue 2/19/08 | Thu 3/13/08 |
| 8 | Verify inventory of subscriber accessories and options prior to order | 3 days | Tue 2/19/08 | Thu 2/21/08 |
| 9 | Conference calls / E-Mails with UO/CE and Field Team | 1 day | Tue 2/19/08 | Tue 2/19/08 |
| 10 | Replacement subscribers and Flash Kits and I-buttons - order and sl | 3 wks | Fri 2/22/08 | Thu 3/13/08 |
| 11 | **Develop Templates** | 56 days | Tue 2/19/08 | Tue 5/6/08 |
| 12 | Confirm interoperability information for Templates | 1 day | Tue 2/19/08 | Tue 2/19/08 |
| 13 | System Engineer and ST works with Williamson County's manager of templates to incorporate infrastructure rebanding considerations to templates design | 3 days | Wed 2/20/08 | Fri 2/22/08 |
| 14 | Build 162 Templates (2.5 hrs. per template) with 2 STs supervised by the Williamson County Template Manager | 52 days | Mon 2/25/08 | Tue 5/6/08 |
| 15 | **Program Radios** | 45 days | Mon 3/31/08 | Fri 5/30/08 |
| 16 | Weekly Logistics meeting for programming radios with the Williamson County and other Agencies | 40 days | Mon 3/31/08 | Fri 5/23/08 |
| 17 | Program mobile radios (1357 * 0.9 hr ea.) - 2 teams of two techs working 2 shifts per day | 40 days | Mon 4/7/08 | Fri 5/30/08 |
| 18 | Program portable radios (1466 * 0.7 hr ea.) - 2 teams of two techs working 2 shifts per day | 40 days | Mon 4/7/08 | Fri 5/30/08 |
| 19 | 2 Project managers (one per shift) update records and database/documents every day and manages day-to-day subscriber programming effort - working 2 shifts per day | 40 days | Mon 4/7/08 | Fri 5/30/08 |
| 20 | **Subscriber Programming Close-out** | 3 days | Mon 6/2/08 | Wed 6/4/08 |
| 21 | Close out Documentation and finalize database update | 2 days | Mon 6/2/08 | Tue 6/3/08 |
| 22 | Customer Documentation Review | 1 day | Wed 6/4/08 | Wed 6/4/08 |
| 23 | Customer Acceptance and Sign off for Subscriber Initial Programming | 0 days | Wed 6/4/08 | Wed 6/4/08 |
| 24 | **FNE Detailed Design followed by NPSPAC Antenna Installation** | 85 days | Mon 2/18/08 | Fri 6/13/08 |
| 25 | NPSPAC transmission and antenna systems designed (4 sites) | 4 wks | Mon 2/18/08 | Fri 3/14/08 |
| 26 | Analog and Digital System cutover plans validated | 5 days | Mon 3/17/08 | Fri 3/21/08 |
| 27 | Tower loading analysis | 4 wks | Mon 2/18/08 | Fri 3/14/08 |
| 28 | **Detailed Design Review (DDR)** | 0 days | Fri 3/21/08 | Fri 3/21/08 |
| 29 | Order and ship temporary antennas | 8 wks | Mon 3/24/08 | Fri 5/16/08 |
| 30 | Reinforce towers (change order may be needed) | 6 wks | Mon 3/17/08 | Fri 4/25/08 |
| 31 | Revised FNE Equipment list ordered & shipped | 8 wks | Mon 3/24/08 | Fri 5/16/08 |

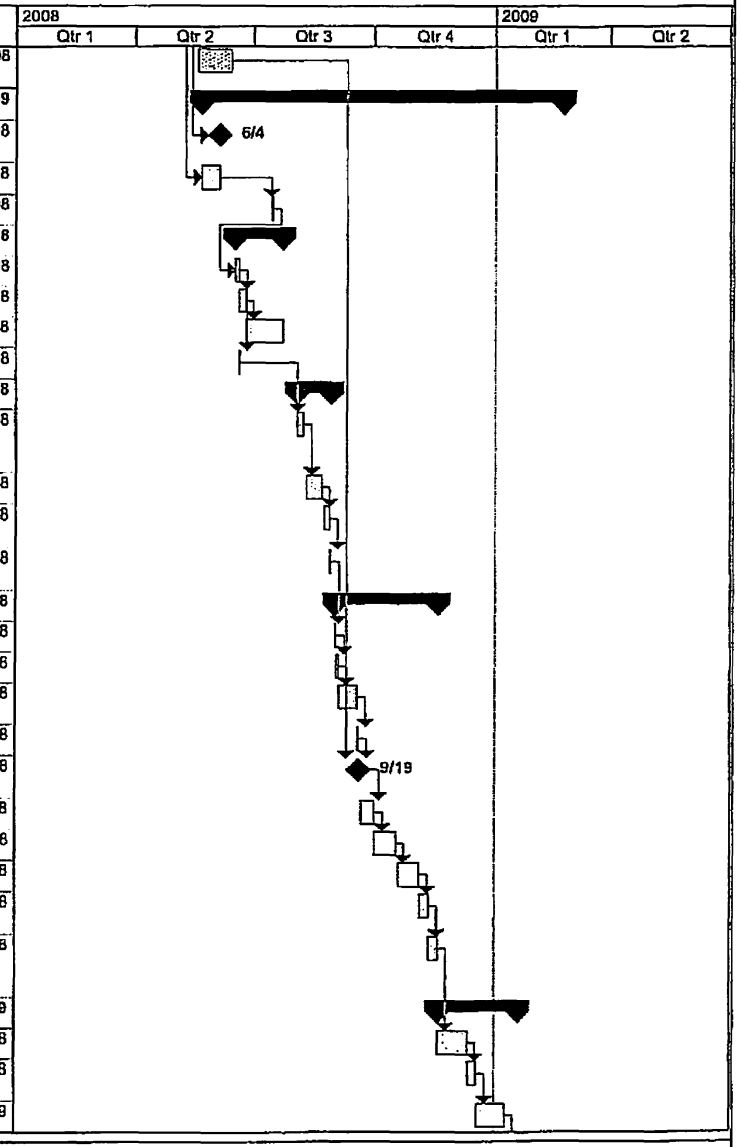



Project: Williamson County Rebanding
Date: Mon 12/17/07

Task | Summary | Rolled Up Progress | Deadline
Split | Rolled Up Task | External Tasks
Progress | Rolled Up Split | Project Summary
Milestone | Rolled Up Milestone | External Milestone

