



September 28, 2016

VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Business Data Services in an Internet Protocol Environment; Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services; WC Docket Nos. 16-143, 15-247 & 05-25, RM-10593

Dear Ms. Dortch:

Pursuant to the Commission’s June 24, 2016 *Order* (“*June 24 Order*”), which “extends the procedures for submitting and accessing Confidential Information adopted in the business data services protective orders in WC Docket No. 05-25 to Confidential Information filed in the record in WC Docket No. 16-143,”¹ Sprint Corporation (“Sprint”) hereby submits a redacted version of the attached letter, which contains redacted highly confidential information protected under the following protective orders adopted by the Commission:

- *Modified Protective Order*² in WC Docket No. 05-25, RM-10593
- *Second Protective Order*³ in WC Docket No. 05-25, RM-10593
- *Data Collection Protective Order*⁴ in WC Docket No. 05-25, RM-10593

¹ *Business Data Services in an Internet Protocol Environment; Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, WC Docket Nos. 16-143, 15-247, and 05-25, RM-10593, Order, DA 16-722 (rel. June 24, 2016).

² *See Special Access Rates for Price Cap Local Exchange Carriers*, Modified Protective Order, DA 10-2075, 25 FCC Rcd. 15,168 (Wireline Comp. Bur. 2010).

³ *See Special Access Rates for Price Cap Local Exchange Carriers*, Second Protective Order, DA 10-2419, 25 FCC Rcd. 17,725 (Wireline Comp. Bur. 2010) (“*Second Protective Order*”).

⁴ *See Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Order and Data Collection Protective Order, DA 14-1424, 29 FCC

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- *Business Data Services Data Collection Protective Order*⁵ in WC Docket Nos. 15-247 & 05-25, RM-10593
- *Tariff Investigation Protective Order*⁶ in WC Docket Nos. 15-247 & 05-25, RM-10593

Highly confidential treatment of the respectively marked portions of the attached document is required to protect information subject to the above-mentioned protective orders, including information regarding:

- The “extent to which companies rely on incumbent local exchange carrier . . . and non-incumbent LEC last-mile facilities and local transport facilities” and “the nature of those inputs”;⁷
- Factors that companies “take into account when deciding what types of channel termination and local transport facilities to lease”;⁸
- The “types of customers companies serve and the types of special access-type services demanded by those customers”;⁹
- The factors companies consider “when deciding whether to self-deploy channel termination and local transport facilities or lease such facilities from a third party”;¹⁰
- The “nature or type of structure where . . . cell sites are placed” and “the type or capacity of the connections provided to companies’ cell sites”;¹¹
- The “terms and conditions of or strategy related to . . . most sensitive business negotiations or contracts”;¹²
- “[D]etailed or granular information about specific network facilities, including types, equivalents, and capacities, whether TDM- or IP-based services”;¹³

Rcd. 11,657 (Wireline Comp. Bur. 2014) (“*Data Collection Protective Order*”). See also *Public Statements Derived from Highly Confidential Data Filed in Response to the Business Data Services (Special Access) Data Collection*, Public Notice, DA 16-368, 31 FCC Rcd. 3420 (2016) (clarifying the confidential treatment of data derived from the data collection).

⁵ See *Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Order and Protective Orders, DA 15-1387, 30 FCC Rcd. 13,680, App. A (Wireline Comp. Bur. 2015).

⁶ See *id.* App. B (“*Tariff Investigation Protective Order*”).

⁷ *Second Protective Order* ¶ 6.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*; *Data Collection Protective Order* at App. B.

¹¹ *Second Protective Order* ¶ 6.

¹² *Tariff Investigation Protective Order* at 13,704.

¹³ *Id.*

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- “[C]urrent or future plans regarding the transition from TDM- to IP-based services or to compete for a customer or specific groups or types of customers (e.g., retail business or wholesale customers), including specific pricing or (tariffed or non-tariffed) contract proposals, pricing strategies, product strategies, advertising or marketing strategies, future business plans, procurement strategies, technology implementation or deployment plans and strategies (e.g., engineering capacity planning documents)”;¹⁴
- The “nature or contents of private non-tariffed commercial agreements”;¹⁵
- The analyses performed about “competitors, including data, sources and methods used in those analyses”;¹⁶
- “Descriptions of CLEC or out-of-region ILEC sales, pricing structures and discounts” and “expenditures” under “certain rate structures and discount plans”;¹⁷
- “Pricing, to the extent such information is not publicly available, for . . . all [packet-switched data services]”;¹⁸
- “[R]ates or charges associated with channel terminations or transport facilities, and information from which, whether alone or in combination with other confidential or non-confidential information, such rates or charges . . . ”;¹⁹ and
- “Information about Requests for Proposals (‘RFPs’), including descriptions of RFPs for which a party was selected as the winning bidder, descriptions of RFPs for which a party submitted unsuccessful competitive bids, and the business rules companies take into consideration to determine whether to submit a bid in response to an RFP”.²⁰

The marked information is not available from public sources, and, “if released to competitors, would allow those competitors to gain a significant advantage in the marketplace.”²¹

In accordance with the protective orders in WC Docket No. 05-25, extended to WC Docket No. 16-143 by the *June 24 Order*, Sprint, in addition to filing this redacted version electronically via ECFS, will submit one original and two hardcopies without redaction to the

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ Letter from Sharon E. Gillett, Chief, Wireline Competition Bureau, to Donna Epps, Vice President, Federal Regulatory Affairs, Verizon, DA 12-199, 27 FCC Rcd. 1545, 1548 (Feb. 13, 2012) (supplementing the *Second Protective Order*) (“*Second Supplement to Second Protective Order*”).

¹⁸ *Id.*

¹⁹ Letter from Sharon E. Gillett, Chief, Wireline Competition Bureau, to Paul Margie, Esq., Wiltshire & Grannis LLP, DA 11-805, 26 FCC Rcd. 6571, 6572 (May 2, 2011) (supplementing the *Second Protective Order*) (“*First Supplement to Second Protective Order*”).

²⁰ *Data Collection Protective Order* at App. B.

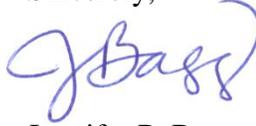
²¹ *Second Protective Order* ¶ 3; *First Supplement to Second Protective Order* at 6571; *Second Supplement to Second Protective Order* at 1546; *Data Collection Protective Order* ¶ 5.

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Secretary's Office. Sprint will also submit one CD copy without redaction to Christopher Koves, Pricing Policy Division, Wireline Competition Bureau.

Please contact me if you have any questions or require any additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Bagg". The signature is fluid and cursive, with the first letter of the first name being a large, stylized "J".

Jennifer P. Bagg
Counsel to Sprint Corporation



September 28, 2016

Ex Parte

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: *Business Data Services in an Internet Protocol Environment*, WC Docket No. 16-143; *Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans*, WC Docket No. 15-247; *Special Access for Price Cap Local Exchange Carriers*, WC Docket No. 05-25; *AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Service*, RM-10593.

Dear Ms. Dortch:

As the Commission recognized in the *Further Notice*, efforts to reform the Business Data Services (“BDS”) marketplace must “ensure that non-competitive market conditions do not disadvantage business customers and their ability to compete and innovate in downstream markets.”¹ These customers include wireless carriers seeking “to expand and operate their networks today,” and build “the dense thicket of cell-sites that will be needed to deliver [the] high bandwidth wireless services” of tomorrow.² The framework proposed by Verizon and INCOMPAS, and supported by Sprint, Windstream, and other market participants, represents the best path forward to accomplish the Commission’s goals.³ After conducting the most extensive data collection in agency history, the Commission has compiled a record that strongly supports the Verizon/INCOMPAS proposal. Nonetheless, AT&T—the one nationwide wireless carrier to

¹ *Business Data Services in an Internet Protocol Environment; Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Tariff Investigation Order and Further Notice of Proposed Rulemaking, FCC 16-54, 31 FCC Rcd. 4723 ¶ 5 (2016) (“*Further Notice*”).

