



FEDERAL COMMUNICATIONS COMMISSION  
Washington DC 20554

March 8, 2012

*Via E-mail*

Steven Teplitz  
Senior Vice President, Government Affairs  
Time Warner Cable Inc.  
901 F Street, N.W., Suite 800  
Washington, DC 20004

Re: Applications of Cellco Partnership d/b/a Verizon Wireless, SpectrumCo LLC and Cox TMI Wireless, LLC for Consent To Assign Licenses Held by SpectrumCo LLC and by Cox TMI Wireless, LLC (WT Docket No. 12-4)

Dear Mr. Teplitz:

Cellco Partnership d/b/a Verizon Wireless ("Verizon Wireless"), SpectrumCo LLC ("SpectrumCo") and Cox TMI Wireless, LLC ("Cox") have filed applications pursuant to section 310(d) of the Communications Act of 1934, as amended,<sup>1</sup> seeking Commission consent to the assignment of licenses held by SpectrumCo and by Cox.<sup>2</sup> In order for the Commission to complete its review of the applications and make the necessary public interest findings under section 310(d) of the Communications Act,<sup>3</sup> we require additional information and clarification of certain matters discussed in the applications and other information provided to the Commission. If necessary, we will follow up with additional requests for information.

Accordingly, pursuant to sections 4(i), 4(j) and 403 of the Act,<sup>4</sup> we request that you provide written responses and supporting documentation for each request set forth in the attachment and, where appropriate, amend the applications to reflect such responses. Each response or document should clearly indicate the specific question or request to which it responds, and each page should be marked with a corporate identification and document control number as specified in the attached instructions. Your response will be treated as confidential pursuant to protective orders issued in WT Docket No. 12-4.<sup>5</sup> We would appreciate receiving your response to each inquiry no later than March 22, 2012.

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<sup>1</sup> 47 U.S.C. § 310(d).

<sup>2</sup> See Cellco Partnership d/b/a Verizon Wireless, SpectrumCo, LLC and Cox TMI Wireless, LLC Seek FCC Consent to the Assignment of AWS-1 Licenses, WT Docket No. 12-4, *Public Notice*, DA 12-67 (Jan. 19, 2012) ("Comment Public Notice").

<sup>3</sup> 47 U.S.C. § 310(d).

<sup>4</sup> 47 U.S.C. § 308(b).

<sup>5</sup> Application of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC for Consent to Assign Licenses, WT Docket No. 12-4, *Protective Order*, DA 12-50 at 4 (WTB Jan. 17, 2012) ("Protective Order"); Application of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC for Consent to Assign Licenses, WT Docket No. 12-4, *Second Protective Order*, DA 12-51 at 5 (WTB Jan. 17, 2012) ("Second Protective Order") (collectively the "Protective Orders").

Your responses should be filed with Marlene H. Dortch, Secretary, Federal Communications Commission, in WT Docket No. 12-4. In addition, the Comment Public Notice and the Protective Orders require the submission of multiple copies of all *ex parte* and other filings submitted in this proceeding.<sup>6</sup> The Wireless Telecommunications Bureau also should receive, at a minimum, two copies of all paper filings. This requirement does not apply, however, to the submission of documents produced in a form compatible with the Commission's document review software as described in the attached instructions, for which only one electronic copy shall be submitted. If you submit information pursuant to the Protective Orders issued in this case, you should deliver to John Spencer of the Wireless Telecommunications Bureau two copies of the unredacted documents marked "Confidential Information – Subject to Protective Order in WT Docket No. 12-4 before the Federal Communications Commission" or "Highly Confidential Information – Subject to Second Protective Order in WT Docket No. 12-4 before the Federal Communications Commission," as applicable, and two copies of the redacted documents marked "Redacted – For Public Inspection."<sup>7</sup> For any electronic filings made using the Commission's Electronic Comment Filing System ("ECFS"), parties also should serve the documents via e-mail to Sandra Danner, [sandra.danner@fcc.gov](mailto:sandra.danner@fcc.gov); Joel Taubenblatt, [joel.taubenblatt@fcc.gov](mailto:joel.taubenblatt@fcc.gov); and Joel Rabinovitz, [joel.rabinovitz@fcc.gov](mailto:joel.rabinovitz@fcc.gov).

If you have any questions regarding this matter, please contact Sandra Danner, Wireless Telecommunications Bureau, at (202) 418-0916, Joel Taubenblatt, Wireless Telecommunications Bureau, at (202) 418-1513, or Joel Rabinovitz, Office of General Counsel, at (202) 418-0689.

Sincerely,



Rick Kaplan  
Chief, Wireless Telecommunications Bureau

Attachment

cc: Matthew Brill, Latham & Watkins LLP

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<sup>6</sup> See Comment Public Notice at 4; Protective Order at 4; Second Protective Order at 5.

<sup>7</sup> See Protective Order at 4; Second Protective Order at 5.

