In the Matter of                                        )

Cellco Partnership d/b/a Verizon Wireless )    File No.: EB-SED-21-00032058
)    CD Acct. No.: 202132100010
)    FRN: 0003290673
)

ORDER

Adopted: June 3, 2021                                      Released: June 3, 2021

By the Chief, Enforcement Bureau:

1. The Enforcement Bureau of the Federal Communications Commission has entered into a Consent Decree to resolve its investigation into whether Cellco Partnership d/b/a Verizon Wireless (Verizon) complied with its obligation to deploy vertical location technology—either dispatchable location or z-axis information—for wireless 911 calls in each of the top 25 cellular market areas by the deadlines established by the Commission.1 Deployment of this technology is critical to ensuring that public safety answering points can accurately identify the indoor location of wireless 911 callers. To settle this matter, Verizon will start providing available z-axis location information on a nationwide basis within seven days of the effective date of this Order, will implement a compliance plan that includes specific testing, reporting, and public interest conditions, and will pay a $100,000 settlement amount.

2. After reviewing the terms of the Consent Decree and evaluating the facts before us, we find that the public interest would be served by adopting the Consent Decree and terminating the referenced investigation regarding Verizon’s compliance with the vertical location requirements of the 911 rules, as set forth in sections 9.10(i)(2)(ii)(C) and (i)(2)(iii) of the Commission’s rules.2

3. In the absence of material new evidence relating to this matter, we do not set for hearing the question of Verizon’s basic qualifications to hold or obtain any Commission license or authorization.3

4. Accordingly, IT IS ORDERED that, pursuant to section 4(i) of the Act4 and the authority delegated by sections 0.111 and 0.311 of the Commission’s rules,5 the attached Consent Decree IS ADOPTED and its terms incorporated by reference.

5. IT IS FURTHER ORDERED that the above-captioned matter IS TERMINATED.

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1 47 CFR §§ 9.10(i)(2)(ii)(C), (i)(2)(iii).
2 Id.
3 See 47 CFR § 1.93(b).
5 47 CFR §§ 0.111, 0.311.
6. **IT IS FURTHER ORDERED** that a copy of this Order and Consent Decree shall be sent by e-mail to David Haga, Associate General Counsel, Litigation, Cellco Partnership d/b/a Verizon Wireless.

FEDERAL COMMUNICATIONS COMMISSION

Rosemary C. Harold  
Chief  
Enforcement Bureau
Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Cellco Partnership d/b/a Verizon Wireless

File No.: EB-SED-21-00032058
CD Acct. No.: 202132100010
FRN: 0003290673

CONSENT DECREE

1. The Enforcement Bureau of the Federal Communications Commission and Cellco Partnership d/b/a Verizon Wireless (Verizon), by their authorized representatives, hereby enter into this Consent Decree for the purpose of terminating the Enforcement Bureau’s investigation into whether Verizon violated sections 9.10(i)(2)(ii)(C) and (i)(2)(iii) of the Commission’s rules. Those rules require nationwide Commercial Mobile Radio Service (CMRS) providers to (i) deploy dispatchable location or z-axis technology in each of the top 25 cellular market areas (CMAs) by April 3, 2021, and (ii) certify to such deployment by June 2, 2021.1 To resolve this matter, Verizon agrees to comply with the terms and conditions of this Consent Decree, including implementation of a Compliance Plan and payment of a $100,000 Settlement Amount.

I. DEFINITIONS

2. For the purposes of this Consent Decree, the following definitions shall apply:

(a) “Act” means the Communications Act of 1934, as amended.2

(b) “Adopting Order” means an order of the Bureau adopting the terms of this Consent Decree without change, addition, deletion, or modification.

(c) “Bureau” means the Enforcement Bureau of the Federal Communications Commission.

(d) “CD Acct No.” means account number 202132100010, associated with payment obligations described in paragraph 16 of this Consent Decree.

(e) “Commission” and “FCC” mean the Federal Communications Commission and all of its bureaus and offices.

(f) “Communications Laws” means collectively, the Act, and the published and promulgated orders, decisions, and rules of the Commission to which Verizon is subject by virtue of its business activities.

