DA 14-1419

Jeanine Poltronieri, Esq.

William L. Roughton, Jr., Esq.

AT&T Services, Inc.

1120 20th Street, NW, Suite 1000

Washington, DC 20036

**RE: Request by AT&T Services, Inc. for Interim Waiver of 47 C.F.R. § 22.913 to Permit the Use of a Power Spectral Density Model for Certain Cellular Service Operations in Three Florida Markets (WT Docket No. 13-202)**

Dear Ms. Poltronieri and Mr. Roughton:

This letter responds to the request filed on July 22, 2013, by AT&T Services Inc.[[1]](#footnote-1) on behalf of AT&T, Inc. and its subsidiaries (AT&T)[[2]](#footnote-2) for an interim waiver of Section 22.913 of the Commission’s rules.[[3]](#footnote-3) Section 22.913 sets forth power limits for the Cellular Radiotelephone (Cellular) Service in terms of effective radiated power (ERP) of base transmitters and Cellular repeaters.[[4]](#footnote-4) As explained below, we grant in part the Waiver Request and permit AT&T to use the power spectral density (PSD) model[[5]](#footnote-5) for measuring ERP at a maximum ERP level of 125 Watts/MHz for the following Florida systems licensed on Cellular Block B: call signs KNKA264, KNKA225, and KNKN793.

1. **BACKGROUND**

In 2007 and 2008, the Commission revised the radiated power rules for various wireless services, including PCS and certain AWS,[[6]](#footnote-6) the 700 MHz Commercial Service,[[7]](#footnote-7) and 700 MHz public safety broadband operations,[[8]](#footnote-8) implementing a PSD model as an alternative for measuring ERP (among other related technical rule modifications).[[9]](#footnote-9) The Commission declined at that time to revise the Cellular ERP rules, primarily because of significant restructuring (800 MHz rebanding) ongoing in the immediately adjacent frequencies, which are used by public safety entities.[[10]](#footnote-10) The Commission also noted a lack of industry support and the need for more time to assess the potential impact of using the PSD model in the Cellular band.[[11]](#footnote-11)

In its Waiver Request, AT&T seeks authority, as an alternative to complying with the current Cellular ERP rule, to use a PSD model for certain station operations pending the outcome of AT&T’s proposed rulemaking to modify the rule.[[12]](#footnote-12) The Waiver Request seeks authority to operate under a PSD model with ERP limits of 250 Watts/MHz in non-rural areas and 500 Watts/MHz in rural areas for ATT stations in the following contiguous Cellular Market Areas (CMAs): West Palm Beach (CMA 72);[[13]](#footnote-13) Miami (CMA 12);[[14]](#footnote-14) and Monroe, FL-11 (CMA 370)[[15]](#footnote-15) (collectively, the Florida Stations):

AT&T states that its proposed Cellular band deployment of advanced digital broadband modulation schemes such as Long Term Evolution (LTE) is hindered by the current radiated power rule, which favors narrowband operations.[[16]](#footnote-16) AT&T argues that it must “rapidly and aggressively roll-out LTE services” in order to maintain a high-quality level of service for its customers.[[17]](#footnote-17) It seeks waiver relief to (1) determine through operations in Florida “if its existing 800 MHz cell spacing is suitable for LTE services and whether site upgrades [such as backhaul] . . . may have to take place to maximize LTE benefits,” and (2) begin site selection immediately if its operations pursuant to waiver relief show that it “must adopt cell spacing that is denser than its existing site inventory.”[[18]](#footnote-18)

AT&T submitted with its Waiver Request a March 2013 Study purporting to show that shifting to PSD-based power limits for the Florida Stations would not cause harmful interference to public safety licensees in adjacent frequency bands.[[19]](#footnote-19) AT&T argues that under its proposed ERP limits using a PSD model, “the power injected into neighboring receivers either in adjacent areas or co-located sites does not increase but remains the same” as under the current rule, because AT&T will maintain “the existing total power levels at its sites.”[[20]](#footnote-20) AT&T claims that future deployments of 2X2 Multiple Input Multiple Output (MIMO) LTE in the Cellular band under a PSD limit would “maintain the status quo with respect to the potential interference impacts on adjacent services – and in particular, the Public Safety services.”[[21]](#footnote-21) As a result, AT&T asserts, “the interference environment into Public Safety units . . . is not appreciably different from that of existing Cellular deployments – and in some cases it is better.”[[22]](#footnote-22) In its supplement, AT&T reiterates that using a PSD model “would not increase [the] interference risk – the received signal strength in Public Safety bands would not increase from the levels they experience today.”[[23]](#footnote-23)