**WT Docket Number 12-4**

**INFORMATION AND DISCOVERY REQUEST FOR TIME WARNER CABLE INC.**

1. Provide an organization chart and personnel directory in effect since January 1, 2010, for the Company as a whole and for each of the Company's facilities or divisions involved in any activity relating to any Relevant Wireless Product or any Relevant Wireless Service.
2. On pages 21-22 of the Public Interest Statement, the Applicants state that "as SpectrumCo assessed the possibility of market entry with the 20 MHz of spectrum it had won at auction, SpectrumCo concluded that this might be sufficient to *initially* deploy an LTE wireless network. SpectrumCo concluded that, if it were successful in attracting a significant number of customers (including from its owners' base of cable customers), it ultimately would have to incur further costs to acquire additional spectrum to serve those customers and their rapidly expanding demand for mobile services in a sustainable way." Provide all plans, analyses, and reports discussing how much spectrum SpectrumCo concluded would be necessary to serve an expanding customer base in a sustainable way, including any assumptions about which spectrum bands could be acquired and in what timeframe.
3. Provide all plans, analyses, and reports on any option the Company considered to enter the wireless market from January 31, 2006 to the present.
4. Provide all plans, analyses, and reports from January 1, 2008 to present discussing TWC's investment in Clearwire, including the implications of the Proposed Transaction on this investment.
5. Provide all plans, analyses, and reports discussing the Company's assessment of the effect of the proposed AT&T/T-Mobile merger on its business, as well as the impact of withdrawal of those companies' plans to merge.
6. Provide a timeline of discussions concerning the Proposed Transaction, including: (a) dates of various discussions between principals and representatives of the parties; (b) dates of meetings of the boards of directors where the matter was discussed; and (c) dates of interactions between advisors and the boards of directors or management. Provide all plans, analyses, and reports presented at these discussions, meetings, and interactions.
7. Paragraph 14 of the Pick Declaration states that SpectrumCo would need to secure nationwide roaming agreements, and that doing so "posed another complicating factor" and "would impose further costs and business complexity." Describe in detail your Company's efforts to negotiate roaming agreements, including whether your Company signed any roaming or wholesale agreements, and provide a timeline for all negotiations. Explain how the failure to obtain a nationwide roaming agreement affected your Company. Provide all plans, analyses, and reports from January 31, 2006 to the present, discussing: (a) past or current roaming or wholesale negotiations and agreements; (b) consideration of roaming or wholesale proposals or agreements; and (c) the cost of roaming or wholesale -- including but not limited to discussions between Verizon Wireless and TWC.

8. On page 22 of the Public Interest Statement and paragraph 13 of the Pick Declaration, SpectrumCo states that entry as a facilities-based provider would involve other costs and complexities such as offering handsets and handset subsidies. In particular, paragraph 13 of the Pick Declaration states that “[w]ith less scale than established wireless carriers, SpectrumCo initially would have been required to pay higher prices to acquire the newest, most desirable devices, and to provide a corresponding greater subsidy for those devices.” Provide all plans, analyses, and reports discussing SpectrumCo’s ability to obtain devices.
9. Provide all plans, analyses, and reports discussing the Company’s use or future use of Wi-Fi networks in the provision of services to wireless service providers, including:
  - a. the benefits to wireless service providers of having access to Wi-Fi networks for the provision of wireless services (e.g., for network management, such as through offloading of traffic, or the provision of enhanced services), and any valuation of having such access, including any competitive implication for wireless service providers;
  - b. how the Proposed Transaction and the Agreements would affect the Company’s use or future use of its Wi-Fi networks in the provision of services to wireless service providers; or
  - c. any potential or actual agreements, partnerships, or arrangements that the Company has to supply Wi-Fi network services to any wireless service provider

To the extent the Company has entered into any agreements, partnerships, or arrangements subject to subsection (c), provide a copy of such agreements, partnerships, or arrangements.

10. Provide all documents discussing the impact of the Proposed Transaction on the availability and terms, including prices, for the Company to provide backhaul for mobile wireless service providers to new or existing network facilities.
11. Provide all plans, analyses, and reports discussing the Company’s actual or potential provision of backhaul services to wireless service providers, or factors relevant to the Company’s provision of such services, and competitive issues relating to the provision of backhaul services to wireless service providers, including:
  - a. the Company’s possible expansion or reduction of backhaul network or backhaul service offerings, including considerations relating to network investments and return on those investments;
  - b. the Company’s provision of backhaul services to VZW and other wireless service providers, including all rights, terms and conditions of such provisioning;
  - c. other providers’ supply of backhaul services;

- d. whether the Company has any preferred provider or similar arrangement with any wireless service provider relating to the provision or use of backhaul services; or
  - e. whether and how the Company's projected provision of backhaul services may change as a result of the Proposed Transaction or the Agreements.
12. Provide all plans, analyses, and reports discussing MVNOs or similar arrangements, or potential arrangements, with any wireless service providers prior to entering into the Agreements, including:
- a. any MVNO or similar arrangement that the Company has entered or sought to enter with a wireless service provider (including the terms, conditions, services, and term period of the arrangement);
  - b. the benefits of such an arrangement (or similar arrangement), or any valuation of such an arrangement;
  - c. how such an arrangement could affect the ability of any wireless service provider to compete in the provision of Relevant Wireless Services now and in the future; or
  - d. the extent to which the Company's ability to offer Wi-Fi services affected the design or attractiveness of such an arrangement.

To the extent that the Company has entered into such an arrangement, provide a copy of any executed agreement.

13. Provide all plans, analyses, and reports discussing the negotiations and final decision to enter into the Agreements with Verizon Wireless instead of entering into or continuing an MVNO arrangement with other providers (including Sprint and Clearwire), including:
- a. the benefits of these arrangements in the Agreement, including how such arrangements compare with the MVNO alternative, as well as any valuation of these arrangements;
  - b. how these arrangements in the Agreements promote the ability of the Company or Verizon Wireless to compete in the provision of Relevant Wireless Services now and in the future;
  - c. the extent to which the Company's ability to offer Wi-Fi services affected the design or attractiveness of such an arrangement;
  - d. the initial term of these arrangements and the renewal period; or

- e. the exclusivity provisions relating to entering into an MVNO with other wireless providers.
14. Provide all plans, reports, and analyses discussing the Company's negotiations and final decision to enter into the Reseller Agreement enabling the possible entering of an MVNO arrangement, including those discussing:
- a. the benefits or valuation of the agreement;
  - b. the rate structure provisions;
  - c. the exclusivity provisions relating to entering into an MVNO arrangement, the initial term of the arrangement, and the renewal period; or
  - d. any competitive analyses of such an arrangement, including the importance of such an arrangement to enable the Company to compete in the provision of Relevant Wireless Services now and in the future.
15. On pages 20-23 of the Public Interest Statement, the Applicants state that SpectrumCo has neither built out nor placed any customers on a wireless network that would utilize the AWS Spectrum. In the Opposition at pages 33-35, there is discussion of efforts undertaken by SpectrumCo regarding its AWS spectrum holdings. Provide all documents from January 31, 2006 to the present discussing:
- a. SpectrumCo's efforts or plans to use the AWS spectrum;
  - b. the decision not to build a standalone wireless system and the reasons therefor; or
  - c. separate and apart from the reasons and explanations given for a-b above, the reasons for the sale of the SpectrumCo AWS spectrum to Verizon Wireless and how the Agreements met the parties' business objectives.
16. From January 31, 2006 to the present provide a detailed list of:
- a. all potential buyers and dates of relevant discussions for sale of some or all the spectrum that is subject to the Proposed Transaction;
  - b. all potential investors for TWC; and
  - c. all potential lessees of some or all of the spectrum that is subject to the Proposed Transaction.