Williamson County Radio System Rebanding Project

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 32 | Install temporary NPSPAC antenna systems & ST performs antenna sweeps (tests) | 4 wks | Mon 5/19/08 | Fri 6/13/08 |
| 33 | **FNE Reconfiguration Subproject** | 188 days | Thu 5/22/08 | Mon 2/23/09 |
| 34 | Confirm all subscribers programmed with new rebanded frequencies | 0 days | Wed 6/4/08 | Wed 6/4/08 |
| 35 | FNE subproject Kickoff Prep Including resource assignment | 2 wks | Thu 5/22/08 | Wed 6/4/08 |
| 36 | FNE subproject Kickoff | 1 day | Tue 7/15/08 | Tue 7/15/08 |
| 37 | **FNE Equipment Order and Ship** | 26 days | Tue 6/17/08 | Wed 7/23/08 |
| 38 | Work Plan and Coordination | 3 days | Tue 6/17/08 | Thu 6/19/08 |
| 39 | Review Equipment List and Order FNE Equipment | 3 days | Fri 6/20/08 | Tue 6/24/08 |
| 40 | Equipment Shipment and Delivery | 4 wks | Wed 6/25/08 | Wed 7/23/08 |
| 41 | Rent network analyzers and other test equipment | 1 day | Fri 6/20/08 | Fri 6/20/08 |
| 42 | **Coverage Pre-Rebanding Drive Test & System Baseline** | 20 days | Mon 8/4/08 | Fri 8/29/08 |
| 43 | Coverage preparation (Assemble team and tools - Voyager, SEs to operate the equipment, drivers identified and briefed, etc.) | 5 days | Mon 8/4/08 | Fri 8/8/08 |
| 44 | Coverage (est. 600 grids/highways only) | 2 wks | Mon 8/11/08 | Fri 8/22/08 |
| 45 | Coverage results compilation (4 sites/reports) and return Voyager drive test tools | 4 days | Mon 8/25/08 | Thu 8/28/08 |
| 46 | Customer Review of Pre-rebanding Drive Test and RF Baseline test results | 1 day | Fri 8/29/08 | Fri 8/29/08 |
| 47 | **Fixed Network Equipment (FNE) Infrastructure Rebanding** | 56 days | Tue 9/2/08 | Tue 11/18/08 |
| 48 | Verify new FCC license posted at all sites | 1 day | Tue 9/2/08 | Tue 9/2/08 |
| 49 | Reband Cutover Coordination | 2 days | Wed 9/3/08 | Thu 9/4/08 |
| 50 | Back-to-back repeaters and other equipment installation and grounding | 2 wks | Fri 9/5/08 | Thu 9/18/08 |
| 51 | R56 audit of sites' temporary equipment installed | 1 day | Fri 9/19/08 | Fri 9/19/08 |
| 52 | Verify Pre-rebanding Baseline Tests for NPSPAC, Analog and Digital Systems are completed | 0 days | Fri 9/19/08 | Fri 9/19/08 |
| 53 | NPSPAC six (6) sites Cutover and Test | 8 days | Mon 9/22/08 | Wed 10/1/08 |
| 54 | Digital System Cutover and Test | 12 days | Thu 10/2/08 | Fri 10/17/08 |
| 55 | Analog radio system Cutover and Test | 12 days | Mon 10/20/08 | Tue 11/4/08 |
| 56 | Post-rebanding Baseline Tests for NPSPAC, Analog and Digital Systems | 5 days | Wed 11/5/08 | Tue 11/11/08 |
| 57 | Verify all rental equipment returned and temporary equipment has been removed, packaged and shipped back to depot unless still in use | 5 days | Wed 11/12/08 | Tue 11/18/08 |
| 58 | **Coverage Post-Rebanding Drive Test & System Baseline** | 36 days | Wed 11/19/08 | Mon 1/19/09 |
| 59 | Verify Post-rebanding System Baseline tests completed at all sites | 3 wks | Wed 11/19/08 | Thu 12/11/08 |
| 60 | Coverage preparation (Assemble team and tools - Voyager, SEs to operate the equipment, drivers identified and briefed) | 5 days | Fri 12/12/08 | Thu 12/18/08 |
| 61 | Coverage (est. 600 grids/highways only) | 2 wks | Fri 12/19/08 | Fri 1/9/09 |

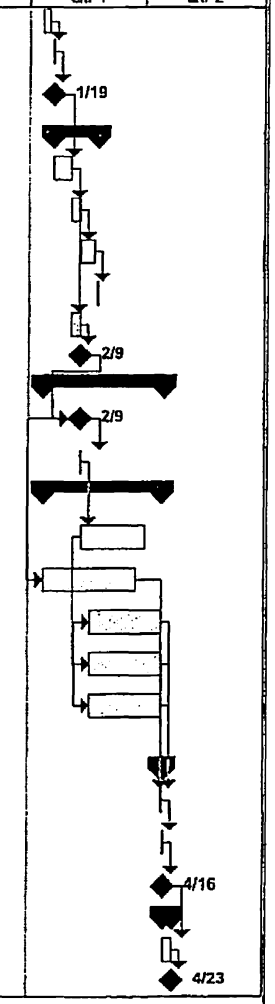



Project: Williamson County Rebanding
Date: Mon 12/17/07

Task | Split | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Split | Rolled Up Milestone | Rolled Up Progress | External Tasks | Project Summary | External Milestone | Deadline

Williamson County Radio System Rebanding Project

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 62 | Coverage results compilation (4 sites/reports) | 5 days | Mon 1/12/09 | Fri 1/16/09 |
| 63 | Customer Review of Post-rebanding Drive Test and RF Baseline test results | 1 day | Mon 1/19/09 | Mon 1/19/09 |
| 64 | Williamson County FNE rebanded and RF System Baseline results and coverage tests reports reviewed | 0 days | Mon 1/19/09 | Mon 1/19/09 |
| 65 | **Close out subproject and FNE System Acceptance** | 25 days | Tue 1/20/09 | Mon 2/23/09 |
| 66 | Shutdown and Uninstall second set of conventional repeaters that were programmed with the pre-rebanded frequencies | 10 days | Tue 1/20/09 | Mon 2/2/09 |
| 67 | Pack and ship repeaters back to depot (assuming interoperability partners have completed rebanding) | 5 days | Tue 2/3/09 | Mon 2/9/09 |
| 68 | Collect Data and Generate Final System Documentation Package | 9 days | Tue 2/10/09 | Fri 2/20/09 |
| 69 | Deliver Final System documentation | 1 day | Mon 2/23/09 | Mon 2/23/09 |
| 70 | Punchlist Resolution | 5 days | Tue 2/3/09 | Mon 2/9/09 |
| 71 | FNE Rebanding System Acceptance Certificate signed | 0 days | Mon 2/9/09 | Mon 2/9/09 |
| 72 | **"Second Touch" of Subscribers Subproject** | 68 days | Tue 1/13/09 | Thu 4/16/09 |
| 73 | Assumption: Interoperability Partners and adjoining counties complete rebanding | 0 days | Mon 2/9/09 | Mon 2/9/09 |
| 74 | Kickoff Meeting for "Second Touch" Subscriber Programming | 1 day | Tue 2/10/09 | Tue 2/10/09 |
| 75 | **Subscriber "Second Touch" Template Development and Programming** | 66 days | Tue 1/13/09 | Tue 4/14/09 |
| 76 | Subscriber Logistics and Agency Coordination Meetings (twice per month) | 36 days | Wed 2/11/09 | Wed 4/1/09 |
| 77 | Template Development to remove old frequencies and address any interoperability issues, etc. | 52 days | Tue 1/13/09 | Wed 3/25/09 |
| 78 | Program portable radios with new template that removes old NPSPAC frequencies | 40 days | Wed 2/18/09 | Tue 4/14/09 |
| 79 | Program mobile radios with new template that removes old NPSPAC frequencies | 40 days | Wed 2/18/09 | Tue 4/14/09 |
| 80 | 2 Project managers (one per shift) update database/documents every day and manages day-to-day subscriber programming effort - working 2 shifts per day | 40 days | Wed 2/18/09 | Tue 4/14/09 |
| 81 | **System Acceptance** | 2 days | Wed 4/15/09 | Thu 4/16/09 |
| 82 | Finalize subscriber update documentation and database record | 1 day | Wed 4/15/09 | Wed 4/15/09 |
| 83 | Customer Review of Subscriber Documentation and Database Update | 1 day | Thu 4/16/09 | Thu 4/16/09 |
| 84 | System Acceptance | 0 days | Thu 4/16/09 | Thu 4/16/09 |
| 85 | **Close out project and Final Acceptance** | 5 days | Fri 4/17/09 | Thu 4/23/09 |
| 86 | Resolve any punchlist items | 5 days | Fri 4/17/09 | Thu 4/23/09 |
| 87 | Final Acceptance Certificate signed | 0 days | Thu 4/23/09 | Thu 4/23/09 |