AT&T further argues that the requested relief “will not undermine the purpose of the rule . . . and will serve the public interest by allowing AT&T to deploy wideband LTE.”[[24]](#footnote-24) It asserts that in carrying out a “core mission” of the Commission “to manage spectrum effectively and ensure that licensees do not interfere with each other,” the Commission establishes power limits on specific services.[[25]](#footnote-25) AT&T asserts that its March 2013 Study demonstrates that “permitting the use of a PSD measurement will not increase interference in any of the subject markets,” and claims that “[t]herefore the underlying purpose of Section 22.913 will not be frustrated . . . .”[[26]](#footnote-26) Finally, AT&T argues that allowing use of the PSD model “maintains the interference protection measures that the Commission found to be reasonable when it established the rule.”[[27]](#footnote-27)

In August, 2013, the Bureau sought comment on the Waiver Request, particularly with respect to any potential adverse impact on public safety operations and Cellular licensees.[[28]](#footnote-28) Only AT&T filed comments or reply comments during the pleading cycle.[[29]](#footnote-29) Subsequently, numerous entities in Florida submitted filings[[30]](#footnote-30) including the State of Florida; Miami-Dade County; City of Atlantis Police Department; City of West Palm Beach; Juno Beach Police Department; Palm Beach County Solid Waste Authority; Palm Beach County; Palm Beach County School Police Department; Jupiter Police Department; and Palm Beach Town Police Department.[[31]](#footnote-31)Most parties originally objecting to granting the waiver relief as requested expressed concern that use of a PSD model at the Florida Stations would cause harmful interference to their radio systems, with serious adverse effects on the health, welfare, and safety of public safety personnel and the citizens they serve.[[32]](#footnote-32) Some urge in the alternative that, if waiver relief is granted, the Commission should impose conditions designed to protect public safety licensees.[[33]](#footnote-33)

Subsequently, numerous commenters filed follow-up comments, modifying their original positions, stating that they are encouraged by ensuing dialogue with AT&T and are ready to work toward a jointly-established test plan and a test plan execution.[[34]](#footnote-34) Miami-Dade County states that it conditionally withdraws its objections subject to AT&T performing a successful test in the PSD environment. Further, Miami-Dade County notes that AT&T only plans to deploy LTE in the Cellular B Block using power of 125 W/MHz at this time and that AT&T will conduct further testing before increasing the power level or deploying LTE in the A Block.[[35]](#footnote-35) The State of Florida supports Miami-Dade’s County follow-up comments and further notes that AT&T responded to the State of Florida’s initial input and addressed each of its four concerns individually.[[36]](#footnote-36)

AT&T sought and was granted an experimental special temporary authorization to conduct testing using a PSD model in Florida.[[37]](#footnote-37) On July 9, 2014, AT&T filed an *ex parte* letter stating that on June 19, 2014, and June 24, 2014, AT&T and representatives from Miami-Dade county, the State of Florida, Palm Beach County and Harris Corporation performed PSD power limit testing at three previously agreed upon AT&T sites located in Miami, FL.[[38]](#footnote-38) While the Waiver Request seeks authority to operate in both the Cellular A and B blocks at 250 W/MHz ERP, the tests were performed only in the Cellular B Block using 125 W/MHz ERP.[[39]](#footnote-39) AT&T states that it commits to retest prior to using PSD in the cellular A Block and/or before raising power levels above 125 W/MHz in either band.[[40]](#footnote-40)

AT&T describes that the test plan agreement with Public Safety representatives included the following activities:

* Establish a baseline RF measurement of downlink signal strength on AT&T’s radio network at the selected area.
* Establish a baseline of RF measurements such as signal strength, noise floor level, and bit error rate (BER) on the Public Safety Radio Network at the selected area.
* Clear any existing interference issue in the selected test area.
* With AT&T functioning without interference on the Public Safety Radio Network, AT&T modified the site’s RF parameters on the Cellular B Block (880-890 MHz) to emulate PSD conditions of 125 W/MHz ERP.
* Public Safety representatives performed the necessary tests at various distances and locations around the AT&T site.[[41]](#footnote-41)

AT&T states that the testing resulted in no interference on the Public Safety Radio Network.[[42]](#footnote-42)

On August 13, 2014, Miami-Dade County filed an *ex parte* letter confirming that representatives of AT&T, the State of Florida and Miami-Dade County[[43]](#footnote-43) conducted a field test at three different AT&T cell sites located in Miami, FL, as described by AT&T. As a result, Miami-Dade County does not object to the approval of AT&T’s Waiver Request, subject to the conditions stated in its March 2014 comments.[[44]](#footnote-44) Miami-Dade County explains that the test consisted of comparing the performance of Miami-Dade County radio system and the State of Florida’s Statewide Law Enforcement Radio System (SLERS) under the current AT&T site operation conditions versus performance of the same radio systems under the PSD approach.[[45]](#footnote-45) Miami-Dade County collected data corresponding to potential out-of-band emissions, the BER behavior of its mobile and portable radios and conducted voice tests on its system. The State of Florida also conducted voice tests utilizing portable and mobile radios. Miami-Dade County states that neither Miami-Dade County nor the State of Florida observed any significant difference in electrical noise, BER, or voice quality under the “ERP” versus the “PSD” scenario at 125 W/MHz.[[46]](#footnote-46)

1. **DISCUSSION**

Under Section 1.925 of the Commission’s rules, a waiver may be granted if the applicant demonstrates that: (i) the underlying purpose of the rule would not be served or would be frustrated by its application to the instant case and that grant of the requested waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.[[47]](#footnote-47)

We have weighed the potential public interest benefits against potential adverse effects and believe it is in the public interest to grant in part the Waiver Request subject to the below conditions. Specifically, we believe it is in the public interest to foster the development of advanced technologies in the Cellular Service, thereby allowing AT&T to launch LTE services and offer its subscribers’ access to these valuable broadband wireless services. A partial grant also furthers the Commission’s goal of increasing regulatory parity in technical rules when possible for competing CMRS services.

We acknowledge the general concerns expressed by the public safety entities operating near the Florida Stations regarding potential increased risk of harmful interference and seek to protect public safety operations. We believe that AT&T’s March 2013 Study provides a general framework for

assessing the likelihood of interference from LTE deployments with MIMO on public safety receivers using various reasonable scenarios to estimate the potential for intermodulation interference, out of band emissions, and overload interference. We find it most persuasive in this case that AT&T and several public safety entities were able to conduct successful tests demonstrating a lack of interference to public safety operations from AT&T’s implementation of the PSD model for radiated power at 125 W/MHz on the Cellular B block. Further, the conditions we impose will help ensure that public safety systems and neighboring cellular licensees will be protected from increased harmful interference from AT&T’s operations using the PSD model. Based on the totality of the circumstances, we find that permitting AT&T to operate the Florida Stations licensed on the Cellular B block at 125 W/MHz better serves the public interest than strict application of the current Cellular radiated power rule.

We also believe that the underlying purpose of the Section 22.913, to prevent harmful interference from a Cellular licensee to public safety and neighboring Cellular co-channel licensees, will not be frustrated by a partial grant of the Waiver Request. AT&T has completed successful testing in Florida demonstrating that operation at 125 W/MHz in the Cellular B block in the three Florida markets does not cause interference to public safety entities. Further, we note that Verizon, the only non-AT&T Cellular licensee neighboring AT&T’s Cellular B-Block system in the three Florida markets, raised no objection.