Provide all documents from January 31, 2006 to the present discussing the decision not to pursue any such transaction or business association with those listed in the above response.

17. Michael J. Angelakis, CFO of Comcast, has made several public statements about the intent to use the AWS Spectrum, including in 2008 at the Citigroup Eighteenth Annual Entertainment Conference (“we also don't feel the immediate pressure of needing a wireless product”); on September 16, 2009 at the Goldman Sachs Communacopia Conference (“We don't want to be the seventh competitor in a market that we think is mature from the voice side. And it's a huge economic investment, which we're uncomfortable there's a real return for.”), and on September 20, 2011 at the Goldman Sachs Communacopia Conference (“[w]e have no desire to own a wireless network”). Most recently, in early January 2012 at a Citi Entertainment, Media and Telecommunications Conference, Mr. Angelakis, in describing the SpectrumCo and Verizon transaction, stated that “we never really intended to build that [S]pectrum.” Provide all documents that discuss Mr. Angelakis's statements. Explain to what extent Mr. Angelakis's statements accurately reflect the opinions and intent of SpectrumCo and each of its Owners with respect to the use of the Spectrum. Provide all documents from January 31, 2006 to the present regarding those opinions and/or intent.

18. Describe in detail and provide all documents discussing whether and if so how the Company:

- a. conditioned or otherwise connected its decision to enter into the Spectrum License Purchase Agreements on the execution or consummation of any of the Agreements or any other commercial agreement or arrangement; or
- b. conditioned or otherwise connected its decision to enter into any of the Agreements on the execution or consummation of the Spectrum License Purchase Agreements, any of the other Agreements, or any other commercial agreement or arrangement;

The response should include, but not be limited to, the nature of and the purposes or objectives underlying any such condition or connection.

19. Provide all documents discussing whether the agreements have an impact on the state of competition on any Mobile Wireless Service or Mobile Wireless Product.

20. To the extent not already provided, provide all documents cited in the Public Interest Statement or Joint Opposition and the attached declarations, and any data, documents or analyses provided to, reviewed by, or relied upon in preparing those declarations, grouped by declaration/Public Interest Statement, or Joint Opposition.

## Definitions

**In this Information and Document Request, the following terms shall have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined):**

1. The term “Company” or “TWC” means Time Warner Cable Inc., its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships, and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms “parents,” “subsidiary,” “affiliate,” and “joint venture” refer to any person in which there is partial (10 percent or more) or total ownership or control between SpectrumCo and any other person.
2. “Agent Agreements” means collectively the Cable Company Agent Agreements and the VZW Agent Agreements.
3. “Agreements” means collectively the Agent Agreements, JOE Agreement, MSO Agreement and Reseller Agreements.
4. The terms “and” and “or” have both conjunctive and disjunctive meanings.
5. The word “any” shall be construed to include the word “all,” and the word “all” shall be construed to include the word “any.” The word “each” shall be construed to include the word “every,” and the word “every” shall be construed to include the word “each.” All words used in the singular should be construed to include the plural, and all words used in the plural should be construed to include the singular.
6. The term “Applicants” means VZW and SpectrumCo, collectively.
7. The term “Application” means the applications submitted by VZW and SpectrumCo on December 16, 2011, with the lead file number for the wireless radio services listed as 0004993617.
8. “Backhaul” means the facilities that comprise the intermediate links that transmit voice and data traffic between a wireless service provider’s cell sites and a core network.
9. The term “BHN” means Bright House Networks, LLC, its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships, and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms “parents,” “subsidiary,” “affiliate,” and “joint venture” refer to any person in which there is partial (10 percent or more) or total ownership or control between SpectrumCo and any other person.
10. “BHN Agent Agreement” means that certain Agent Agreement, dated as of December 2, 2011, by and between VZW and BHN.
11. “Cable Company” means any of Comcast Cable Communications, LLC, Cox Communications Inc., Time Warner Cable Inc., or Bright House Networks, LLC.

12. "Cable Company Agent Agreement" means any of the Comcast Agent Agreement, the Cox Agent Agreement, the TWC Agent Agreement, or the BHN Agent Agreement.
13. The term "CDMA" means Code Division Multiple Access technology.
14. The term "CMA" means Cellular Market Area.
15. The term "Comcast" means Comcast Corp., its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships, and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms "parents", "subsidiary," "affiliate," and "joint venture" refer to any person in which there is partial (10 percent or more) or total ownership or control between SpectrumCo and any other person.
16. "Comcast Agent Agreement" means that certain Agent Agreement, dated as of December 2, 2011, by and between VZW and Comcast.
17. "Competing Provider" means any partnership, corporation (including a business trust), joint stock company, trust, unincorporated association, joint venture, limited liability company, or other entity that can provide actual or potential competition in any relevant area for any relevant product.
18. The term "Cox" means Cox Communications Inc., its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships, and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms "parents", "subsidiary," "affiliate," and "joint venture" refer to any person in which there is partial (10 percent or more) or total ownership or control between SpectrumCo and any other person.
19. "Cox Agent Agreement" means that certain Agent Agreement, dated as of December 16, 2011, by and between VZW and Cox.
20. The term "discussing" when used to refer to documents means analyzing, constituting, summarizing, reporting on, considering, recommending, setting forth, or describing a subject. Documents that contain reports, studies, forecasts, analyses, plans, proposals, evaluations, recommendations, directives, procedures, policies, or guidelines regarding a subject should be treated as documents that discuss the subject. However, documents that merely mention or refer to a subject without further elaboration should not be treated as documents that discuss that subject.
21. The term "documents" means all computer files and written, recorded, and graphic materials of every kind in the possession, custody, or control of the Company. The term "documents" includes without limitation drafts of documents, copies of documents that are not identical duplicates of the originals, and copies of documents the originals of which are not in the possession, custody, or control of the Company. The term "documents" includes, without limitation, materials of every kind in the possession, custody, or control of the Company whether created internally or externally. In addition, the term "documents" includes without limitation any amendments, side letters, appendices, or attachments. The term "computer files" includes without limitation information stored in, or accessible through, computer or other information retrieval systems. Thus, the Company should produce documents that exist in machine-readable

