



2450 N Street, NW
Washington, D.C. 20037
(202) 295-4200

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON SEPTEMBER 10, 2018**

A Special Meeting of Stockholders (the "Special Meeting") of Cogent Communications Holdings, Inc., a Delaware corporation (the "Company"), will be held on September 10, 2018, at 9:00 a.m., local time, at the Company's offices at 2450 N Street, NW, Washington, D.C. 20037, for the following purposes:

1. To approve the amended and restated bylaws of the Company, as attached hereto as Annex A, for the sole purpose of amending Section 12 of the bylaws to increase the size of the Board of Directors to seven (7) directors from the current six (6) directors.
2. To transact such other business as may properly come before the Special Meeting and any adjournment or postponement thereof.

The foregoing matters are described in more detail in the enclosed Proxy Statement.

The Board of Directors has fixed July 13, 2018 as the record date for determining stockholders entitled to vote at the Special Meeting.

You are cordially invited to attend the Special Meeting in person. Your participation in these matters is important, regardless of the number of shares you own. Whether or not you expect to attend in person, we urge you to complete, sign, date and return the enclosed proxy card as promptly as possible in the enclosed envelope. If you choose to attend the Special Meeting, you may then vote in person if you so desire, even though you may have executed and returned the proxy. Any stockholder who executes such a proxy may revoke it at any time before it is exercised. A proxy may be revoked at any time before it is exercised by delivering written notice of revocation to the Company, Attention: Ried Zulager, 2450 N Street, NW, Washington, D.C. 20037; by delivering a duly executed proxy bearing a later date to the Company; or by attending the Special Meeting and voting in person.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read "Ried Zulager", followed by a long horizontal line extending to the right.

Ried Zulager, *Secretary*
Washington, D.C.
July 19, 2018

COGENT COMMUNICATIONS HOLDINGS, INC.

**Important Notice Regarding the Availability of Proxy Materials for the
Stockholder Meeting to Be Held on September 10, 2018**

The proxy statement is available at: www.cogentco.com/en/about-cogent/investor-relations/reports.

A special meeting of the stockholders (the “Special Meeting”) of Cogent Communications Holdings, Inc. (“Cogent” or the “Company”) will be held at 9:00 a.m., local time, on September 10, 2018 at Cogent’s offices at 2450 N Street, NW, Washington, D.C. 20037. The matters to be covered are noted below:

1. To approve the amended and restated bylaws of the Company, as attached hereto as Annex A, for the sole purpose of amending Section 12 of the bylaws to increase the size of the Board of Directors to seven (7) directors from the current six (6) directors.
2. To transact such other business as may properly come before the Special Meeting and any adjournment or postponement thereof.

The Board of Directors of Cogent recommends voting FOR Proposal 1—to approve the amended and restated bylaws of the Company for the sole purpose of increasing the size of the Board of Directors to seven (7) directors from the current six (6) directors.

You are cordially invited to attend the meeting in person. Your participation is important, regardless of the number of shares you own. Whether or not you expect to attend in person, we urge you to complete, sign, date and return the enclosed proxy card as promptly as possible in the enclosed envelope. If you choose to attend the meeting, you may then vote in person if you so desire, even though you may have executed and returned the proxy. Any stockholder who executes such a proxy may revoke it at any time before it is exercised. A proxy may be revoked at any time before it is exercised by delivering written notice of revocation to the Company, Attention: Ried Zulager, 2450 N Street, NW, Washington, D.C. 20037; by delivering a duly executed proxy bearing a later date to the Company; or by attending the Special Meeting and voting in person.



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PROXY STATEMENT

The Board of Directors (the “Board”) of Cogent Communications Holdings, Inc. (referred to herein as the “Company,” “Cogent,” “we,” “us,” or “our”), a Delaware corporation, is soliciting your proxy on the proxy card enclosed with this Proxy Statement. Your proxy will be voted at a Special Meeting of Stockholders (the “Special Meeting”) to be held on September 10, 2018, at 9:00 a.m., local time, at the Company’s offices at 2450 N Street, NW, Washington, D.C. 20037, and any adjournment or postponement thereof. This Proxy Statement and the accompanying proxy card are first being mailed to stockholders on or about July 19, 2018.

VOTING SECURITIES

Voting Rights and Outstanding Shares

Only stockholders of record on the books of the Company as of 5:00 p.m., July 13, 2018 (the “Record Date”), will be entitled to vote at the Special Meeting. At the close of business on the Record Date, the outstanding voting securities of the Company consisted of 46,506,135 shares of common stock, par value \$0.001 per share.

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Votes cast by proxy or in person at the Special Meeting will be tabulated by the Inspector of Elections with the assistance of the Company’s transfer agent. The Inspector will also determine whether or not a quorum is present. In general, our bylaws (the “Bylaws”) provide that a quorum consists of a majority of the shares issued and outstanding and entitled to vote, the holders of which are present in person or represented by proxy. Abstentions are counted for purposes of determining whether a quorum is present.

The affirmative vote of a majority of the shares having voting power present in person or represented by proxy at a duly held meeting at which a quorum is present is required under the Bylaws for approval of Proposal 1. Abstentions will be treated as present and having voting power, and accordingly will have the effect of a negative vote for purposes of determining the approval of Proposal 1. Proposal 1 is considered a non-routine matter under applicable rules. A broker or other nominee cannot vote on this non-routine matter without specific voting instructions from the beneficial owner.

Proxies

The shares represented by the proxies received, properly dated and executed and not revoked will be voted at the Special Meeting in accordance with the instructions of the stockholders. A proxy may be revoked at any time before it is exercised by:

- delivering written notice of revocation to the Company, Attention: Ried Zulager, 2450 N Street, NW, Washington, D.C. 20037;
- delivering a duly executed proxy bearing a later date to the Company; or
- attending the Special Meeting and voting in person.

Any proxy that is returned using the form of proxy enclosed and that is not marked as to a particular item will be voted “FOR” Proposal 1—to approve the amended and restated Bylaws for the sole purpose of increasing the size of the Board of Directors to seven (7) directors from the current six (6) directors.

The Company believes that the tabulation procedures to be followed by the Inspector of Elections are consistent with the general statutory requirements of the State of Delaware concerning the voting of shares and determination of a quorum.

The cost of soliciting proxies will be borne by the Company. In addition, the Company may reimburse brokerage firms and other persons representing beneficial owners of shares for their expenses in forwarding solicitation materials to such beneficial owners. Proxies may also be solicited by certain of the Company’s directors, officers and regular employees, without additional compensation, personally or by telephone or email.

PROPOSAL NO. 1
BYLAW AMENDMENT TO INCREASE THE SIZE OF THE BOARD TO SEVEN DIRECTORS

We are asking stockholders to approve the amended and restated Bylaws for the sole purpose of amending Article 3, Section 12 of the Bylaws to increase the number of directors that shall constitute the whole Board to seven (7) from six (6).

The Board believes an increase in its size will provide the opportunity to add a new director with demonstrated experience and expertise relevant to our business, operations, and industry. The Board believes this increase in the size of the Board is in the best interests of the Company and its stockholders.

On June 1, 2018, the Board approved, subject to stockholder approval, the amended and restated Bylaws to increase the number of directors that shall constitute the whole Board to seven (7) from six (6). No other changes are being made to the Bylaws. The full text of the amended and restated Bylaws is attached hereto as Annex A.

If the amendment of the Company's Bylaws is approved by stockholders, the Board expects to appoint Lewis H. Ferguson III to fill the vacancy resulting from the increase in the size of the Board.

Mr. Ferguson, age 73, was appointed by the U.S. Securities and Exchange Commission ("SEC") to two terms as a board member of the Public Company Accounting Oversight Board ("PCAOB"), the oversight body for auditors of U.S. public companies, serving from 2011 to 2018. Mr. Ferguson served as Vice-Chair and Chair of the International Forum of Independent Audit Regulators, the international coordinating body of more than 50 independent audit regulators throughout the world, from 2012 to 2015. Mr. Ferguson also served as the first general counsel of the PCAOB from 2004 to 2007.

Prior to his service at the PCAOB, Mr. Ferguson was a partner at the law firm of Williams & Connolly, LLP from 1979 to 1993 and 1998 to 2003, and at the law firm of Gibson, Dunn & Crutcher, LLP ("Gibson Dunn") from 2007 to 2011, specializing in securities controversy work, board counseling, representation of audit firms and corporate financial restructurings. While he was a partner at Gibson Dunn he served as acting General Counsel and part of the senior management team at Sunrise Senior Living, the nation's largest provider of senior living facilities, during its financial restructuring from 2009 to 2010. He also served as Senior Vice President and General Counsel of Wright Medical Technology from 1994 to 1997, a publicly traded medical device manufacturer, where he was also head of strategic planning and acquisitions, completing approximately 25 acquisitions of companies and technologies and raising approximately \$100 million of equity capital.

Mr. Ferguson has at various times served on the boards of seven companies, two public and five private. The two public companies were Wright Medical Technologies (1994-1997) and Cogent Communications Group, Inc., a predecessor of the Company (2007 to 2009). His roles as a board member included board chair of one company and audit committee chair, compliance committee chair or member of several others. Mr. Ferguson also taught tax, securities and business planning law at Georgetown University Law Center from 1985 to 2000 and has lectured widely on accounting regulation, the role of audit committees and corporate governance.

Recommendation of the Board:

The Board recommends a vote "FOR" approval of the amended and restated Bylaws of the Company for the sole purpose of increasing the size of the Board of Directors to seven (7) directors from the current six (6) directors.

BOARD OF DIRECTORS AND COMMITTEES

Board of Directors

Our Board currently consists of six directors holding office until the next annual meeting of stockholders or until their respective successors have been elected or appointed. Set forth below is certain information concerning each of the six directors.

Dave Schaeffer, age 62, founded our Company in August 1999 and is our Chairman of the Board, Chief Executive Officer and President. Prior to founding the Company, Mr. Schaeffer was the founder of Pathnet, Inc., a broadband telecommunications provider, where he served as Chief Executive Officer from 1995 until 1997 and as Chairman from 1997 until 1999. Mr. Schaeffer has been a director since 1999. Mr. Schaeffer serves as both Chairman and Chief Executive Officer (“CEO”) because he is the founder of the Company and has successfully led the Company and the Board since the Company was founded. Since 2014 Mr. Schaeffer has been a director of CyberArk Software Ltd. (NASDAQ: CYBR), a publicly traded Israeli company.

Steven D. Brooks, age 66, has served on our Board since October 2003. Mr. Brooks is a private investor. He was Managing Partner of BCP Capital Management from 1999 to 2009. From 1997 until 1999, Mr. Brooks headed the technology industry mergers and acquisition practice at Donaldson, Lufkin & Jenrette. Previously, Mr. Brooks held a variety of positions in the investment banking and private equity fields, including: Head of Global Technology Banking at Union Bank of Switzerland, Managing Partner of Corporate Finance at Robertson Stephens, founder and Managing Partner of West Coast technology investment banking at Alex Brown & Sons, and Principal at Rainwater, Inc., a private equity firm in Fort Worth, Texas. Mr. Brooks serves on the Board because of his extensive experience with firms such as Cogent and with public market activities of such companies. Having been involved with the Company since its early days he also brings extensive historical perspective to the Board.

Timothy Weingarten, age 43, has served on our Board since October 2003. Mr. Weingarten is currently a Product Manager at Pinterest. Prior to Pinterest, he was the co-founder & CEO of ShopTAP Inc. Prior to founding ShopTAP Inc., he was the Chairman and CEO of Visage Mobile. He is also a former General Partner of Worldview Technology Partners—an early stage venture capital fund. From 1996 to 2000, Mr. Weingarten was a member of the telecom equipment research group at Robertson Stephens and Company. Mr. Weingarten serves on the Board because of his extensive knowledge of the U.S. venture capital backed companies making use of the Internet. The Board values this insight because Cogent’s future growth depends to a great extent on the uses made of the Internet.

Richard T. Liebhaber, age 83, has served on our Board since March 2006. Mr. Liebhaber was with IBM from 1954 to 1985, where he held a variety of positions. Subsequently, he served as executive vice president and member of the management committee at MCI Communications, and served on the board of directors of MCI from 1992 to 1995. From 1995 to 2001, Mr. Liebhaber served as managing director at Veronis, Suhler & Associates, a New York media merchant banking firm. Mr. Liebhaber serves on the Board because of his extensive operational experience with telecommunications companies.

D. Blake Bath, age 55, has served on our Board since November 2006. He is currently engaged in philanthropic concerns. He is a board member of the Protestant Episcopal Cathedral Foundation in Washington D.C., and a board member and the treasurer of the Bethesda-Chevy Chase Educational Foundation. From 2006 to 2016 he was the Chief Executive Officer of Bay Bridge Capital Management, LLC, an investment firm in Bethesda, MD. From 1996 until 2006, Mr. Bath was Managing Director at Lehman Brothers and, as a senior equity research analyst for Lehman Brothers, was Lehman’s lead analyst covering wireline and wireless telecommunications services. Prior to joining Lehman Brothers he was the primary telecommunications analyst at Sanford C. Bernstein from 1992 to

1996. From 1989 to 1992 he was an analyst in the Strategic Planning and Corporate Finance organizations at MCI Communications. Mr. Bath serves on the Board because of his wide experience with the telecommunications industry which allows him to contribute a broad perspective to discussions about the Company's future activities and its place in the current competitive landscape.

Marc Montagner, age 57, has served on our Board since April 2010. He is currently Chief Financial Officer at Endurance International Group Holdings, Inc. (NASDAQ: EIGI), which position he has held since September of 2015. He was previously Chief Financial Officer at LightSquared from 2012 until August 2015. Previously, he had been Executive Vice President of Strategy, Development and Distribution at LightSquared. On May 14, 2012, LightSquared filed for reorganization under Chapter 11 of the U.S. Bankruptcy Code. Prior to joining LightSquared in February of 2009, Mr. Montagner was Managing Director and Co-Head of the Global Telecom, Media and Technology Merger and Acquisition Group at Banc of America Securities. Until August of 2006, he was Senior Vice President, Corporate Development and M&A with the Sprint Nextel Corporation. Prior to this, Mr. Montagner had the same responsibilities with Nextel Communications. Prior to 2002, Mr. Montagner was a Managing Director in the Media and Telecom Group at Morgan Stanley. Prior to joining Morgan Stanley, Mr. Montagner worked for France Télécom in New York where he was Head of Corporate Development for North America. He holds an M.S. degree in Electrical Engineering from the École Nationale Supérieure des Télécommunications, in Paris, and an M.B.A. from Columbia University. Mr. Montagner serves on the Board due to his extensive experience in the telecommunications industry, specifically with respect to operational, financial and strategic matters.

Board Committees and Corporate Governance

The Board met four times during 2017 and there was one action by written consent. Each director attended at least 75% of the meetings of the Board. Each director attended at least 75% of the meetings of the committees of the Board of which he was a member. The independent directors met four times. The Company encourages all directors to attend the Company's annual meeting of stockholders. All of the directors attended the Annual Meeting of Stockholders in 2017 and 2018. During 2017, the Board had a standing Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee.