² *Id.*

³ *See, e.g.*, Letter from Kathleen Grillo, Senior Vice President, Verizon, and Chip Pickering, Chief Executive Officer, INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 16-143 (filed Aug. 9, 2016).

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Ms. Marlene H. Dortch
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stand outside of this consensus—argues that even this is somehow inadequate.⁴ The Commission should recognize AT&T's complaint for what it is: an eleventh-hour effort to derail years of hard work by Commission staff and preserve its lucrative dominance over the BDS marketplace.

To facilitate the Commission's review of the record, Sprint submits herewith a high-level summary of the overwhelming evidence in support of the Verizon/INCOMPAS proposal. The summary also marshals support for backstop remedies that would promote access to BDS at lawful rates, terms, and conditions.

The Commission has an affirmative duty to ensure that all BDS rates, terms, and conditions are just, reasonable, and not unreasonably discriminatory, and the record it needs to act on this mandate. By following the evidence assembled in this long-running proceeding, the Commission can ensure that its more than a decade-long effort culminates in reform that will satisfy its statutory responsibilities, promote BDS competition, and unleash innovation and investment in tomorrow's new networks—including the 5G wireless networks that will depend on competitive access to high-capacity BDS.

Sincerely,



Jennifer P. Bagg
V. Shiva Goel
Harris, Wiltshire & Grannis LLP
1919 M Street NW, 8th Floor
Washington, DC 20036

Counsel to Sprint Corporation

A. Richard Metzger, Jr.
Emily Daniels
Lawler, Metzger, Keeney & Logan, LLC
1717 K Street NW, Suite 1075
Washington, DC 20006

Attachment

⁴ See Letter from Christopher T. Shenk, Counsel for AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 16-143 (filed Sept. 19, 2016).

Attachment

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CONCLUSION	SUPPORT FROM THE RECORD
<p><i>Other evidence confirms the presence of market power in low-bandwidth BDS markets.</i></p>	<ul style="list-style-type: none"> • Wholesale Above Retail. “[I]n a competitive marketplace, one would expect rates for more efficient packet-based inputs to be lower than rates for TDM-based inputs of comparable capacity. But at lower bandwidth levels, ILECs commonly price their wholesale IP offerings not only above their retail offerings, but also above what they charge wholesale purchasers for comparable capacity in TDM.” (Windstream Comments at 45) • Anticompetitive Actions Following Tariff Designation Order. “AT&T’s and Verizon’s proposed tariff revisions filed in response to the <i>Tariff Investigation Order</i> show that incumbent LECs have substantial and persisting market power in the provision of Low-Bandwidth Services. AT&T’s disregard for its customers’ strong preference for circuit portability and its introduction of penalties that harm its customers as well as Verizon’s unilateral price increase of almost three percent for DS1 services are blatant exercises of market power in the provision of those services and the packet-based dedicated services . . . that are substitutes for those services.” (Level 3 Reply Comments at 3, 16-17. <i>See also</i> Sprint Reply Comments at 25) • Reliance on Incumbent Facilities. “Continued ILEC dominance of last-mile customer access is further evidenced by the degree to which competitive providers must rely on their facilities to reach customers.” (Windstream Comments at 12-13)
<p><i>BDS providers are exploiting their market power to charge exorbitant supracompetitive rates.</i></p>	<p>Regression Analysis</p> <ul style="list-style-type: none"> • Dr. Rysman concludes that “competitive supply in a unique location is correlated in both statistically and economically significant ways with lower ILEC prices for DS1s and DS3s at that location.” (FNPRM, 31 FCC Rcd 4723 ¶ 238. <i>See also</i> Rysman Rev. White Paper at 3, 22-23; Besen/Mitchell 04/11 Rev. Decl. ¶ 43) • Similarly, Dr. Baker’s regression analysis shows large reductions in incumbent LECs’ prices in response to competitive entry. For example, Baker found “reduce[d] ILEC prices for DS1 connections by 51% according to one estimate and by 42% according to another.” (Baker 08/19 Reply Decl. ¶ 5) Similarly, Dr. Sappington notes that Baker’s regressions indicate that [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] (Sappington 04/11 Rev. Decl. ¶ 21) • Moreover, “the decline in price associated with additional rivals is likely greater than the reported results suggest, because the regression results are likely biased against identifying an inverse relationship between the number of rivals and price.” (Baker 04/14 Rev. Decl. ¶ 8) <p style="margin-left: 40px;"><i>Note:</i> Dr. Baker also has fully addressed ILEC criticisms of his statistical analysis of the BDS data. (Baker 04/14 Rev. Suppl. Reply Decl. ¶¶ 4-22; Baker 04/21 Second Suppl. Reply Decl. ¶¶ 4-39; Baker 09/21 Decl. ¶¶ 11-48)</p> • “[W]hether through the use of interaction terms or separate regressions, it appears that DS-1 and DS-3 prices are consistently lower when facing competition in Phase II areas than when facing competition in price cap and Phase I areas.” (FCC 06/28 Staff Report at 5. <i>See also</i> Rysman Rev. White Paper at 26) <p>Headroom</p> <ul style="list-style-type: none"> • “The six largest price cap incumbent LECs have been charging close to maximum prices for the last four tariff years,” a fact that “implies that if the price capped carrier had any headroom in previous years, then in or prior to 2012[, it] took advantage of that headroom and raised its prices.” (FNPRM, 31 FCC Rcd 4723 ¶ 240) • “[T]he fact that the price capped incumbent LECs have kept their prices at the top of the cap is additional evidence of market power.” (FNPRM, 31 FCC Rcd 4723 ¶ 239. <i>See also</i> Level 3 Reply Comments at 25-26; Sprint Reply Comments at 42-43; Windstream Comments at 61) • tw telecom submitted extensive “information regarding instances in which incumbent LECs have increased, or attempted to increase, special access prices in Phase II areas,” as well as “illustrative examples of differentials in prices that tw telecom pays in Phase II versus non-Phase II areas.” (tw telecom 06/18/12 Ex Parte at 1-2, App. B)