(g) “Compliance Plan” means the compliance obligations, program, and procedures described in this Consent Decree at paragraph 11.

(h) “Effective Date” means the date by which the Enforcement Bureau and Verizon have signed the Consent Decree and the Enforcement Bureau has released the Adopting Order.

1 47 CFR §§ 9.10(i)(2)(ii)(C), (i)(2)(iii).
2 47 U.S.C. § 151 et seq.
(i) “Investigation” means the investigation commenced by the Enforcement Bureau in EB-SED-21-00032058 regarding whether Verizon violated sections 9.10(i)(2)(ii)(C) and (i)(2)(iii) of the Commission’s rules.

(j) “Parties” means Verizon and the Enforcement Bureau, each of which is a “Party.”

(k) “Petition for Waiver” means the February 12, 2021, petition filed by Verizon requesting an eighteen-month extension of the deadlines set forth in sections 9.10(i)(2)(ii)(C) and 9.10(i)(2)(iii) of the Commission’s rules.3

(l) “PSAP” means Public Safety Answering Point.

(m) “Test Bed” means the independently administered and transparent test bed established by nationwide CMRS providers to test location technologies to be used in meeting the Commission’s location accuracy requirements.4

(n) “Verizon” means Cellco Partnership, d/b/a Verizon Wireless and its affiliates, subsidiaries, predecessors-in-interest, and successors-in-interest.

II. BACKGROUND

3. The Commission has taken important steps to ensure that PSAPs can accurately identify the location of wireless 911 callers when the caller is indoors. In the November 2019 Fifth Report and Order, the Commission adopted a z-axis location accuracy metric of 3 meters above or below the handset (plus or minus 3 meters) for 80% of wireless E911 calls made from z-axis capable devices.5 The Commission also required CMRS providers to deliver z-axis information to PSAPs based on Height Above Ellipsoid (HAE)6 and to provide floor level information in addition to z-axis location information where it is available.7 In the July 2020 Sixth Report and Order, the Commission expanded the compliance options for CMRS providers choosing to deploy z-axis technology to meet the April 2021 vertical location benchmarks.8 Section 9.10(i)(2)(ii)(C) of the Commission’s rules require CMRS providers to deploy vertical location technology—either dispatchable location or z-axis information—for wireless 911 calls in each of the top 25 CMAs by April 3, 2021.9 Section 9.10(i)(2)(iii) requires CMRS providers to certify to the Commission that they meet the April 3, 2021, deadline by June 2, 2021.10

4. On February 12, 2021, Verizon filed a Petition for Waiver indicating that the April 3, 2021 deployment deadline could not be met. Verizon requested an eighteen-month extension of this deadline and the associated June 2, 2021 certification deadline. In support of this request, Verizon cited challenges with testing z-axis solutions due to the COVID-19 pandemic and technical issues outside its

3 Verizon Petition for Waiver, PS Docket No. 07-114 (filed Feb. 12, 2021); see also Letter from Robert G. Morse, Associate General Counsel, Federal Regulatory and Legal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114 (filed Feb. 22, 2021) (Feb. 22 Letter) (correcting waiver request).

4 See 47 CFR § 9.10(i)(3)(i).


6 HAE represents distance (height) between any given point and a globally defined reference ellipsoid. For this purpose, HAE represents altitude between the wireless devices that makes the 911 call and a globally defined World Geodetic System 1984 (WGS-84) reference ellipsoid. See Fifth Report and Order, at 11608, para. 32 & n. 134.

7 Id.


10 47 CFR § 9.10(i)(2)(iii).
control. On April 2, 2021, the Bureau’s Spectrum Enforcement Division issued a Letter of Inquiry (LOI) to Verizon directing it to submit a sworn written response to a series of questions relating to its efforts to comply with sections 9.10(i)(2)(ii)(C) and (i)(2)(iii) of the Commission’s rules.

5. Verizon and the Bureau subsequently engaged in settlement negotiations. To settle this matter, Verizon and the Bureau enter into this Consent Decree and agree to the following terms and conditions.