Project: Williamson County Rebanding
Date: Mon 12/17/07

Task | Split | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Split | Rolled Up Milestone | Rolled Up Progress | External Tasks | Project Summary | External Milestone | Deadline

# Attachment H

# Equipment Return Process

# Motorola Rebanding Equipment Return Process

## SUMMARY

All of the Motorola replaced subscriber radios and related accessories must be returned to the address below. Licensee will deliver the Trade-In Radios and Trade-In Non-Kit Accessories to Motorola as soon as practical after they are replaced by the Rebanding Radios and Non-Kit Accessories or at a different time mutually agreed by the Parties. Requests for an extension must be sent to bruce.ross@motorola.com stating the reason for the request and a proposed new timetable for the returns to be completed. The only exceptions to the return requirement are the cables for trunk mounted mobile radios and mobile antennas which can be discarded on site. Any replaced fixed equipment such as base stations, tower antennas, 6809 boards, firmware, code plugs, computer equipment, system management terminals, Futurecom VRS units, etc. must be sent to the Abilene location.

Subscriber shipping destinations for Motorola lead Rebanding projects:

| | *Original Radio* | |
|---|---|---|
| *Replacement Radio* | **Motorola** | **Competitive** |
| **Motorola** | CTDI - Elgin, IL | CTDI - Elgin, IL |
| **Competitive** | [redacted] | Nextel - Abilene, TX |

Motorola c/o CTDI
800 MHz Rebanding Project
2224 Galvin Drive
Elgin, IL 60124

or

Sprint/Nextel
5520 N 1st Street
Abilene, TX 79603

## Basic Process

### 1) Serial Number Collection

- Gather the serial numbers of all the radios to be returned in that shipment. The serial number can be read from the label on the back or bottom of the radio.
- If the serial number is not readable on the outside of the radio, obtain the serial number from the radio display or from the programming tool. Affix a separate label to the outside of the radio and write the serial number on the label.
- If the serial number is not obtainable using method "B" above, obtain the serial number from your records or any other method then affix a label to the outside of the radio and write the serial number on the label.
- If the serial number is not obtainable by any method, affix a label to the outside of the radio and write the Nextel Deal Number followed by a two digit sequential number that is unique to each unit (e.g. 01, 02 etc.) Keep record of the unique numbers used for potential future reference or for reconciliation purposes.

### 2) Customer Programming

If required by the customer, remove customer specific programming from the radios including talk groups.

**3) Packaging material**

Reuse the new radio packaging material whenever possible. If reusing packaging material, all existing carrier labels should be removed or covered up. If packaging material is needed then contact Terry Sunday at the Sprint Nextel Abilene warehouse at (800) 599-7255.

**4) Packing the equipment**

Pack the equipment into the boxes in a uniform manner to allow for ease of verification and counts of the equipment at the receiving location. This would include packaging radios such that the serial numbers point outward or upward in the box. This would also include packaging like accessories together in bags or smaller containers with counts noted on the outside of the smaller container which would be placed into the larger box.

**5) Packing Slip(s)**

Create a packing slip for each box by going to https://etos1.ctdi.com/login/
Use your deal number (Example: DL1234567890) as the Logon ID.

** IMPORTANT NOTE: If you have multiple Deal Numbers, it is important to use the one that is associated with replacement of the equipment being returned in this shipment. If in doubt, please contact your Sprint Nextel Project Manager.

- Use the same deal number as your password.
- Click on Deal Entry in the top left corner.
- Enter your contact information and click "Next".
- Enter the Tracking #, if known.
- Enter the weight, if known.
- Select the Make of the item you are returning.
- Select the Type of the item you are returning.
- Select the Model of the item you are returning.
- Input the quantity for that item you are returning.
- Input the serial numbers, if the items are radios by clicking on the "Enter Serial #s" box.
- Click the box "Add Line" for the next item to input.
- When finished inputting the lines then click the "Build Carton".
- Print the packing slip for each carton and include it inside the carton.
- Retain a copy of all packing slip(s) for future reference. To retain a soft copy of the packing slip, go to the browser and select File > Edit with Microsoft Word to copy the file to Word.