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CONCLUSION	SUPPORT FROM THE RECORD
<p><i>There is no credible evidence that this market power will dissipate in the near future.</i></p>	<ul style="list-style-type: none"> • “Carriers simply are not actively deploying low-capacity BDS services, such as DS1s, DS3s, and the Ethernet equivalents of these services.” (Sprint Comments at 19. <i>See also</i> XO 01/27 Comments at 52-55) • “[T]here is little prospect of new entrants for these services.” (CCA Comments at 3. <i>See also</i> CCA Reply Comments at 6-7) • “The evidence regarding competitive carriers’ ability to deploy connections to customer locations . . . strongly supports the conclusion that there is little competition for Business Data Services with bandwidths of 100 Mbps or less.” (Joint CLECs Comments at 21) <ul style="list-style-type: none"> ○ “Level 3 can rarely deploy connections to customers demanding [BDS] with bandwidth equal to or less than 100 Mbps and can only sometimes deploy connections to customers demanding [BDS] with bandwidth above 100 Mbps.” (Level 3 07/14 Ex Parte at 2. <i>See also</i> Level 3 09/09 Ex Parte at 2; Joint CLECs 01/27 Comments at 7-8; Joint CLECs Comments at 24-25; Merriman 06/28 Decl. ¶ 6; Level 3 Reply Comments at 3-4, 18-19) ○ “[A] fiber lateral build to any customer located 100 to 1,000 feet from the nearest splice point on TDS CLEC’s fiber network is not competitive at speeds ranging from 10 to 100 Mbps because TDS CLEC could not recover its required revenue and compete with lower RBOC retail rates.” (TDS 02/19 Reply Comments at 2, 15. <i>See also</i> Loch 02/19 Third Decl. ¶¶ 11-13; TDS Comments at 11-12) ○ ILEC studies contending that entry is easy at low bandwidths do not reflect current entry conditions, and ignore that competitors build from splice points. <i>See</i> Level 3 09/09 Ex Parte at 2; Baker 09/21 Decl. ¶ 6.
<p>B. Insufficient competition above 50 Mbps</p>	
<p><i>The record demonstrates that the marketplace for higher-bandwidth BDS is highly concentrated and is not subject to adequate competition.</i></p>	<p><u>General</u></p> <ul style="list-style-type: none"> • “[T]he record . . . demonstrates that the marketplace for higher-bandwidth BDS offerings is not adequately competitive. At best, the record shows that competitive conditions vary depending on the location, but most often are insufficient to produce competitive pricing.” (Sprint Comments at 27. <i>See also</i> Sprint Reply Comments at 37-41; CCA Comments at 3-4, 7-8; Joint CLECs Comments at 28-35; Level 3 Reply Comments at 5; Windstream 04/21 Ex Parte at 2) • As Dr. Baker notes, there is no “critical bandwidth level between 45 Mbps and 1 Gbps beyond which ease of entry reduces competitive concerns so much as to make regulation unnecessary.” (Baker 07/14 Rev. Decl. ¶ 4) <p><u>Concentration</u></p> <ul style="list-style-type: none"> • Market concentration data supports “a more confident prediction of anticompetitive effects from high concentration and small numbers of effective competitors.” (Kwoka 06/28 Decl. ¶ 44) • For circuits greater than 50 Mbps, no more than one ILEC and one competitive provider provide BDS circuits in about 83% of census blocks and 94% of locations. (<i>See</i> Zarakas 08/29 Further Suppl. Decl. at Tables 5-6)
<p><i>BDS providers are able to charge supracompetitive prices for high-bandwidth offerings.</i></p>	<ul style="list-style-type: none"> • <u>Baker Regressions.</u> “The presence of four or more in-building and four or more in-block high-bandwidth rivals lowers the prices of high-bandwidth connections by 43% according to one estimate and by 25% according to another.” (Baker 07/14 Rev. Decl. ¶ 3) This “inverse relationship between rivalry and price for high-bandwidth connections. . . suggest[s] the exercise of ILEC market power in the supply of high-bandwidth business data services connections.” (<i>Id.</i> ¶ 10). Contrary to ILEC arguments, these regression results are valid and informative, and criticisms to the contrary “look at the trees without seeing the forest.” (Baker 09/21 Decl. ¶¶ 11-48) As mentioned above, Dr. Baker has fully addressed criticisms of his statistical analysis. (Baker 04/14 Rev. Suppl. Reply Decl. ¶¶ 4-22; Baker 04/21 Second Suppl. Reply Decl. ¶¶ 4-39; Baker 09/21 Decl. ¶¶ 11-48) • <u>Kwoka Regressions.</u> Based on the analysis of the same evidence Rysman considered at a more disaggregated level, Dr. Kwoka concluded that competition for high capacity services “is not sufficiently strong or pervasive to bring prices charged by the ILECs into conformity with competitive levels.”

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CONCLUSION	SUPPORT FROM THE RECORD
	<p>CONFIDENTIAL [REDACTED] [END HIGHLY CONFIDENTIAL] MSAs. Most customer locations lie outside this limit. The [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] linear feet maximum construction feasibility limit is . . . [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] the size of most census blocks.” (Joint CLECs Comments at 24-25)</p> <ul style="list-style-type: none"> • Level 3 explains that, at best, it “can only sometimes deploy connections to customers demanding [BDS] with bandwidth above 100 Mbps.” (Level 3 07/14 Ex Parte at 2. <i>See also</i> Joint CLECs 01/27 Comments at 7-8; Joint CLECs Comments at 24-25; Merriman 06/28 Decl. ¶ 6; Level 3 Reply Comments at 3-4, 18-19) • Contrary to the suggestions of some ILECs and cable operators, “empirical results . . . do not indicate that entry is easy,” and the possibility of contracting with the customer in advance of construction provides no solution. (Baker 09/21 Decl. ¶¶ 6-10)
C. Impact of fiber facilities and cable	
<p><i>The mere presence of fiber in a census block does not establish that competition is forthcoming.</i></p>	<ul style="list-style-type: none"> • “The mere presence of fiber in a block is not an accurate indicator of actual or potential competition because the presence of fiber in the census block does not establish that a provider can extend a lateral to a business customer in that block on an economical basis.” (TDS Reply Comments at 7. <i>See also</i> INCOMPAS Comments at 8; Loch 02/19 Third Decl. ¶ 9; NASUCA et al. Reply Comments at 11-12; PaPUC Reply Comments at 9; Sprint Comments at 9-12; Sprint Reply Comments at 5-11; TDS 02/19 Reply Comments at 13-15) <ul style="list-style-type: none"> ○ “The idea that a new entrant can simply build off an existing facility in an area, such as a fiber ring running through a census block, to every location in that area is somewhat akin to suggesting that because one can add another lane to the freeway, one can easily add another lane to every road in the area.” (INCOMPAS 02/19 Reply Comments at 3-4) ○ “[E]ven a competitive LEC like Level 3, which owns an extensive fiber transport network, can deploy loops to, at most, approximately [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] percent of the commercial buildings in the ten most populous metropolitan statistical areas (‘MSAs’) in the country.” (Joint CLECs 02/19 Reply Comments at 3) ○ If the presence of fiber were sufficient, “then this proceeding would be largely unnecessary because potential competition would have already prevented incumbent LECs from offering their BDS at supra-competitive rates and on anticompetitive terms and conditions.” (Public Knowledge et al. Comments at 9. <i>See also</i> Sappington 04/11 Rev. Decl. ¶¶ 5, 25; Sprint 04/11 Rev. Reply Comments at 33-35; Windstream Reply Comments at 15-16) • “Competitors must overcome substantial barriers to the provision of facilities-based services that the incumbents do not face—such as the need to obtain building and rights-of-way access and permission to build new conduit in a timely manner—in order to deploy last mile fiber connections to business customer locations.” (INCOMPAS 02/19 Reply Comments at 10-11. <i>See also</i> Joint CLECs 01/27 Comments at 23; Joint CLECs 02/19 Reply Comments at 14-15; Sprint 04/11 Rev. Reply Comments at 20-35; Windstream 02/19 Reply Comments at 13-17; Windstream Reply Comments at 21-23; Baker 04/14 Rev. Decl. ¶¶ 39-40; Baker 04/14 Rev. Reply Decl. ¶¶ 6-7) • Numerous parties have outlined the magnitude of buildout costs in the record. For example, Windstream presented an analysis conducted by CostQuest that demonstrated the far higher economic obstacles faced by a competitive carrier entering on a targeted, greenfield basis as a second (or third or fourth) entrant in a market, as compared to the incumbent LEC, which has a large existing subscriber base over which to spread its deployment costs. (<i>See</i> CostQuest 06/08/15 White Paper #1 at 1-3; <i>see also</i> Joint CLECs 01/27 Comments at 31-40; Merriman 06/28 Decl. ¶¶ 4-6; Sprint 04/11 Rev. Comments at 34-36; TDS 01/27 Comments at 18-23; Butman 03/26/15 Decl. ¶¶ 10-16; Windstream 01/27 Comments at 35-42; Deem et al. 01/27 Decl. ¶¶ 50-52; Schirack/Baer 06/28 Decl. ¶¶ 16-18; XO 01/27 Comments at 36-40; Kuzmanovski 01/27 Decl. ¶¶ 29-35; Baker 04/14 Rev. Decl. ¶¶ 39-40)