III. TERMS OF AGREEMENT

6. **Adopting Order.** The provisions of this Consent Decree shall be incorporated by the Bureau in an Adopting Order.

7. **Jurisdiction.** Verizon agrees that the Bureau has jurisdiction over it for the matters contained in this Consent Decree and has the authority to enter into and adopt this Consent Decree.

8. **Effective Date.** The Parties agree that this Consent Decree shall become effective on the Effective Date as defined herein. As of the Effective Date, the Parties agree that this Consent Decree shall have the same force and effect as any other order of the Commission.

9. **Termination of Investigation.** In express reliance on the covenants and representations in this Consent Decree and to avoid further expenditure of public resources, the Bureau agrees to terminate the Investigation. In consideration for the termination of the Investigation, Verizon agrees to the terms, conditions, and procedures contained herein. The Bureau further agrees that, in the absence of new material evidence, it will not use the facts developed in the Investigation through the Effective Date, or the existence of this Consent Decree, to institute any new proceeding on its own motion against Verizon concerning the matters that were the subject of the Investigation, or to set for hearing the question of Verizon’s basic qualifications to be a Commission licensee or hold Commission licenses or authorizations based on the matters that were the subject of the Investigation.

10. **Compliance Officer.** Within thirty (30) calendar days after the Effective Date, Verizon shall designate a senior corporate manager with the requisite corporate and organizational authority to serve as a Compliance Officer. The person designated as the Compliance Officer shall be responsible for developing, implementing, and administering the Compliance Plan and ensuring that Verizon complies with the terms and conditions of the Compliance Plan and this Consent Decree. In addition to the general knowledge of the Communications Laws necessary to discharge his or her duties under this Consent Decree, the Compliance Officer shall have specific knowledge of the requirements in sections 9.10(i)(2)(ii)(C) and (i)(2)(iii) of the Commission’s rules prior to assuming his/her duties.

11. **Compliance Plan.** For purposes of settling the matters set forth herein, Verizon agrees that it shall develop and implement a Compliance Plan designed to ensure future compliance with the Communications Laws and with the terms and conditions of this Consent Decree. With respect to rules 9.10(i)(2)(ii)(C) and (i)(2)(iii), Verizon will meet the following conditions:

   (a) **Delivery of available z-axis data.**

      i. No later than seven days after the Effective Date, Verizon must deliver the z-axis location information that is available to it to the same Automatic Location Information (ALI) databases to which it delivers horizontal (x, y) location information. The confidence level for this data must be 90%, and Verizon must report the uncertainty value in meters for all calls. These requirements apply everywhere Verizon is capable of delivering z-axis data and are not limited to the top 25 CMAs. In addition, these requirements apply regardless of whether any individual PSAP requests z-axis data.

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11 Petition for Waiver at 1; Feb. 22 Letter at 1.

12 See 47 CFR § 1.93(b).
(b) **Testing Milestones.**

i. No later than 30 days after the Effective Date, Verizon, either directly or using a third party, must complete an initial round of testing in one CMA of the vertical location technologies Verizon intends to deploy. Testing must be conducted in dense urban, urban, and suburban morphologies. For all other aspects of testing (e.g., building types, test points and test point distribution, test call execution timing and sequencing, inclusion of different models of mobile devices, collection of ground truth data, etc.), Verizon must use best efforts to ensure that the testing meets the ATIS-0500040 standard\(^{13}\) and identify any testing elements that do not conform to that standard. No later than 45 days after the Effective Date, Verizon shall submit a joint report with T-Mobile and AT&T to the Commission containing the aggregated results of each company’s testing by morphology.

ii. No later than 75 days after the Effective Date, Verizon, either directly or using a third party, must complete additional testing in two of the top 25 CMAs, including all of the morphologies (dense urban, urban, suburban, and rural). This testing can include the test city in the initial round of testing described in the preceding paragraph. For all other aspects of testing (e.g., building types, test points and test point distribution, test call execution timing and sequencing, inclusion of different models of mobile devices, collection of ground truth data, etc.), Verizon must use best efforts to ensure that the testing meets the ATIS-0500040 standard and identify any testing elements that do not conform to that standard. No later than 90 days after the Effective Date, Verizon shall submit a joint report with T-Mobile and AT&T to the Commission containing the aggregated results of each company’s testing by morphology.

iii. No later than 90 days after the Effective Date, Verizon must submit a report documenting its individual testing to meet the conditions in subparagraphs 11(b)(i) and (ii), including test results for representative handset models in its subscriber base.