**6) Ship**

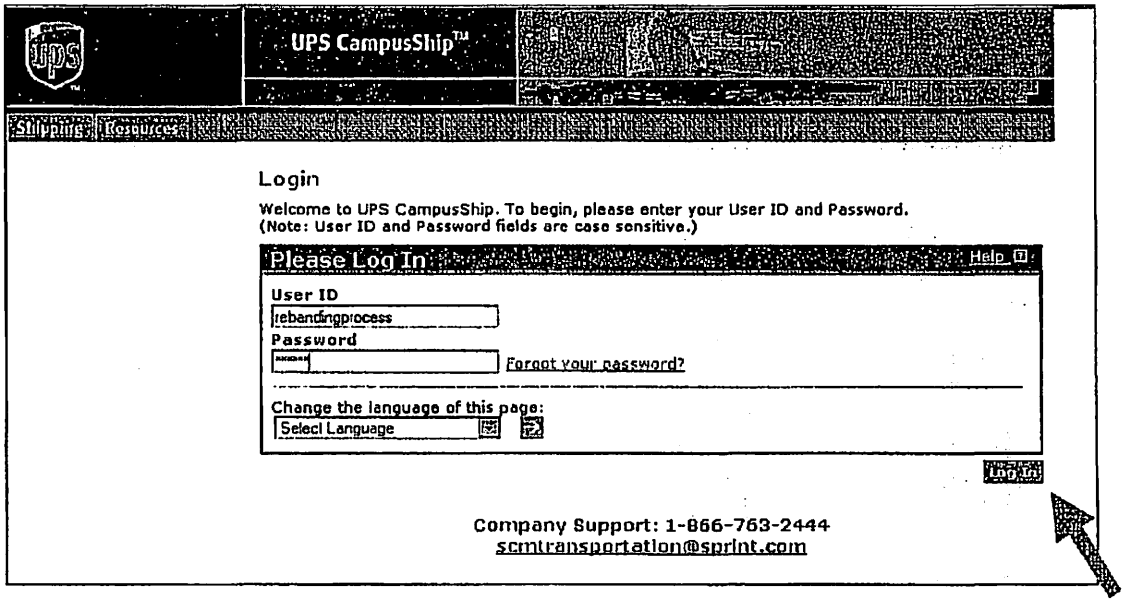
Follow the shipping instructions on the file Rebanding Subscriber Return Shipment Process_12 20 06_v1.doc Nextel will be billed directly from UPS for the shipping cost. If you want to ship multiple boxes (each with their own packing slip) on pallet(s) then call Terry Sunday from Sprint Nextel (800) 599-7255. He will arrange for the pallet(s) pick up.

**7) Reconciliation Resolution**

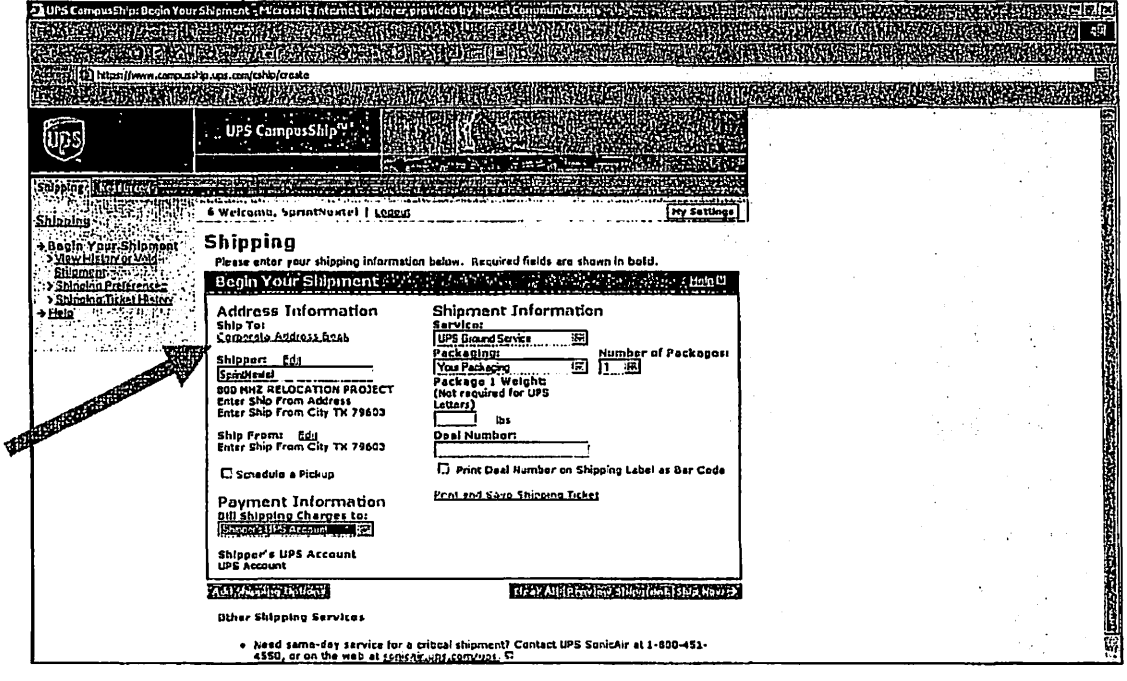
Be prepared to assist in resolving any reconciliation issues that may arise from the comparison of the returns vs. the replacements.

# REBANDING SUBSCRIBER RETURN PROCESS

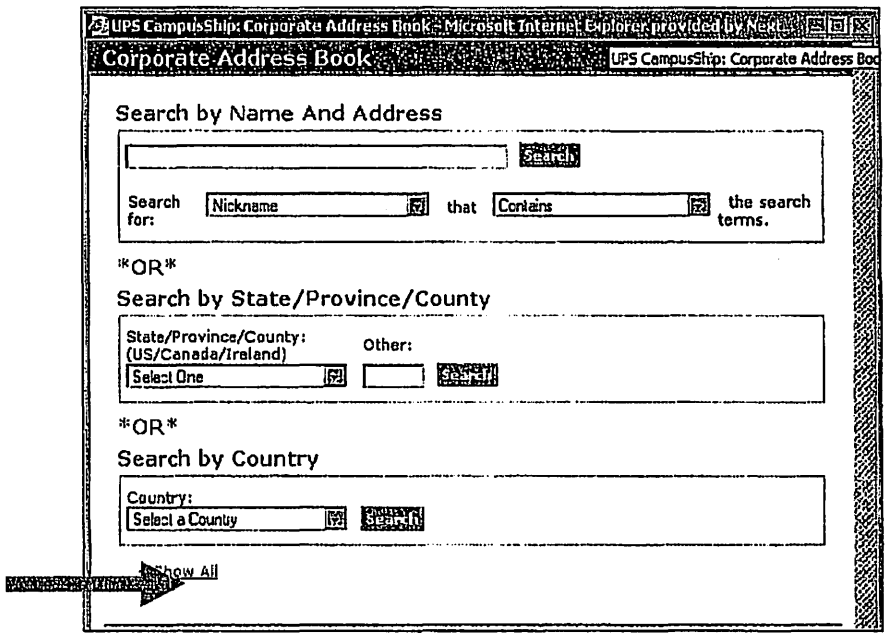
1. Go to https://www.campusship.ups.com/cship/create
2. Enter User ID: rebanding process (one word – small letters).
3. Enter Password: Sprint (case sensitive).
4. Click Log In.