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CONCLUSION	SUPPORT FROM THE RECORD
	<ul style="list-style-type: none"> • “[E]ven if a provider with nearby transport fiber would extend a lateral to reach an individual customer location in time and on economically feasible terms, the competitive provider still may not be a viable competitor for a customer seeking to attain its communications solution for multiple customer locations. Because of the multilocation needs of dedicated services customers, prospective competitors often must be able to enter the market across many geographic areas, which makes [entry] even less likely [for] companies without widespread last-mile facilities.” (Windstream 02/19 Reply Comments at 16-17. See also Baker 04/14 Rev. Reply Decl. ¶¶ 8-9; Joint CLECs 02/19 Reply Comments at 15; Sprint 04/11 Rev. Reply Comments at 26-27) • The BDS providers who possess market power appear to recognize the significant constraints that potential competitors face. For this reason, both Dr. Rysman and Dr. Baker found in their respective analyses that it is the “physical presence of local competition [that] is important for DS1 and DS3 lines.” (Rysman Rev. White Paper at 23. See also Baker 04/14 Rev. Decl. ¶¶ 37, 107; Baker 04/14 Rev. Suppl. Reply Decl. ¶ 2)
<p><i>Cable providers face constraints that impede their ability to compete in the provision of BDS.</i></p>	<ul style="list-style-type: none"> • “[C]able offerings are available only in the more limited set of buildings where cable providers have their own last-mile fiber access” and are not an “effective market competitor for both multi-location customer sites and larger single-location customers.” (Windstream 01/27 Comments at 19-20. See also Deem et al. 01/27 Decl. ¶ 75; Joint CLECs 01/27 Comments at 5; Joint CLECs 02/19 Reply Comments at 10-12; Level 3 Reply Comments at 5, 28; Sprint 04/11 Rev. Reply Comments at 54-56; TDS 04/14 Ex Parte at Attach.) • “Sanford Bernstein estimates that, in aggregate, ‘competitive carriers, as well as cable, have built facilities to a small portion (less than 5 percent) of towers and business locations.’” (Windstream Comments at 13) • “[E]ven at these locations, cable companies’ relatively limited range of managed and individual tailored services has made it more difficult for these companies to expand into the dedicated services markets.” (Windstream 01/27 Comments at 19-20. See also Sprint Reply Comments at 12-20, 36-37) • Notably, cable providers agree that differences between cable HFC networks and fiber networks render HFC-based services “at best, an inferior, occasional substitute for business data services,” and that construction and capacity constraints make it impossible for cable companies to deliver a BDS-like product at scale. (Windstream Reply Comments at 18-19. See also Joint CLECs 01/27 Comments at 17-18; Level 3 Reply Comments at 4; McReynolds 01/27 Decl. ¶¶ 18-22; Sprint Reply Comments at 17-20, 26-31) <ul style="list-style-type: none"> ○ Comcast notes that EoHFC “represents a very small segment of the market with little potential for significant growth” – approximately [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] of its BDS connections were EoHFC in 2013, and this number increased to only [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] in 2016. (Comcast Comments at 31-32) ○ Charter notes that “it remains to be seen how HFC-delivered BDS will fit into the marketplace.” (Charter Comments at 9) ○ Cox indicates that its “fiber based BDS and Ethernet over HFC services are completely different.” (Cox Comments at 9) ○ NCTA concluded that the performance objectives of EoHFC services, when they are even offered, “often are well below the performance commitments offered with TDM or fiber-based Ethernet services.” (NCTA Comments at 28) ○ As ACA explains, “dedicating HFC bandwidth to BDS subtracts from the available shared network capacity” for residential video and broadband services—cable providers’ core business. (ACA Comments at 28). Because “DOCSIS 3.1 remains a shared network service,” “there is little likelihood that expected service upgrades, including the deployment of DOCSIS 3.1 will make a difference” and allow cable operators to deploy BDS services at scale. (Charter Comments at 19).

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CONCLUSION	SUPPORT FROM THE RECORD
<p><i>The presence of cable competitors does not alter the state of BDS competition.</i></p>	<ul style="list-style-type: none"> • Dr. Rysman found that “even if we optimistically assume that cable is now in 50% more census blocks, the qualitative results do not change.” (Rysman Rev. White Paper at 16) Following release of the supplemental cable data, the Commission further concluded that: (1) “inclusion of the cable infrastructure has no appreciable effect on the previously estimated effects of facilities-based competition,” and (2) “the presence of the potential cable competition generally does not have a statistically significant effect on its own.” (FCC 06/28 Staff Report at 1) • Dr. Baker also updated his findings to account for the EoHFC data. Notably, he also found that the “validity of the estimation results I have presented . . . is not called into question by the data.” In particular, inclusion of EoHFC offerings “has no material effect on the estimates of the competitive significance of in-building and nearby rivalry.” (Baker 07/14 Rev. Decl. ¶¶ 27, 32. <i>See also</i> Baker 08/09 Reply Decl. ¶ 44) • Similarly, William Zarakas notes in his analysis that “[w]hile the inclusion of the supplemental cable data causes an increase in the total number of census blocks in which cable companies have deployed facilities capable of providing BDS, these data do not materially alter the results of my prior analyses – there are only one or two BDS providers present in the vast majority of census blocks.” In particular, there are no more than two BDS providers in approximately 82% of locations and 91% of census blocks with BDS demand, while only 1.4% of census blocks have four or more competitors. (Zarakas 08/09 Further Suppl. Decl. ¶¶ 6, 9, 13) • Prior to the availability of the supplemental cable data, Zarakas already had concluded that even if cable companies were to sell special access services in <i>every</i> location where the ILEC has special access facilities, there would be an ILEC-cable duopoly in 90% of the locations and 86% of census blocks where special access services are sold. Moreover, there would be four or more competitors present in only 0.5% of locations and 2% of census blocks with BDS demand. (Zarakas Rev. Suppl. Decl. ¶¶ 9-10, 12. <i>See also</i> Windstream Reply Comments at 15) • Finally, Zarakas notes that even these bleak numbers overstate competition, as “the cable companies have made no representation that they actually are providing EoHFC in these census blocks or intend to do so.” (Zarakas 08/09 Further Suppl. Decl. ¶ 5)