Accordingly, we grant in part AT&T’s request and will permit AT&T to utilize the PSD model in the Cellular B Block at an ERP level of 125 W/MHz. AT&T’s operation under this waiver is subject to any rule changes resulting from Commission action on AT&T’s pending Petition to modify the rule. Further, this partial grant of waiver is conditioned on the following:

1. AT&T’s use of a PSD model is limited to a maximum ERP limit of 125 Watts/MHz using LTE as described in AT&T’s Waiver Request and only applies to those Florida Stations operating in the Cellular B Block, as follows: West Palm Beach (CMA 72), Call sign KNKA264; Miami (CMA 12), Call sign KNKA225; and Monroe, FL-11 (CMA 370), Call sign KNKN793.
2. Before deploying a base station with power specified in terms of PSD under this waiver, AT&T shall provide a minimum of thirty (30)days written advance notice to any public safety[[48]](#footnote-48) licensee authorized in the frequency range 806-824 MHz/851-869 MHz with a base station(s) located within a radius of 113 km[[49]](#footnote-49) of the base station to be deployed. The written notice shall specify (a) the location of the base station(s) by geographical coordinates and street intersection or address, (b) the height above ground level of the radiation center of the base station(s) antenna(s) and the amount of beam tilt, if any, (c) the date and time when the base station(s) will be activated, and (d) a telephone number monitored 24 hours a day to advise AT&T of any resulting interference.
3. If AT&T receives a report that such base station(s) or is causing harmful interfering with a public safety licensee, it shallimmediately suspend operation under this waiver of such base station(s) except for test transmissions to identify and eliminate the interference. AT&T may resume operation under this waiver of such base station(s) after the interference has been successfully mitigated. This condition shall remain in effect until further action of the Commission, and is in addition to, not a replacement for, AT&T’s obligations pursuant to 47 C.F.R. §§ 22.971 and 22.972.

1. AT&T must coordinate with adjacent channel and neighboring co-channel cellular licensees prior to commencing operation under this waiver, and must cease operation under this waiver upon receipt of a complaint of harmful interference until such interference concerns are mitigated.

We understand that the City of West Palm Beach has not withdrawn its objection to a grant of waiver relief to AT&T at the requested ERP level of 250 W/MHz. However, AT&T has completed successful testing at 125 W/MHz with the majority of the public safety entities operating near the Florida Stations, and the City of West Palm Beach has not providedany comments or technical showing on the record demonstrating that this lower power level will cause harmful interference. We stress that we will consider expansion of the granted waiver relief in order for AT&T to increase its power levels for the B block Florida Stations to those sought in the Waiver Request, 250 Watts/MHz in urban areas and 500 Watts/MHz in rural areas, or to use the PSD model to measure ERP for the Cellular A Block Florida Stations, provided AT&T makes an adequate showing that it has completed successful testing with any public safety entity that has submitted objections on the record to AT&T’s use of the PSD model in this proceeding.

We conclude that the relief we grant today strikes an appropriate balance in the public interest by enabling AT&T to deploy LTE using the Cellular B Block Florida Stations and allowing it to make more effective use of the spectrum by providing enhanced product offerings to consumers, while also protecting public safety licensees and neighboring Cellular licensees from increased risk of harmful interference.

1. **ORDERING CLAUSE**

Accordingly, IT IS ORDEREDthat the request filed by AT&T Services, Inc. on behalf of AT&T, Inc. and its subsidiaries is HEREBY GRANTED IN PART WITH THE CONDITIONS SET FORTH ABOVE and FURTHER CONDITIONED ON COMPLIANCE with new rules that may be adopted as a result of AT&T’s pending Petition for rulemaking (RM-11660). This action is taken under delegated authority pursuant to sections 0.11, 0.231, 0.131, 0.331 and 1.925 of the Commission’s rules, 47 C.F.R. §§ 0.11, 0.231, 0.131, 0.331 and 1.925.