form, including documents stored in personal computers, portable computers, workstations, minicomputers, mainframes, servers, backup disks and tapes and archive disks and tapes, and other forms of offline storage, whether on or off the Company's premises. Electronic mail messages should also be provided, even if only available on backup or archive tapes or disks. Computer files shall be printed and produced in hard copy or produced in machine-readable form (provided that Commission staff determine prior to submission that it would be in a format that allows the Commission to use the computer files), together with instruction and all other materials necessary to use or interpret the data. Unless otherwise specified, the term "documents" excludes bills of lading, invoices, purchase orders, customs declarations, and other similar documents of a purely transactional nature and also excludes architectural plans and engineering blueprints. Where more than one identical copy of a requested document exists, the Company shall only submit one representative copy.

22. The term "EDGE" means Enhanced Data rates for GSM Evolution technology.
23. The term "EvDO" or "EvDO Rev. A" means Evolution-Data Optimized or Evolution-Data Optimized Revolution A. technology.
24. The term "GSM" means Global System for Mobile Communications technology.
25. The term "HSPA" or "HSPA+" means High Speed Packet Access or High Speed Packet Access + technology.
26. The term "identify," when used with reference to a document, means to state the date, author, addressee, type of document (e.g., the types of document, as described above), a brief description of the subject matter, its present or last known location, and its custodian, who must also be identified.
27. The term "including" shall be construed as including, but not limited to, and indicates examples to be addressed. The term should not be construed as to limit the response to only those examples listed.
28. "JOE Agreement" means that agreement, dated December 2, 2011, among Comcast Cable Communications, LLC, Time Warner Cable Inc., Bright House Networks, LLC and Cellco Partnership d/b/a Verizon Wireless.
29. "Joint Operating Entity" or "JOE" means the Joint Operating Entity, LLC formed pursuant to the JOE Agreement.
30. The term "LTE" means Long Term Evolution technology.
31. The term "Mobile Wireless Application," also referred to as "application software" or "app," means software that enables one or more functions on a mobile wireless device running a mobile operating system (e.g., Android, iOS).
32. The term "Mobile Wireless Data Services" means any data communications service using radio transmission between mobile or fixed stations and a network providing communication of packet data information, including but not limited to, broadband data, video, remote file access, status reporting, facsimile, and internet/intranet access. Mobile

Wireless Data Services include non interconnected Voice over IP but exclude mobile wireless voice and text services, as defined herein.

33. The term “Mobile Wireless Services” includes Mobile Wireless Voice Services, Mobile Wireless Text Services, Mobile Wireless Data Services, and Mobile Wireless Applications.
34. The term “Mobile Wireless Text Services” means any communications service using radio transmission between mobile or fixed stations and a network providing communication of numeric or alphanumeric messages, such as multi media messaging, short messaging, and short codes. Mobile wireless text services exclude e-mails.
35. The term “Mobile Wireless Voice Services” means interconnected voice communications services provided using radio transmission between mobile or fixed stations on a wireless basis to customers, other than fixed wireless services. Mobile Wireless Voice Services include interconnected voice over Internet protocol.
36. “MSO Agreement” means the MSO Agreement, dated as of December 2, 2011, by and among C Spectrum Investment, LLC, Time Warner Cable LLC, BHN Spectrum Investments, LLC, Comcast Cable Communications, LLC, Time Warner Cable Inc., and Bright House Networks, LLC.
37. “MVNO” means mobile virtual network operator.
38. The term “plans” means tentative and preliminary proposals, recommendations, or considerations, whether or not finalized or authorized, as well as those that have been adopted.
39. The term “plans, analyses and reports” means business plans, strategic plans, written policies, budgets, analyses, reports, presentations (including quantitative presentations), and similar documents, including all appendices and attachments thereto, prepared for, presented to, reviewed by, discussed by, or considered by the Company’s board of directors or the Company’s executive management, or any member thereof. The term “plans, analyses and reports” includes without limitation copies of plans, analyses and reports that are not identical duplicates of the originals, and copies of plans, analyses and reports, the originals of which are not in the possession, custody, or control of the Company, but does not include drafts of plans, analyses and reports, but only the final version or the latest draft if the final version does not exist or is not in the possession, custody, or control of the Company.
40. The term “Proposed Transaction” means the proposed acquisition of AWS spectrum by VZW from SpectrumCo, filed on December 16, 2011, with lead application file number for the wireless radio services listed as 0004993617.
41. The term “Public Interest Statement” refers to the document filed by the Applicants on December 16, 2011 entitled “Description of the Transaction and Public Interest Statement.”
42. The term “Relevant Area” means, and information must be provided separately for, each Cellular Market Area and the United States as a whole (including Puerto Rico).