II. REMEDYING THE BROKEN BDS MARKETPLACE	
A. Application of a Competitive Market Test	
<p><i>The CMT should be applied to BDS offerings with capacities above 50 Mbps and below 1 Gbps.</i></p>	<p><u>Low Bandwidths</u></p> <ul style="list-style-type: none"> As noted above (<i>see</i> sections I.A & I.C), “a vanishingly small percentage of locations are competitive, or even potentially competitive, for BDS products at or below 50 Mbps.” (Sprint Comments at 4. <i>See also id.</i> at 16; Sprint Reply Comments at 23-26) The “competitive landscape is equally grim when assessed at the census block level.” (Sprint Reply Comments at 24) In addition, build-buy decisions support the presumption of non-competitiveness at lower bandwidths. (<i>See, e.g.,</i> Sprint Reply Comments at 23-26; Joint CLECs Comments at 22; INCOMPAS Comments at 6; CCA Comments at 3; Windstream Comments at 7; TDS Comments at 11; Level 3 09/09 Ex Parte at 3) Accordingly, the Verizon-INCOMPAS proposal encourages the FCC to designate BDS offerings at or below 50 Mbps as non-competitive in all geographic areas. (<i>See</i> Verizon/INCOMPAS 08/09 Ex Parte at 2; <i>see also</i> Sprint Comments at 15-21; Zayo Comments at 6) Other parties urge the FCC to consider setting the threshold at a higher capacity (<i>i.e.</i>, 100 Mbps). (<i>See</i> CCA Reply Comments at 3; Joint CLECs Comments at 7, 46-47; TDS Comments at 10-12; TDS Reply Comments at 3; Windstream Comments at 7, 32-33; Windstream Reply Comments at 8-10, 22) “[S]hould the Commission decline to adopt the proposed presumption, the administrative burden of conducting an accurate CMT for lower-capacity BDS offerings would increase significantly.” (Sprint Comments at 20. <i>See also</i> Joint CLECs Comments at 46) <p><u>Mid-Range Bandwidths</u></p> <ul style="list-style-type: none"> There is more variation in competitive conditions for BDS offerings above 50 or 100 Mbps. Accordingly, for services between this lower threshold and the higher threshold, the FCC should apply the CMT. (<i>See</i> Verizon/INCOMPAS 08/09 Ex Parte at 2-3; CCA Comments at 3-4; CCA Reply Comments at 20-21; Joint CLECs Comments at 7, 47-48; Sprint Comments at 21-27; Windstream Comments at 14-15; Windstream Reply Comments at 8-10) “It would be inappropriate for the Commission to presume that markets for business data services . . . with connections above 50 Mbps perform competitively.” (Baker 04/22 Ex Parte at 1) As explained above (<i>see</i> sections I.B & I.C), a wide range of evidence establishes that ILECs possess market power over higher bandwidth services in many areas. Failure to address the lack of competition above 50 Mbps would “eviscerate any impact this proceeding will have on 5G deployment.” (CCA 08/03 Ex Parte at 1-2; <i>see also</i> Sprint Reply Comments at 40, 48-53; INCOMPAS Comments at 11-12). As shown in Dr. Katz’s analysis, supracompetitive “backhaul prices harm wireless innovation and investment by limiting network deployment, lowering consumer quality of service, and delaying—and possibly forestalling—the ability of competitive carriers to migrate to next generation services.” (CCA Reply Comments at 3. <i>See also</i> CCA 09/09 Ex Parte Presentation). <p><u>High Bandwidths</u></p> <ul style="list-style-type: none"> There is broad agreement that the Commission should establish a high-bandwidth threshold of 1 Gbps, at or above which services would be deemed competitive. (<i>See</i> Joint CLECs Comments at 47; Verizon/INCOMPAS 08/09 Ex Parte at 2; Verizon Comments at 8-9; Windstream Reply Comments at 9) Build/buy analyses suggest that competitive entry, while challenging at any capacity, becomes easier at very high bandwidths. (<i>See, e.g.,</i> Level 3 07/14 Ex Parte at 2. <i>See also</i> Level 3 09/09 Ex Parte at 2; Joint CLECs 01/27 Comments at 7-8; Joint CLECs Comments at 24-25; Merriman 06/28 Decl. ¶ 6; Level 3 Reply Comments at 3-4, 18-19)
<p><i>Census blocks in which there are four or more providers with a BDS customer or connection should</i></p>	<p><u>General Test</u></p> <ul style="list-style-type: none"> “[T]he proposed CMT would treat as competitive any census blocks in which there are four or more providers with either an actual BDS customer or a connection.” (Sprint Comments at 29. <i>See also</i> Public Knowledge et al. Reply Comments at 4-5)

be deemed competitive.

- “[F]or purposes of applying this test, the ILEC, including its affiliates, would be deemed to be a single facilities-based provider in all census blocks within the ILEC’s service area.” ([Verizon/INCOMPAS 08/09 Ex Parte](#) at 2. *See also* [INCOMPAS Reply Comments](#) at 7-8)

Use of Actual Connections

- Focusing on BDS providers that reported a *Connection* in a census block is appropriate. (*See* [INCOMPAS 02/19 Reply Comments](#) at 2-4; [Joint CLECs Comments](#) at 49; [PaPUC Reply Comments](#) at 9; [Sprint Comments](#) at 4, 8-12; [Sprint Reply Comments](#) at 60-61; [TDS Comments](#) at 12-15; [Windstream Comments](#) at 21, 34; [Windstream Reply Comments](#) at 16-17)
- Conversely and as noted above, focusing only on the presence of fiber in circumstances where a provider has no connections would be inappropriate. (*See* [CCA Reply Comments](#) at 3; [Sprint 02/19 Reply Comments](#) at 6-8)
 - Dr. Baker finds that the presence of nearby competitive fiber has a very weak impact on pricing when compared to the presence of an actual competitor. ([Baker 04/14 Rev. Decl.](#) ¶¶ 80-82. *See also* [Baker 09/21 Decl.](#) ¶¶ 3-10)
 - Dr. Sappington explains that this outcome contradicts the “assertion that any CLEC that has deployed fiber nearby can impose strong competitive discipline on an incumbent supplier of special access services.” ([Sappington 04/11 Rev. Decl.](#) ¶¶ 19-23)
- In fact, the proposed CMT is likely to prove quite conservative.
 - “Even where a competitor has been able to leverage its existing network to build a connection to a single location, or even a few locations, this is no indication that a competitor can build facilities to all locations. Indeed, the record demonstrates otherwise.” ([INCOMPAS 02/19 Reply Comments](#) at 3. *See also* [Besen/Mitchell 04/11 Rev. Decl.](#) ¶ 29)
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([Joint CLECs Comments](#) at 53-54)

Use of Four Competitors as a Threshold for Effective Competition in the BDS Market

- Numerous parties agree that four competitors can ensure a competitive outcome in the BDS market. (*See* [CCA Reply Comments](#) at 21-22; [Level 3 Reply Comments](#) at 7-8; [Sprint Comments](#) at 29-32; [Sprint Reply Comments](#) at 55-60; [Windstream Reply Comments](#) at 10.)
- ***Economic Findings.***
 - Dr. Baker concludes that “the full effect of rivalry on price likely requires (at least) four in-building providers and four nearby providers.” ([Baker 07/14 Rev. Decl.](#) ¶¶ 4, 19)
 - Drs. Zarakas and Verlinda conclude that [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] ([Sprint Reply Comments](#) at 56)
 - Dr. Kwoka finds that the “number of ‘effective competitors’ necessary for competition may be on the order of three to five.” ([Kwoka 06/28 Decl.](#) ¶ 47)
 - Similarly, Drs. Besen and Mitchell conclude that, although “the exact number may be different in different industries, based on their different cost and demand characteristics, it is likely that four . . . are needed to give a competitive outcome in the special access markets under consideration in this proceeding.” ([Besen/Mitchell 04/11 Rev. Decl.](#) ¶ 47)
- ***Precedent.*** “[B]oth the Commission and the Department of Justice have indicated that at least four suppliers are necessary for competition.” ([INCOMPAS 02/19 Reply Comments](#) at 14. *See also* [Joint CLECs Comments](#) at 43-45; [Level 3 Reply Comments](#) at 7-8)