Mr. Schaeffer serves as CEO and Chairman of the Board. He is the founder of the Company and owns approximately 9% of the Company's stock. His dual role was established more than 18 years ago when he founded the Company. The Board believes that at the Company's current stage of growth the Board is best served by a chairman who is involved with the Company on a full-time basis, fully knowledgeable of both the Company's financial and operational workings, and is therefore able to bring great depth of knowledge about the Company to this role. The Board does not have a designated lead independent director.

The Board's role in the Company is to provide general oversight of strategy and operations. As part of its oversight of operations it reviews the performance of the Company and the risks involved in the operations of the Company. The Board and the Audit Committee receive regular reports on the status of the Company's internal controls and each has reviewed key operational risks. The Board's risk oversight role has no effect on its leadership structure as all directors other than Mr. Schaeffer are independent directors and therefore have no conflict that might discourage critical review.

Nominating and Corporate Governance Committee

We established our Nominating and Corporate Governance Committee of the Board (the "Nominating and Governance Committee") in April 2005. During all of 2017, the members of this committee were Messrs. Brooks (Chairman) and Montagner, each of whom is "independent" as the term is defined in the applicable listing standards of the Nasdaq Marketplace Rules. Our Board has

adopted a charter governing the activities of the Nominating and Corporate Governance Committee. The charter of the Nominating and Corporate Governance Committee may be found on the Company's website under the tab "About Cogent; Investor Relations; Corporate Governance" at www.cogentco.com. Pursuant to its charter, the Nominating and Corporate Governance Committee's tasks include assisting the Board in identifying individuals qualified to become Board members, recommending to the Board director nominees to fill vacancies in the membership of the Board as they occur and, prior to each annual meeting of stockholders, recommending director nominees for election at such meeting.

The Nominating and Corporate Governance Committee seeks diversity of perspective in considering the membership of the Board. It does not have precise measures for the optimal range and type of diversity desirable. Instead it and the Board seek candidates with a range of experience. Board candidates are considered based upon various criteria, such as skills, knowledge, perspective, broad business judgment and leadership, relevant specific industry or regulatory affairs knowledge, business creativity and vision, experience, and any other factors appropriate in the context of an assessment of the committee's understood needs of the Board at that time. In addition, the Nominating and Corporate Governance Committee considers whether the individual satisfies criteria for independence as may be required by applicable regulations and personal integrity and judgment. Accordingly, the Company seeks to attract and retain highly qualified directors who have sufficient time to attend to their substantial duties and responsibilities to the Company.

The Nominating and Corporate Governance Committee has the sole authority to retain, compensate, and terminate any search firm or firms to be used in connection with the identification, assessment, and/or engagement of directors and director candidates. No such firm has been retained by the Company in the past.

The Nominating and Corporate Governance Committee considers proposed nominees whose names are submitted to it by stockholders; however, it does not have a formal process for that consideration. The Company has not to date adopted a formal process because it believes that the informal consideration process has been adequate. The committee intends to review periodically whether a more formal policy should be adopted. If a stockholder wishes to suggest a proposed name for committee consideration, the stockholder should comply with the provisions of the Company's Bylaws, including without limitation, sending the name of that nominee and related personal information to the Nominating and Corporate Governance Committee, in care of our Secretary, at least three months before the next annual meeting of stockholders to ensure meaningful consideration by the Nominating and Corporate Governance Committee. See "Stockholder Proposals" for Bylaw requirements for nominations.

The Nominating and Corporate Governance Committee had one formal meeting in 2017. In 2018, it met and recommended to the Board that the size of the Board be increased to seven directors to accommodate the addition of Mr. Ferguson, who would bring extensive experience to the Board, especially with respect to audit matters. All meetings and activities of the Nominating and Corporate Governance Committee were held in conjunction with a meeting of the full Board to accommodate the views of all members of the Board concerning its membership and constitution.

Audit Committee

The Audit Committee is established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). During all of 2017, the members of this committee were Messrs. Liebhaber (Chairman), Bath and Montagner, each of whom is "independent" as the term is defined in the applicable listing standards of Nasdaq Marketplace Rules and Rule 10A-3 under the Exchange Act. The Board has determined that each of Messrs. Liebhaber, Bath and

Montagner qualifies as a financial expert, as that term is defined in the Exchange Act. The responsibilities of this Audit Committee include:

- the appointment, compensation, retention and oversight of our independent registered public accountants;
- reviewing with our independent registered public accountants the plans and results of the audit engagement;
- pre-approving professional services provided by our independent registered public accountants;
- reviewing our critical accounting policies, our Annual and Quarterly reports on Forms 10-K and 10-Q, and our earnings releases;
- reviewing the independence of our independent registered public accountants; and
- reviewing the adequacy of our internal accounting controls and overseeing our ethics program.

The Audit Committee met four times during 2017. The charter of the Audit Committee may be found under the tab “About Cogent; Investor Relations; Corporate Governance” at www.cogentco.com.

Compensation Committee

During 2017, all of the independent directors were members of the Compensation Committee. Accordingly, the membership of the Compensation Committee consisted of Messrs. Brooks, Weingarten, Liebhaber, Bath, and Montagner, each of whom is “independent” as the term is defined in the applicable listing standards of the Nasdaq Marketplace Rules. The Compensation Committee does not have a chairman. The Compensation Committee is responsible for determining the compensation for our executive officers and other employees, and administering our compensation programs. The Compensation Committee had two formal meetings in 2017. Salary and equity compensation awards for all of the executive officers and key employees of the Company were considered during these meetings and Mr. Schaeffer was absent from any discussions concerning his compensation. The charter of the Compensation Committee is available under the tab “About Cogent; Investor Relations; Corporate Governance” at www.cogentco.com.

Stockholder Communication with Board Members

To provide our stockholders with a direct and open line of communication to our Board, a process has been established for communications with the Board, or any member of the Board. Any communications to the Board should be sent to the Board of the Company, in care of our Secretary at 2450 N Street, NW, Washington, D.C. 20037 or to BoardofDirectors@cogentco.com. All communications will be reviewed and then directed to the appropriate member(s) of the Board, other than, at the Board’s request, certain items unrelated to the Board’s duties, such as spam, junk mail, solicitations, employment inquires and similar items.

In addition, the Board plans to hold a meeting with stockholders in October for the purpose of discussing compensation and governance issues with the stockholders. The independent directors will hold such discussions separately from the Board, i.e. without the CEO present. The Board intends to hold such a meeting on a regular basis.

Board Member Attendance at Annual Meetings

The Company encourages all of its directors to attend the Annual Meeting of Stockholders. All of the directors attended the 2017 and 2018 Annual Meetings of Stockholders. The Company generally holds a Board meeting coincident with the annual meeting of stockholders to minimize director travel obligations and facilitate their attendance at the annual meeting.

Director Independence

Nasdaq Marketplace Rules require that a majority of the Board be independent. No director qualifies as independent unless the Board determines that the director has no direct or indirect relationship with the Company that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In assessing the independence of its members, the Board examined the commercial, industrial, banking, consulting, legal, accounting, charitable and familial relationships of each member. The Board's inquiry extended to both direct and indirect relationships with the Company. Based upon both detailed written submissions by its members and discussions regarding the facts and circumstances pertaining to each member, considered in the context of applicable Nasdaq Marketplace Rules, the Board has determined that all of the current members of the Board, other than Mr. Schaeffer, are independent.

If Proposal 1 is approved by the stockholders, the Board intends to make a formal determination regarding Mr. Ferguson's independence before appointing him to fill the vacancy resulting from the increase in the size of the Board. The Board expects that Mr. Ferguson would be found to be independent under the applicable listing standards of Nasdaq Marketplace Rules and Rule 10A-3 under the Exchange Act.

EXECUTIVE OFFICERS AND SIGNIFICANT EMPLOYEES

Set forth below is certain information concerning the executive officers and significant employees of the Company. Biographical information on Mr. Schaeffer is included under “Board of Directors” above.

Thaddeus G. Weed, age 57, joined us in 2000 and served as Vice President and Controller until May 2004 when he became our Chief Financial Officer and Treasurer. From 1997 to 1999, Mr. Weed served as Senior Vice President of Finance and Treasurer at Transaction Network Services, Inc. where Mr. Weed undertook a broad range of financial management responsibilities. From 1987 to 1997, Mr. Weed was employed at Arthur Andersen LLP where he served as Senior Audit Manager.

Robert N. Beury, Jr., age 65, joined us in 2000 and serves as Chief Legal Officer (Vice President and General Counsel) and Assistant Secretary. Prior to joining us, Mr. Beury served as Deputy General Counsel of Iridium LLC, a mobile satellite service provider, from 1994 to 2000. From 1987 to 1994, Mr. Beury was General Counsel of Virginia’s Center for Innovative Technology, a non-profit corporation set up to develop the high tech industry in Virginia.

R. Brad Kummer, age 69, joined us in 2000 and serves as Vice President of Optical Transport Engineering and Chief Technology Officer. Mr. Kummer spent the 25 years prior to joining us at Lucent Technologies (formerly Bell Laboratories), where he served in a variety of research and development and business development roles relating to optical fibers and systems. In his most recent work at Lucent, he was responsible for optical fiber systems engineering for long haul and metropolitan dense wavelength division multiplexing systems.

Timothy G. O’Neill, age 62, joined us in 2001 and serves as the Vice President of Field Engineering, Construction and Network Operations. He is responsible for network operation, construction and maintenance. From 1999 to 2001, Mr. O’Neill was employed at @Link Networks, Inc. where he served as Chief Network Officer. While at @Link Networks, Inc., Mr. O’Neill was responsible for engineering, implementing and operating a network for Internet access and layer 2 services.

Bryant Hird “Guy” Banks, age 54, joined us in 2000 and serves as Vice President of Real Estate. Prior to joining us Mr. Banks held positions with various affiliates of Security Capital Group Incorporated, including the positions of Vice President of Land Acquisition and Vice President of Development for CWS Communities Trust.

Henry W. Kilmer, age 49, joined us in 2011 and serves as Vice President of IP Engineering. Prior to joining us, Mr. Kilmer held positions with UUNET (now Verizon), Sprint, Digex/Intermedia and Metromedia Fiber Networks/Abovenet where he was Senior Vice President of Engineering and Operations. Most recently, Mr. Kilmer was President of Terrapin Communications, Inc., a small consulting firm which focused on network consulting and technical strategy development for companies like GPX, Airband, and Switch and Data (now part of Equinix).

James Bubeck, age 52, was appointed as our Chief Revenue Officer and Vice President of Global Sales in October 2015. Mr. Bubeck has served in the sales organization of Cogent in various capacities since May of 2000, most recently, since 2007, as Vice President of Central Region Sales, based in Chicago. From 1996 to 2000 he was a sales manager for MCI’s internet network business, which was subsequently divested to Cable and Wireless due to the merger of MCI and WorldCom.

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis describes the compensation program for our Principal Executive Officer, our Principal Financial Officer, and the next three most highly-compensated Executive Officers of the Company during 2017 (the “Named Executive Officers”). During 2017, these individuals were:

- Dave Schaeffer, our Founder and Chief Executive Officer (our “CEO”);
- Thaddeus G. Weed, our Chief Financial Officer (our “CFO”);
- Robert N. Beury, Jr., our Chief Legal Officer;
- Timothy G. O’Neill, our Vice President of Field Engineering, Construction, and Network Operations; and
- James Bubeck, our Chief Revenue Officer and Vice President of Global Sales.

This Compensation Discussion and Analysis describes the material elements of our executive compensation program during 2017. It also provides an overview of our executive compensation philosophy and objectives. Finally, it analyzes how and why we arrived at the specific compensation decisions for our executive officers, including the Named Executive Officers, for 2017, including the key factors that the Compensation Committee considered in determining their compensation. We note that, at this time as well as during all of 2017, the functions of the Compensation Committee were largely undertaken by the independent members of our Board.

Executive Summary

2017 Executive Compensation Highlights

The Compensation Committee took the following key actions with respect to the compensation of the Named Executive Officers for 2017:

- **Base Salaries**—With the exception of our CEO, who receives no annual base salary, increased their annual base salaries by 10% (2% in common with all employees and 8% based on length of employment).
- **Annual Incentive Compensation for CEO**—Based on achievement of 57% of our revenue growth target and 48% of our adjusted EBITDA growth target for 2017, made an annual incentive award in the amount of \$263,337 to our CEO;
- **Annual Commission for Chief Revenue Officer**—Based on achievement of 98% of his revenue target for 2017, made a commission payment in the amount of \$98,158 to Mr. Bubeck; and
- **Long-Term Incentive Compensation**—Granted long-term incentive compensation opportunities in the form of time-based restricted stock awards, which vest in 2020, and performance-based restricted stock awards, which are to be earned based on our performance over a multi-year period through the end of 2020.
- **Extension of Term of CEO Employment Agreement**—Entered into a seventh amendment of our employment agreement with our CEO, which extended the term of the agreement through 2021 and extended his eligibility to earn up to \$500,000 per year in annual incentive compensation based on the achievement of specified revenue and adjusted EBITDA targets for the performance of Cogent. His employment agreement continues to provide that he does not receive a base salary.

Pay-for-Performance Discussion

We view our executive compensation practices as an avenue to communicate our goals and standards of conduct and a means to reward our executive officers for their achievements. We believe our executive compensation program is reasonable, competitive, and appropriately balances the goals of attracting, motivating, rewarding, and retaining our executive officers and, therefore, that it promotes stability in our leadership.

To ensure our executive officers' interests are aligned with those of our stockholders and to motivate and reward individual initiative and effort, currently a substantial portion of their target annual total direct compensation opportunity is delivered in the form of equity awards and, therefore, "at-risk." Further, in the case of our CEO, all of his cash compensation opportunity for 2017 was performance-based.

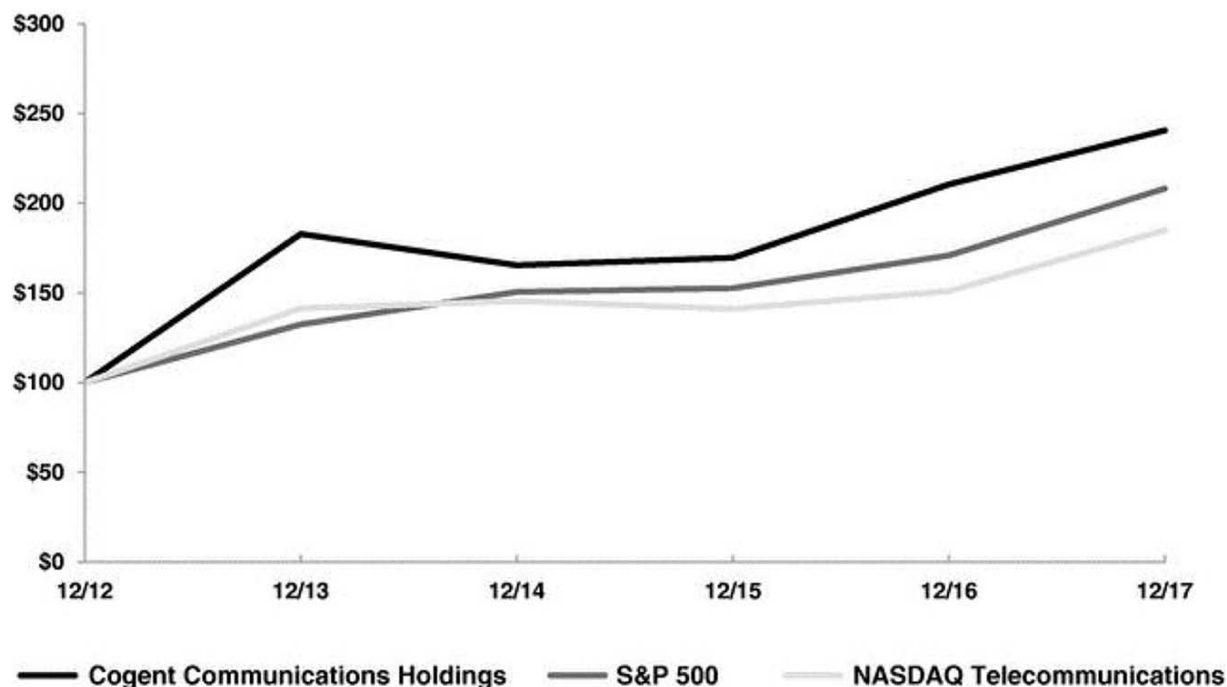
We believe that long-term incentive compensation opportunities in the form of equity awards are a key incentive for our CEO, as well as our other executive officers, to drive long-term growth in stockholder value. To ensure that we maintain faithful to our compensation philosophy, the Board evaluates the relationship between the reported values of the equity awards granted to our executive officers, the amount of compensation realizable (and, ultimately, realized) from such awards in subsequent years, and our total stockholder return over this period.