Sincerely,

Roger S. Noel

Chief, Mobility Division

Wireless Telecommunications Bureau

1. AT&T Services, Inc., Request for Rule Waiver (filed July 22, 2013) (Waiver Request) (under cover letter from William L. Roughton, Jr., Esq., AT&T Services, Inc., to Marlene H. Dortch, Secretary, FCC, and attaching a technical study dated March 21, 2013 (March 2013 Study)). The Waiver Request was supplemented on December 5, 2013, and again on July 9, 2014. *See* Letter from Jeanine Poltronieri, Esq., Assistant Vice President for External Affairs, AT&T Services, Inc., dated Dec. 5, 2013, to Marlene Dortch, Secretary, FCC (AT&T Supplement); *Ex Parte* Letter from Linda Vandeloop, Director-Regulatory, AT&T, to Marlene H. Dortch, Secretary, FCC (July 9, 2014) (AT&T July 9, 2014 *Ex Parte* Letter). [↑](#footnote-ref-1)
2. We note that the licenses subject to the Waiver Request are licensed under New Cingular Wireless PCS, LLC d/b/a AT&T Mobility, which is a wholly owned subsidiary of AT&T, Inc. [↑](#footnote-ref-2)
3. *See* 47 C.F.R. § 22.913. [↑](#footnote-ref-3)
4. *See id.* (establishing the current ERP maximum of 500 Watts for base transmitters and Cellular repeaters, with a maximum of 1000 Watts ERP when operating in rural counties a certain distance from international borders). [↑](#footnote-ref-4)
5. Power spectral density is a method of expressing radiated power over a unit of bandwidth, *e.g*. per megahertz, rather than per emission. [↑](#footnote-ref-5)
6. *See* Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27 and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Third Report and Order*, WT Docket No. 03-264, 23 FCC Rcd 5319 (2008) (Streamlining 3d R&O) (revising §§ 24.232 and 27.50(d)). [↑](#footnote-ref-6)
7. *See* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 06-150, 22 FCC Rcd 8064 (2007). [↑](#footnote-ref-7)
8. *See* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, *Second Report and Order*, 22 FCC Rcd 15289 (2007). [↑](#footnote-ref-8)
9. More recently, the Commission adopted the PSD model as an alternative for measuring ERP in the 600 MHz band, AWS-3, H Block and AWS-4. *See, e.g.* Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, *Report and Order*, GN Docket No. 12-268, FCC 14-50, 2014 WL 2464834 at \*211-12 (FCC June 2, 2014) (PSD in 600 MHz band); Amendment of the Commission’s Rules With Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands*,* *Report and Order*, GN Docket No. 13-185, 29 FCC Rcd 4610, 4642-43 (2014) (PSD in AWS-3 bands); Service Rules for Advanced Wireless Services H Block – Implementing Section 6401 of the Middle Class Tax Relief and Job Creation Act of 2012 Related to the 1915-1920 MHz and 1995-2000 MHz Bands, *Report and Order*,WT Docket No. 12-357, 28 FCC Rcd 9483, 9504-05 (2013) (PSD in H Block); Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands, *Report and Order and Order of Proposed Modification*, WT Docket Nos. 04-356 and ET Docket No. 10-142, 27 FCC Rcd 16102, 16156 (2012) (PSD in AWS-4 bands). [↑](#footnote-ref-9)