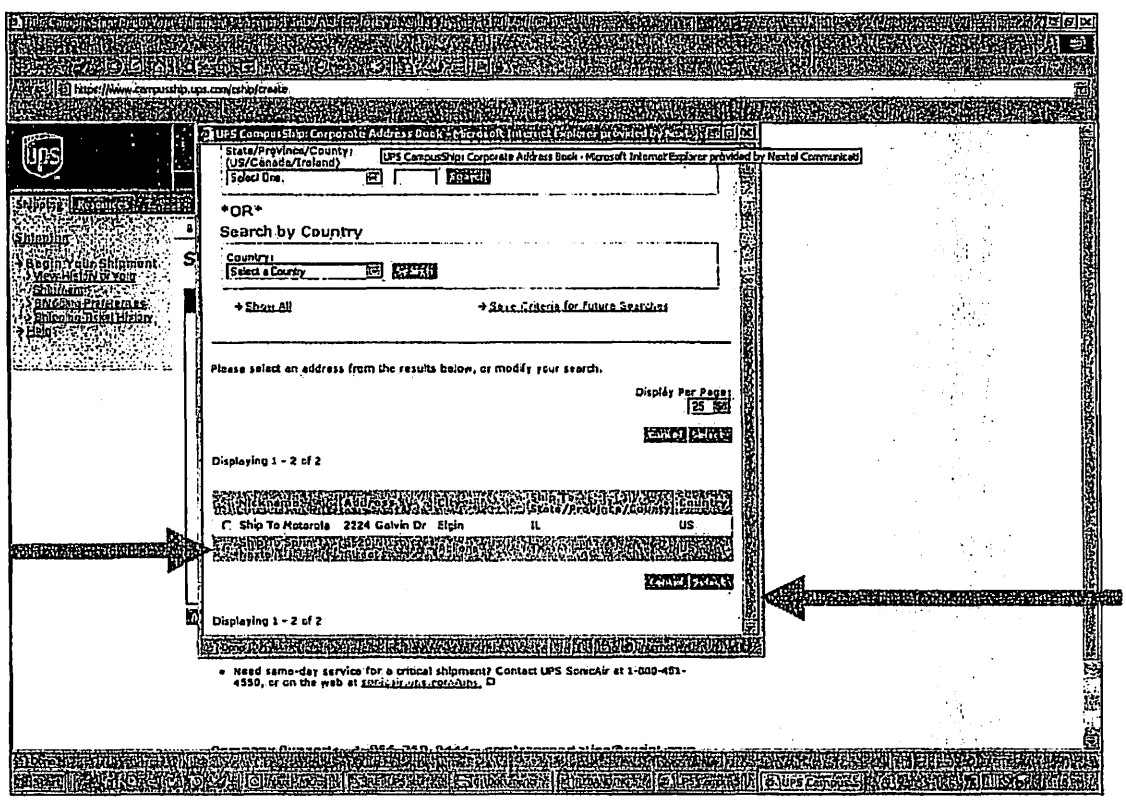

5. Click on "Corporate Address Book".



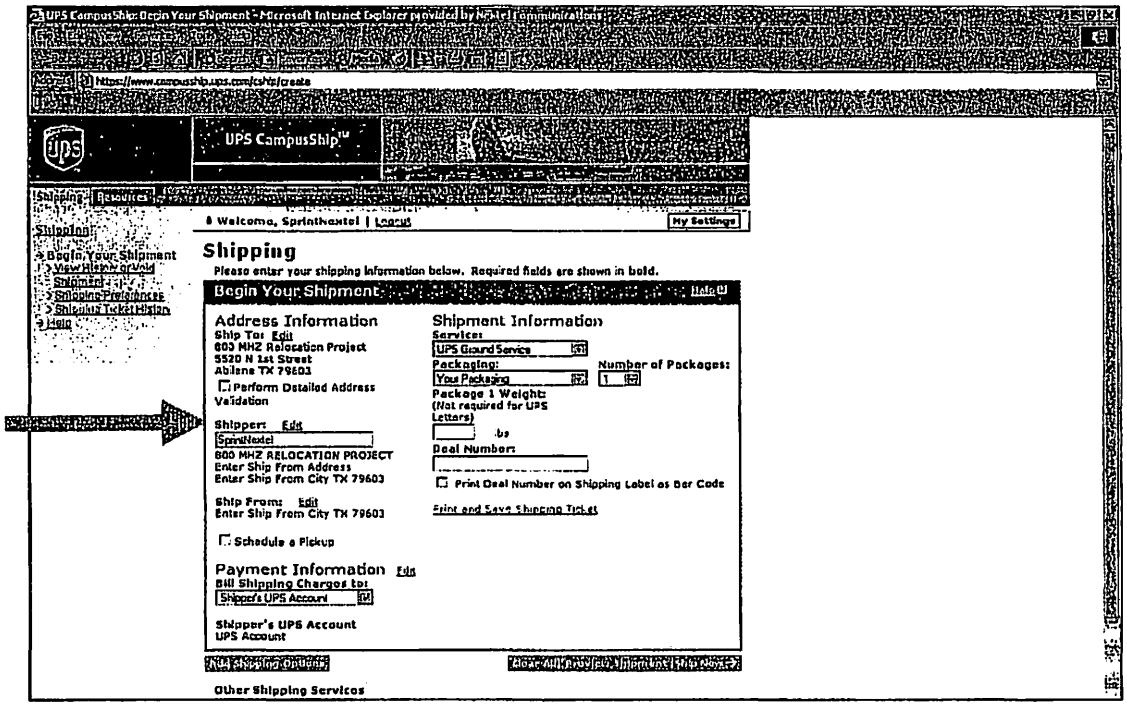
6. Click on "Show All" and scroll down.