(c) **Dispatchable Location and Floor Level.**

i. No later than 90 days after the Effective Date, Verizon must submit an initial progress report to the Commission describing what technologies are available to provide dispatchable location and floor level information, and how it intends to implement such technologies, including any funding for testing of potential candidate technologies.


(d) **Provider support to public safety campaign/best practices on how PSAPs can receive and use z-axis location information.**

i. No later than 180 days after the Effective Date, Verizon, in conjunction with T-Mobile and AT&T, and after consultation with at least one or more of the following public safety entities: the National Emergency Number Association (NENA), the Association of Public Safety Communications Officials (APCO) and the National Association of State 911 Administrators (NASNA), must develop and submit to the Public Safety and Homeland

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Security Bureau a proposal for a campaign to educate PSAPs on the availability and delivery of z-axis location information from all technologies in use by the providers (barometric sensor-based and/or OS-based).

(e) Data on z-axis capable devices.

i. No later than 90 days after the Effective Date, Verizon shall report to the Commission on z-axis-capable devices in its subscriber handset base to help illustrate its specific efforts to come into compliance with the Commission’s location accuracy rules. The report shall identify (1) all handset models available to subscribers that are z-axis capable or, in the alternative, all mobile operating systems that support z-axis technology,\(^{14}\) and (2) the total aggregate percentage of subscribers that have z-axis capable handsets.

(f) Compliance and Certification.

i. By April 3, 2022, Verizon must fully comply with all z-axis deployment requirements that would have been applicable to it on April 3, 2021, including provision of z-axis location information that meets the Commission’s metric and validation of all z-axis location solutions in the Test Bed or through other testing that meets the ATIS-0500040 standard.

ii. By June 2, 2022, Verizon must submit a compliance certification that would have been due on June 2, 2021 consistent with the requirements of 47 CFR § 9.10(i)(2)(ii)(M) and certifying that it has complied with all requirements of this Consent Decree, except for any such requirements that extend beyond June 2, 2022.

12. Compliance Reports. Verizon shall file compliance and other reports with the Commission as indicated in the conditions in paragraph 11 as follows:

(a) Each Compliance Report shall include a detailed description of Verizon’s efforts during the relevant period to comply with the terms and conditions of this Consent Decree. In addition, each Compliance Report shall include a certification by the Compliance Officer, as an agent of and on behalf of Verizon, stating that the Compliance Officer has personal knowledge that Verizon: (i) has established and implemented the Compliance Plan; and (ii) is not aware of any instances of noncompliance with the terms and conditions of this Consent Decree, including the reporting obligations set forth in paragraph 13 of this Consent Decree.

(b) The Compliance Officer’s certification shall be accompanied by a statement explaining the basis for such certification and shall comply with section 1.16 of the Rules and be subscribed to as true under penalty of perjury in substantially the form set forth therein.\(^ {15}\)

(c) If the Compliance Officer cannot provide the requisite certification, the Compliance Officer, as an agent of and on behalf of Verizon, shall provide the Commission with a detailed explanation of the reason(s) why and describe fully: (i) each instance of noncompliance; (ii) the steps that Verizon has taken or will take to remedy such noncompliance, including the schedule on which proposed remedial actions will be taken; and (iii) the steps that Verizon has taken or will take to prevent the recurrence

\(^{14}\)See 47 CFR § 9.10(i)(2)(ii)(M) (“A z-axis capable device is one that can measure and report vertical location without a hardware upgrade. For z-axis location solutions that rely on barometric pressure sensor information, only devices that have such sensors installed shall be considered z-axis capable. In the case of location solutions that do not require barometric pressure sensor information, both devices with and without barometric sensors shall be considered z-axis capable, provided that they are software-upgradable.”).

