

Title: Improving Public Safety Communications in the 800 MHz Band

SUPPORTING STATEMENT

A. Justification:

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1. **Background.** To address a growing problem of harmful interference to 800 MHz public safety communication systems caused by high-density commercial wireless systems, the Commission in July 2004 adopted a comprehensive plan to reconfigure the band. This plan is designed to protect the lives of first responders and other emergency personnel and fulfills the Commission's obligation to promote safety of life and property through the use of wire and radio communications. Under that plan, the Commission ordered the reconfiguration of the 800 MHz band to migrate incompatible technologies to separate segments of the band. The new band plan requires public safety and other high-site systems to relocate to the lower portion of the band, while cellular-architecture SMR systems relocate to the upper portion of the band.

To facilitate the rebanding process, the Commission has provided for the creation of an independent 800 MHz Transition Administrator (TA) to administer the transition and review expenditures. The Commission tasked the TA with administering the technical and financial aspects of the band reconfiguration process to ensure that the Commission's goals would be achieved with minimal disruption to licensees, particularly public safety entities.

The Commission provided for a 36-month transition to the new band plan, and required Sprint to pay all reasonable relocation costs incurred by public safety and other 800 MHz incumbents, including costs associated with remaining fully operable during the transition. The 36-month rebanding transition period began on June 27, 2005 and ended on June 26, 2008. However, a number of public safety licensees have requested additional time beyond June 26, 2008 to complete rebanding, thus necessitating renewal of some of the information collections described in this submission.

That band reconfiguration undertaking also established continuing procedures to resolve incidents of interference through the exchange of information between public safety licensees and commercial operators.

As part of band reconfiguration process plan, the Commission adopted a number of information collections. The Office of Management and Budget approved these information collections under OMB 3060-1080 for a three year period. Consistent with the requirements of the Paperwork Reduction Act, the Commission seeks to renew those information collections for another three year period. On January 17, 2008, the Federal Communications Commission (Commission) released a Public Notice (included as an attachment in this submission) that established procedures and provided guidance for submission by 800 MHz licensees of requests for waiver of the 800 MHz rebanding deadline. As noted above, several licensees have requested waivers of the June 26, 2008 deadline and may be required to submit additional

information, thus warranting extension of this collection. The Commission has continued to receive extension requests from licensees and has issued multiple waivers extending the deadline for individual licensees to complete 800 MHz rebanding.

The following queries are examples of the information that will be sought from the licensees of public safety systems that are being relocated to new frequencies under the Commission's 800 MHz rebanding program. The information collection data include a requirement to (1) respond to requests for pre-coordination of facilities; (2) respond to interference complaints; (3) establish an electronic system (*i.e.*, e-mail) to file interference complaints; (4) perform an analysis of interference complaints; (5) exchange information to effectuate relocation agreements, and, in some instances, disclose such information to the Transition Administrator; and (7) certify to the Transition Administrator that relocation has been completed. Such certification will be reflected in a quarterly report to the Commission from the Transition Administrator. Additionally, to address interference concerns, the Commission will require many small governmental entities and public safety radio licensees to provide information relevant to avoiding interference in the first instance and eliminating future interference incidents. Generally, we note that small entities were not among the interfering parties in those instances of interference that parties brought to the attention of the Commission in this proceeding. Public Safety and Critical Infrastructure Industry licensees, many of which may be considered small entities, have experienced interference and largely supported the information collections adopted to resolve interference. Therefore, we do not perceive the information collection requirements as a burden on such small entities. Further, to address relocation cost concerns and the costs of relocating public safety, CII, and others, Sprint Nextel Corp. (Sprint) is obliged to pay these relocation costs, including obtaining cost estimates from relocating licensees. In order to reach agreement with Sprint on relocation costs, incumbents must furnish information about their communications systems. As a matter of contract, however, incumbents and Sprint may adopt confidentiality agreements to safeguard sensitive or proprietary information from unnecessary disclosure and avoid any unintended consequences.