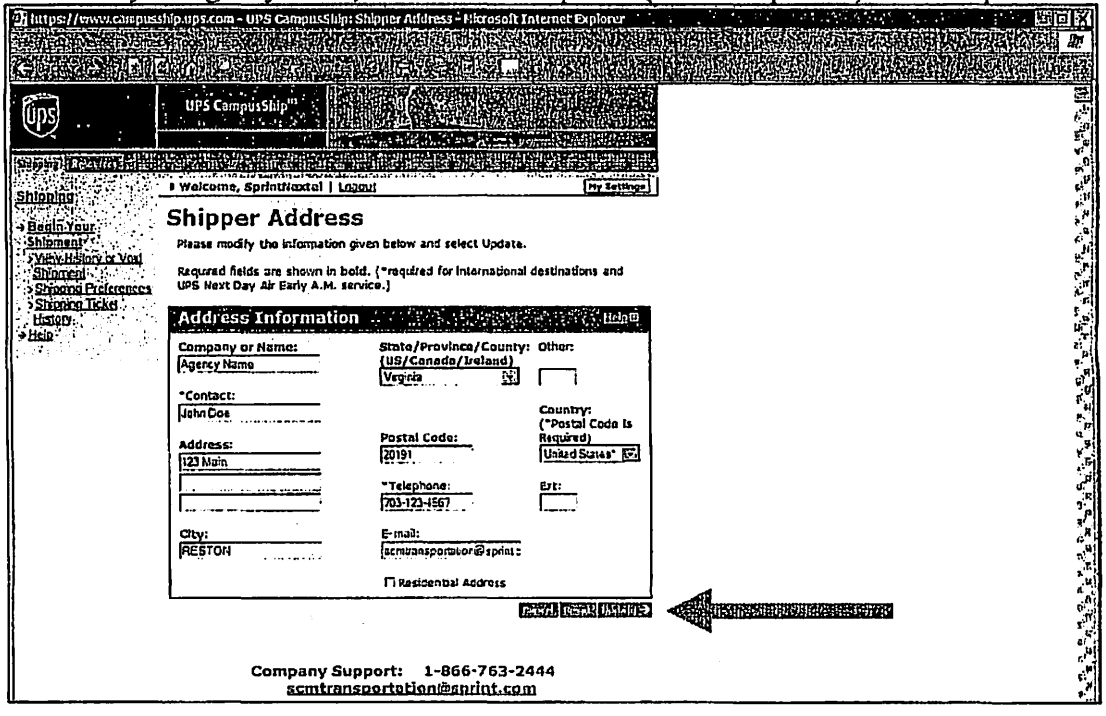

7. Click on the correct destination address, then click Select.



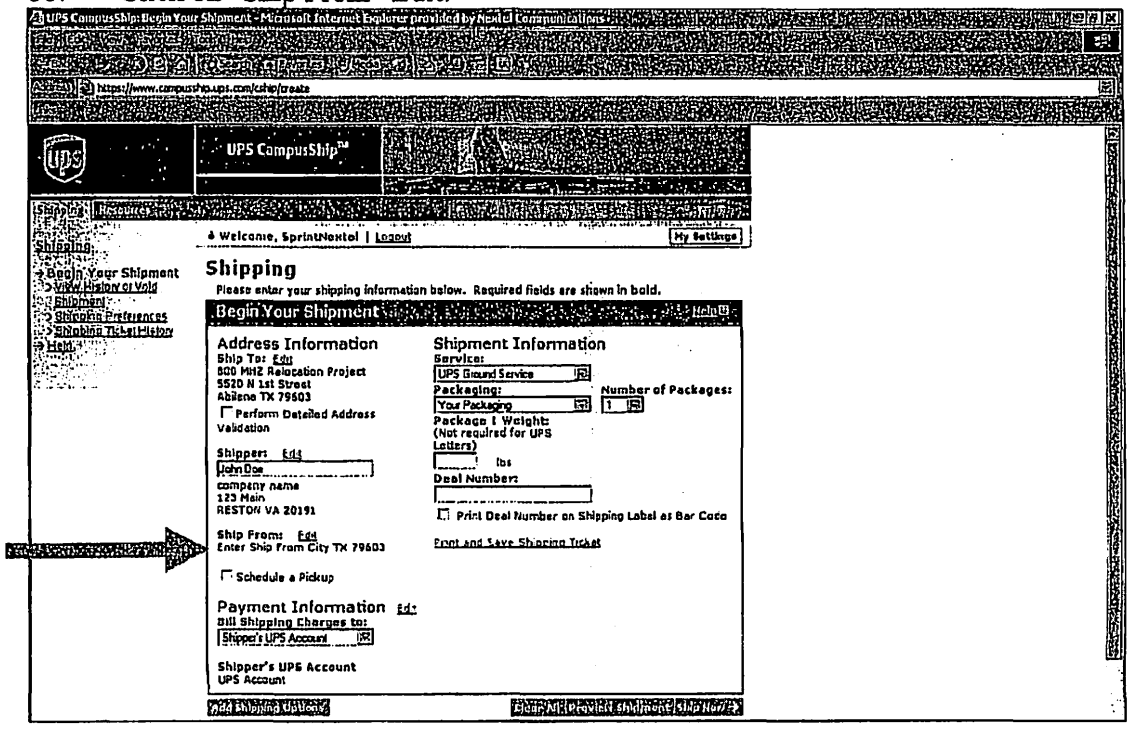
8. Now click on "Shipper" Edit.