We believe that our focused emphasis on the use of long-term incentive compensation as the key element of our executive officers' target total direct compensation opportunities has enabled us to maintain a strong alignment of our executive officers' and stockholders' interests and resulted in the above-market performance of our common stock as illustrated below.

The following graph compares the cumulative five-year total stockholder return on our common stock with the cumulative total returns of the Standard & Poor's 500 Index and the NASDAQ Telecommunications Index (the "NTI"). The graph tracks the performance of a \$100 investment in our common stock and in each index (with the reinvestment of all dividends) from December 31, 2012 through December 31, 2017.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Cogent Communications Holdings, the S&P 500 Index
and the NASDAQ Telecommunications Index



* \$100 invested on 12/31/12 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

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Burn Rate

The “burn rate” at which the Company has awarded stock and options to employees, including the Named Executive Officers, in the last three years is set out below. The “burn rate” is the sum of the stock and option awards granted, divided by the number of weighted average common shares used in our basic earnings per share calculation.

| | 2017 | 2016 | 2015 | TOTAL | AVERAGE |
|---|--------------|------------|------------|--------------|------------|
| Options granted | 81 | 73 | 84 | 238 | 79 |
| Shares granted | 500 | 358 | 63 | 921 | 307 |
| TOTAL | <u>581</u> | <u>431</u> | <u>147</u> | <u>1,159</u> | <u>386</u> |
| Weighted average shares—basic EPS | 44,855 | | | | |
| Burn rate—1 year | 1.30% | | | | |
| Burn rate—3 year average | 0.86% | | | | |

Executive Compensation Policies and Practices

We endeavor to maintain sound executive compensation policies and practices, including compensation-related corporate governance standards, consistent with our executive compensation

philosophy. During 2017, we maintained the following executive compensation policies and practices, including both policies and practices we have implemented to drive performance and policies and practices that either prohibit or minimize behaviors that we do not believe serve our stockholders' long-term interests:

What We Do

- ***Maintain an Independent Compensation Committee.*** The Compensation Committee consists solely of independent directors who establish our compensation practices.
- ***Retain an Independent Compensation Advisor.*** The Compensation Committee has engaged its own compensation consultant to provide information, analysis, and other advice on executive compensation independent of management.
- ***Annual Executive Compensation Review.*** At least once each year, the Board conducts a review of our compensation strategy.
- ***Compensation At-Risk.*** Our executive compensation program is designed so that a significant portion of our executive officer's compensation is "at risk" based on corporate performance, because it is equity-based, to align the interests of our executive officers and stockholders.
- ***Annual Compensation-Related Risk Assessment.*** The Board considers our compensation-related risk profile to ensure that our compensation-related risks do not create inappropriate or excessive risk and are not reasonably likely to have a material adverse effect on the Company.
- ***Multi-Year Vesting Requirements.*** To align the interests of our executive officers and stockholders, the equity awards granted to our executive officers vest or are earned over multi-year periods.
- ***Compensation Recovery ("Clawback") Policy.*** We have adopted a compensation recovery ("clawback") policy which enables the Board to recover incentive compensation from our CEO and our other executive officers in the event of an accounting restatement resulting from misconduct.
- ***Stock Ownership Policy.*** We have adopted a stock ownership policy for our CEO and the members of the Board under which they must accumulate and maintain, consistent with the terms of the guidelines, shares of our common stock.
- ***Conduct an Annual Stockholder Advisory Vote on Named Executive Officer Compensation.*** We conduct an annual stockholder advisory vote on the compensation of the Named Executive Officers. The Board considers the voting results of this advisory vote during the course of its deliberations and also separately seeks to engage on executive compensation matters with our stockholders.

What We Do Not Do

- ***No Guaranteed Bonuses.*** We do not provide guaranteed bonuses to our executive officers. Only our CEO and Chief Revenue Officer are eligible to receive cash bonuses, which are entirely performance-based. Our other executive officers are not eligible for cash bonuses.
- ***No Defined Benefit Retirement Plans.*** We do not currently offer, nor do we have plans to offer, defined benefit pension plans or any non-qualified deferred compensation plans or arrangements to our executive officers other than the plans and arrangements that are available to all employees. Our executive officers are eligible to participate in our Section 401(k) retirement plan on the same basis as our other employees.

- **No Hedging or Pledging.** We prohibit our employees, including our executive officers, and the members of the Board from hedging our equity securities and from pledging our equity securities on a non-recourse basis.
- **No Tax Payments on Perquisites.** We do not provide any tax reimbursement payments (including “gross-ups”) on any perquisites or other personal benefits.
- **No Excise Tax Payments on Future Post-Employment Compensation Arrangements.** We do not provide any excise tax reimbursement payments (including “gross-ups”) on payments or benefits contingent upon a change in control of the Company.
- **No Special Welfare or Health Benefits.** We do not provide our executive officers with any welfare or health benefit programs, other than participation in the broad-based employee programs, such as medical, dental and vision benefits, medical and dependent care flexible spending accounts, health savings accounts, long-term and short-term disability insurance, and basic life insurance coverage.
- **No Stock Option Re-pricing.** We do not permit options to purchase shares of our common stock to be re-priced to a lower exercise price without the approval of our stockholders.

Executive Compensation Philosophy and Program Design

Compensation Philosophy

Our philosophy is to compensate all of our employees, including our executive officers, in a manner which reflects the competitive value of their skills and experience in the marketplace, to pay our sales force and sales management substantial cash commissions based upon revenue generated, and to tie the compensation of our senior executive officers to the value of our common stock through the grant of restricted stock awards that vest or are earned over multi-year periods.

We believe that the success of our philosophy is demonstrated by our record of revenue growth and increased profitability, our stable and capable leadership, and our equity appreciation.

Program Design

We structure the annual compensation of our executive officers, including the Named Executive Officers, using two principal elements: base salary and long-term incentive compensation opportunities in the form of equity awards. In addition, the two executive officers who are most directly responsible for driving our revenue growth—our CEO and Chief Revenue Officer—are also eligible to receive annual cash incentive awards based on our performance against pre-established financial objectives.

Executive Compensation Program Governance

Role of the Compensation Committee

The Compensation Committee, which is composed entirely of independent directors, is responsible for determining compensation for our executive officers and other employees, and administering our compensation programs. In 2017, the functions of the Compensation Committee were undertaken by the independent members of the Board.

Accordingly, in 2017 the Board had overall responsibility for overseeing our compensation and benefits policies generally, overseeing, evaluating, and approving the compensation plans, policies, and programs applicable to our CEO as well as our other executive officers, determining and overseeing the process of evaluating our CEO’s performance, and overseeing the preparation of, reviewing, and approving this Compensation Discussion and Analysis.

The Board's practice of developing and maintaining compensation arrangements that are competitive includes a balance between retaining the best possible talent and maintaining a reasonable and responsible cost structure.

When selecting and setting the amount of each compensation element, the Board considers the following factors:

- our performance against the financial and operational objectives established by the Board;
- each individual executive officer's skills, experience, and qualifications relative to other similarly-situated executives in the competitive market;
- the scope of each executive officer's role compared to other similarly-situated executives in the competitive market;
- the performance of each individual executive officer, based on a subjective assessment of his or her contributions to our overall performance, ability to lead his or her business unit or function, and work as part of a team, all of which reflect our core values;
- compensation parity among our executive officers; and
- our financial performance relative to our peers.

These factors provide the framework for compensation decision-making and final decisions regarding the compensation opportunity for each executive officer. No single factor is determinative in setting pay levels, nor was the impact of any factor on the determination of pay levels quantifiable.

Role of Management

In discharging its responsibilities, the Board works with members of our management, including our CEO. Management assists the Board by providing information on Company and individual performance, market data, and management's perspective and recommendations on compensation matters. The Board solicits and reviews our CEO's recommendations and proposals with respect to adjustments to annual cash compensation, long-term incentive compensation opportunities, program structures, and other compensation-related matters for our executive officers. The Board reviews and discusses these recommendations and proposals with our CEO and uses them as one factor in determining and approving the compensation for our executive officers. In setting the compensation of our CEO, he recuses himself from all discussions regarding his own compensation.

Role of Compensation Consultant

In May 2016, the Compensation Committee engaged Compensia, a national compensation consulting firm, to serve as its compensation advisor. During 2017, Compensia provided the following services:

- assisted with the development of a compensation peer group, provided competitive market data based on the compensation peer group for our executive officer positions and evaluated how the compensation we pay our executive officers compares both to our performance and to how the companies in our compensation peer group compensate their executives;
- reviewed and analyzed the base salary levels and annual and long-term incentive compensation opportunities of our executive officers;
- assessed executive compensation trends within our industry, and updated us on corporate governance and regulatory issues and developments; and
- reviewed our executive compensation disclosure, including the Compensation Discussion and Analysis.

In 2017, Compensia provided no services to us other than the consulting services to the Compensation Committee. The Compensation Committee has reviewed the objectivity and independence of the advice provided by Compensia to the Compensation Committee on executive compensation matters and determined that Compensia is independent and that its work did not raise any conflicts of interest.

Competitive Positioning

Compensia developed and recommended a compensation peer group to be used as a reference for understanding the market for executive talent when making future compensation decisions for our executive officers. Compensia determined our compensation peer group by focusing on U.S.-based publicly-traded companies in the following technology industry sectors—telecommunications, Internet, and software. Compensia then selected companies that were similar to us relative to our size, using the following criteria:

- similar revenue size—~0.5x to ~2.0x our last four fiscal quarter revenue of approximately \$400 million (~\$200 million to \$830 million); and
- similar market capitalization—~0.3x to ~3.0x our market capitalization of \$1.8 billion (~\$535 million to \$5.4 billion).

The Board approved Compensia's recommended peer group of 16 communications and technology companies for purposes of comparing our executive compensation levels and practices against the competitive market, which the Board subsequently approved. The companies comprising this compensation peer group were as follows:

| | |
|-----------------------------|---------------------------|
| 8x8 | inContact |
| ATN International | InterDigital |
| Consolidated Communications | Iridium Communications |
| Demandware | J2 Global |
| Earthlink Holdings | RingCentral |
| FireEye | Shenandoah Communications |
| General Communications | TrueCar |
| GTT Communications | Vonage Holdings |

The Board does not believe that it is appropriate to make compensation decisions, whether regarding base salaries or long-term incentive compensation, upon any type of benchmarking. However, the Board believes that information regarding the compensation practices at other companies is useful in at least two respects. First, the Board recognizes that our compensation policies and practices must be competitive in the marketplace. Second, this information is useful in assessing the reasonableness and appropriateness of individual executive compensation elements and of our overall executive compensation packages. This information is only one of several factors that the Board considers, however, in making its decisions with respect to the compensation of our executive officers.

The Board intends to review our compensation peer group at least annually and make adjustments to its composition, taking into account changes in both our business and the businesses of the companies in the compensation peer group.

Individual Compensation Elements

For 2017, our executive compensation program consisted of the following three principal elements:

- Base salary (except for our CEO, whose base salary was replaced with an annual cash incentive compensation opportunity in 2015);

- Long-term incentive compensation in the form of time-based restricted stock awards and performance-based restricted stock awards; and
- Sales commissions for our Chief Revenue Officer and Vice President of Global Sales.

Other than the annual cash incentive compensation opportunity for our CEO and the sales commission opportunity for our Chief Revenue Officer and Vice President of Global Sales, we did not provide any of our executive officers with an annual incentive opportunity in 2017.

Base Salary

Base salary represents the fixed portion of the compensation of our executive officers and is an important element of compensation intended to attract and retain highly-talented individuals.

Generally, we establish the initial base salaries of our executive officers through arm's-length negotiation at the time we hire the individual executive officer, taking into account his or her position, qualifications, experience, prior salary level, and the base salaries of our other executive officers. Thereafter, the Board reviews the base salaries of our executive officers from time to time and makes adjustments to base salaries as it determines to be necessary or appropriate.

It is the general policy of the Board to provide our executive officers with the same general salary increase granted to all employees each year. Consistent with this policy, in 2017 our executive officers, including the Named Executive Officers (other than our CEO), received the same 2% base salary increase as our other employees. In addition, in recognition of each's tenure and length of service with us, the Board determined that each Named Executive Officer received an additional 8% base salary increase.

Our CEO has not received a base salary for several years and, accordingly, did not receive a base salary in 2017.

Annual Incentive Compensation

Except for our CEO and our Chief Revenue Officer, annual incentive compensation in the form of cash bonuses has not been a part of our executive compensation program. This policy continued in effect in 2017.

Incentive Compensation Opportunity for Our CEO

As in 2016, our CEO was eligible to receive an annual cash incentive award based on our ability to improve our financial performance year-over-year as measured by two equally-weighted metrics: increases in revenue and increases in adjusted earnings before interest, taxes, depreciation, and amortization ("Adjusted EBITDA").

For purposes of his 2017 incentive compensation opportunity, our CEO was to receive a cash award in the amount of \$250,000 if our revenue growth for the year equaled or exceeded by 15% our prior year total and, separately, an additional cash award in the amount of \$250,000 if our Adjusted EBITDA growth for the year equaled or exceeded by 20% our prior year total. If the growth of these performance metrics was less than the target level specified, he would receive a proportionally smaller amount.

Our revenue grew 8.6% from 2016 to 2017 and our Adjusted EBITDA grew 9.7% from 2016 to 2017. Based on the framework the Board had established for determining his annual cash incentive award, this translated to a cash award in the amount of \$142,735 for the revenue metric and a cash award in the amount of \$120,602 for the Adjusted EBITDA metric, or an aggregate annual cash incentive award in the amount of \$263,337.