\(^{15}\) 47 CFR § 1.16.
of any such noncompliance, including the schedule on which such preventive action will be taken.

(d) All Compliance Reports shall be submitted electronically to Chief, Spectrum Enforcement Division, Enforcement Bureau, Federal Communications Commission at EB-SED-Response@fcc.gov and to John Evanoff, Deputy Division Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau at John.Evanoff@fcc.gov.

13. **Reporting Noncompliance.** Verizon shall report any noncompliance with sections 9.10(i)(2)(ii)(C) and (i)(2)(iii) of the Commission’s rules and with the terms and conditions of this Consent Decree within fifteen (15) calendar days after discovery of such noncompliance. Such reports shall include a detailed explanation of: (i) each instance of noncompliance; (ii) the steps that Verizon has taken or will take to remedy such noncompliance; (iii) the schedule on which such remedial actions will be taken; and (iv) the steps that Verizon has taken or will take to prevent the recurrence of any such noncompliance. All reports of noncompliance shall be submitted electronically to Chief, Spectrum Enforcement Division, Enforcement Bureau, Federal Communications Commission at EB-SED-Response@fcc.gov and to John Evanoff, Deputy Division Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau at John.Evanoff@fcc.gov.

14. **Termination Date.** Unless stated otherwise, the requirements set forth in paragraphs 10 through 13 of this Consent Decree shall expire on December 21, 2023.

15. **Section 208 Complaints; Subsequent Investigations.** Nothing in this Consent Decree shall prevent the Commission or its delegated authority from adjudicating complaints filed pursuant to section 208 of the Act\(^{16}\) against Verizon or its affiliates for alleged violations of the Act, or for any other type of alleged misconduct, regardless of when such misconduct took place. The Commission’s adjudication of any such complaint will be based solely on the record developed in that proceeding. Except as expressly provided in this Consent Decree, this Consent Decree shall not prevent the Commission from investigating new evidence of noncompliance by Verizon with the Communications Laws.

16. **Settlement Amount.** Verizon will pay a Settlement Amount to the United States Treasury in the amount of one hundred thousand dollars ($100,000) within thirty (30) calendar days of the Effective Date. Verizon acknowledges and agrees that upon execution of this Consent Decree, the Settlement Amount shall become a “Claim” or “Debt” as defined in 31 U.S.C. § 3701(b)(1).\(^{17}\) Upon an Event of Default, all procedures for collection as permitted by law may, at the Commission’s discretion, be initiated. Verizon shall send electronic notification of payment to EB-SED-Response@fcc.gov on the date said payment is made. Payment of the Settlement Amount must be made by credit card, ACH (Automated Clearing House) debit from a bank account using the Commission’s Fee Filer (the Commission’s online payment system),\(^{18}\) or by wire transfer. The Commission no longer accepts such payments by check or money order. Below are instructions that payors should follow based on the form of payment selected:\(^{19}\)

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. A completed Form 159 must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 may result in payment not being recognized as

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\(^{16}\) 47 U.S.C. § 208.


\(^{18}\) Payments made using the Commission’s Fee Filer system do not require the submission of an FCC Form 159.

\(^{19}\) For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.
having been received. When completing FCC Form 159, enter the Account Number in block number 23A (call sign/other ID), enter the letters “FORF” in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).20 For additional detail and wire transfer instructions, go to https://www.fcc.gov/licensing-databases/fees/wire-transfer.

- Payment by credit card must be made by using the Commission’s Fee Filer website at https://apps.fcc.gov/FeeFiler/login.cfm. To pay by credit card, log-in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Pay bills” on the Fee Filer Menu, and select the bill number associated with the CD Acct. No. – the bill number is the CD Acct. No. with the first two digits excluded – and then choose the “Pay by Credit Card” option. IMPORTANT NOTE: there is a $24,999.99 limit on credit card transactions.