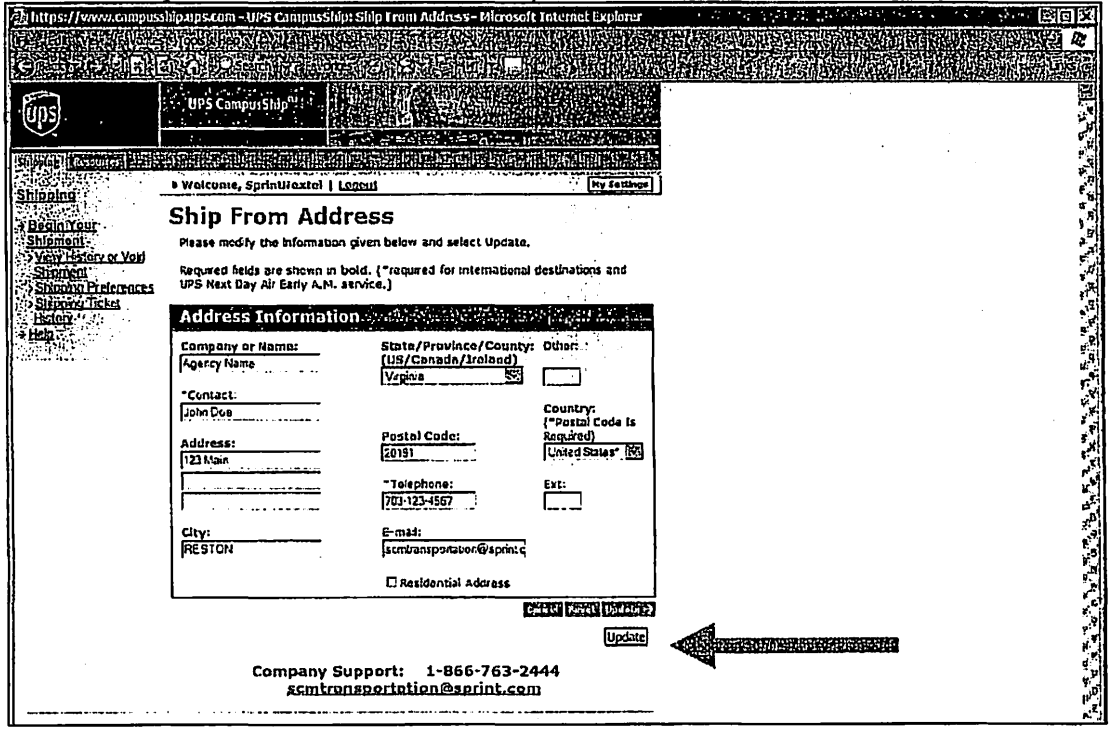

9. Fill in your agency name, address and telephone (email is optional). Click Update.



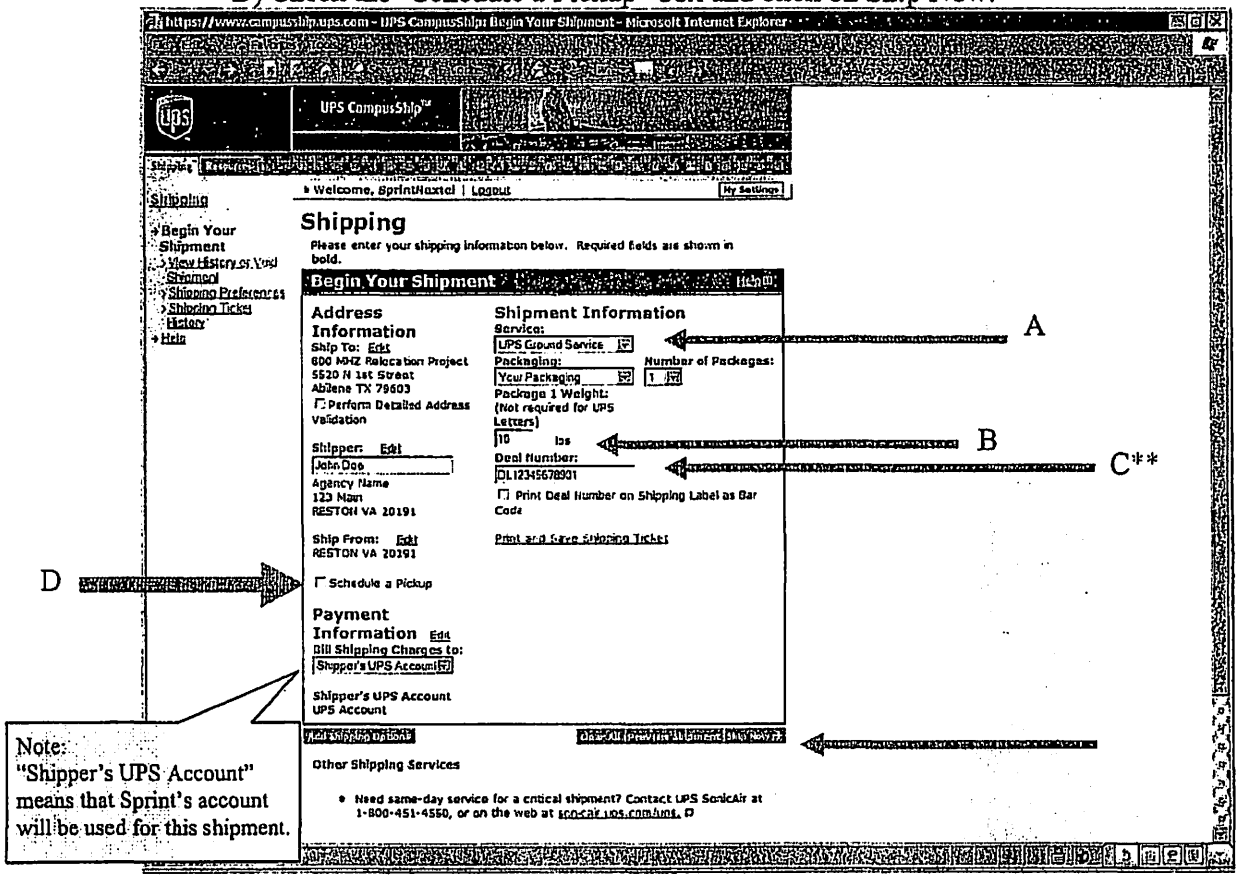
10. Click on "Ship From" Edit.




11. Enter Ship From information. Click Update.

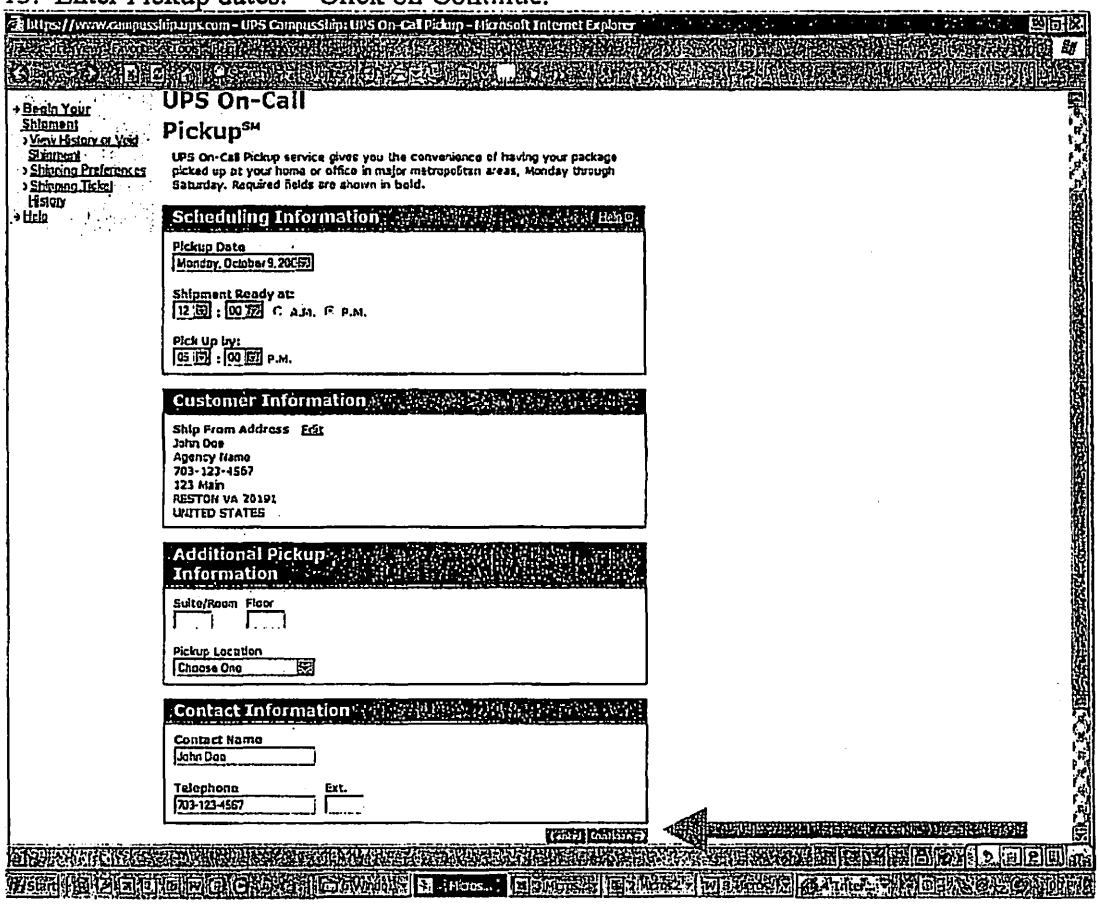


12. A) Choose "UPS Ground Service" and ALWAYS choose "Your Packaging".
B) Guess and enter the package weight.
C) Add your Deal Number.
D) Check the "Schedule a Pickup" box and click on Ship Now.