43. The term “Relevant Wireless Product” means any of the mobile wireless services and using any of the following formats: CDMA, EV-DO, EV-DO Rev. A, LTE, GSM, EDGE, UMTS only, HSPA, and HSPA+:
- 1) feature mobile devices: wireless handset devices that are cable of supporting voice services as well as text services;
  - 2) smartphones: wireless handset devices other than iPhones, with advanced computing capability and connectivity sufficient to run complete mobile operating system software (e.g., Android, Research in Motion Ltd. Blackberry, Windows phone) to support all mobile wireless services, including broadband data and video applications as well as voice, photographic cinematic, and audio-visual media player services (including books, periodicals, movies, music, games);
  - 3) iPhones: smartphones designed and marketed by Apple Inc.;
  - 4) tablet PCs (includes netbook PCs): portable devices (other than iPads) with touch screen and/or a QWERTY keyboard input, and advanced computing capability and connectivity sufficient to run complete operating system software (e.g., Android, Windows) to support broadband data and video applications as well as photographic, cinematic, and audio-visual media player services (including books, periodicals, movies, music, games);
  - 5) iPads: tablet PCs designed by Apple Inc.;
  - 6) e-readers: portable personal computing devices with a display size of 6" to 10" typically, with advanced computing capability and connectivity sufficient to enable users to shop for, purchase, download, and display text, designed primarily for the purpose of reading books, newspapers, and periodicals;
  - 7) “air cards” (also referred to as “laptop cards”): portable wireless modems that enable personal computing devices to connect to a mobile wireless network in order to support and deliver voice, data, and video services;
  - 8) mobile hotspots devices: network routing devices that enable portable, Wi-Fi enabled handset and personal computing devices to connect to a mobile wireless network in order to support and deliver voice, data, and video services; and
  - 9) other mobile wireless devices not listed above. Describe the other devices included in this category.
44. The term “Relevant Wireless Service” means any of the services identified below using any of the following formats: CDMA, EVDO, EVDO Rev. A, LTE, GSM, EDGE, UMTS only, HSPA, and HSPA+:
- 1) mobile wireless voice services;
  - 2) mobile wireless text services;
  - 3) mobile wireless data services; and
  - 4) mobile wireless applications.
45. “Reseller Agreements” means the proposed Reseller Agreement between a Cable Company and VZW pursuant to which, among other things, VZW shall make available VZW wireless services for Cable Company’s purchase and resale.
46. The term “SMS” means short message service.
47. The term “SpectrumCo” means SpectrumCo, LLC, its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships, and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms “parents”, “subsidiary,” “affiliate,” and “joint venture” refer to any person in which there

is partial (10 percent or more) or total ownership or control between SpectrumCo and any other person and shall also include Bright House Networks, LLC.

48. "Spectrum License Purchase Agreements" means either of two agreements, together or separately, dated December 2, 2011, between SpectrumCo and VZW and, dated December 16, 2011, between Cox and VZW.
49. The term "subsidiary" as to any Person means any corporation, partnership, joint venture, limited liability company, or other entity of which shares of stock or other ownership interests having ordinary voting power to elect a majority of the board of directors or other managers of such corporation, partnership, joint venture, limited liability company or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly, through one or more intermediaries, or both, by such Person.
50. "TWC Agent Agreement" means that certain Agent Agreement, dated as of December 2, 2011, by and between VZW and TWC.
51. "United States" or "U.S." means the United States, its possessions, territories, and outlying areas.
52. The term Verizon, Verizon Wireless or "VZW" means Cellco Partnership d/b/a Verizon Wireless, its parents, predecessors, divisions, subsidiaries, affiliates, partnerships and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms "parent", "subsidiary", "affiliate", and "joint venture" refer to any person in which there is partial (10 percent or more) or total ownership or control between the company and any other person.
53. "VZW Agent Agreement" shall mean any of the Agent Agreements dated December 2, 2011 by and between VZW, of the first part, and any one of Comcast, TWC, or BHN, of the second part, or the Agent Agreement, dated as of December 16, 2011, by and between, VZW and Cox, pursuant to which, among other things, VZW appoints each Cable Company as its sales agent for certain VZW services.

## Instructions

1. Unless otherwise specified, all Information and Document Requests cover the period from January 1, 2010 through the present.
2. Corporations and other entities, including affiliated or subsidiary entities, shall be identified by the Central Index Key (“CIK”) assigned by the Securities and Exchange Commission (“SEC”). A unique identifier should be used for each entity that has not been assigned a CIK by the SEC.
3. Submit responses to Information Requests in both paper and electronic form, unless an electronic form is specified (*e.g.*, electronic spreadsheet). Submit responses to Document Requests (including materials containing Highly Confidential or Confidential Information) in electronic form only in a manner that is fully compatible with the Commission’s Summation Enterprise software database, as set forth in the Instructions for Submission of Electronic Documents. The Commission does not require the submission of paper copies of these documents at this time, but reserves the right to require their submission at a later time.
4. Each requested document shall be submitted in its entirety, even if only a portion of that document is responsive to a request made herein. This means that the document shall not be edited, cut, or expunged, and shall include all appendices, tables, or other attachments, and all other documents referred to in the document or attachments. All written materials necessary to understand any document responsive to these requests shall also be submitted. Provide final versions of each document; however, if a final version does not exist provide one copy of the latest draft of the document.
5. Those documents written in a language other than English must be translated into English; automated or machine translations are not permitted. Submit the foreign language document, with the English translation attached thereto.
6. Data provided in response to this Request should include a list of all parameters/assumptions on which the data are based.
7. Unless otherwise agreed to by the Commission, requests for the production of documents (and any particular type of document) require the production of all responsive documents in the possession, custody, or control of the Company.
8. For each document or statement submitted in response to the requests, indicate, by number and subsection, the request to which it is responsive and, for documents, identify the Person(s) from whose files the document was retrieved (*i.e.*, custodian). Group submitted materials according to the request number to which they are responsive and then, within each of those request-number groupings, by the appropriate custodian. If a document is responsive to more than one request, submit the document in response to the first request to which it is responsive, and, in accordance with the Instructions for Submission of Electronic Documents below, indicate in the metadata accompanying the document’s electronic record all subsequent requests to which it also is responsive. If any document is not dated, if known, state the date on which it was prepared. If any document does not identify its author(s) or recipient(s), provide, if known, the name(s) of the author(s) or recipient(s) as metadata in accordance with Instructions for Submission of Electronic Documents. The Company must identify with reasonable specificity all documents provided in response to these requests. Where more than one identical copy of a requested document exists, the Company may submit only one representative copy, but in all cases all metadata, including without limitation all custodians who possessed identical

documents withheld, must be provided in accordance with the provisions of Instructions for Submission of Electronic Documents.