10. *See* Streamlining 3d R&O, 23 FCC Rcd at 5321, 5341. *See also* Improving Public Safety Communications in the 800 MHz Band, [*Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, WT Docket No. 02-55, 19 FCC Rcd 14969, 15074 (2004)](http://web2.westlaw.com/find/default.wl?mt=12&db=4493&tc=-1&rp=%2ffind%2fdefault.wl&findtype=Y&ordoc=2022389067&serialnum=2004844838&vr=2.0&fn=_top&sv=Split&tf=-1&referencepositiontype=S&pbc=3AB5D98F&referenceposition=15074&rs=WLW14.04) (other captions and docket numbers omitted) (800 MHz Rebanding Order), *clarified by* Improving Public Safety Communications in the 800 MHz Band, [*Memorandum Opinion and Order,* WT Docket No. 02-55, 22 FCC Rcd 9818, 9819-21 (2007)](http://web2.westlaw.com/find/default.wl?mt=12&db=4493&tc=-1&rp=%2ffind%2fdefault.wl&findtype=Y&ordoc=2022389067&serialnum=2012298502&vr=2.0&fn=_top&sv=Split&tf=-1&referencepositiontype=S&pbc=3AB5D98F&referenceposition=9819&rs=WLW14.04). [↑](#footnote-ref-10)
11. *See* Streamlining 3d R&O, 23 FCC Rcd at 5338. [↑](#footnote-ref-11)
12. *See* AT&T Services, Inc., Petition for Expedited Rulemaking and Request for Waiver of Section 22.913 of the Commission’s Rules (filed February 29, 2012) (Petition). A technical study dated February 14, 2012, similar to the March 2013 Study, was attached to AT&T’s Petition at Appendix A. On May 2, 2012, the Wireless Telecommunications Bureau (Bureau) sought comment on the Petition, which remains pending. *See* “Wireless Telecommunications Bureau Seeks Comment on Petition for Rulemaking Filed by AT&T Consistent with Rules for Other Mobile Broadband Services,” *Public Notice,* RM-11660, 27 FCC Rcd 4926 (WTB 2012). The Bureau did not seek comment on AT&T’s request for a blanket interim waiver of 47 C.F.R. § 22.913, which was included with the Petition, and AT&T withdrew the request on July 22, 2013. *See* Waiver Request at 1, n.2. [↑](#footnote-ref-12)
13. *See* ULS call signs KNKA264 and KNKA355. [↑](#footnote-ref-13)
14. *See* ULS call signs KNKA225 and KNKA364. [↑](#footnote-ref-14)
15. *See* ULS call signs KNKN793 and WPSJ791. [↑](#footnote-ref-15)
16. *See* Waiver Request at 1, 4, 8. [↑](#footnote-ref-16)
17. *Id*. at 5. [↑](#footnote-ref-17)
18. *Id*. *See also* AT&T Reply Comments at 2. [↑](#footnote-ref-18)
19. *See id*. at 6 (describing its March 2013 Study). [↑](#footnote-ref-19)
20. Waiver Request at 7-8. [↑](#footnote-ref-20)
21. *See id*. at 6-7 and n.20 (referencing its March 2013 Study). [↑](#footnote-ref-21)
22. Waiver Request at 7. [↑](#footnote-ref-22)
23. AT&T Supplement at 3. AT&T indicates that there will be no increase in interference to public safety from PSD-based operation “whether or not rebanding has been completed.” *Id.* [↑](#footnote-ref-23)
24. *Id*. at 3. [↑](#footnote-ref-24)
25. *Id*. at 3 (citing 47 U.S.C. § 302). [↑](#footnote-ref-25)
26. *Id*. at 3-4. [↑](#footnote-ref-26)
27. *Id*. at 4. [↑](#footnote-ref-27)
28. *See* “Wireless Telecommunications Bureau Seeks Comment on AT&T Request for Waiver to Permit Power Spectral Density Model for 800 MHz Cellular Operations in Three Florida Markets,” *Public Notice,* 28 FCC Rcd 12584 (Aug. 22, 2013). [↑](#footnote-ref-28)
29. Letter from William L. Roughton, Jr., AT&T Services, Inc., to Marlene H. Dortch, Secretary, FCC, dated Oct. 25, 2013 (AT&T Reply Comments); *See also* Letter from Jeanine Poltronieri, AT&T Services, Inc., to Marlene H. Dortch, Secretary, FCC, dated Nov. 20, 2013. [↑](#footnote-ref-29)
30. We will consider filings made outside the pleading cycle as informal comments in the interest of achieving a complete record in this proceeding. [↑](#footnote-ref-30)