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	<ul style="list-style-type: none"> • Network Vision. Sprint’s own experience with Network Vision confirms that rates do not reach competitive levels until four providers have entered the relevant market. (See Sprint Reply Comments at 56; Sprint Comments at 29-30; Frentrup 06/28 Decl. ¶¶ 4-11) • Build-out Barriers. Selecting four competitors as the threshold may in fact be conservative since “it does not account for the myriad impediments documented in this proceeding that prevent competitive LECs from connecting a new customer even when they have previously established connections to customers in the relevant area.” (INCOMPAS Reply Comments at 7-8. See also Baker 08/09 Reply Decl. ¶ 13) <p><u>Insufficiency of Duopoly</u></p> <ul style="list-style-type: none"> • The record, FCC precedent, and economics literature are clear that a duopoly does not represent adequate competition. (Baker 04/14 Rev. Decl. ¶¶ 48-49; Besen/Mitchell 04/11 Rev. Decl. ¶ 47; NASUCA et al. Comments at 21-22; Public Knowledge et al. Comments at 11; Sprint 04/11 Rev. Reply Comments at 39-41; TDS 01/27 Comments at 17-18; TDS 02/19 Reply Comments at 4; Windstream 02/19 Reply Comments at 21-23; Windstream Reply Comments at 14-15, 20) • Even Verizon agrees that “more than two” competitors are needed. (Verizon/INCOMPAS 08/09 Ex Parte at 3)
<p><i>The census block is the appropriate geographic unit of analysis.</i></p>	<ul style="list-style-type: none"> • As both BDS providers and purchasers have agreed, “a census block test both eases the administration of the CMT and gives great weight to potential competition by assuming that any company with a connection near a customer location will discipline prices at that location, even if they do not offer service.” (Sprint Reply Comments at 62. See also CCA Comments at 4, 9-13; CCA Reply Comments at 21-22; INCOMPAS Comments at 7-8; Joint CLECs Comments at 52-54; Level 3 Reply Comments at 8; Sprint Comments at 7-8; Verizon Comments at 10-11; Windstream Comments at 7, 21, 32) • “As the record demonstrates, administering the CMT by census block is a very conservative approach because these areas are far larger than the distance that competitors are typically willing to extend their networks in response to a price increase by an incumbent.” (Sprint Reply Comments at 62) • If the FCC determines that census blocks present administrative challenges, it could apply the CMT across adjacent census blocks. Verizon and INCOMPAS have “agreed that the [CMT] should look not only at competition within a census block, but also within adjacent census blocks.” (Verizon Reply Comments at 5. See also Verizon/INCOMPAS 08/09 Ex Parte at 3) Although this will likely classify some census blocks as competitive that do not have competitive market conditions, this proposal takes into account the fact that a competitive provider may in some cases be able to construct facilities across census block boundaries to buildings in adjacent blocks. (See Sprint Reply Comments at 65; Windstream Reply Comments at 9-10)
<p><i>The Commission should exclude offerings that are not substitutes for BDS from the CMT.</i></p>	<p><u>UNEs</u></p> <ul style="list-style-type: none"> • A provider using only UNEs should not be counted as part of the CMT. (See Verizon/INCOMPAS 08/09 Ex Parte at 2-3; Baker 04/17 Rev. Decl. at n.3; Joint CLECs Comments at 41; Sprint Reply Comments at v, 22-23; TDS Reply Comments at 8-9; Windstream Comments at 34) • “[A] host of practical and legal limitations prevent competitive LECs relying on UNEs from competing with incumbent LECs at more than a limited number of customer locations and for more than a limited set of Business Data Services.” (Level 3 Reply Comments at 2) • “UNEs typically cannot be used to provision services above 50 Mbps, due to limits on the availability of loops as well as technical and economic feasibility.” (Windstream 01/27 Comments at 43) <p><u>Best Efforts</u></p> <ul style="list-style-type: none"> • Best efforts offerings should not count as connections for purposes of the CMT. (See Verizon/INCOMPAS 08/09 Ex Parte at 2-3; INCOMPAS Reply Comments at 8; Level 3 Reply Comments at 2, 11-14) • The record is replete with evidence that best efforts services are not substitutes for BDS because they lack fundamental features of BDS (e.g., the requisite service level guarantees and symmetrical capacities). (See Baker 04/14 Rev. Decl. ¶¶ 31-33; Besen/Mitchell 04/11 Rev. Decl. ¶ 16; Black 01/27 Decl. ¶ 16; Comcast Comments at 5, 10-11, 30-31; Cox Comments at 16-17; Joint CLECs 01/27 Comments at 4, 15-18, 27; Level 3 Reply Comments at 2, 11-14; Loch 01/27 Second Decl. ¶ 5;

	<p>NASUCA et al. Comments at 15-16; NASUCA et al. 02/19 Reply Comments at 12-13; Schieber 02/11/13 Decl. ¶¶ 12-16; Sprint 04/11 Rev. Comments at 12-14; Sprint 04/11 Rev. Reply Comments at 13-16; Sprint Comments at 12-15; Sprint Reply Comments at 13-17; Windstream 02/19 Reply Comments at 4-12; Windstream Comments at 21, 25-29; Windstream Reply Comments at 17-18; XO 01/27 Comments at 18-19, 25-26)</p> <ul style="list-style-type: none"> Unsurprisingly, “[c]ustomers are willing to pay a substantial premium per Mbps for dedicated services to achieve superior performance over best efforts services offered by the same providers, including when the best efforts services deliver much higher advertised bandwidths.” (Windstream 01/27 Comments at 23-24. See also Windstream 02/19 Reply Comments at 11-12) Indeed, as the cable companies explain, purchases of dedicated Ethernet services [BEGIN HIGHLY CONFIDENTIAL] ██████████ [END HIGHLY CONFIDENTIAL], notwithstanding their significantly higher price. (Sprint Reply Comments at 15-16) <p>Fixed Wireless</p> <ul style="list-style-type: none"> “[F]ixed wireless services do not have the performance capabilities or sufficient reliability for the provision of dedicated services” and should therefore not be counted as part of the CMT. (INCOMPAS 02/19 Reply Comments at 17. See also Baker 04/14 Rev. Decl. ¶ 34; Deem et al. 01/27 Decl. ¶¶ 34-36; Joint CLECs 01/27 Comments at 17-18; Sprint 04/11 Rev. Reply Comments at 16-18; Sprint Reply Comments at 21; Windstream 01/27 Comments at n.80) <p>EoHFC</p> <ul style="list-style-type: none"> “[G]iven that EoHFC services currently are limited in capacity to 10 Mbps, they inherently cannot serve as a competitive alternative for high-bandwidth needs” and should not be counted as a “connection” in the CMT. (Sprint Reply Comments at 17. See also TDS Reply Comments at 3, 7-8; Windstream Comments at 17) Dr. Baker’s [BEGIN HIGHLY CONFIDENTIAL] ██████████ [END HIGHLY CONFIDENTIAL] (Baker 07/14 Rev. Decl. ¶ 30)
<i>Other</i>	<ul style="list-style-type: none"> The FCC should use the data from the BDS collection to perform the initial CMT. (See Sprint Comments at 33-36) <ul style="list-style-type: none"> Zarakas and Verlinda performed two possible applications of the CMT and submitted the resulting list of census blocks that where there are four or more BDS providers. (Zarakas/Verlinda 06/28 Decl. ¶¶ 20-22, Exhibit) Level 3 calculated the number of census blocks and locations that would be deemed “competitive” under various permutations of the CMT. (Level 3 07/21 Ex Parte at 2-3) “Having left open the possibility of using Form 477 to collect BDS data, the Commission can now easily reincorporate a BDS information requirement that will enable it to have up-to-date information on the state of competition [going forward]. Form 477 is an ideal vehicle for the Commission to collect the necessary ongoing data to administer the CMT. . . . Such use of the Form 477 is unlikely to prove burdensome. BDS providers generally already submit Form 477 twice a year and therefore are familiar with the format and data requirements.” (Sprint Comments at 37-38)
B. Price cap reset	
<i>The record reflects widespread support for the application of price caps to low-bandwidth BDS offerings.</i>	<ul style="list-style-type: none"> “[I]t is critical that Commission reforms ensure . . . [a]ll DS1 and DS3 services, including those under optional discount plans, are subject to price caps.” (Windstream Comments at 7. See also CCA Reply Comments at 23-24; Joint CLECs Comments at 62-66; NASUCA et al. Comments at 24-25) “[T]he Commission should . . . [r]everse its forbearance from price caps regulation for packet services at speeds of 50 Mbps and below and move those services under the price caps rules.” (Ad Hoc Comments at ii. See also Joint CLECs Comments at 39-40) “[B]ecause price caps have been in place for decades and are well understood, there is little risk that reliance on price caps would lead to unintended consequences or would be overturned on appeal” or that such a regime would prove burdensome. (Level 3 Reply Comments at 52. See also Verizon Comments at 15)