Incentive Compensation Opportunity for Chief Revenue Officer

In addition, due to the importance of his position in driving revenue and, therefore, stockholder value, Mr. Bubeck was eligible to receive monthly commissions based on our revenue for each month of 2017. Since revenue growth is critical to our success, the Board believes that it is important to directly link a significant portion of Mr. Bubeck's target total direct compensation opportunity to achieving our monthly revenue targets.

At the beginning of 2017, monthly revenue targets for Mr. Bubeck for the year and his target commission opportunity for the year were established. Mr. Bubeck's monthly commissions were determined by measuring our actual net new revenue for each month against the pre-established revenue target for that month, with the resulting percentage multiplied by his target commission opportunity. In 2017, approximately one third of his target total cash compensation opportunity was tied to the achievement of these revenue targets.

For 2017, Mr. Bubeck achieved 98% of his revenue target for the year. Accordingly, he received \$98,158 of his target commission opportunity of \$100,000 based on his monthly performance against his targets.

Long-Term Incentive Compensation

We believe that the strongest alignment of executive and stockholder interests arises from their common ownership of our equity securities. Accordingly, the Board allocates the largest portion of our executive officer's target total direct compensation opportunity to long-term incentive compensation in the form of equity awards. The Board believes that equity awards provide an effective means for focusing our executive officers, including the Named Executive Officers, on driving increased stockholder value over a multi-year period, provides a meaningful reward for appreciation in our stock price and long-term value creation, and motivates them to remain employed with us.

Over the last several years, the long-term incentive compensation opportunities of our executive officers, including the Named Executive Officers, have been delivered in the form of restricted stock awards. As noted above, these awards have represented approximately 95% of our CEO's target total direct compensation opportunity, and, on average, 61% of the target total direct compensation opportunity of our other executive officers.

As with their other compensation elements, the Board determines the amount of long-term incentive compensation for our executive officers as part of its annual compensation review and after taking into consideration the competitive market environment, the recommendations of our CEO (except with respect to his own equity award), the proportion of our total shares of common stock outstanding used for annual employee long-term incentive compensation awards (our "burn rate"), and the other factors described above.

In May 2017, the Board granted a combination of time-based restricted stock awards and performance-based restricted stock awards to our executive officers, including the Named Executive Officers. The equity awards granted to the Named Executive Officers for 2017 were as follows:

| Named Executive Officer | Time-Based Restricted Stock Awards (# of shares) | Time-Based Restricted Stock Awards (grant date fair value) | Performance-Based Restricted Stock Awards (# of shares) | Performance-Based Restricted Stock Awards (grant date fair value) | Aggregate Grant Date Fair Value |
|-------------------------|---|--|--|---|---------------------------------------|
| Mr. Schaeffer | 84,000 | \$3,639,300 | 105,000 | \$3,529,050 | \$7,168,350 |
| Mr. Weed | 19,400 | \$ 840,505 | 4,850 | \$ 210,126 | \$1,050,631 |
| Mr. Beury | 9,600 | \$ 415,920 | 2,400 | \$ 103,980 | \$ 519,900 |
| Mr. O'Neil | 9,600 | \$ 415,920 | 2,400 | \$ 103,980 | \$ 519,900 |
| Mr. Bubeck | 9,600 | \$ 415,920 | 2,400 | \$ 103,980 | \$ 519,900 |

Equity Awards Granted to Our CEO

Time-Based Restricted Stock Award. The shares of our common stock subject to the time-based restricted stock award granted to our CEO vest in equal monthly increments of 7,000 shares each commencing on January 1, 2020 and ending on December 1, 2020.

Performance-Based Restricted Stock Award. The shares of our common stock subject to the performance-based restricted stock award granted to our CEO are to be earned (if at all) based on our absolute total stockholder return (“TSR”) as measured over a performance period commencing on April 1, 2017 and ending on December 31, 2020. In the event that our TSR for the performance period is positive, then the number of shares of our common stock earned with respect to the award will be determined by dividing our TSR by the TSR of the Nasdaq Telecommunications Index (the “NTI”) for the performance period and multiplying that percentage by 84,000 (the target number of shares subject to the performance-based restricted stock award); provided, however that the maximum number of shares of our common stock that may be earned pursuant to the performance-based restricted stock award may not exceed 105,000 shares. If our TSR for the performance period is zero or negative, then no shares of our common stock will be earned. Any shares of our common stock subject to the performance-based restricted stock award which are not earned at the end of the performance period will be forfeited and cancelled. For purposes of the performance-based restricted stock award, our “TSR” is to be calculated by comparing an amount invested in the Company to the same amount invested in the NTI at the beginning of the performance period with all dividends reinvested during the performance. In calculating our TSR, the average market price of our common stock for the 20 trading days prior to the measurement date will be used.

In addition, our CEO’s restricted stock awards made in 2017 are eligible for accelerated vesting as follows:

- **Death or disability**—Upon a termination of employment due to death or disability, all of the unvested time-based restricted stock and 84,000 shares of performance-based restricted stock will vest.
- **Retirement**—Upon a termination of employment due to retirement, all of the unvested time-based restricted stock and, upon expiration of the performance period, the actual number of shares of our common stock earned based on our actual performance for the performance period based will vest.
- **Termination of Employment**—In the event that our CEO’s employment is terminated entitling him to severance under the terms of his employment agreement either prior to or more than six months after a change in control of the Company, then the number of shares of restricted stock award that he would have vested in had he remained employed during the severance period (which will be determined based on the number of months used to calculate severance under his employment agreement) will vest and, upon expiration of the performance period, the actual number of shares of our common stock earned based on our actual performance for the performance period based, pro-rated based on the number of days elapsed from the beginning of the performance period through the last day of his applicable severance period, will vest.
- **Change in control**—Immediately prior to a change in control of the company, the performance period for the performance-based restricted stock award will end and the number of shares of such performance based stock that he earns will be determined based on our TSR through such date provided he remains employed with us through January 1, 2021; provided, however, that he will be considered to have earned such number of shares if during the six months following the change in control of the Company, his employment is terminated without cause or he terminates his employment for good reason, a “double trigger”.

Equity Awards Granted to Other Named Executive Officers

Time-Based Restricted Stock Awards. The time-based restricted stock granted in 2017 to the other Named Executive Officers vests in equal quarterly increments of shares each on March 1, June 1, September 1, and December 1, 2020.

Performance-Based Restricted Stock Awards. The performance-based restricted stock granted to the other Named Executive Officers are to be earned (if at all) on December 1, 2020, based on the attainment of customer satisfaction goals as determined and evaluated in the discretion of the Compensation Committee.

In addition, the restricted stock granted to the other Named Executive Officers will be eligible for accelerated vesting as follows:

- Death, disability, retirement, or change in control—Upon a termination of employment due to death, disability, or retirement and upon a change in control of the Company (even if not accompanied by a termination of employment), all of the unvested shares of time-based restricted stock and performance-based restricted stock will vest.
- Other termination of employment—In the event of a termination of employment entitling the Named Executive Officer to severance under the terms of his employment agreement, the number of shares of time-based restricted stock that he would have vested in had he remained employed during the severance period (which will be determined based on the number of months used to calculate severance under his employment agreement) will vest and, upon expiration of the performance period, the performance based stock will vest based on actual performance for the performance period pro-rated based on the number of days elapsed from the beginning of the performance period through the last day of his applicable severance period.

In the event of a termination of employment other than as provided in the foregoing paragraphs, the Named Executive Officer will forfeit any unvested time-based restricted stock and performance-based restricted stock.

Welfare and Health Benefits

We have established a tax-qualified Section 401(k) retirement plan for all employees. Currently, we match contributions made to the plan by our employees, including our executive officers, up to 2% of their compensation. We intend for the plan to qualify under Section 401(a) of the Internal Revenue Code (the “Code”) so that contributions by employees to the plan, and income earned on plan contributions, are not taxable to employees until withdrawn from the plan.

In addition, we provide other benefits to our executive officers, including the Named Executive Officers, on the same basis as all of our full-time employees. These benefits include medical, dental and vision benefits (paid for on a shared basis by the employee and the company), medical and dependent care flexible spending accounts, health savings accounts, short-term and long-term disability insurance, and basic life insurance coverage.

We design our employee benefits programs to be affordable and competitive in relation to the market, as well as compliant with applicable laws and practices. We adjust our employee benefits programs as needed based upon regular monitoring of applicable laws and practices and the competitive market.

Perquisites and Other Personal Benefits

Perquisites or other personal benefits are not a component of our executive compensation program. Accordingly, we do not provide perquisites or other personal benefits to our executive officers, including the Named Executive Officers.

In the future, we may provide perquisites or other personal benefits in limited circumstances. All future practices with respect to perquisites or other personal benefits will be approved and subject to periodic review by the Board.

Employment Agreements

We have entered into written employment agreements with each of the Named Executive Officers (other than Mr. Bubeck).

Each of these employment agreements provides for “at will” employment. These agreements also set forth the rights and responsibilities of each party and protect both parties’ interests in the event of a termination of employment by providing the executive officer with the opportunity to receive certain post-employment payments and benefits in the event of certain terminations of employment, including following a change in control of the Company. Finally, these employment agreements prohibit the executive officer from engaging directly or indirectly in competition with us or disclosing our confidential information or business practices. These post-employment compensation arrangements are described in more detail in the discussion entitled “Post-Employment Compensation” below.

Extension of Employment Agreement of CEO

On November 17, 2017, we entered into a seventh amendment to our employment agreement with Mr. Schaeffer. This amendment extended the term of the agreement through December 31, 2021 and extended Mr. Schaeffer’s eligibility to receive an annual bonus of up to \$500,000 if we achieve year-over-year revenue growth of 15% and year-over-year adjusted EBITDA growth of 20% (each as defined in our earnings release).

For information on the specific terms and conditions of the employment agreements of the Named Executive Officers, see the discussion of “Employment Agreements and Potential Post-Employment Compensation Arrangements” in this proxy statement.

Post-Employment Compensation

We believe that having in place reasonable and competitive post-employment compensation arrangements are essential to attracting and retaining highly-qualified executive officers. Our post-employment compensation arrangements are designed to provide reasonable compensation to executive officers who leave the Company under certain circumstances to facilitate their transition to new employment.

In determining payment and benefit levels under the various circumstances triggering the post-employment compensation provisions of our executive officers’ employment agreements, the Board has drawn a distinction between voluntary terminations of employment and terminations of employment for cause, and terminations of employment without cause or as a result of a change in control of the Company. Payment in the latter circumstances has been deemed appropriate in light of the benefits to us described above, as well as the likelihood that the executive officer’s departure is due, at least in part, to circumstances not within his or her control. In contrast, we believe that payments are not appropriate in the event of a termination of employment for cause or a voluntary resignation.

In addition, the written agreements for the equity awards granted to the Named Executive Officers contain provisions covering a change in control of the Company. We believe that these arrangements are designed to align the interests of management and stockholders when considering the long-term future for the Company. The primary purpose of these arrangements is to keep our most senior

executive officers focused on pursuing all corporate transaction activity that is in the best interests of our stockholders. Specifically, these agreements provide that:

- The unvested restricted stock awards granted to our executive officers, including the Named Executive Officers, prior to 2017 vest in full upon a change in control of the Company.
- In the case of our CEO, beginning with the equity awards granted to him in 2017, the vesting of such awards will accelerate only if, in the event of a change in control of the Company, there is also a subsequent involuntary loss of employment by him (a so-called “double-trigger” arrangement).

The written agreements for the equity awards granted to the Named Executive Officers also provide for accelerated vesting upon their death, disability, or retirement.

We have no arrangements with the Named Executive Officers providing for excise tax payments (or “gross-ups”) relating to a change in control of the Company.

For information on the post-employment compensation arrangements for the Named Executive Officer, as well as an estimate of the potential payments and benefits payable under these arrangements as of the end of 2017, see “Employment Agreements and Potential Post-Employment Compensation Arrangements” in this proxy statement.

Other Compensation Policies and Practices

Stock Ownership Policy

We have adopted a stock ownership policy for our CEO and the members of the Board to align their interests with the interests of our stockholders. This policy provides that:

- our CEO is required to own that number of shares of our common stock with a market value equal to ten times his annual cash compensation or \$3 million, whichever is greater; and
- the members of the Board are required to own that number of shares of our common stock with a market value equal to twice the value of their annual equity awards.

Until such time as our CEO and the members of the Board have satisfied their specified ownership level, they are required to hold all shares of our common stock earned pursuant to the equity awards granted to them in connection with their employment or service, as applicable.

As of December 31, 2017, each of the individuals subject to our stock ownership policy satisfied his or her stock ownership requirement.

Compensation Recovery (“Clawback”) Policy

To further align the interests of our executive officers and stockholders and promote good governance practices, we have adopted a compensation recovery (“clawback”) policy providing that, in the event of a financial restatement resulting from misconduct, the Board will seek repayment of all cash-based incentive compensation or performance-based equity awards erroneously paid or granted to our CEO and any of such executive officers based on the original financial statements if the amount paid or awarded would have been lower had they been based on the restated financial statements.

Hedging, Derivatives, and Pledging Policies

Our Hedging and Derivatives Policy prohibits our employees, including our executive officers, and the members of the Board from hedging our securities and from entering into a derivative contract involving our securities (except for ownership of options to purchase shares of our common stock

granted in connection with employment). Among the investment vehicles that are subject to this prohibition are:

- puts, calls, and futures contracts involving our securities whether covered or not;
- swaps involving our securities;
- forward contracts involving our securities; and
- shorting our securities.

In addition, our Hedging and Derivatives Policy prohibits our employees, including our executive officers, and the members of the Board from pledging our securities to secure a non-recourse loan or holding such securities in a margin account.

Tax and Accounting Considerations

Deductibility of Executive Compensation

Generally, Section 162(m) of the Code disallows public companies a tax deduction for federal income tax purposes of remuneration in excess of \$1 million paid to their chief executive officer and each of the three other most highly-compensated executive officers (other than their chief financial officer) whose compensation is required to be disclosed to our stockholders under the Exchange Act in any taxable year. Remuneration in excess of \$1 million may only be deducted if it is “performance-based compensation” within the meaning of Section 162(m) or qualifies for one of the other exemptions from the deduction limit.

The exemption from Section 162(m)’s deduction limit for performance-based compensation has been repealed, effective for taxable years beginning after December 31, 2017, such that compensation paid to our chief executive officer, chief financial officer and each of the three other most highly-compensated executive officers in excess of \$1 million will not be deductible unless it qualifies for transition relief applicable to certain arrangements in place as of November 2, 2017.

Accounting for Stock-Based Compensation

We follow the Financial Accounting Standard Board’s Accounting Standards Codification Topic 718 (“FASB ASC Topic 718”) for our stock-based compensation awards. FASB ASC Topic 718 requires us to measure the compensation expense for all share-based payment awards made to our employees and members of the Board, including restricted stock awards, based on the grant date “fair value” of these awards. This calculation is performed for accounting purposes and reported in the executive compensation tables required by the federal securities laws, even though the recipient of the awards may never realize any value from their awards.