9. If search terms were used to conduct all or any part of a search conducted in response to this Information Request, provide a list of search terms used, along with a glossary of industry and company terminology. In addition, describe the search methodologies and the applications used to execute the search.
10. The specific requests made herein are continuing in nature. The Company is required to produce in the future any and all documents and information that are responsive to the requests made herein but not initially produced at the time, date, and place specified herein. In this regard, the Company must supplement its responses (a) if the Company learns that, in some material respect, the documents and information initially disclosed were incomplete or incorrect or (b) if additional responsive documents or information are acquired by or become known to the Company after the initial production.
11. Any documents that are withheld in whole or in part from production based on a claim of privilege shall be assigned document control numbers (with unique consecutive numbers for each page of each document). For any page of any Document that the Company has designated to be withheld as entirely privileged, the Company shall submit a substitute, placeholder page that lists only the Document ID of the page that was withheld in entirety as privileged and a statement indicating that the page has been withheld in entirety as privileged. For any document withheld as entirely privilege, it is sufficient to supply one substitute, placeholder page for that document, so long as the range of Document IDs for the entire document is listed on the placeholder page and each Document ID for each page of the document is reflected in metadata. The placeholder pages must be OCR'd as any other paper record, as described above. For each document withheld as privileged, whether in entirety or in part, the Company shall code the substitute document submitted as specified in and provide as metadata the information in the attached MetaData Table of Requested Fields.
12. For each Document identified on the Company privilege log:
  - 1) Provide the document control number(s);
  - 2) Identify all authors of the document;
  - 3) Identify all addressees of the document;
  - 4) Identify all recipients of the document or of any copies of the document, to the extent not included among the document's addressees;
  - 5) Provide the date of the document;
  - 6) Provide a description of the subject matter of the document;
  - 7) State the nature or type of the privilege that the Company is asserting for the document (e.g., "attorney-client privilege");
  - 8) Provide the number(s) of the Request to which the document is responsive;
  - 9) Provide the document control number(s) of any attachments to the document, regardless of whether any privilege is being asserted for such attachment(s); and
  - 10) State whether the document has been produced in redacted form, and include the range of Document ID labels for those produced documents.
13. The Company's privilege log shall also conform with all of the following requirements:
  - 1) Provide a separate legend identifying each author, addressee, and recipient identified on the Company's privilege log.
  - 2) Identify on the privilege log, and denote with an asterisk, all attorneys acting in a legal capacity with respect to the withheld document or communication.

- 3) The description of the subject matter of each document shall describe the nature of the document in a manner that, though not revealing information that is itself privileged, provides sufficiently detailed information to enable the Commission to assess the applicability of the privilege claimed.
- 4) For each document withheld under a claim that it constitutes or contains attorney work product, also state whether the Company asserts that the document was prepared in anticipation of litigation or for trial and, if so, specify the anticipated litigation or trial upon which the assertion is based.
- 5) Produce all nonprivileged portions of any responsive document (including nonprivileged or redactable attachments) for which a claim of privilege is asserted, except where the only nonprivileged information in the document has already been produced. Note where any redactions in the document have been made.
- 6) The privilege log shall be produced in both hardcopy and electronic form, the electronic form of which shall be both searchable and sortable.
- 7) Documents sent solely between counsel, including in-house counsel acting solely in a legal capacity, and documents authored by the Company's outside counsel that were not directly or indirectly furnished to any third party, such as internal law firm memoranda, may be omitted from the privilege log. However, any attachments to such documents must be included on the privilege log (if a privilege is applicable to such materials), unless such attachments are addressed and sent solely to counsel.

## **Instructions for Submission of Electronic Documents**

### **A. Form of Production**

1. Electronic documents shall be produced in Summation Enterprise load files as images and/or native format files with extracted text and related metadata and bibliographic information. A list of metadata fields that must be populated, as relevant, is attached. Specific requirements for different types of documents are discussed below. Please contact Commission staff for further technical specifications, including the image and text file specifications and the load file configuration, and for a sample load file set.
2. Each Summation submission must be on a physical media, either a portable hard drive or DVD-ROM.
3. Each physical media provided must have a label affixed. The label shall state: (a) the name of the party submitting the data, (b) the date of the submission, (c) the volume number of production (see below), and (d) the range of documents contained on the media
4. Each Summation submission must have a volume number associated with it. On the root of the media, the top-level folder must be named for the volume. This volume number should also be indicated on the physical label of the media. The volume naming scheme should start with a 2 or 3 letter prefix (identifying your company) followed by a 3-digit counter (e.g., ABC001). Load file volumes may not contain more than 25,000 records each (but multiple file volumes may be included on one hard drive).
5. Under the volume folder, the production should be organized in 3 subfolders:
  - a) IMAGES (may contain subfolders, with no more than 5,000 image files per folder) and FULLTEXT (may contain subfolders, with document-level text files). No file may be more than 25 megabytes.
  - b) DOCLINK (documents in native format, including all spreadsheets and presentations)
  - c) LOADFILES (the metadata, EDIL, and LST information should be contained in one file, and the custodian append information in a separate file)
6. Each submission shall be accompanied by an spreadsheet (production index), in hard copy and electronic form, detailing what has been produced, by custodian and document identification number, and containing statistical information about each volume.
7. If a password is used, the same password must be used for all submissions. If encryption is used, only Truecrypt software may be used
8. To minimize any delay in loading your submissions, each submission shall be as large as practical under these specifications, while also maintaining a timely and rolling production.
9. Subsequent submissions shall not include information produced in previous submissions, unless specifically requested by the Commission. However, if an error occurs in loading, the entire load must be resubmitted, maintaining the original volume number(s). For example, if a hard drive contains volumes ABC005 – ABC 009, and there is an error with volume ABC006, ABC006 must be corrected and the entire submission ABC005 – ABC009 must be resubmitted on a new hard drive.

### **B. Document Types**

1. Hard-copy (or paper) documents.
  - (a) Except as otherwise agreed, hard-copy documents shall be produced as image files with

related searchable OCR text and bibliographic information.

(b) Some documents may more appropriately and efficiently be produced in hard-copy form (*e.g.*, maps).

(c) Special care should be taken to properly unitize documents, maintain attachment relationships, and indicate file folder or binder labels, consistent with the Definitions and Instructions.

2. E-mail and Other Electronic Messages.

(a) E-mail and other electronic messages (*e.g.*, instant messages (“IMs”)) shall be produced as image files with related searchable text and metadata and bibliographic information.

(b) Each IM conversation shall be produced as one document.

(c) E-mail metadata shall include the folderpath (“folder” field) information for e-mail file folders into which a custodian’s e-mail messages have been organized. Be sure to preserve and produce this information as specified. Beware of copying e-mails into an electronic repository or forwarding them to a central e-mail box, as such processes may destroy this information. *See also infra* Section C(2) regarding custodian metadata.