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<p><i>The Commission should implement a one-time reduction of at least 15%, along with a going-forward X-factor of at least 4%.</i></p>	<ul style="list-style-type: none"> • The record reflects widespread support for a one-time adjustment to the PCI to reflect past productivity gains, as well as a going-forward price reduction. (See, e.g., CCA Reply Comments at 4, 23-24; Joint CLECs 01/27 Comments at 65-67; Joint CLECs Comments at 2-3, 12, 69-70; Sprint 04/11 Rev. Reply Comments at 70-73; Sprint Comments at 42-44; Windstream Comments at 7) • Verizon and INCOMPAS have proposed a two-year reduction: “In the first year, we propose the Commission reduce the Price Cap Index . . . by 10 percent with an additional rate reduction based on an X-factor of 4.4 percent minus inflation. In the second year, we propose an additional 5 percent reduction in the PCI, plus an additional rate adjustment based on an X-factor of 4.4 percent minus inflation. Going forward, the PCI would continue to be adjusted annually by an X-factor of 4.4 percent minus inflation.” (Verizon/INCOMPAS 08/09 Ex Parte at 1) • The record indicates that a 15% reduction would be conservative. <ul style="list-style-type: none"> ○ Based on the FCC’s use of Connect America Cost Model (CACM) data, Drs. Frentrup and Sappington calculated that an initial reduction in the PCI of at least 17.1% (and an initial X-factor of at least 3.94%) are appropriate. (Frentrup/Sappington 08/31 Decl. ¶ 3) ○ Ad Hoc notes that “assum[ing] an average GDP-PI of 1.9% for the period 2005 through the present . . . would result in an adjustment of approximately 25% (assuming recouped lost revenues for annual access filings from July, 2005 to July, 2016).” (Ad Hoc Comments at 17. See also CFA/NNI Reply Comments at 5) • The record also indicates that a going-forward X-factor adjustment is needed. (See Joint CLECs Comments at 12; Verizon Reply Comments at 10; Windstream Reply Comments at 11-12) • ILEC allegations that costs are in fact rising “is based on unreliable evidence that contradicts public statements.” (INCOMPAS 08/24 Ex Parte at 4. See also Windstream 09/22 Ex Parte)
<p><i>The FCC must implement a robust enforcement mechanism.</i></p>	<ul style="list-style-type: none"> • “In order to ensure that carriers are protected adequately, an effective price cap regime must include a robust enforcement mechanism that will prevent unlawful pricing and other practices. Particularly if the Commission intends to forbear from tariffing, it must ensure that there is another effective remedy available to the Commission and affected customers to prevent the BDS prices in question from exceeding the applicable PCI without adequate justification.” (Sprint Comments at 63-64) • “The price cap LEC . . . should not be without redress. If a price cap LEC believes that the existing index will prevent the carrier from earning a reasonable return on its regulated investment, it should have an opportunity to demonstrate to the Commission that the rate it wishes to impose is just, reasonable, and not unduly discriminatory.” (Sprint Comments at 64)
<p>C. Ethernet benchmark</p>	
<p><i>Parties support use of benchmarks for packet-based BDS offerings that are not subject to adequate competition.</i></p>	<ul style="list-style-type: none"> • “In areas where the market today is not sufficiently competitive to ensure reasonably priced packet-based Business Data Services, the Commission should adopt a benchmarking approach. Such an approach can ensure just and reasonable rates without imposing an undue burden on providers of Business Data Services and while still preserving incentives for investment and competition.” (Verizon Reply Comments at 12. See also Verizon/INCOMPAS 08/09 Ex Parte at 1-2) • In particular, the FCC should adopt the Verizon-INCOMPAS benchmark proposals, which would establish levels at which rates for packet-based BDS offerings will be presumed just and reasonable in non-competitive areas. These proposals reflect “an integrated compromise – not what individual parties would advocate on their own – and . . . a balance among competing interests comprised of incumbent LECs, competitive LECs and wireless carriers.” (Windstream Reply Comments at 8) • In addition to compromise, the Verizon-INCOMPAS benchmark proposal also reflects the record evidence. For example, “the Verizon-INCOMPAS [benchmark] proposal is a better way of implementing the anchor-rate benchmark as sketched by the Commission in the <i>FNPRM</i> because it recognizes that market prices for bandwidth do not increase linearly as bandwidth increases.” (Windstream Reply Comments at 12). Moreover, as discussed above (see Section II.B), studies of productivity enhancements support an annual reduction of at least 4%. In addition, “[a]pplying the benchmark rate to the highest service level of switched Ethernet service is both appropriate from a technological standpoint and minimizes the administrative burden on the Commission,” and establishing

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	<p>benchmarks at “frequently purchased bandwidth tiers” decreases “the potential for exercise of market power in between the benchmarked levels[.]” (Windstream 09/22 Ex Parte at 4)</p>
<p style="text-align: center;"><i>Benchmarks should be established using current TDM-based BDS rates.</i></p>	<p><u>Mechanics</u></p> <ul style="list-style-type: none"> • <i>Lowest-Speed Benchmark.</i> The benchmarking process should begin with the lowest-speed switched Ethernet service above 1.5 Mbps that is closest in quality to a DS1. The benchmark for this offering for a 3-year term should be equal to the carrier’s tariffed DS1 rate for a 3-year term, after applying the one-time adjustment and the annual X-factor minus inflation. “The DS1 circuit rate would include the rates for one channel termination, one fixed mile, five variable miles and 1/20th of a DS3/DS1 multiplexing arrangement. This and all other Ethernet benchmarks cover charges for the carrier handoff point to the end user premises.” (Verizon/INCOMPAS 08/09 Ex Parte at 2. <i>See also</i> Sprint 08/30 Ex Parte Presentation at 2-4; Windstream 08/22 Ex Parte at 2-5) • <i>Higher-Speed Benchmarks.</i> “Once the lowest-speed benchmarks are established, the benchmarks for higher Ethernet speeds would be derived by applying the price-cap carrier’s respective relationship of rates for higher-speed Ethernet services to the lowest-speed Ethernet services. The Ethernet rate relationship would be developed using the rates in each price-cap carrier’s publicly available product guide. A carrier that does not have a publicly available product guide would file with the Commission rate information necessary to establish the benchmarks. For carriers for which the necessary information is not available, the Commission could develop a benchmark using the average of the available information. Services with a different quality of service should reflect a reasonable relationship to the benchmark.” (Verizon/INCOMPAS 08/09 Ex Parte at 2. <i>See also</i> Sprint 08/30 Ex Parte Presentation at 2, 5). • <i>Going Forward.</i> “The benchmarks would be reduced annually by 4.4 percent minus inflation.” (Verizon/INCOMPAS 08/09 Ex Parte at 2). <p><u>Application of Benchmarks</u></p> <ul style="list-style-type: none"> • <i>Leading Provider.</i> The FCC could apply the Ethernet benchmark only to the leading provider or firms with market power in a particular geographic area. (<i>See</i> Sprint Reply Comments at 71; Joint CLECs Comments at 10, 58-60) • <i>New Entrants.</i> “New entrants would not be subject to the benchmark at least until the FCC reassesses marketplace competition in approximately three years.” (Verizon/INCOMPAS 08/09 Ex Parte at 2. <i>See also</i> Sprint Reply Comments at 73) • <i>Wireless Backhaul.</i> “The benchmarks should apply in a neutral manner, and . . . the Commission should make clear that Ethernet services provided to wireless providers are subject to [the FCC’s BDS] framework, including the benchmarks.” (INCOMPAS Reply Comments at 14. <i>See also</i> CCA Reply Comments at 16-19; Sprint 08/30 Ex Parte Presentation at 7)
<p style="text-align: center;"><i>The Commission should ensure compliance with the benchmarks through an expedited dispute resolution process.</i></p>	<ul style="list-style-type: none"> • <u>Transparency.</u> Price cap carriers should be required to “post on their websites schedules of the benchmarks.” (Verizon/INCOMPAS 08/09 Ex Parte at 2) • <u>Challenge Process.</u> Verizon and INCOMPAS urge the FCC to “adopt a streamlined dispute resolution process that reflects which parties possess necessary information to resolve complaints related to compliance with the benchmarks.” (Verizon/INCOMPAS 08/09 Ex Parte at 2. <i>See also</i> TDS Reply Comments at 18-19; Windstream Reply Comments at 13) Sprint has proposed a 60-day timeline for resolving benchmark complaints and provided additional details on required disclosures, burden of proof, and provisional rates. (<i>See</i> Sprint 09/15 Ex Parte Presentation) <ul style="list-style-type: none"> ○ <i>Disclosures.</i> “The FCC should establish in advance the list of initial disclosures that Respondents must file in any benchmark challenge process.” (Sprint 09/15 Ex Parte Presentation at 13) This information should include a “[r]ate and service description (quality, speed, term) for each retail and wholesale non-government customer located within a CB where buyer seeks service.” (<i>Id.</i> at 7) If the Seller/Respondent alleges “that rates are cost-justified,” it should produce cost information and bear the burden of justifying “allocation of costs to BDS.” (<i>Id.</i>) ○ <i>Burden of proof.</i> “If a seller prices at or below the benchmark, the buyer should have the burden of proving that the rate is unjust and unreasonable. If a seller prices above the benchmark, the seller