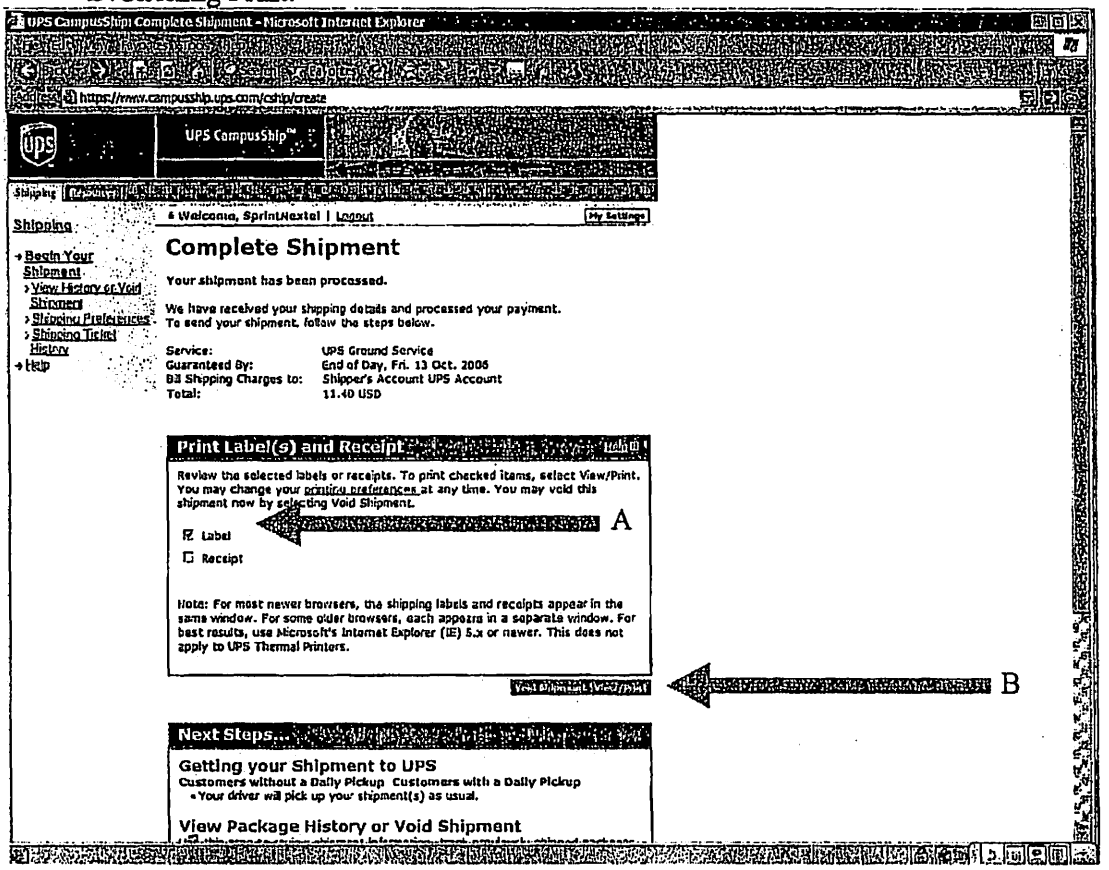


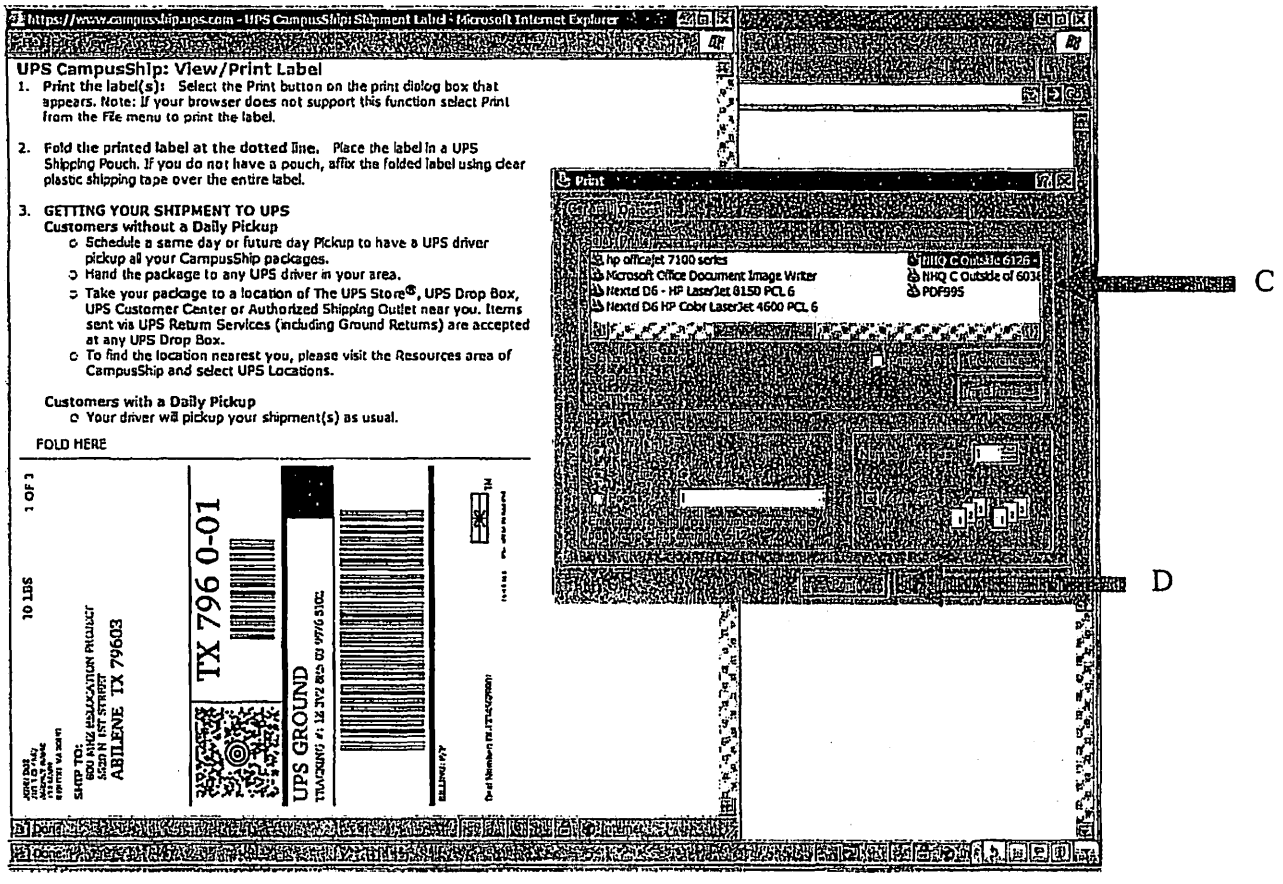

** IMPORTANT NOTE: If you have multiple Deal Numbers, it is important to use the one that is associated with replacement of the equipment being returned in this shipment. If in doubt, please contact your Sprint Nextel Project Manager.

13. Enter Pickup dates. Click on Continue.



14. Print your label by:
    A. Checking the "Label" box.
    B. Clicking View/Print.
    C. Selecting your printer from the print dialog box that appears.
    D. Clicking Print.






15. Adhere the label to the package and wait for UPS to pickup.