(d) Depending on how the Company’s systems represent names in e-mail messages or IMs, the Commission may require a table of names or contact lists.

3. Spreadsheets shall be produced in native format (*e.g.*, .XLS files) with the first page imaged and with related searchable text and metadata and bibliographic information.

4. Presentations.

(a) Presentations shall be produced as images that show the full slide images and speaker notes, with related searchable text and metadata and bibliographic information.

(b) Presentations shall also be produced in native format (*e.g.*, .PPT files).

5. Word processing and other electronic documents not specifically addressed elsewhere in this letter shall be produced as image files with related searchable text and metadata and bibliographic information.

6. Databases.

(a) This letter does not address enterprise databases which may be responsive to the Information and Document Requests and should be the subject of a separate discussion once you have identified them.

(b) Smaller databases (*e.g.*, Microsoft Access) that are responsive should be produced, but not as part of the load-file production. Such databases should be produced separately.

7. Company Intranets and Social Networking Sites.

(a) If the Company’s intranet or company social networking content (*e.g.*, Facebook, Twitter) contains responsive information, production of these items should be the subject of a separate discussion.

(b) Depending on the nature of the information, it may be appropriate to provide the Commission direct access to the Company's intranet via a secure Internet connection, but significant technical issues are often involved.

8. Embedded files with no substantive content (e.g., corporate logos, executive "head-shot" photographs, stationery address blocks), which would appear in the production as an otherwise blank and therefore unresponsive "TIFF" image, should not be produced.

### C. General Issues

1. Attachments and their parent documents are a "family" of documents. Families of documents (e.g., a cover e-mail with multiple attachments) must all be produced in full. If one member of the family is responsive, the entire family is considered responsive, and individual documents in the family cannot be withheld on grounds of being "non-responsive."

2. The required metadata for each electronic document includes "custodian" information (typically, the name of the human person from whose files the document was gathered) and "filepath" information for directory/server folders into which a custodian's documents have been organized. Ensure that this information is collected when collecting responsive documents. If the Company stores documents in a repository that does not maintain personal custodian or filepath information (e.g., that "journals" e-mails), it shall be required to stipulate to custodian identities for purposes of using documents.

3. In certain circumstances, a custodian may be a shared resource (e.g., shared drive or server, shared filing cabinet). Materials gathered from such repositories, to which multiple people have access, shall be produced as separate custodians. The Company shall provide a brief description of each shared resource that includes a list of the employees who have access to that shared resource. The documents in shared resources should otherwise be produced as described in the rest of this letter. (Personal share or server drives are not shared resources and shall be produced as part of each human custodian's files.)

#### 4. Native Format Files

(a) If any native files will be produced that cannot be viewed using the standard configuration of Microsoft Office 2007, Adobe Acrobat Reader 9, WordPerfect X4, or Internet Explorer 7, you will need to notify the Commission so it can determine whether it has the appropriate software and licenses to view those files. If it does not, it may be necessary for the Company to provide that software.

(b) Any encryption or password protection shall be removed from all native format files produced.

#### 5. Images and Text Files

(a) Images of the produced electronic documents shall conform with any further specifications provided by the Commission.

(b) Searchable OCR and extracted text from the produced electronic documents shall conform with any further specifications provided by the Commission.

(c) Care should be taken to ensure that the text files will properly format and wrap.

(d) If any document cannot be interpreted in image/text format (*e.g.*, color, Microsoft Project), the Commission may request that it be produced natively, or the Company can contact the Commission to discuss producing them natively. As noted above in C(4)(a), the Company may need to provide the appropriate software in order for the Commission to view these documents.

## 6. Deduplication

(a) The Company shall deduplicate vertically within each custodian's files.

(b) The Commission prefers that the Company also deduplicate horizontally across all custodians' files, but only if:

(i) the deduplication methodology preserves information on BCC recipients of e-mail;

(ii) custodian information from suppressed duplicates can be preserved and produced as a custodian append file; and

(iii) the Company, prior to beginning its production, provides a written description its deduplication methodology, including how custodial and BCC information shall be preserved and produced, to which the Commission agrees.

(c) The Company must produce all members of a family of documents (*see* C(1)) and cannot suppress attachments to other documents. In other words, the integrity of families of documents must be maintained, except as limited by any claim of privilege. For example, and in particular, the deduplication process may not remove attachments to e-mails that are being produced because the attachment is produced elsewhere. Improper deduplication may require the resubmission of a production set.

(d) The Company agrees not to raise any objections to the Commission's use of the produced duplicate in relation to whether it was in the files of the custodians who had the suppressed duplicates in their files or were the sender or recipients of any e-mail.

## 7. Privilege Designations

(a) Documents redacted pursuant to any claim of privilege shall be designated "Redacted" in the Properties field in the metadata and bibliographic information provided. The Company shall provide appropriately redacted related searchable text, metadata, and bibliographic information for these documents.

(b) Documents withheld pursuant to any claim of privilege that are part of a document family shall include a designation of "Family Member of Priv Doc" in the Properties field in the metadata and bibliographic information provided for all the other documents in its family. A placeholder image with a document identification number should be provided in place of the document.

(c) Both redacted and withheld documents shall appear on the privilege log. Each withheld document from a family shall include the family document identification number range in its entry on the privilege log.

## 8. Document Identification Numbering

(a) A consistent format for document identification numbering shall be used across the entire production. Document identification numbers should contain no more than three segments – *e.g.*, a company identifier, a middle segment (*e.g.*, custodian identifier), and a sequence of 6-8 digits (the number of digits should be consistent across the entire production).

(b) Document identification numbers should not contain embedded spaces (“ ”), slashes (“/”), backslashes (“\”), or underscores (“\_”). Document identification numbers may contain hyphens (“-”).

(c) Native format files should be assigned a document identification number; if images have been produced with a native format file, the beginning document identification number of the images should be the native format file’s document identification number.

9. These instructions do not address or endorse any search method the Company may use to identify responsive electronic documents.

10. In order to ensure the Company’s full technical and procedural compliance with these instructions, the Company shall make its Information Technology personnel and those of its vendors available to Commission staff for consultation and coordination before, during, and after its production of materials responsive to the requests.