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	<p>should have the burden of proving that the rate is just and reasonable.” (Sprint Reply Comments at vi. <i>See also</i> CCA 08/05 Ex Parte at 2; Windstream 08/22 Ex Parte at 5)</p> <ul style="list-style-type: none"> ○ If the “[c]hallenge is related to the rate of a service without a directly comparable benchmark . . . the Seller/Respondent” should bear the burden of “identifying [the] closest benchmark and establishing that the rate differential is reasonable.” (Sprint 09/15 Ex Parte Presentation at 13; <i>see also</i> Windstream 08/22 Ex Parte at 5) ○ <i>Provisional rates.</i> “[W]hile a complaint is pending, it would be reasonable to permit a complainant to pay the benchmark rate, subject to true-up and interest.” (Verizon/INCOMPAS 08/09 Ex Parte at 2. <i>See also</i> Sprint 08/30 Ex Parte Presentation at 9; Windstream 08/22 Ex Parte at 5; Sprint 09/15 Ex Parte Presentation at 14) If the challenge is to a “below-benchmark rate,” the buyer should “take[] at the seller’s offered rate.” (Sprint 09/15 Ex Parte Presentation at 14) “Provisional service” should be “deemed provided on a month-to-month basis,” even if the challenged offering is for a multi-year term, to provide the buyer with “30 days to terminate after a final decision” on the complaint. (<i>Id.</i>) ○ <i>Timeline.</i> Expedited proceedings are “increasingly commonplace,” “promote[] certainty[,] and reduce[] burdens on buyers, sellers, and consumers.” (Sprint 09/15 Ex Parte Presentation at 3) ● Backstop. “The Commission . . . should make clear that market leaders subject to the reduction cannot affect backdoor price increases – such as through inappropriate special construction charges, moving buildings off lists designated for lower pricing, increasing rates of other network components, imposing unwarranted penalties . . . , or any other unjustified charges.” (Windstream Reply Comments at 13. <i>See also</i> Windstream 08/22 Ex Parte at 1-5)
D. Wholesale/retail pricing	
<p><i>Incumbent LECs continue to impose wholesale rates that exceed retail rates for identical and/or similar services.</i></p>	<ul style="list-style-type: none"> ● “ILECs often charge a high price for wholesale connections relative to the retail price they charge for similar connections.” (Baker 04/14 Rev. Decl. ¶ 38. <i>See also id.</i> nn.31-32; Baker 04/14 Rev. Reply Decl. ¶¶ 15-16; Baker 03/02 Suppl. Reply Decl. ¶ 24; INCOMPAS Reply Comments at 14-16) ● Windstream submitted an extensive comparison of ILEC wholesale rates and retail rates that demonstrates ILEC <i>retail</i> prices are lower than the commercially “discounted” <i>wholesale</i> rates that Windstream pays. (Windstream Reply Comments at Attach. A) Similarly, Windstream has extensively discussed how incumbent LECs’ price squeeze is an exercise of market power that unjustifiably raises competitive LECs’ costs, thereby inhibiting downstream competition. (<i>See</i> Windstream 01/27 Comments at 49-56; Deem et al. 01/27 Decl. ¶¶ 86-96; Windstream 02/19 Reply Comments at 28-30; Windstream Comments at 39-44; Windstream Reply Comments at 25-28) ● TDS found that AT&T’s average wholesale prices for 10 Mbps, 20 Mbps, and 50 Mbps, were [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] of the prices charged for similar AT&T retail Ethernet services. (Loch 03/24 Fourth Decl. ¶ 5) ● TDS explained that “AT&T’s price squeeze practices continue AT&T’s publicly posted bid prices for 20 and 50 Mbps Ethernet Internet services (carrier’s facilities) were significantly lower than the price AT&T offers TDS CLEC for the Ethernet loop portion (partner facilities) of the retail service AT&T bid to provide Outagamie County, Wisconsin for a two-year term.” (TDS 08/25 Ex Parte at 2) ● TDS has “anecdotal evidence of . . . ILECs . . . offering on-net rates for near-net services to retail customers and other wholesale customers but not to TDS CLEC.” (TDS 08/25 Ex Parte at 2) ● XO estimated that after including its standard markup of [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] XO’s retail prices when using an AT&T wholesale Ethernet input were [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END HIGHLY CONFIDENTIAL] higher than AT&T’s retail price for a similar service. (Anderson 01/27 Decl. ¶ 22)
<p><i>Imposing wholesale rates that exceed retail rates is unjust and unreasonable.</i></p>	<ul style="list-style-type: none"> ● “[W]hen a bottleneck owner – which can be a monopolist or a duopolist – controls a critical input used in providing downstream services, the bottleneck owner may weaken downstream competitors ‘by pricing access to its critical input sufficiently high and pricing its retail services sufficiently low that the retail rivals could not succeed sustainably in the marketplace by utilizing either the anticompetitively high-priced efficient bottleneck input or the inferior alternatives.’” (Windstream Reply Comments at 5-6. <i>See also id.</i> at 29-30; Windstream Comments at 39-41)

F. “Fresh look”

The FCC should grant BDS purchasers a “fresh look” opportunity.

- “The Commission must . . . establish a transition period in which all contracts that contain the terms that have been deemed anticompetitive are subject to a fresh look at the discretion of the purchasers of Business Data Services.” ([CFA/NNI Reply Comments](#) at 5. *See also* [INCOMPAS 04/21 Ex Parte](#) at 2)
- The FCC “should grant customers currently purchasing CBDS pursuant to volume and term plans under standard tariffs and pursuant to contract tariffs the right to either reduce their volume commitments without incurring shortfall penalties or to terminate their plans or contract tariffs without incurring early termination penalties at any time during a 180-day period following the effective date of the new rules. This ‘fresh look’ will give such customers the opportunity to take advantage of the prohibition on all-or-nothing provisions while maintaining their existing purchase arrangements or to terminate their existing arrangements and enter into entirely new purchase arrangements with incumbent LECs.” ([Joint CLECs Comments](#) at 105. *See also id.* at 18; [Level 3 Reply Comments](#) at 67-68; [Sprint Comments](#) at vii, 41, 79-82; [Sprint 04/11 Rev. Reply Comments](#) at 4-5, 68-69)
 - “[A] fresh look opportunity will remove barriers to competition much more quickly than waiting for existing arrangements to expire.” ([Joint CLECs Comments](#) at 105-06)
 - “A fresh look for purchasers . . . is supported by Commission precedent and is a reasonable approach to address the harmful effects of . . . lock-ups, especially in light of the complexity of the various plans and their interrelation with the various overlay agreements customers have entered into.” ([Level 3 04/22 Ex Parte](#) at 1-2. *See also* [Sprint Comments](#) at 80)
 - “[A] fresh look strikes the right balance between allowing purchasers to adjust the ‘all or nothing’ volume commitments that the Commission has found to be unlawful and avoiding other potential remedies that could cause further harm and disruption to purchasers. Instead, a fresh look would simply allow purchasers and competitive BDS providers to adjust existing unlawful volume commitments that have long served as unreasonable restraints on the emergence of competition and the transition from TDM to IP-based services.” ([Sprint Comments](#) at 80-81)
- “While this action would provide relief in only the very limited locations where facilities-based competition exists, it represents a quick and easily implemented mechanism for allowing competition to take root in the few places where the broken market currently makes competition possible at all.” ([Sprint 02/05 Comments, WC Docket No. 15-247](#) at 52. *See also* [Sprint 04/11 Rev. Reply Comments](#) at 69)