Statutory authority for this collection of information is contained in 47 U.S.C., Sections 151, 154, 160, 251–254, 303, and 332 unless otherwise noted.

This collection of information does not affect individuals or households; thus, there are no impacts under the Privacy Act.

2. The information collection requirements will be used by the Commission to ensure that Cellular/ESMR, Public Safety, Critical Infrastructure Industry (CII), and other 800 MHz licensees comply with the interference mitigation and frequency relocation requirements in an orderly, timely, comprehensive fashion with no unnecessary delay.

3. These information collections will make use of electronic collection techniques. It is expected that all respondents will employ electronic correspondence to submit interference complaints. To further ease the burden imposed by this information collection, respondents are encouraged to make use of template forms created for waivers. Those forms are publicly available on the 800 MHz Transition Administrator's web site (www.800ta.org) and are also included as attachments to this submission.

4. This information is not available elsewhere. It is being collected specifically to meet the requirements of the Commission's Orders. This is a unique collection and there is no duplication.

5. In conformance with the Paperwork Reduction Act of 1995 (PRA), the Commission strives to minimize burdens on all respondents regardless of size consistent with the critical nature of this proceeding. The Commission has limited the information requirements to those absolutely essential to ensure a timely, comprehensive resolution to 800 MHz interference. The information that the Commission requires in the *Report and Order* is the minimal amount of data that the Commission needs to meet its oversight role.

6. Failure to collect this information will adversely impact the FCC's ability to carry out its congressionally mandated duty to promote public safety communications and its objective to eliminate interference to public safety communications.

7. In the normal course, the Commission avoids requiring responses to information collections in fewer than thirty days. However, as noted *supra* there are exigent circumstances attendant on the need for prompt abatement of interference to crucial public safety communications that dictate that responses be made within a matter of hours, rather than days. Current data are consistent with 5 CFR § 1320.6. If Public Safety licensees perceive an interference threat or experience interference, corrective action must be taken immediately (*i.e.*, a response must be filed within 24 hours and an interference analysis must be performed within 48 hours) to resolve the interference. Indeed, to the extent that a public safety licensee experiencing interference determines that an unresolved incident of interference constitutes a clear and imminent threat to safety of life and property, the licensee may request immediate discontinuance of operation of the interfering station by a written statement served immediately on the Commission and the relevant cellular/ESMR licensee(s). The nature of such a threat necessitates a prompt response to preserve public safety communications and safety of life.

With regard to band reconfiguration, we note that parties will generally be required to exchange information to reach relocation agreements. Imposing a thirty day or greater response period in these circumstances would make it impossible to complete band reconfiguration within the thirty-six month period (as extended) that the Commission has specified. Should parties to a relocation agreement deem it necessary, they may, as a matter of contract, adopt confidentiality agreements to safeguard secure, proprietary, or other confidential information from unnecessary disclosure and avoid any unintended consequences. To the extent that such information is submitted to the Commission, Section 0.459 of the Commission's rules affords licensees a procedure to request confidential treatment of confidential information.

8. The Commission published a 60-day notice (*see* 76 FR 28030) in the Federal Register on May 13, 2011, informing the public that the Commission will request renewal of these information collections by OMB and that the public may submit comments on the collections to the FCC. No comments were received in response to the 60-day notice.

9. There are no payments or gifts to respondents.

10. No questions of a confidential nature are asked. However, under the Commission's rules, licensees may request confidential treatment for information they provide in response to these information collections.

11. The collection of information contained in this supporting statement does not address any private matters of a sensitive nature.

12. **Burden on Respondents:** The total burden is 16,988 hours. Below we summarize our estimates. These information collections are required to obtain or retain a benefit.

A. 47 C.F.R. § 22.972(a)(2); 90.674(a)(2). (Electronic Notification System)

The Commission directed Cellular carriers and ESMR licensees to establish, at their expense, an electronic notification system to receive interference complaints. The electronic notification system -- which is an email box -- has been established and therefore there is no need to recreate the electronic notification system now that it is active. The burden on respondents has been fulfilled.