#### **D. Sample Submission Required Prior to Full Production**

In consultation with Commission staff, the Company shall submit a test submission to ensure proper configuration of data for uploading into the Commission’s Summation Enterprise database server before the Company “ramps up” production. To minimize the likelihood of encountering problems during full production, the sample must be representative of an actual production, including multiple types of documents, documents with attachments (“families”), document families from which an item has been removed pursuant to privilege (and replaced with a document identification -numbered, placeholder image), redacted documents with appropriately related searchable text, and presentation documents with speaker notes.

FIELD LISTING FOR SUMMATION METADATA LOAD FILE			TYPE OF RECORD(S) TO WHICH EACH FIELD APPLIES			
Field Name	Field Description	Field Type	Hard Copy	E-Mail	Spreadsheets and Presentations	Other E-Docs (all Attachments, Calendar Appts, Loose Files)
<b>SUBMISSION#</b>	Production volume number (e.g., ABC001)	Note Text	x	x	x	x
<b>REQUEST#</b>	Request(s) to which the document is responsive	Multi-Entry	x	x	x	x
<b>BEGDOC#</b>	Start Document Identification Number (including prefix) -- do not use commas, underscores, ampersands, slashes, spaces, characters not allowed in Windows file names or any character used as a delimiter in the load files as part of this number	Note Text	x	x	x	x
<b>ENDDOC#</b>	End Document Identification Number (including prefix) -- do not use commas, underscores, ampersands, slashes, spaces, characters not allowed in Windows file names, or any character used as a delimiter in the load file as part of this number	Note Text	x	x	x	x
<b>EPROPERTIES</b>	Indicate All That Apply : <u>Record Type</u> : Loose File, E-mail, Attachment, Hard Copy, Calendar Appt  <u>Privilege Notations</u> : Redacted, Privileged, Family Member of Priv Doc	Multi-Entry	x	x	x	x
<b>PRIV</b>	Privileged (Y/N)	Note Text	x	x	x	x
<b>PO1</b>	Subject to First Protective Order (Y/N)	Note Text	x	x	x	x
<b>PO2</b>	Subject to Second Protective Order (Y/N)	Note Text	x	x	x	x
<b>DATEAPPTSTART</b>	Start date of calendar appointment - YYYYMMDD	Date				x
<b>TIMEAPPTSTART</b>	Start time of calendar appointment - HH:MM am/pm	Time				x

<b>DATEAPPTEND</b>	End date of calendar appointment - YYYYMMDD	Date					x
<b>TIMEAPPTEND</b>	End time of calendar appointment -- HH:MM am/pm	Time					x
<b>FILESIZE</b>	File size (numeric value only - do not include unit of measure)	Integer		x	x		x
<b>FILEEXTENSION</b>	File extension of native electronic file	Fixed Length 5 chars		x	x		x
<b>FILEPATH</b>	File path to native file as it existed in original environment	Note Text		x	x		x
<b>HASHMD5</b>	MD5 hash value (used for deduplication or other processing)	Note Text		x	x		x
<b>HASHSHA</b>	SHA1 hash value (used for deduplication or other processing)	Note Text		x	x		x
<b>SEARCHVALUES</b>	List of search terms used to identify record as responsive (if used)	Multi-Entry	x	x	x		x
<b>COMPANIES</b>	Company submitting data	Multi-Entry	x	x	x		x
<b>CUSTODIAN</b>	Custodian(s) / source(s) -- format: Last, First or ABC Dept	Multi-Entry	x	x	x		x
<b>DOCID</b>	Must equal the value appearing in the BEGDOC# field	Note Text	x	x	x		x
<b>NUMPAGES</b>	Page count	Integer	x	x	x		x
<b>PARENTID</b>	Parent record's BEGDOC#, including prefix (populated ONLY in child records)	Note Text	x	x	x		x
<b>ATTACHMENTIDS</b>	Child document list: BEGDOC# of each child (populated ONLY in parent records)	Multi-Entry	x	x	x		x
<b>DOCIDRANGE</b>	BEGDOC# value of the parent record and ENDDOC# value (including prefix) of the last child record (for example, ABC-001 - ABC-020); populated for all documents in the group - otherwise, remains empty	Note Text	x	x	x		x
<b>FROM</b>	Author of the e-mail or loose electronic file (as formatted on the original)	Note Text		x	x		x
<b>TO</b>	Recipients of the e-mail (as formatted on the original)	Multi-Entry		x			

<b>CC</b>	Names of the individuals who were copied on the e-mail (as formatted on the original)	Multi-Entry						
<b>BCC</b>	Names of the individuals who were blind-copied on the e-mail (as formatted on the original)	Multi-Entry						
<b>SUBJECT</b>	E-mail or calendar subject, or electronic file's document title	Note Text						
<b>DATESENT</b>	Date the e-mail was sent - YYYYMMDD	Date						
<b>TIMESENT</b>	Time e-mail was sent -- HH:MM am/pm (e.g., 09:32 am; Timezone indicators cannot be included)	Time						
<b>DATERECEIVED</b>	Date e-mail was received - YYYYMMDD	Date						
<b>TIMERECEIVED</b>	Time e-mail was received -- HH:MM am/pm	Time						
<b>HEADER</b>	The internet header information for e-mail sent through the internet;	Note Text						
<b>INTERNETMSGID</b>	Internet message identification number	Note Text						
<b>MESSAGEID</b>	Unique system identification number for the e-mail message	Note Text						
<b>DATECREATED</b>	Date electronic file was created - YYYYMMDD	Date						
<b>DATESAVED</b>	Date electronic file was last modified - YYYYMMDD	Date						
<b>DOCDATE</b>	Populate with: DATESAVED for electronic files (loose files and e-mail attachments) ; DATESENT for e-mails; or DATEAPPTSTART for calendar appointments - YYYYMMDD	Date						
<b>ATTACHTITLE</b>	File name of an e-mail, e-mail attachment, or loose electronic document	Note Text						
<b>APPLICATION</b>	Application used to create native file (e.g., Excel, Outlook, Word)	Note Text						
<b>DOCLINK</b>	Current file path location to the native file (on the delivery medium)	Note Text						

FOLDER	E-mail folder path (sample: Inbox\Active); or Hard Copy folder/binder title/label	Note Text	x	x		
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