2017 Summary Compensation Table

The following table sets forth the cash and non-cash compensation paid or incurred on our behalf to our Chief Executive Officer, our principal financial officer, and each of our three other most highly compensated executive officers, or the Named Executive Officers, whose annual compensation equaled or exceeded \$100,000 for the three years ended December 31, 2017.

| Name | Principal Position | Year | Salary | Bonus | Stock Awards(a) | Non Equity Incentive Plan Compensation(c) | All other Compensation(b) | TOTAL |
|----------------------|-----------------------|------|-----------|-------|-----------------|---|---------------------------|-------------|
| Dave Schaeffer . . . | CEO | 2017 | \$ 0 | \$0 | \$7,168,350(d) | \$263,337 | \$5,400 | \$7,437,087 |
| | | 2016 | \$ 0 | \$0 | \$6,626,600(e) | \$335,660 | \$4,840 | \$6,967,100 |
| | | 2015 | \$ 0 | \$0 | \$ 0 | \$112,170 | \$5,236 | \$ 117,406 |
| Thaddeus Weed . . . | CFO | 2017 | \$303,919 | \$0 | \$1,050,631(f) | | \$5,400 | \$1,359,950 |
| | | 2016 | \$275,000 | \$0 | \$ 945,265(g) | | \$5,300 | \$1,225,565 |
| | | 2015 | \$269,000 | \$0 | \$ 0 | | \$5,300 | \$ 274,300 |
| Robert Beury | Chief Legal Officer | 2017 | \$299,453 | \$0 | \$ 519,900(h) | | \$5,400 | \$ 824,753 |
| | | 2016 | \$272,000 | \$0 | \$ 467,760(i) | | \$5,300 | \$ 745,060 |
| | | 2015 | \$267,000 | \$0 | \$ 0 | | \$5,300 | \$ 272,300 |
| Timothy O'Neill . . | VP of Operations | 2017 | \$293,623 | \$0 | \$ 519,900(h) | | \$5,400 | \$ 818,923 |
| | | 2016 | \$267,000 | \$0 | \$ 467,760(i) | | \$5,300 | \$ 740,060 |
| | | 2015 | \$261,000 | \$0 | \$ 0 | | \$5,300 | \$ 266,300 |
| James Bubeck . . . | Chief Revenue Officer | 2017 | \$224,726 | \$0 | \$ 519,900(h) | \$ 98,158 | \$5,400 | \$ 848,184 |
| | | 2016 | \$204,000 | \$0 | \$ 467,760(i) | \$ 99,220 | \$5,300 | \$ 776,280 |
| | | 2015 | \$186,000 | \$0 | \$ 133,000(j) | \$ 77,700 | \$5,260 | \$ 401,960 |

- (a) Amounts represent the grant date fair value of stock awards computed in accordance with FASB Accounting Standards Codification 718. For additional information regarding the assumptions used in determining these values, see Note 8 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017.
- (b) Consists of employer matching amounts contributed to the Company's 401(k) defined contribution plan.
- (c) Consists of cash compensation earned for performance against financial targets. See text above for a description of the criteria.
- (d) Consist of a restricted stock award of 189,000 shares made on May 3, 2017 of which 84,000 shares were valued at \$43.33 per share and 105,000 shares were valued via an appraised value at \$33.61 per share since they are based upon market conditions. Up to 105,000 shares vest on January 1, 2021 subject to certain performance conditions as described in the text above and 84,000 shares vest monthly at 7,000 per month in 2020.
- (e) Consist of a restricted stock award of 170,000 shares made on May 4, 2016 valued at \$38.98 per share of which 50,000 shares vest on March 1, 2020 subject to certain performance conditions as described in the text above and 120,000 shares vest monthly at 10,000 per month in 2019.
- (f) Consist of a restricted stock award of 24,250 shares made on May 3, 2017 valued at \$43.33 per share of which 4,250 shares vest on December 1, 2020 subject to certain performance conditions as described in the text above and 5,000 shares vest quarterly beginning on March 1, 2020 to December 1, 2020.
- (g) Consist of a restricted stock award of 24,250 shares made on May 4, 2016 valued at \$38.98 per share of which 4,250 shares vest on December 31, 2019 subject to certain performance conditions as described in the text above and 5,000 shares vest quarterly beginning on March 1, 2019 to December 1, 2019.
- (h) Consist of a restricted stock award of 12,000 shares made on May 3, 2017 valued at \$43.33 per share of which 2,400 shares vest on December 1, 2020 subject to certain performance conditions as described in the text above and 2,400 shares vest quarterly beginning on March 1, 2010 to December 1, 2020.
- (i) Consist of a restricted stock award of 12,000 shares made on May 4, 2016 valued at \$38.98 per share of which 2,400 shares vest on December 31, 2019 subject to certain performance conditions as described in the text above and 2,400 shares vest quarterly beginning on March 1, 2019 to December 1, 2019. (j) Consists of a restricted stock award of 5,000 shares made on September 28, 2015 valued at \$26.50 per share, of which 1,250 shares vest on October 1, 2016, 313 shares vest quarterly until October 1, 2019.

CEO Pay Ratio

For 2017 the total compensation of our median employee calculated in the same manner as our CEO's as set forth in the Summary Compensation Table above was \$81,479. The total compensation of the CEO was \$7,437,087. The ratio of the two was 91:1. Our median employee was determined as of October 1, 2017 by calculating the total compensation of each employee other than the CEO and determining the median. Total compensation includes salary, commissions, and the grant date value of

stock awards made in 2017. Compensation of employees outside the U.S. was converted to dollars using 2017 exchange rates.

2017 Grants of Plan-Based Awards Table

The following table provides information with regard to the grants of plan-based awards to each Named Executive Officer during our fiscal year ended December 31, 2017.

Mr. Bubeck's commission is based on sales as measured by revenue. If the revenue generated by the entire sales organization for a particular month is 100% of Mr. Bubeck's revenue quota, he will receive 100% of \$8,333 for that month. If the percentage is more or less he receives a proportionally lesser or greater amount. For example if revenue were at 50% of his quota for the month, then he would be paid 50% of \$8,333 or \$4,167 for the month. If revenue were 200% of his quota he would receive \$16,667 for the month. (Prior to becoming Chief Revenue Officer Mr. Bubeck received a commission based on revenue from the central region of the U.S., which he managed.)

Mr. Schaeffer's performance-based cash bonus is based on the growth of the Company's revenue and EBITDA, as adjusted. If the revenue growth equals or exceeds 15%, he will receive \$250,000 and, separately, if EBITDA, as adjusted, growth equals or exceeds 20%, he will received \$250,000. If the growth of the performance measures is less than the amount specified, he would receive a proportionally lesser amount. For example, if revenue growth equaled 7.5% and EBITDA growth equaled 15%, he would be paid 50% of \$250,000 or \$125,000 of the revenue growth bonus and 75% of \$250,000 or \$187,500 of the EBITDA growth bonus.

| Name | Grant Date | Notes | Estimated Future Payouts Under Non-Equity Incentive Plan Awards | | | All Other Stock Awards: Number of Shares of Stock or Units | Grant Date Fair Value of Stock and Option Awards(a) |
|--------------------------|------------|--------|---|-------------|--------------|--|---|
| | | | Threshold (\$) | Target (\$) | Maximum (\$) | | |
| Dave Schaeffer | 5/3/2017 | (b)(e) | — | \$500,000 | \$500,000 | 189,000 | \$7,168,350 |
| Thaddeus Weed | 5/3/2017 | (c) | | | | 24,250 | \$1,050,631 |
| Robert Beury | 5/3/2017 | (d) | | | | 12,000 | \$ 519,900 |
| Timothy O'Neil | 5/3/2017 | (d) | | | | 12,000 | \$ 519,900 |
| James Bubeck | 5/3/2017 | (d)(f) | — | \$100,000 | unlimited | 12,000 | \$ 519,900 |

- (a) Except as otherwise noted, amounts represent the grant date fair value of stock awards computed in accordance with FASB Accounting Standards Codification 718. For additional information regarding the assumptions used in determining these values, see Note 8 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017.
- (b) Consist of a restricted stock award of 189,000 shares made on May 3, 2017 of which 84,000 shares were valued at \$43.33 per share and 105,000 shares were valued via an appraised value at \$33.61 per share since they are based upon market conditions. Up to 105,000 shares vest on January 1, 2021 subject to certain performance conditions as described in the text above and 84,000 shares vest monthly at 7,000 per month in 2020.
- (c) Consist of a restricted stock award of 24,250 shares made on May 3, 2017 valued at \$43.33 per share of which 4,250 shares vest on December 1, 2020 subject to certain performance conditions as described in the text above and 5,000 shares vest quarterly beginning on March 1, 2020 to December 1, 2020.
- (d) Consist of a restricted stock award of 12,000 shares made on May 3, 2017 valued at \$43.33 per share of which 2,400 shares vest on December 1, 2020 subject to certain performance conditions as described in the text above and 2,400 shares vest quarterly beginning on March 1, 2010 to December 1, 2020.

- (e) Mr. Schaeffer's annual cash award is based on achieving revenue and EBITDA, as adjusted, targets as described in the text above.
- (f) While in theory Mr. Bubeck's commission is unlimited it is in practice limited by the Company's ability to accept and install service for new customers. The performance measures of this annual commission are described in the text above.

2017 Outstanding Equity Awards at Fiscal Year End Table

The following table shows the information regarding the stock options and stock awards held by the Named Executive Officers on December 31, 2017.

| Name | OPTION AWARDS | | | | STOCK AWARDS | | | |
|---------------------------|---|---|----------------------------|------------------------|---|---|---|---|
| | Number of Securities Underlying Unexercised Options Exercisable (#) | Number of Securities Underlying Unexercised Options Unexercisable (#) | Option Exercise Price (\$) | Option Expiration Date | Number of Shares or Units of Stock That Have Not Vested (#) | Market Value of Shares or Units of Stock That Have Not Vested (\$)(a) | Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#) | Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)(i) |
| Dave Schaeffer | (b) | | | | 100,000 | \$4,530,000 | | |
| | (c) | | | | 120,000 | \$5,436,000 | | |
| | (d) | | | | 170,000 | \$7,701,000 | | |
| | (e) | | | | 189,000 | \$8,561,700 | | |
| Thaddeus Weed | (f) | | | | 18,000 | \$ 815,400 | | |
| | (g) | | | | 24,250 | \$1,098,525 | | |
| | (h) | | | | 24,250 | \$1,098,525 | | |
| James Bubeck | (i) | | | | 277 | \$ 12,548 | | |
| | (j) | | | | 2,500 | \$ 113,250 | | |
| | (k) | | | | 12,000 | \$ 543,600 | | |
| | (l) | | | | 12,000 | \$ 543,600 | | |
| Robert Beury | (m) | | | | 12,000 | \$ 543,600 | | |
| | (k) | | | | 12,000 | \$ 543,600 | | |
| | (l) | | | | 12,000 | \$ 543,600 | | |
| Timothy O'Neill | (m) | | | | 12,000 | \$ 543,600 | | |
| | (k) | | | | 12,000 | \$ 543,600 | | |
| | (l) | | | | 12,000 | \$ 543,600 | | |

(a) Valued using the closing market price of our common stock on December 29, 2017—\$45.30

(b) Shares vest on December 31, 2018.

(c) Shares vest 10,000 shares per month from January 1, 2018 until fully vested on December 1, 2018.

(d) 50,000 shares vest on March 1, 2020 subject to certain performance conditions and 120,000 shares vest monthly at 10,000 per month in 2019.

(e) Up to 105,000 shares vest on January 1, 2021 subject to certain performance conditions as described in the text above and 84,000 shares vest monthly at 7,000 per month in 2020.

(f) 4,500 shares vest each quarter from March 1, 2018 until fully vested on December 1, 2018.

(g) 4,250 shares vest on December 31, 2019 subject to certain performance conditions and 5,000 shares vest quarterly beginning on March 1, 2019 to December 1, 2019.

(h) 4,250 shares vest on December 1, 2020 subject to certain performance conditions and 5,000 shares vest quarterly beginning on March 1, 2020 to December 1, 2020.

(i) Shares vest quarterly from March 1, 2018 to December 1, 2018.

(j) 313 shares vest each quarter from April 1, 2018 until October 1, 2019.

(k) Shares vest 2,400 on December 31, 2019 subject to certain performance conditions and 2,400 shares vest quarterly beginning on March 1, 2019 to December 1, 2019.

(l) 2,400 shares vest on December 1, 2020 subject to certain performance conditions as described in the text above and 2,400 shares vest quarterly beginning on March 1, 2020 to December 1, 2020.

(m) 3,000 shares vest each quarter from March 1, 2018 until fully vested on December 1, 2018.

2017 Option Exercises and Stock Vested Table

The following table shows information regarding option exercises by the Named Executive Officers during the fiscal year ended December 31, 2017, and the value of stock awards at the time of vesting for stock awards that vested during the year.

| Name | Option Awards | | Stock Awards | |
|---------------------------|---|----------------------------------|--|---------------------------------|
| | Number of Shares Acquired on Exercise | Value Realized On Exercise | Number of Shares Acquired on Vesting | Value Realized On Vesting |
| Dave Schaeffer | | | 120,000 | \$5,309,000 |
| Thaddeus Weed | | | 18,000 | \$ 794,025 |
| James Bubeck | | | 1,527 | \$ 66,408 |
| Robert Beury | | | 12,000 | \$ 529,350 |
| Timothy O'Neill | | | 12,000 | \$ 529,350 |

Employment Agreements and Potential Post-Employment Compensation Arrangements

Dave Schaeffer Employment Agreement. Mr. Schaeffer has an employment agreement that provides for his services as our Chief Executive Officer. He also receives all of our standard employee benefits. If he is discharged without cause or resigns for “good reason” he is entitled to a lump sum amount equal to his annual salary at the time and continuation of his benefits for one year (subject to the same employee contribution for benefits as when he was employed). Under the terms of the restricted stock awards that have been granted to him in the event of death, disability, or retirement, 100% of his then unvested restricted stock awards will vest immediately. For restricted stock grants made prior to 2017 vesting accelerates upon a change in control. For restricted stock grants made in 2017 vesting accelerates upon a change in control only if he is discharged (“double trigger”). In the event of a change in control, the total dollar value of the restricted stock that immediately vests will not exceed three times his annual compensation. Had his employment been terminated without cause or had he resigned for “good reason” on December 31, 2017, he would have received no cash payment because he is not currently receiving a salary. He would have continued to vest in his restricted stock awards during his one year severance period and would have vested in certain other awards after the end of that severance period. “Good reason” for resignation includes removal from his position as CEO or failure to elect him as chairman of the Board. The value of his post-employment compensation is shown in the table below.

Thaddeus G. Weed Employment Agreement. Mr. Weed has an employment agreement under which he serves as Chief Financial Officer and Treasurer. In the event that his employment with us is terminated without cause or he resigns for good reason, the agreement entitles him to twelve months of salary and continuation of benefits for twelve months (subject to the same employee contribution for benefits as when he was employed). Under the terms of the grants of restricted stock he is also entitled to continued vesting of his restricted stock during his severance period. In the event of death, disability, retirement, or a change in control he becomes fully vested in his restricted stock; provided that, in the event of a change in control, the total dollar value of the restricted stock that immediately vests shall not exceed three times his annual compensation. In the event of a change in control resulting in his termination without cause or resignation for good reason, 100% of his then restricted stock will vest immediately and he will receive his severance payment as a lump sum. The value of his post-employment compensation is shown in the table below.