B. 47 C.F.R. §§ 22.972(a)(3), (b); 90.674(a)(3), (b). (Interference Response)

The Commission, for purposes of estimating the PRA burdens, predicts that interference incidents will require approximately five of the estimated 50 Cellular carriers and ESMR licensees participating in the electronic notification database to prepare a response and interference analysis and that all will use staff to prepare their submission in each instance. Although there are numerous other cellular carriers, the record does not support a conclusion that they are other than *de minimis* sources of interference. Each response and analysis should take an average of approximately 8 hours to prepare. Based on data extrapolated from the electronic notification system for interference complaints, the number of such complaints is reported to be approximately 436 incidents in 2010.

5 carriers x estimated 87.2 incidents per carrier (436 total incidents) x 8 hours = 3,488 hours total burden.

C. 47 C.F.R. §§ 22.972(c)(3); 90.674(c)(3). (Interference Statement to FCC of Imminent Danger)

In certain instances, a public safety licensee will prepare a written statement when it determines that an interference incident constitutes an imminent danger to safety of life, health, and property and that all will use in-house staff to prepare the submission. We anticipate that such determinations will be rare. The Commission, for purposes of estimating the PRA burdens, predicts that one such interference incident per year affecting one public safety licensee in a public safety region will occur in each of the nation's 55 public safety regions. The written statement, and the underlying analysis, should take an average of approximately 8 hours to prepare.

1 public safety licensee in each region x 55 public safety regions x 8 hours = 440 hours total burden.

D. 47 C.F.R. § 22.973(a); 90.675(a). (Prior Coordination)

The Commission, for purposes of estimating the PRA burdens, predicts that prior coordination filings will affect, at most, five of the estimated 50 Cellular carriers and ESMR licensees that are participating in the electronic notification system for filing interference complaints, not all of which are operating in areas in which 800 MHz public safety and CII systems exist. The estimated number of Cellular carriers and ESMR carriers was derived from the electronic notification system web site. We anticipate that the carriers all will use in-house staff to prepare their submission. The prior coordination response should take an average of approximately 3 hours to prepare.

It is exceptionally difficult to estimate the number of prior coordination reports that will be filed by Cellular/ESMR carriers inasmuch as some Cellular/ESMR infrastructure is relatively static and other infrastructure can change parameters on a daily basis. However, a very approximate estimate is that, on the average, the operating parameters of a Cellular or ESMR system will change once a week. Therefore in a given one year period the total hours burden could be

3 hours per response x 52 responses per carrier x 5 carriers = 780 total annual burden hours.

E. 47 C.F.R. 90.674(a); 90.674(a)(1). (Interference Complaint)

The Commission, for purposes of estimating the PRA burdens, predicts that each initial notification of interference (interference complaint) will originate from one out of the estimated 2,500 800 MHz licensees, (which include Public Safety, CII, Business, Industrial/Land Transportation and non-cellular Specialized Mobile Radio licensees) and that all will use staff to prepare their submission. The estimated number of 800 MHz licensees was derived from the Commission's licensing database. The initial notification of interference should take an average of approximately 3 hours to prepare.

One 800 MHz licensee per incident x 3 hours = 3 hours total burden.

Based on data extrapolated from the electronic notification system for interference complaints, the number of such complaints is reported to be approximately 436 incidents in 2010. Therefore the total hours burden could be

3 hours x 436 incidents = 1,308 hours total burden.

F. 47 C.F.R. 90.675(c)(1)-(2) (Prior Coordination Response)

The Commission, for purposes of estimating the PRA burdens, predicts that each prior coordination response will involve, at most, each of the estimated 1,450 800 MHz Public Safety/CII licensees and that all will use in-house staff to prepare their submission. The estimated number of 800 MHz licensees was derived from the Commission's licensing database. The prior coordination response should take an average of approximately 3 hours to prepare.

1450 800 MHz licensees x 3 hours = 4,350 hours total burden.