- Payment by ACH must be made by using the Commission’s Fee Filer website at https://apps.fcc.gov/FeeFiler/login.cfm. To pay by ACH, log in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Pay bills” on the Fee Filer Menu and then select the bill number associated with the CD Acct. No. – the bill number is the CD Acct. No. with the first two digits excluded (e.g., NAL 1912345678 = FCC bill Number 12345678) – and choose the “Pay from Bank Account” option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify that financial institution that the designated account has authorization to accept ACH transactions.

17. **Event of Default.** An Event of Default shall occur upon the failure by Verizon to pay the full amount of the Settlement Amount on or before the due date specified in this Consent Decree.

18. **Interest, Charges for Collection, and Acceleration of Maturity Date.** After an Event of Default has occurred under this Consent Decree, the then unpaid amount of the Settlement Amount shall accrue interest, computed using the U.S. Prime Rate in effect on the date of the Event of Default plus 4.75%, from the date of the Event of Default until payment in full. Upon an Event of Default, the then unpaid amount of the Settlement Amount, together with interest, any penalties permitted and/or required by the law, including but not limited to 31 U.S.C. § 3717 and administrative charges, plus the costs of collection, litigation, and attorneys’ fees, shall become immediately due and payable, without notice, presentment, demand, protest, or notice of protest of any kind, all of which are waived by Verizon.

19. **Waivers.** As of the Effective Date, Verizon waives any and all rights it may have to seek administrative or judicial reconsideration, review, appeal or stay, or to otherwise challenge or contest the validity of this Consent Decree and the Adopting Order. Verizon shall retain the right to challenge Commission interpretation of the Consent Decree or any terms contained herein. If either Party (or the United States on behalf of the Commission) brings a judicial action to enforce the terms of the Consent Decree or the Adopting Order, neither Verizon nor the Commission shall contest the validity of the Consent Decree or the Waiver and Adopting Order, and Verizon shall waive any statutory right to a trial de novo. Verizon hereby agrees to waive any claims it may otherwise have under the Equal Access to Justice Act21 relating to the matters addressed in this Consent Decree.

20. **Severability.** The Parties agree that if any of the provisions of the Consent Decree shall be held unenforceable by any court of competent jurisdiction, such unenforceability shall not render unenforceable the entire Consent Decree, but rather the entire Consent Decree shall be construed as if not containing the particular unenforceable provision or provisions, and the rights and obligations of the Parties shall be construed and enforced accordingly.

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20 Instructions for completing the form may be obtained at http://www.fcc.gov/Forms/Form159/159.pdf.

21. **Invalidity.** In the event that this Consent Decree in its entirety is rendered invalid by any court of competent jurisdiction, it shall become null and void and may not be used in any manner in any legal proceeding.

22. **Subsequent Rule or Order.** The Parties agree that if any provision of the Consent Decree conflicts with any subsequent Rule or order adopted by the Commission (except an order specifically intended to revise the terms of this Consent Decree to which Verizon does not expressly consent) that provision will be superseded by such Rule or order.

23. **Successors and Assigns.** Verizon agrees that the provisions of this Consent Decree shall be binding on its successors, assigns, and transferees.

24. **Final Settlement.** The Parties agree and acknowledge that this Consent Decree shall constitute a final settlement between the Parties with respect to the Investigation.

25. **Modifications.** This Consent Decree cannot be modified without the advance written consent of the Parties.

26. **Paragraph Headings.** The headings of the paragraphs in this Consent Decree are inserted for convenience only and are not intended to affect the meaning or interpretation of this Consent Decree.

27. **Authorized Representative.** Each Party represents and warrants to the other that it has full power and authority to enter into this Consent Decree. Each person signing this Consent Decree on behalf of a Party hereby represents that he or she is fully authorized by the Party to execute this Consent Decree and to bind the Party to its terms and conditions.

28. **Counterparts.** This Consent Decree may be signed in counterpart (including electronically or by facsimile). Each counterpart, when executed and delivered, shall be an original, and all of the counterparts together shall constitute one and the same fully executed instrument.

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Rosemary Harold  
Chief  
Enforcement Bureau  

Date  

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Chris M. Miller  
Senior Vice President & Deputy General Counsel  
Cellco Partnership d/b/a Verizon Wireless  

Date