Robert N. Beury, Jr. Employment Agreement. Mr. Beury’s employment agreement entitles him to twelve months of salary and twelve months of benefits (subject to the same employee contribution for benefits as when he was employed) in the event that his employment with us is terminated without cause or he resigns for good reason. Under the terms of the grants of restricted stock he is also

entitled to continued vesting of his restricted stock during his severance period. In the event of death, disability, retirement, or a change in control the vesting of his restricted stock accelerates so that he will be 100% vested; provided that, in the event of a change in control, the total dollar value of the restricted stock that immediately vests shall not exceed three times his annual compensation. In the event of a change in control resulting in his termination without cause or resignation for good reason, 100% of his then restricted stock will vest immediately and he will receive his severance payment as a lump sum. The value of his post-employment compensation is shown in the table below.

James Bubeck. Mr. Bubeck does not have an employment agreement with us that provides for severance. In the event of death, disability, retirement, or a change in control the vesting of his restricted stock accelerates so that he will be 100% vested; provided that, in the event of a change in control, the total dollar value of the restricted stock that immediately vests shall not exceed three times his annual compensation. The value of his post-employment compensation is shown in the table below.

Timothy G. O'Neill Employment Agreement. Timothy O'Neill's employment agreement provides that in the event his employment with us is terminated without cause or he resigns for good reason he will receive six months' salary and continuation of benefits for six months (subject to the same employee contribution for benefits as when he was employed). Under the terms of the grants of restricted stock he is also entitled to continued vesting of his restricted stock during his severance period. In the event of death, disability, retirement, or a change in control the vesting of his restricted stock accelerates so that he will be 100% vested; provided that, in the event of a change in control, the total dollar value of the restricted stock that immediately vests shall not exceed three times his annual compensation. In the event of a change in control resulting in his termination without cause or resignation for good reason, 100% of his then restricted stock will vest immediately and he will receive his severance payment as a lump sum. The value of his post-employment compensation is shown in the table below.

The table below shows the compensation that would have been received by each Named Executive Officer in the event of termination without cause, change in control, and termination without cause upon a change in control as of December 31, 2017. Stock is valued at the closing price on December 29, 2017—\$45.30.

| | | Termination without cause | Change of control | Termination without cause upon a change of control |
|--------------------------|---------------|------------------------------|----------------------|---|
| Dave Schaeffer | Cash | \$ — | \$ — | \$ — |
| | Stock vesting | \$12,184,543 | \$17,667,000 | \$25,164,652 |
| | Total | \$12,184,543 | \$17,667,000 | \$25,164,652 |
| Thaddeus Weed | Cash | \$ 303,920 | \$ — | \$ 303,920 |
| | Stock vesting | \$ 922,569 | \$ 3,012,450 | \$ 3,012,450 |
| | Total | \$ 1,226,489 | \$ 3,012,450 | \$ 3,316,370 |
| Robert Beury | Cash | \$ 299,469 | | \$ 299,469 |
| | Stock vesting | \$ 596,632 | \$ 1,630,800 | \$ 1,630,800 |
| | Total | \$ 896,101 | \$ 1,630,800 | \$ 1,930,269 |
| Tim O'Neill | Cash | \$ 146,812 | | \$ 146,812 |
| | Stock vesting | \$ 309,562 | \$ 1,630,800 | \$ 1,630,800 |
| | Total | \$ 456,374 | \$ 1,630,800 | \$ 1,777,612 |
| James Bubeck | Cash | \$ — | \$ — | \$ — |
| | Stock vesting | \$ 22,740 | \$ 1,200,450 | \$ 1,200,450 |
| | Total | \$ 22,740 | \$ 1,200,450 | \$ 1,200,450 |

Director Compensation

Our non-employee Board members were compensated in 2017 as follows for their services:

- 7,000 shares of our common stock issued in increments of 1,750 shares per quarter, and
- \$1,000 per in-person Board meeting.
- Reimbursement of travel expenses.

The following table shows the amounts earned or paid in 2017.

2017 Director Compensation Table

| | Fees Earned in Cash | Stock Awards(a) | TOTAL |
|------------------------------|--------------------------------|------------------------|--------------|
| Blake Bath | \$3,000 | \$303,931 | \$306,931 |
| Steven Brooks | \$3,000 | \$303,931 | \$306,931 |
| Richard Liebhaber | \$4,000 | \$303,931 | \$307,931 |
| Marc Montagner | \$3,000 | \$303,931 | \$306,931 |
| Timothy Weingarten | \$3,000 | \$303,931 | \$306,931 |

- (a) Amounts represent the grant date fair value of restricted stock awards computed in accordance with FASB Accounting Standards Codification Topic No. 718. For additional information regarding the assumptions used in determining these values, see Note 8 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017.

The compensation of Mr. Schaeffer, who is a member of the Board and our Chief Executive Officer is disclosed in the Summary Compensation Table, above, and is therefore not shown in the Director Compensation Table. He does not receive compensation for serving as a director.

RISK ASSESSMENT IN COMPENSATION PROGRAMS

The Board and the Compensation Committee have reviewed and considered all of our compensation policies and practices and does not believe that our compensation policies and practices create risks that are reasonably likely to have a material adverse effect on the Company.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During 2017:

- None of the members of the Compensation Committee was an officer (or former officer) or employee of the Company or any of its subsidiaries;
- None of the members of the Compensation Committee entered into (or agreed to enter into) any transaction or series of transactions with the Company or any of its subsidiaries in which the amount involved exceeds \$120,000;
- None of the Company's executive officers served on the compensation committee (or another board committee with similar functions) of any entity where one of that entity's executive officers served on the Company's Compensation Committee;
- None of the Company's executive officers was a director of another entity where one of that entity's executive officers served on the Company's Compensation Committee; and
- None of the Company's executive officers served on the compensation committee (or another board committee with similar functions) of another entity where one of that entity's executive officers served as a director on the Company's Board of Directors.

COMPENSATION COMMITTEE REPORT

The Compensation Committee of the Board is responsible for determining compensation for the Company's executive officers and other employees, and administering the 2017 Incentive Award Plan and the 2004 Incentive Award Plan (although no new grants are issued under that plan), the Company's management bonus plan and other compensation programs. The committee reviewed and discussed the Compensation, Discussion and Analysis with management and based on that review and discussion, recommended its inclusion in this Proxy Statement.

Compensation Committee:

Steven Brooks

Blake Bath

Marc Montagner

Timothy Weingarten

Richard Liebhaber

The material in this report is being furnished and shall not be deemed "filed" with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall the material in this section be deemed to be "soliciting material" or incorporated by reference in any registration statement or other document filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, or the Exchange Act, except as otherwise expressly stated in such filing.

AUDIT COMMITTEE REPORT

To the Board of Directors:

We have reviewed and discussed with management the Company's audited consolidated financial statements as of and for the year ended December 31, 2017.

We have discussed with the independent registered public accountants, Ernst & Young LLP, the matters required to be discussed with us by the American Institute of Certified Public Accountants, the Securities and Exchange Commission, the Nasdaq Stock Market and the Public Company Accounting Oversight Board, including those required by the Auditing Standard No. 1301, Communications with Audit Committees, as amended.

We have received and reviewed the letter from Ernst & Young LLP required by the Public Company Accounting Oversight Board, and have discussed with Ernst & Young LLP their independence, including the written disclosures and letter required by Rule 3526 of the Public Company Accounting Oversight Board.

Based on the reviews and discussions referred to above, we recommended to the Board of Directors that the audited consolidated financial statements referred to above be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 for filing with the Securities and Exchange Commission. The Board of Directors caused the Form 10-K to be so filed.

Audit Committee:

Richard T. Liebhaber

Marc Montagner

D. Blake Bath

The material in this report is being furnished and shall not be deemed "filed" with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall the material in this section be deemed to be "soliciting material" or incorporated by reference in any registration statement or other document filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, or the Exchange Act, except as otherwise expressly stated in such filing.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table provides summary information regarding beneficial ownership of our outstanding capital stock based on information available to the Company as of June 20, 2018, for:

- each person or group who beneficially owns more than 5% of our capital stock on a fully diluted basis;
- each of the executive officers named in the Summary Compensation Table in our definitive proxy statement on Schedule 14A for our 2018 Annual Meeting of Stockholders filed with the “SEC” on March 20, 2018;
- each of our directors; and
- all of our directors and executive officers as a group.

Beneficial ownership of shares is determined under the rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power. Except as indicated by footnote, and subject to applicable community property laws, each person identified in the table possesses sole voting and investment power with respect to all shares of common stock held by them. The information has been compiled by the Company from reports filed with the SEC and other information available to the Company. Shares of common stock that will vest or are subject to options currently exercisable or exercisable within the period 60 days after June 20, 2018, are deemed outstanding for calculating the percentage of outstanding shares of the person holding these options, but are not deemed outstanding for calculating the percentage of any other person.

Unless otherwise noted, the address for each director and executive officer is c/o Cogent Communications Holdings, Inc., 2450 N Street, NW, 4th Floor, Washington, D.C. 20037. The shares of stock to which this table applies are shares of common stock. The Company has no other class of stock.

| <u>Name and Address of Beneficial Owner</u> | <u>Amount Owned</u> | <u>Percent of Class</u> |
|---|---------------------|-------------------------|
| BlackRock, Inc.(1) 55 East 52 nd Street, New York, NY 10055 | 6,288,095 | 13.51% |
| Renaissance Technologies LLC(2) 800 Third Avenue, New York, NY 10022 | 2,775,300 | 5.96% |
| The Vanguard Group, Inc(3) 100 Vanguard Blvd, Malvern, PA 19355 | 4,601,795 | 9.89% |
| Directors and Officers: | | |
| Dave Schaeffer(4) | 4,220,340 | 9.07% |
| Timothy Weingarten(5) | 21,861 | * |
| Steven Brooks(5) | 26,400 | * |
| Richard Liebhaber(5) | 68,545 | * |
| Blake Bath(5) | 45,175 | * |
| Marc Montagner(5) | 43,250 | * |
| Thaddeus Weed(6) | 83,250 | * |
| Robert Beury(6) | 55,640 | * |
| James Bubeck(6) | 38,342 | * |
| Timothy O'Neill(6) | 47,452 | * |
| Directors and executive officers as a group (12 persons)(7) | 4,748,445 | 10.21% |

* Denotes less than 1% ownership.

- (1) BlackRock, Inc. has sole voting power over 6,178,987 shares of common stock and sole dispositive power over 6,288,095 shares of our common stock. The information herein regarding this stockholder is derived from such stockholder's Schedule 13G/A filed with the SEC on January 19, 2018.
- (2) Renaissance Technologies LLC reports sole voting power and sole dispositive power over 2,775,300 shares of our common stock on behalf of both Renaissance Technologies LLC and Renaissance Technologies Holdings Corporation. Renaissance Technologies Holdings Corporation is the majority owner of Renaissance Technologies LLC and therefore beneficially owns the same shares. The information herein regarding this stockholder is derived from such stockholder's Schedule 13G filed with the SEC on February 14, 2018.
- (3) The Vanguard Group, Inc. reports sole voting power over 80,469 shares of common stock and sole dispositive power over 4,515,355 shares of common stock and shared voting power over 9,900 shares of our common stock and shared dispositive power over 86,440 shares of our common stock. Vanguard Fiduciary Trust Company, a wholly-owned subsidiary of The Vanguard Group, Inc. is the beneficial owner of 76,540 shares of our common stock outstanding as a result of serving as investment manager of collective trust accounts. Vanguard Investments Australia, Ltd., a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 13,829 shares of our common stock outstanding as a result of its serving as investment manager of Australian investment offerings. The information herein regarding this stockholder is derived from such stockholder's Schedule 13G/A filed with the SEC on March 12, 2018.
- (4) Includes 4,220,340 shares of common stock. Includes 708,000 shares of restricted stock that may be voted but remain subject to certain vesting provisions. Of the shares owned 3,215,477 shares remain pledged as security for full recourse loans.
- (5) As of June 20, 2018, of the shares owned in the table for Mr. Weingarten, 1,750 shares are not yet vested. As of June 20, 2018, of the shares owned in the table for Mr. Brooks, 1,750 shares are not yet vested. As of June 20, 2018, of the shares owned in the table for Mr. Liebhaber, 1,750 shares are not yet vested. As of June 20, 2018, of the shares owned in the table for Mr. Bath, 1,750 shares are not yet vested. As of June 20, 2018, of the shares owned in the table for Mr. Montagner, 1,750 shares are not yet vested and all shares are pledged pursuant to a credit line with his broker.
- (6) Consists of common stock (not all of which is vested). Also includes performance shares with voting rights, granted in years 2017 and 2018. The grant of 2017 performance shares was disclosed in Company's Current Report on Form 8-K dated May 3, 2017. These performance shares will vest in years 2020 and 2021, respectively. As of June 20, 2018, of the shares shown in the table for Mr. Beury, 42,000 shares are not yet vested. As of June 20, 2018, of the shares shown in the table for Mr. Weed, 81,750 shares are not yet vested. As of June 20, 2018, of the shares shown in the table for Mr. O'Neill, 42,000 shares are not yet vested. As of June 20, 2018, of the shares shown in the table for Mr. Bubeck, 38,014 shares are not yet vested.
- (7) Consists of Dave Schaeffer, Timothy Weingarten, Steven Brooks, Richard T. Liebhaber, D. Blake Bath, Marc Montagner, Robert Beury, James Bubeck, Thaddeus Weed, R. Brad Kummer, Timothy O'Neill and Henry Kilmer. As of June 20, 2018, of the shares shown in the table, Mr. Kummer owns 49,640 shares of the Company's common stock; 42,000 of the shares are not yet vested. As of June 20, 2018, of the shares shown in the table, Mr. Kilmer owns 42,000 shares of Company's common stock, which are not yet vested.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Employment Agreements

We have employment agreements with most of our Named Executive Officers as described in “Employment Agreements and Potential Post Employment Compensation Arrangements.”

Our Headquarters Lease

In April 2015, the Company entered into a lease agreement for its headquarters building with Sodium LLC whose two owners were during 2017 the Company’s Chief Executive Officer, who had a 51% interest in Sodium LLC and his wife, Ruth Schaeffer, who had a 49% interest. The Company moved into the headquarters building in May 2015. The fixed annual rent for the new headquarters building is \$1.0 million per year plus an allocation of taxes and utilities. The lease term is for five years and is cancellable by the Company upon 60 days’ notice. The Company’s Audit Committee reviewed and approved the lease as a related party transaction. We believe that the lease is on the terms at least as favorable to us as could have been obtained from an unaffiliated third party. The Company paid \$1.6 million in 2017, \$1.7 million in 2016, and \$1.2 million in 2015, for rent and related costs (including taxes and utilities) to these lessors for this lease and the prior lease. David Schaeffer’s interest in those amounts was 51%; Ruth Schaeffer’s was 49%.

Mr. Montagner is a Named Executive Officer of a Customer

In August of 2015 Mr. Montagner, a director of the Company and a member of our Audit Committee and Compensation Committee, became the Chief Financial Officer at Endurance International Group Holdings, Inc. (NASDAQ: EIGI). Endurance International was a customer of Cogent prior to August of 2015. The total amount paid to Cogent by Endurance International in 2017 was \$140,000. The services provided to Endurance International are standard services that the Company provides to other customers. The Board has concluded that Mr. Montagner does not have a material interest in these transactions and that he remains an independent director.