G. 47 C.F.R. §§ 90.676(a)(1) (Relocation Information)

The Commission, for purposes of estimating the PRA burdens, predicts that all of the estimated 473 800 MHz licensees subject to relocation will provide the Transition Administrator the information necessary to facilitate relocation, including equipment inventory and relocation cost estimates, and that all will use staff to prepare their submission. The submission should take an average of approximately 10 hours to prepare.

473 800 MHz licensees x 10 hours = 4,730 hours total burden.

This information collection is required to obtain a benefit. Upon completion of the band reconfiguration process we anticipate that there will no longer be a need to provide this information.

H. 47 C.F.R. § 90.676(b)(3). (Relocation Agreement Certification)

The Commission, for purposes of estimating the PRA burdens, predicts that all of the estimated 473 800 MHz licensees subject to relocation will certify that they have executed relocation agreements and that all will use staff to prepare their submission. The certification should take an average of approximately 3 hours to prepare.

473 800 MHz licensees x 3 hours = 1,419 hour total burden.

Upon completion of the three-year band reconfiguration process (as extended) we anticipate that there will no longer be a need for relocation certifications.

I. 47 C.F.R. § 90.677(e). (Waivers)

There are a total of 473 respondents that fall under this waiver requirement. Of the 473 respondents, 426 (90%) respondents will provide information primarily through e-mail correspondence without outside assistance. 10% of the respondents (47 respondents) may choose to hire outside counsel to prepare their waiver requests. The additional costs that these 10% of respondents may incur are estimated in no. 13 below.

Total Burden Hours to collect this information is as follows:

473 Respondents

473 Total Responses = 473 final waiver responses at 1 hour.

Estimated Total Annual Hours Burden = 426 final waiver requests (respondents filing waivers without outside assistance) x 1 hour per request = **426 hours total**.

Total Number of Respondents: 5 cellular carriers and ESMR licensees + 55 public safety licensees + 1,450 800 MHz licensees = **1,510 respondents**.

Total Number of Annual Responses: a) 0 + b) 436 + c) 55 + d) 260 + e) 436 + f) 1,450 + g) 473 + h) 473 + i) 473 = **4,056 responses**.

Total Annual Burden Hours: a) 0 + b) 3,488 + c) 440 + d) 780 + e) 1,308 + f) 4,350 + g) 4,730 + h) 1,419 + i) 426 = **16,941 hours**.

ESTIMATED IN-HOUSE RESPONDENT COST

The total in-house costs are estimated to be **\$2,371,620** as follows:

A. 47 C.F.R. § 22.972(a)(2); 90.674(a)(2). (Electronic Notification System)

The Commission directed Cellular carriers and ESMR licensees to establish, at their expense, an electronic notification system to receive interference complaints. The electronic notification system -- which is an email box -- has been established and therefore there is no need to recreate the electronic notification system now that it is active.

B. 47 C.F.R. §§ 22.972(a)(3), (b); 90.674(a)(3), (b). (Interference Response)

The Commission estimates that all of the Cellular carriers and ESMR licensees will use a staff engineer at approximately \$140.00 per hour to draft its interference response and analysis. If each response takes about 8 hours to prepare, then the cost per submission will be \$140.00 x 8 hours = \$1,120.00 burden per response.

Based on data extrapolated from the electronic notification system for interference complaints, approximately 436 incidents of interference involving cellular/ESMR carriers were reported in 2010.

The total cost burden could be \$1,120 x 436 incidents = \$488,200.

We anticipate a dramatic reduction in the number of interference incidents after completion of

band reconfiguration, thus reducing the number of instances requiring an interference response and analysis.

C. 47 C.F.R. §§ 22.972(c)(3); 90.674(c)(3). (Interference Statement to FCC of Imminent Danger)

The Commission estimates that all 800 MHz Public Safety licensees involved in an interference incident will use in-house staff at approximately \$140.00 per hour to draft its determination that interference constitutes an imminent danger to safety of life, health, or property. If each response takes about 8 hours to prepare, that the cost per submission will be \$140.00 x 8 hours = \$1,120.00 burden per party.