31. *See* “Input by the State of Florida to the AT&T Request for Waiver,” signed by John Ford, Chief, Bureau of Public Safety, dated Dec. 3, 2013 (filed Dec. 5, 2013) (State of Florida December 2013 Comments); Letter from Cindy M. Cast, Radio Systems Manager, Miami-Dade County, to Marlene Dortch, Secretary, FCC, dated Dec. 5, 2013 (Miami-Dade December 2013 Comments); Memorandum from Robert G. Mangold, Chief of Police, Atlantis, to the FCC, dated Dec. 16, 2013 (Atlantis Police Comments); Comments Letter from Jeffrey L. Green, City Administrator, West Palm Beach, to Marlene H. Dortch, Secretary, FCC, dated Dec. 12, 2013 (filed Dec. 16, 2013) (West Palm Beach Comments); Memorandum from Brian J. Smith, Chief, Juno Beach Police Department, to the FCC, dated December 24, 2013 (Juno Police Comments); Letter from Mark Hammond, Executive Director, Solid Waste Authority (SWA) of Palm Beach County, to Marlene Dortch, Secretary, FCC, dated Dec. 19, 2013 (Palm Beach County SWA Comments); “Input by Palm Beach County (FL) to the AT&T Request for Waiver," signed by Audrey Wolf, Director, Palm Beach County Facilities Development & Operations (undated; filed Jan. 3, 2014) (Palm Beach County Comments); Memorandum from Tommy L. Copen, Technical Manager, School District of Palm Beach County, Department of School Police, to Marlene H. Dortch, Secretary, FCC, dated Dec. 17, 2013 (Palm Beach County School Police Dept. Comments); Comments filed Dec. 18, 2013, by Major David England, a representative of the Jupiter Police Department (Jupiter Police Comments); Letter from Christine Cunningham, Communications Manager, Palm Beach Police Department, dated Dec. 20, 2013 (Palm Beach Police Comments). [↑](#footnote-ref-31)
32. Miami-Dade December 2013 Comments at 1. [↑](#footnote-ref-32)
33. *See, e.g.* Miami-Dade December 2013 Comments at 1; State of Florida December 2013 Comments at 2; State of Florida December 2013 Comments at 2; Palm Beach County SWA Comments; Miami-Dade March 2014 Comments at 4. [↑](#footnote-ref-33)
34. Letter from Felix Perez, Director, Radio Communications Division, Information Technology Department, Miami-Dade County, dated March 24, 2014 (Miami-Dade March 2014 Comments); "Follow-up Comments by the State of Florida to the AT&T Request for Waiver," signed by John Ford, Chief, Bureau of Public Safety, dated Apr. 18, 2014 (State of Florida April 2014 Comments). [↑](#footnote-ref-34)
35. Miami-Dade County March 2014 Comments at 2. [↑](#footnote-ref-35)
36. State of Florida April 2014 Comments at 1. [↑](#footnote-ref-36)
37. *See* FCC File No. 0376-EX-ST-2014 (assigning call sign WH9XP for experimental service effective May 9-Nov. 10, 2014). [↑](#footnote-ref-37)
38. AT&T July 9, 2014 *Ex Parte* Letter at 1. [↑](#footnote-ref-38)
39. *Id.* [↑](#footnote-ref-39)
40. *Id.* [↑](#footnote-ref-40)
41. *See* AT&T July 9, 2014 *Ex Parte* Letter at 1-2. [↑](#footnote-ref-41)
42. *Id.* at 2. [↑](#footnote-ref-42)
43. Palm Beach County witnessed, but did not participate in, the testing. [↑](#footnote-ref-43)
44. *Ex Parte* Letter from Felix Perez, Division Director, Miami-Dade County (Aug. 14, 2014) (Miami-Dade County August 2014 *Ex Parte* Letter). [↑](#footnote-ref-44)
45. Miami-Dade County August 2014 *Ex Parte* Letterat 2. [↑](#footnote-ref-45)
46. *Id.* (Miami-Dade County August 2014 *Ex Parte* Letterat 2.) [↑](#footnote-ref-46)
47. 47 C.F.R. § 1.925. [↑](#footnote-ref-47)
48. Public safety licensees are defined for purposes of this waiver relief as licensees authorized under the following Universal Licensing System radio service codes: GE, GF, GP, YE, YF and YP. [↑](#footnote-ref-48)
49. We note that the general required separation distance between certain co-channel 800 MHz systems is 113 km.  *See* 47 C.F.R. § 90.621(b). [↑](#footnote-ref-49)