Approval of Related Party Transactions

The Audit Committee is responsible for reviewing, approving or ratifying any transaction in which the Company and any of our directors, director nominees, executive officers, 5% stockholders and their immediate family members are participants and in which such persons have a direct or indirect material interest as provided under SEC rules. The company does not have a written policy for reviewing these transactions. However, in the course of reviewing potential related person transactions, the Audit Committee considers the nature of the related person’s interest in the transaction; the presence of standard prices, rates or charges or terms otherwise consistent with arm’s length dealings with unrelated third parties; the materiality of the transaction to each party; the reasons for the Company entering into the transaction with the related person; the potential effect of the transaction on the status of a director as an independent, outside or disinterested director or committee member; and any other factors the Audit Committee may deem relevant. In the case of the headquarters lease described above the Audit Committee reviewed information on comparable leases in making its determination to approve the lease.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires the Company’s officers and directors, and persons who own more than ten percent of a registered class of the Company’s stock to file reports of ownership and changes in ownership with the SEC. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) reports they file. Based on its records and other information, the Company believes that all Section 16(a) filing

requirements applicable to its directors and executive officers for 2017 were timely met except for two Form 4 filings for Mr. Bubeck relating to the sale of shares in two separate transactions.

SAY-ON-PAY VOTE AND STOCKHOLDER ENGAGEMENT

At the Company's 2018 Annual Meeting of Stockholders, we held a non-binding advisory vote to approve the compensation of our Named Executive Officers, commonly referred to as a "say-on-pay" proposal. Approximately 49.6% of the stockholders voted in favor of the say-on-pay proposal. We believe this low level of support resulted from the negative commentary of proxy advisory services regarding the Company's corporate governance and CEO compensation program.

In order to address this low level of support, the Board has committed to expand its investor outreach in a manner that will give the independent directors direct interaction with stockholders so that they can listen to, and better understand the views of, our stockholders with respect to compensation and governance matters. Specifically, the Board has committed to take three steps.

First, in October, the Company intends to hold an investor day for analysts and stockholders. At that meeting, the independent directors will participate in conversations with stockholders on matters of corporate governance and compensation without management present, soliciting feedback from our stockholders to gain an understanding of their concerns. As necessary, the independent directors will continue to communicate with investors in advance of the 2019 Annual Meeting of Stockholders. The Company plans for this investor day to become a regular event where stockholders can openly express their views directly to our Board. The Board intends to summarize the feedback received from stockholders in the next annual meeting proxy statement alongside the Board's response to this feedback.

Second, the Board plans to address corporate governance and compensation matters with the stockholders at the 2019 Annual Meeting of Stockholders. This will provide the stockholders and independent directors with another forum to address stockholder concerns.

Third, to provide our stockholders with a direct and open line of communication to our Board, a process has been established for communications with the Board, or any member of the Board. Any communications to the Board should be sent to the Board of the Company, in care of our Secretary at 2450 N Street, NW, Washington, D.C. 20037 or to BoardofDirectors@cogentco.com. All communications will be reviewed and then directed to the appropriate member(s) of the Board, other than, at the Board's request, certain items unrelated to the Board's duties, such as spam, junk mail, solicitations, employment inquiries and similar items. See "Stockholder Communication with Board Members" in this proxy statement.

The board intends to summarize the feedback received in the annual meeting proxy statement alongside the Board's response to this feedback.

STOCKHOLDER PROPOSALS

Stockholders who wish to submit a proposal to be included in the Proxy Statement for the 2019 Annual Meeting of Stockholders may do so by following the procedures in Rule 14a-8 under the Exchange Act. To be eligible for inclusion, a stockholder must submit their proposal by November 23, 2018 to Ried Zulager, Secretary, Cogent Communications Holdings, Inc., 2450 N Street NW, 4th Floor, Washington, D.C. 20037. The proposal must comply with the SEC's proxy rules.

Additionally, the Bylaws provide that stockholders desiring to nominate a director or bring any other business before the stockholders at an annual meeting must notify the Secretary of the Company thereof in writing during the period 120 to 90 days before the first anniversary of the date of the preceding year's annual meeting or, if the date of the annual meeting is more than 30 days before or more than 70 days after such anniversary date, notice by the stockholder to be timely must be so delivered during the period 120 to 90 days before such annual meeting or 10 days following the day on which public announcement of the date of such meeting is first made by the Company. These stockholder notices must set forth certain information specified in the Bylaws. For information about the required information, see "Annual Meeting of Stockholders" in the Meetings of Stockholders section of the Bylaws.

OTHER MATTERS

The Board knows of no other business that will be presented to the Special Meeting. If any other business is properly brought before the Special Meeting, proxies in the enclosed form will be voted in respect thereof in accordance with the judgments of the persons voting the proxies.

It is important that the proxies be returned promptly and that your shares are represented. Stockholders are urged to sign, date and promptly return the enclosed proxy card in the enclosed envelope.

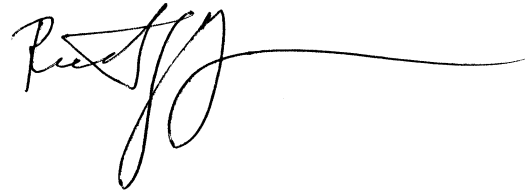
HOUSEHOLDING OF PROXIES

The SEC has adopted rules that permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as "householding," potentially provides extra convenience for stockholders and cost savings for companies. We and some brokers deliver a single proxy statement to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders.

The Company will promptly deliver, upon written or oral request by such stockholder, a separate copy of the proxy statement to a stockholder at a shared address to which a single copy was delivered. To request individual copies for each stockholder in your household, please contact our Investor Relations department by e-mail at investor.relations@cogentco.com, by mail to Cogent Communication, Inc., 2450 N Street, NW, 4th Floor, Washington, D.C. 20037, Attn: Investor Relations, or by phone at 202-295-4274. To ask that only one set of the documents be mailed to your household, please contact your bank, broker or other nominee or, if you are a stockholder of record, please call our transfer agent, Computershare Shareholder Services at (800)-368-5948 from within in the United States and Canada or +1 (781) 575-4223 outside the United States and Canada, or by

mail to P.O. Box 505000, Louisville, KY 40233-5000. The transfer agent also has the following website:
www.computershare.com/investor.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read 'Ried Zulager', followed by a long horizontal line extending to the right.

Ried Zulager, *Secretary*
Washington, D.C.
July 19, 2018

**AMENDED AND RESTATED
BYLAWS
OF
COGENT COMMUNICATIONS HOLDINGS, INC.
(as of September , 2018)**

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ARTICLE I. OFFICES

Section 1. REGISTERED OFFICE. The registered office of Cogent Communications Holdings, Inc. (the “Corporation”) shall be in the City of Dover, County of Kent, State of Delaware.

Section 2. OTHER OFFICES. The Corporation may also have offices at such other places both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may require.

ARTICLE II. MEETINGS OF STOCKHOLDERS

Section 3. PLACE OF MEETINGS. Meetings of stockholders shall be held at any place within or outside the State of Delaware designated by the Board of Directors. In the absence of any such designation, stockholders’ meetings shall be held at the principal executive office of the Corporation.

Section 4. NOTICE OF STOCKHOLDER BUSINESS AND NOMINATIONS. The annual meeting of stockholders shall be held each year at a date and a time designated by the Board of Directors. At each annual meeting directors shall be elected and any other proper business may be transacted.

(A) ANNUAL MEETING OF STOCKHOLDERS.

(1) Nominations of persons for election to the Board of Directors of the Corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders only (a) pursuant to the Corporation’s notice of meeting (or any supplement thereto), (b) by or at the direction of the Board of Directors or (c) by any stockholder of the Corporation who was a stockholder of record of the Corporation at the time the notice provided for in this Section 4 is delivered to the Secretary of the Corporation, who is entitled to vote at the meeting and who complies with the notice procedures set forth in this Section 4.

(2) For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (c) of paragraph (A)(1) of this Section 4, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation and such other business must otherwise be a proper matter for stockholder action. To be timely, a stockholder’s notice shall be delivered to the Secretary at the principal executive office of the Corporation not later than the close of business on the ninetieth day nor earlier than the close of business on the one hundred twentieth day prior to the first anniversary of the preceding year’s annual meeting (provided, however, that in the event that the date of the annual meeting is more than thirty days before or more than seventy days after such anniversary date, notice by the stockholder must be so delivered not earlier than the close of business on the one hundred twentieth day prior to such annual meeting and not later than the close of business on the later of the ninetieth day prior to such annual meeting or the tenth day following the day on which public announcement of the date of such meeting is first made by the Corporation). In no event shall the public announcement of an adjournment or postponement of an annual meeting commence a new time period for the giving of a stockholder’s notice as described above. Such stockholder’s notice shall set forth: (a) as to each person whom the stockholder proposes to nominate for election or reelection as a director all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) and Rule 14a-11 thereunder (and such person’s written consent to being

named in the proxy statement as a nominee and to serving as a director if elected); (b) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made, and in the event that such business includes a proposal to amend the By-laws of the Corporation, the language of the proposed amendment; and (c) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder, as they appear on the Corporation's books, and or such beneficial owner, (ii) the class and number of shares of capital stock of the Corporation which are owned beneficially and of record by such stockholder and such beneficial owner, (iii) a representation that the stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business of nomination, and (iv) a representation whether the stockholder or the beneficial owner, if any, intends or is part of a group which intends to (a) deliver a proxy statement and/or form of proxy to holders of at least the percentage of the Corporation's outstanding capital stock required to approve or adopt the proposal or elect the nominee and/or (b) otherwise solicit proxies from stockholders in support of such proposal or nomination. The Corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as a director of the Corporation.

(3) Notwithstanding anything in the second sentence of paragraph (A)(2) of this Section 4 to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation at an annual meeting is increased and there is no public announcement by the Corporation naming all of the nominees for director or specifying the size of the increased Board of Directors at least one hundred days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section 4 shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary at the principal executive office of the Corporation not later than the close of business on the tenth day following the day on which such public announcement is first made by the Corporation.

(B) **SPECIAL MEETINGS OF STOCKHOLDERS.** Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting pursuant to Section 9. Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Corporation's notice of meeting (1) by or at the direction of the Board of Directors or (2) provided that the Board of Directors has determined that directors shall be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time the notice provided for in this Section 4 is delivered to the Secretary of the Corporation, who shall be entitled to vote at the meeting and upon such election and who complies with the notice procedures set forth in this Section 4. In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder entitled to vote in such election of directors may nominate a person or persons (as the case may be) for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by paragraph (A)(2) of this Section 4 shall be delivered to the Secretary at the principal executive offices of the Corporation not earlier than the close of business on the one hundred twentieth day prior to such special meeting and not later than the close of business on the later of the ninetieth day prior to such special meeting, or the tenth day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In

no event shall the public announcement of an adjournment or postponement of a special meeting commence a new time period for the giving of a stockholder's notice as described above.

(C) GENERAL

(1) Only such persons who are nominated in accordance with the procedures set forth in this Section 4 shall be eligible to be elected at an annual or special meeting of stockholders of the Corporation to serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 4. Except as otherwise provided by law or the Certificate of Incorporation, the chairman of the meeting shall have the power and duty to (a) determine whether a nomination or any business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this Section 4 and (b) if any proposed nomination or business is not in compliance with this Section 4 (including whether the stockholder or beneficial owner, if any, on whose behalf the nomination or proposal is made solicits (or is part of a group which solicits), or fails to so solicit (as the case may be), proxies in support of such stockholder's proposal in compliance with such stockholder's representation required by clause (c)(iv) of Section (A)(2) of this By-law), to declare that such defective nomination shall be disregarded or that such proposed business shall not be transacted.

(2) For purposes of this Section 4, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation, with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(3) Notwithstanding the foregoing provisions of this Section 4, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section 4. Nothing in this Section 4 shall be deemed to affect any rights (a) of stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or (b) of the holders of any series of Preferred Stock to elect directors under specified circumstances.

Section 5. QUORUM; ADJOURNED MEETINGS AND NOTICE THEREOF. A majority of the stock issued and outstanding and entitled to vote at any meeting of stockholders, the holders of which are present in person or represented by proxy, shall constitute a quorum for the transaction of business except as otherwise provided by law, by the Certificate of Incorporation, or by these Bylaws. A quorum, once established, shall not be broken by the withdrawal of enough votes to leave less than a quorum and the votes present may continue to transact business until adjournment. If, however, such quorum shall not be present or represented at any meeting of the stockholders, a majority of the voting stock represented in person or by proxy may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote thereat.

Section 6. VOTING. When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes, or the Certificate of Incorporation, or these Bylaws, a different vote is required in which case such express provision shall govern and control the decision of such question.

Section 7. PROXIES. At each meeting of the stockholders, each stockholder having the right to vote may vote in person or may authorize another person or persons to act for him by proxy appointed by an instrument in writing subscribed by such stockholder and bearing a date not more than three years prior to said meeting, unless said instrument provides for a longer period. All proxies must be filed with the Secretary of the Corporation at the beginning of each meeting in order to be counted in any vote at the meeting. Each stockholder shall have one vote for each share of stock having voting power, registered in his name on the books of the Corporation on the record date set by the Board of Directors as provided in Article 6, Section 53 hereof.

Section 8. SPECIAL MEETINGS. Special meetings of the stockholders, for any purpose, or purposes, unless otherwise prescribed by statute or by the Certificate of Incorporation, may be called by the President and shall be called by the President or the Secretary at the request in writing of a majority of the Board of Directors, or at the request in writing of stockholders owning at least a majority of the entire capital stock of the Corporation, issued and outstanding, and entitled to vote. Such request shall state the purpose or purposes of the proposed meeting. Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

Section 9. NOTICE OF MEETINGS. Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which notice shall state the place, date and hour of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. The written notice of any meeting shall be given to each stockholder entitled to vote at such meeting not less than ten nor more than sixty days before the date of the meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the Corporation.

Section 10. MAINTENANCE AND INSPECTION OF STOCKHOLDER LIST. The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

Section 11. STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING. Unless otherwise provided in the Certificate of Incorporation, any action required to be taken at any annual or special meeting of stockholders of the Corporation, including the election of directors, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

ARTICLE III. DIRECTORS

Section 12. THE NUMBER OF DIRECTORS. The number of directors which shall constitute the whole Board shall be seven (7). Thereafter, the number of directors constituting the whole Board may be increased or decreased, from time to time, in conformity with the Certificate of Incorporation

or any Stockholders Agreement (as defined below). The directors need not be stockholders. The directors shall be elected at the annual meeting of the stockholders, except as provided in Section 13, and each director elected shall hold office until his successor is elected and qualified; provided, however, that unless otherwise restricted by the Certificate of Incorporation, any stockholders agreement, the execution of which is approved unanimously the Board of Directors (a "Stockholders Agreement"), or by law, any director or the entire Board of Directors may be removed, either with or without cause, from the Board of Directors at any meeting of stockholders by a majority of the stock represented and entitled to vote thereat.