We expect such determinations to be rare, approximately one such determination in each of the 55 public safety regions.

\$1,120 x 55 incidents = \$61,600 total cost burden per year.

We cannot predict the number of interference incidents in a given area during band reconfiguration, nor how many Public Safety licensees will determine that an interference incident constitutes an imminent threat. We anticipate, however, a dramatic reduction in the number of interference incidents after completion of band reconfiguration, thus reducing the number of instances that require interference determinations.

D. 47 C.F.R. § 22.973(a); 90.675(a). (Prior Coordination)

The Commission estimates that all of the Cellular carriers and ESMR licensees will use a staff engineer at approximately \$140.00 per hour to draft their response to a prior coordination request and that there will be an average of one such request per week. If each response takes about 3 hours to prepare, then the cost per submission will be \$140.00 x 3 = \$420.

It is exceptionally difficult to estimate the number of prior coordination reports that will be filed by Cellular/ESMR carriers inasmuch as some Cellular/ESMR infrastructure is relatively static and other infrastructure can change parameters on a daily basis. However, a very approximate estimate is that, on the average, the operating parameters of a Cellular or ESMR system will change once a week. Therefore in a given one year period the total estimated cost burden could be

\$420 hours x 52 weeks = \$21,840 total cost burden per carrier over a one year period.

We cannot, however, predict the number of instances in which a Public Safety or CII licensee will seek prior coordination in a given area. Nor can we predict the number of instances in which Cellular/ESMR carriers will add or modify facilities such that prior coordination would be warranted. However, we note that there are 50 Cellular carriers and ESMR licensees participating in the interference notification system and we estimate that over the course of a year an average of 5 licensees may need to file a report once a week.

\$21,840 x 5 Cellular/ESMR licensees = \$109,200 total cost burden.

E. 47 C.F.R. 90.674(a); 90.674(a)(1). (Interference Complaint)

The Commission estimates that all of the 800 MHz licensees will use a staff engineer at approximately \$140.00 per hour to draft their initial notification of interference. If each notification of interference takes about 3 hours to prepare, then the cost per submission will be $\$140.00 \times 3 = \420.00 burden per party.

Based on data extrapolated from the electronic notification system for interference complaints, approximately 436 incidents of interference involving cellular/ESMR carriers were reported in 2010.

The total estimated cost burden could be $\$420 \times 436$ incidents = \$183,120.

We anticipate, however, a dramatic reduction in the number of interference incidents after completion of band reconfiguration.

F. 47 C.F.R. 90.675(c)(1)-(2). (Prior Coordination Response)

The Commission estimates that all of the 800 MHz Public Safety and CII licensees will use a staff engineer at approximately \$140.00 per hour to draft their response to a request for prior coordination. Because the operating parameters of these licensees' systems change much less frequently than the parameters of Cellular/ESMR systems, we estimate that an average of one report will be submitted per licensee. If each response takes about 3 hours to prepare, then the cost per submission will be $\$140.00 \times 3 = \420.00 burden per party.

There are approximately 1450 800 MHz public safety and CII licensees, nationwide. Therefore in a given year the total estimated cost burden could be

\$420 x 1450 licensees = \$609,000 total cost burden per year.

We cannot, however, predict the number of instances in which a Cellular/ESMR carriers will seek prior coordination in a given market. Nor can we predict the number of instances in which Public Safety and CII licensees will add or modify facilities such that prior coordination would be warranted.

G. 47 C.F.R. §§ 90.676(a)(1) (Relocation Information)

The Commission estimates that all of the estimated 473 800 MHz licensees subject to relocation will use staff at approximately \$140.00 per hour to draft their inventory and cost estimate. If each inventory and cost estimate takes about 10 hours to prepare, then the cost per submission will be $\$140.00 \times 10 = \$1,400.00$ burden per party.

The total cost burden then would be $\$1,400.00 \times 473$ 800 MHz licensees = \$662,200.

We note, however, that the cost for preparing a relocation cost estimate will be paid for by Sprint. Upon completion of the band reconfiguration process, we anticipate that there will no longer be a need to provide this information.

H. 47 C.F.R. § 90.676(b)(3) (Relocation Agreement Certification)

The Commission estimates that all of the estimated 473 800 MHz licensees subject to relocation will use staff at approximately \$140.00 per hour to draft their certification. If each certification takes about 3 hours to prepare, then the cost per submission will be $\$140.00 \times 3 = \420.00 burden per party.

The total cost burden then would be $\$420.00 \times 473\ 800$ MHz licensees = \$198,660.

Upon completion of the three-year band reconfiguration process we anticipate that there will no longer be a need for relocation certifications.

I. 47 C.F.R. § 90.677(e). (Waivers)

Respondents will provide information primarily through e-mail correspondence.

We believe most respondents will file waiver requests without the assistance of outside counsel. Therefore we estimate the cost to respondents as follows:

426 hours x \$140 average hourly wage of person supplying information = \$59,640.

We estimate that up to 10% of respondents may choose to hire outside counsel to prepare their waiver requests. The additional costs that these 10% of respondents may incur are estimated in no. 13 below.

13. The Commission anticipates that the parties subject to these collections will mostly use in-house staff to respond to the collections except as noted in (b) below. It should also be noted that the costs associated with the information collections such as inventorying equipment and obtaining cost estimates to facilitate band reconfiguration will be assumed by Sprint as set forth in ¶ 198 of the *Report and Order*.

(a) Total annualized capital/startup costs: **None.**

(b) Total operations and maintenance and purchase of services costs:

We believe most respondents will file waiver requests without the assistance of outside counsel. However, we estimate that up to 10% of respondents (47 respondents) may choose to hire outside counsel to prepare their waiver requests. We estimate those respondents will incur the following additional costs:

47 respondents (10% of 473) x \$200 per hour for outside counsel x average of 4 hours charged to each respondent by outside counsel = **\$37,600.**

14. Estimated Annualized Cost to the Federal Government. With respect to 47 C.F.R. 90.677(e), to review the estimated 473 responses will require approximately 2 hours of analysis and review per waiver. The Commission anticipates that those 946 hours will be performed by staff at the GS 15 step 5 grade level. Thus the cost is 946 hours x \$67.21/hour = \$63,580.66.

With respect to 47 C.F.R. §§ 22.972(c)(3) and 90.674(c)(3), there may be a cost to the Commission associated with reviewing statements of imminent danger that it receives from licensees. For Paperwork Reduction Act purposes, we estimate that one such statement may be filed in each of the 55 Public Safety Regions. We estimate that each such statement will incur 8 hours of review by Commission staff, thus resulting in 440 hours of Commission review. The Commission anticipates that those 440 hours will be performed by staff at the GS 15 step 5 grade level. Thus the cost is 440 hours x \$67.21/hour = \$29,572.40.

Total estimated annualized cost to the federal government = **\$93,153.06** (\$63,580.66 + \$29,572.40).

15. There are adjustments/decreases to the annual burden hours of 11,335 hours (decrease from 28,276 hours to 16,941 hours) and to the annual cost burden of \$24,800 (decrease from \$62,400 to \$37,600) for this information collection. The adjustments/decreases are due to the Commission reevaluating its burden for this collection.

16. We do not intend to publish this information for statistical use.

17. We do not seek approval not to display the expiration date for OMB approval of the information collection.

18. The Commission published a 60-day notice (*see* 76 FR 28030) in the Federal Register on May 13, 2011, seeking comments from the public on the information collection requirements contained in this supporting statement. With this submission the Commission corrects some of the figures that were contained in the 60-day notice. The numbers that have been corrected are as follows: the number of respondents is 1,510 instead of 1,450; the number of responses is 4,056 instead of 3,848 and the annual burden hours are 16,941 instead of 16,988. There are no other exceptions to the certification statement.

B. Collections of Information Employing Statistical Methods:

No statistical methods are employed.