Section 13. **VACANCIES.** Vacancies on the Board of Directors by reason of death, resignation, retirement, disqualification, removal from office, or otherwise, and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director, provided, however, that the Board of Directors shall not take any action unless and until the any Stockholders entitled to designate nominees of the Board of Directors under any Stockholders Agreement have been given adequate opportunity to do so.

Section 14. **POWERS.** The Board of Directors shall elect and appoint management to manage the business and property of the Corporation. In addition to the powers and authorities by these Bylaws expressly conferred upon them, the Board may exercise all such powers of the Corporation and do all such lawful acts and things as are not by statute or by the Certificate of Incorporation or by these Bylaws directed or required to be exercised or done by the stockholders.

Section 15. **PLACE OF DIRECTORS' MEETINGS.** The directors may hold their meetings and have one or more offices, and keep the books of the Corporation outside of the State of Delaware.

Section 16. **REGULAR MEETINGS.** Regular meetings of the Board of Directors may be held without notice at such time and place as shall from time to time be determined by the Board.

Section 17. **SPECIAL MEETINGS.** Special meetings of the Board of Directors may be called by the Chairman of the Board or the President on forty-eight hours' notice to each director, either personally or by mail or by facsimile; special meetings shall be called by the President or the Secretary in like manner and on like notice on the written request of two directors.

Section 18. **QUORUM.** At all meetings of the Board of Directors, a majority of the then-appointed directors shall be necessary and sufficient to constitute a quorum for the transaction of business, and the vote of a majority of the directors present at any meeting at which there is a quorum, shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute, by the Certificate of Incorporation, by any Stockholders Agreement or by these Bylaws. If a quorum shall not be present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present. If only one director is authorized, such sole director shall constitute a quorum. At any meeting, a director shall have the right to be accompanied by counsel (provided that such counsel shall agree to any confidentiality restrictions reasonably imposed by the Corporation) and an observer (to the extent such right is agreed upon in any Stockholders Agreement).

Section 19. **ACTION WITHOUT MEETING.** Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board or committee.

Section 20. **TELEPHONIC MEETINGS.** Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or any committee, by

means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at such meeting.

Section 21. COMMITTEES OF DIRECTORS. The Board of Directors may, by resolution passed by a majority of the whole Board, designate one or more committees, each such committee to consist of one or more of the directors of the Corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors, shall make recommendations regarding the management of the business and affairs of the Corporation.

Section 22. MINUTES OF COMMITTEE MEETINGS. Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors.

Section 23. COMPENSATION OF DIRECTORS. Unless otherwise restricted by the Certificate of Incorporation, any Stockholders Agreement or these Bylaws, the Board of Directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary as director. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

ARTICLE IV. INDEMNIFICATION AND INSURANCE

Section 24. POWER TO INDEMNIFY IN ACTIONS, SUITS OR PROCEEDINGS OTHER THAN ACTIONS BY OR IN THE RIGHT OF THE CORPORATION. Subject to Section 26 of this Article 4, the Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that such person is or was a director or officer of the Corporation, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, such person had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that such person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the Corporation, and with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

Section 25. POWER TO INDEMNIFY IN ACTIONS BY OR IN THE RIGHT OF THE CORPORATION. Subject to Section 26 of this Article 4, the Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action or suit or by or in the right of the Corporation to procure a judgment in its favor by reason of

the fact that such person is or was a director or officer of the Corporation, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 26. **AUTHORIZATION OF INDEMNIFICATION.** Any indemnification under this Article 4 (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 24 or 25 of this Article 4, as the case may be. Such determination shall be made (i) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (ii) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (iii) by the stockholders. To the extent, however, that a director or officer of the Corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described above, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith, without the necessity of authorization in the specific case.

Section 27. **GOOD FAITH DEFINED.** For purposes of any determination under Section 26 of this Article 4, a person shall be deemed to have acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, or, with respect to any criminal action or proceeding, to have had no reasonable cause to believe his or her conduct was unlawful, if such person's action is based on the records or books of account of the Corporation or another enterprise, or on information supplied to such person by the officers of the Corporation or another enterprise in the course of their duties, or on the advice of legal counsel for the Corporation or another enterprise or on information or records given or reports made to the Corporation or another enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Corporation or another enterprise. The term "another enterprise" as used in this Section 27 shall mean any other corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise of which such person is or was serving at the request of the Corporation as director, officer, employee or agent. The provisions of this Section 27 shall not be deemed to be exclusive or to limit in any way the circumstances in which a person may be deemed to have met the applicable standard of conduct set forth in Section 24 or 25 of this Article 4, as the case may be.

Section 28. **INDEMNIFICATION BY A COURT.** Notwithstanding any contrary determination in the specific case under Section 26 of this Article 4, and notwithstanding the absence of any determination thereunder, any director or officer may apply to the Court of Chancery of the State of Delaware or any other court of competent jurisdiction in the State of Delaware for indemnification to the extent otherwise permissible under Sections 24 and 25 of this Article 4. The basis of such indemnification by a court shall be a determination by such court that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standards of conduct set forth in Section 24 or 25 of this Article 4, as the case may be. Neither a contrary determination in the specific case under Section 26 of this Article 4 nor the absence of any

determination thereunder shall be a defense to such application or create a presumption that the director or officer seeking indemnification has not met any applicable standard of conduct. Notice of any application for indemnification pursuant to this Section 28 shall be given to the Corporation promptly upon the filing of such application. If successful, in whole or in part, the director or officer seeking indemnification shall also be entitled to be paid the expense of prosecuting such application.

Section 29. **EXPENSES PAYABLE IN ADVANCE.** Expenses incurred by a director or officer in defending or investigating a threatened or pending action, suit or proceeding shall be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation as authorized in this Article 4. Notwithstanding the foregoing, the Corporation shall not be required to advance any expenses to an Indemnatee in the event and to the extent that such Indemnatee has entered a plea of guilty in the applicable criminal proceeding.

Section 30. **NON-EXCLUSIVITY OF INDEMNIFICATION AND ADVANCEMENT OF EXPENSES.** The indemnification and the advancement of expenses provided by or granted pursuant to this Article 4 shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the Certificate of Incorporation or any By-law, agreement, contract, vote of stockholders or disinterested directors or pursuant to the direction (howsoever embodied) of any court of competent jurisdiction or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, it being the policy of the corporation that indemnification of persons specified in Section 24 and 25 of this Article 4 shall be made to the fullest extent permitted by law. The provisions of this Article 4 shall not be deemed to preclude the indemnification of any person who is not specified in Section 24 or 25 of this Article 4 but whom the Corporation has the power or obligation to indemnify under the provision of the Delaware General Corporation Law ("DGCL") or otherwise.

Section 31. **INSURANCE.** The Corporation may purchase and maintain insurance on behalf of any person who is or was a director or officer of the Corporation or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Article 4.

Section 32. **CERTAIN DEFINITIONS.** For the purposes of this Article 4, references to the "Corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors or officers, so that any person who is or was a director or officer of such constituent corporation, or is or was a director or officer of such constituent corporation serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, shall stand in the same position under the provisions of this Article 4 with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. For purposes of this Article 4, references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the Corporation" shall include any service as a director, officer, employee or agent of the Corporation which imposes duties on, or involves services by, such director or officer with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation" as referred to in this Article 4.

Section 33. **SURVIVAL OF INDEMNIFICATION AND ADVANCEMENT OF EXPENSES.** The indemnification and advancement of expenses provided by, or granted pursuant to, this Article 4 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director or officer shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 34. **LIMITATION ON INDEMNIFICATION.** Notwithstanding anything contained in this Article 4 to the contrary, except for proceedings to enforce rights to indemnification (which shall be governed by Section 28 hereof), the Corporation shall not be obligated to indemnify any director or officer (or his heirs, executors or personal or legal representatives) or advance expenses in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the Board of Directors of the Corporation.

Section 35. **INDEMNIFICATION OF EMPLOYEES AND AGENTS.** The Corporation may, to the extent authorized from time to time by the Board of Directors, provide rights to indemnification and to advancement of expenses to employees and agents of the Corporation similar to those conferred in this Article 4 to directors and officers of the Corporation.

ARTICLE V. OFFICERS

Section 36. **OFFICERS.** The officers of this corporation shall be chosen by the Board of Directors and shall include a Chief Executive Officer, President, a Secretary, and a Treasurer. The Corporation may also have, at the discretion of the Board of Directors, such other officers as are desired, including a Chairman of the Board, one or more Vice Presidents, one or more Assistant Secretaries and Assistant Treasurers, and such other officers as may be appointed in accordance with the provisions of Section 3 hereof. In the event there are two or more Vice Presidents, then one or more may be designated as Executive Vice President, Senior Vice President, or other similar or dissimilar title. Any number of offices may be held by the same person unless the Certificate of Incorporation or these Bylaws otherwise provide.

Section 37. **ELECTION OF OFFICERS.** The Board of Directors, at its first meeting after each annual meeting of stockholders, shall choose the officers of the Corporation.

Section 38. **COMPENSATION OF OFFICERS.** The salaries of all officers and agents of the Corporation shall be fixed by the Board of Directors on the advice and consent of the Compensation Committee thereof.

Section 39. **TERM OF OFFICE; REMOVAL AND VACANCIES.** The officers of the Corporation shall hold office until their successors are chosen and qualify in their stead. Any officer elected or appointed by the Board of Directors may be removed at any time by the affirmative vote of a majority of the Board of Directors. If the office of any officer or officers becomes vacant for any reason, the vacancy shall be filled by the Board of Directors.

Section 40. **CHAIRMAN OF THE BOARD.** The Chairman of the Board, if such an officer be elected, shall, if present, preside at meetings of the Board of Directors and shall have no power or authority to manage the affairs of the corporation.

Section 41. **CHIEF EXECUTIVE OFFICER.** The Chief Executive Officer of the Corporation shall be the principle officer of the Corporation and shall have general supervision, direction and control of the business and officers of the Corporation. He shall preside at all meetings of the stockholders and, in the absence of the Chairman of the Board, or if there be none, at all meetings of the Board of Directors.

Section 42. **PRESIDENT.** The President shall be the chief operating officer of the Corporation. He shall assist the Chief Executive Officer at the Chief Executive Officer's discretion in the performance of his duties.

Section 43. **VICE PRESIDENTS.** The Vice Presidents shall assist the President at the President's discretion in the performance of his duties.

Section 44. **SECRETARY.** The Secretary shall attend all sessions of the Board of Directors and all meetings of the stockholders and record all votes and the minutes of all proceedings in a book to be kept for that purpose; and shall perform like duties for the standing committees when required by the Board of Directors. He shall give, or cause to be given, notice of all meetings of the stockholders and of the Board of Directors.

He shall keep in safe custody the seal of the Corporation, and when authorized by the Board, affix the same to any instrument requiring it, and when so affixed it shall be attested by his signature or by the signature of an Assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest the affixing by his signature.

Section 45. **ASSISTANT SECRETARY.** The Assistant Secretary, or if there be more than one, the Assistant Secretaries in the order determined by the Board of Directors, or if there be no such determination, the Assistant Secretary designated by the Board of Directors, shall, in the absence or disability of the Secretary, perform the duties and exercise the powers of the Secretary.

Section 46. **TREASURER.** The Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all moneys, and other valuable effects in the name and to the credit of the Corporation, in such depositories as may be designated by the Board of Directors. He shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the Board of Directors, at its regular meetings, or when the Board of Directors so requires, an account of all his transactions as Treasurer and of the financial condition of the Corporation. If required by the Board of Directors, he shall give the Corporation a bond, in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors, for the faithful performance of the duties of his office and for the restoration to the Corporation, in case of his death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control belonging to the Corporation.

Section 47. **ASSISTANT TREASURER.** The Assistant Treasurer, or if there shall be more than one, the Assistant Treasurers, shall, in the absence or disability of the Treasurer, perform the duties and exercise the powers of the Treasurer.

ARTICLE VI. CERTIFICATES OF STOCK

Section 48. **CERTIFICATES.** Every holder of stock of the Corporation shall be entitled to have a certificate signed by, or in the name of the Corporation by, the Chairman or Vice Chairman of the Board of Directors, or the President or a Vice President, and by the Secretary or an Assistant Secretary, or the Treasurer or an Assistant Treasurer of the Corporation, certifying the number of shares represented by the certificate owned by such stockholder in the Corporation, except that the Board of Directors may provide that some or all of any class or series of stock will be uncertificated shares. No decision to have uncertificated shares will apply to stock represented by a certificate until that certificate has been surrendered to the Corporation.

Section 49. **SIGNATURES ON CERTIFICATES.** Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent, or registrar who has signed or whose facsimile

signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 50. **STATEMENT OF STOCK RIGHTS, PREFERENCES, PRIVILEGES.** If the Corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualification, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, provided that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

Section 51. **LOST CERTIFICATES.** The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to advertise the same in such manner as it shall require and/or to give the Corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

Section 52. **TRANSFERS OF STOCK.** Upon surrender to the Corporation, or the transfer agent of the Corporation, of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, the Corporation shall issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its book.

Section 53. **FIXING RECORD DATE.** In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of the stockholders, or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date which shall not be more than sixty nor less than ten days before the date of such meeting, nor more than sixty days prior to any other action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

Section 54. **REGISTERED STOCKHOLDERS.** The Corporation shall be entitled to treat the holder of record of any share or shares of stock as the holder in fact thereof and accordingly shall not be bound to recognize any equitable or other claim or interest in such share on the part of any other person, whether or not it shall have express or other notice thereof, save as expressly provided by the laws of the State of Delaware.

ARTICLE VII. GENERAL PROVISIONS

Section 55. **DIVIDENDS.** Dividends upon the capital stock of the Corporation, subject to the provisions of the Certificate of Incorporation, if any, may be declared by the Board of Directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation.

Section 56. **PAYMENT OF DIVIDENDS; DIRECTORS' DUTIES.** Before payment of any dividend there may be set aside out of any funds of the Corporation available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve fund to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Corporation, or for such other purpose as the directors shall think conducive to the interests of the Corporation, and the directors may abolish any such reserve.

Section 57. **CHECKS.** All checks or demands for money and notes of the Corporation shall be signed by such officer or officers as the Board of Directors may from time to time designate.

Section 58. **FISCAL YEAR.** The fiscal year of the Corporation shall be the calendar year.

Section 59. **CORPORATE SEAL.** The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware." Said Seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

Section 60. **MANNER OF GIVING NOTICE.** Whenever, under the provisions of the statutes or of the Certificate of Incorporation or of these Bylaws, notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing, by mail, addressed to such director or stockholder, at his address as it appears on the records of the Corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Notice to directors may also be given by telegram or by facsimile or e-mail at such fax or e-mail addresses as the directors have last given to the Secretary.

Section 61. **WAIVER OF NOTICE.** Whenever any notice is required to be given under the provisions of the statutes or of the Certificate of Incorporation or of these Bylaws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

ARTICLE VIII. AMENDMENTS

Section 62. **AMENDMENT.** These Bylaws may be altered, amended or repealed or new Bylaws may be adopted by the Board of Directors or stockholders at any annual, regular or special meeting, in accordance with the Certificate of Incorporation and any Stockholders Agreement, if notice of such alteration, amendment, repeal or adoption of new Bylaws be contained in the notice of such meeting.