COGENT COMMUNICATIONS GROUP INC Form DEF 14C October 06, 2004

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SCHEDULE 14C INFORMATION

Information Statement Pursuant to Section 14(c) of the Securities Exchange Act of 1934

Check the appropriate box:

- o Preliminary Information Statement
- o Confidential, for use of the Commission only (as permitted by Rule 14c-5(d)(2))
- ý Definitive Information Statement

COGENT COMMUNICATIONS GROUP, INC.

(Name of Registrant as Specified In Its Charter)

Payment of Filing Fee (Check the appropriate box):

- ý No fee required.
- o Fee computed on table below per Exchange Act Rules 14c-5(g) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
 - (2) Aggregate number of securities to which transaction applies:
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
 - (4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

- o Fee paid previously with preliminary materials.
- o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

1015 31st Street N.W. Washington, D.C. 20007 (202) 295-4200

INFORMATION STATEMENT

This Information Statement is being furnished to the stockholders of Cogent Communications Group, Inc., a Delaware corporation (the "Company" or "Cogent"), in connection with an amendment to the Company's Fourth Amended and Restated Certificate of Incorporation, as amended ("Existing Charter"), to (1) revise the antidilution provisions of the Company's existing Series G Participating Convertible Preferred Stock and the Series H Participating Convertible Preferred Stock in connection with the issuance of 2,600 shares of Series K Participating Convertible Preferred Stock and the issuance of 185.4 shares of Series L Participating Convertible Preferred Stock and (2) increase the number of shares of authorized Common Stock from 600,000,000 to 750,000,000 and increase the number of shares of authorized preferred stock from 170,000 to 200,000. The Company has issued shares of its Series K Preferred Stock and Series L Preferred Stock, as defined below, and these shares will become convertible into shares of Common Stock upon the amendment of the Company's Existing Charter.

The Series K Preferred Stock was issued in connection with the merger of UFO Group, Inc. ("UFO Group") with and into Marvin Internet, Inc., a wholly-owned subsidiary of the Company, on August 12, 2004 (the "Merger"). The Series L Preferred Stock was issued in connection with the acquisition by the Company of substantially all of the assets of Global Access Telecommunications, Inc. on September 15, 2004 (the "Asset Purchase" and, together with the Merger, the "Transactions"), These proposals are described in more detail in this Information Statement. This Information Statement will be first mailed to stockholders on or about October 7, 2004.

As a result of the issuance of Series K Preferred Stock and the Series L Preferred Stock in connection with the Transactions and as described more fully in the proposal set forth on page 4 (the "Proposal") and the dilution table on page 9, the current holders of the Company's Common Stock will be diluted. In addition, by electing to forego their anti-dilution protection, the holders of Series G Participating Convertible Preferred Stock and Series H Participating Convertible Preferred Stock will be diluted to a greater extent than if they had not foregone such anti-dilution protection. As of September 15, 2004, assuming no anti-dilution adjustment to the Series G Preferred Stock and Series H Preferred Stock and Series L Preferred Stock and Series L Preferred Stock at the conversion rate that will be applicable to such shares at the time that the proposed amendments to the Existing Charter becomes effective), the holders of the Series K Preferred Stock and Series L Preferred Stock and outstanding equity of the Company, and the equity securities of the Company. If the anti-dilution provisions of the Series G Preferred Stock and Series H Preferred Stock and Series H Preferred Stock and series H Preferred Stock and outstanding equity of the Company. If the anti-dilution provisions of the Series C Preferred Stock and Series K Preferred Stock and series G Preferred Stock and Series H Preferred Stock had not been amended as described herein, the Series K Preferred Stock and the Series L Preferred Stock and Series K Preferred Stock and the Series L Preferred Stock would together represent approximately 4.08% of the total issued and outstanding equity of the Company, and the equity securities of the Company outstanding prior to the Transactions would represent approximately 95.92% of the total issued and outstanding equity of the Company.

WE ARE NOT ASKING YOU FOR A PROXY AND YOU ARE REQUESTED NOT TO SEND A PROXY.

Consent Date; Outstanding Shares; Voting Rights

Prior to the mailing of this information statement (the "Consent Date"), certain of the Company's stockholders, including holders of at least a majority of the Series G Participating Convertible Preferred Stock and Series H Participating Convertible Preferred Stock, each voting as a separate class, acted by written consent to approve the Proposal described in this Information Statement. On the Consent Date, the Company's issued and outstanding capital stock consisted of:

16,145,918 shares of common stock, par value \$.001 per share (the "Common Stock"), which was held by approximately 460 holders of record;

11,000 shares of Series F Participating Convertible Preferred Stock, par value \$.001 per share (the "Series F Preferred Stock");

41,030 shares of Series G Participating Convertible Preferred Stock, par value \$.001 per share (the "Series G Preferred Stock");

46,808 shares of Series H Participating Convertible Preferred Stock, par value \$.001 per share (the "Series H Preferred Stock");

2,575 shares of Series I Participating Convertible Preferred Stock, par value \$.001 per share (the "Series I Preferred Stock");

3,891 shares of Series J Participating Convertible Preferred Stock, par value \$.001 per share (the "Series J Preferred Stock");

2,600 shares of Series K Participating Convertible Preferred Stock, par value \$.001 per share (the "Series K Preferred Stock"); and

185.4 shares of Series L Participating Convertible Preferred Stock, par value \$.001 per share (the "Series L Preferred Stock").

Holders of shares of our Common Stock are entitled to one vote for every share held, and holders of our Series F Preferred Stock, Series G Preferred Stock, Series I Preferred Stock, Series J Preferred Stock and Series K Preferred Stock are entitled to a number of votes per share equal to the number of shares of Common Stock issuable upon conversion of such shares of preferred stock. The Series L Preferred Stock is not entitled to vote, except as required by Delaware Law. Each share of Series F Preferred Stock is convertible into 6,200 shares of Common Stock; each share of Series G Preferred Stock is convertible into between 5,759 and 19,617 shares of Common Stock (depending on the specific terms of the sub-series); each share of Series H Preferred Stock is convertible into 769 shares of Common Stock; each share of Series I Preferred Stock is convertible into approximately 6,200 shares of Common Stock; and each share of Series J Preferred Stock is convertible into 30,998 shares of Common Stock. Prior to the amendment of the Existing Charter, neither the Series K Preferred Stock and Series L Preferred Stock currently are not entitled to vote. After the amendment of the Existing Charter, each share of Series K Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible into 30,998 shares of Common Stock and each share of Series L Preferred Stock will be convertible

Dissenters' Rights of Appraisal

Under the laws of the State of Delaware and the Company's governing documents, stockholders will not have the right to dissent and obtain payment for their shares in connection with the proposals described in this Information Statement.

Note Regarding Share and Per Share Data

In connection with the completion of the merger of Allied Riser Communications Corporation ("Allied Riser") with a subsidiary of the Company, which is discussed in the footnotes to the financial statements accompanying this Information Statement, the Company completed a ten-for-one reverse stock split with respect to its Common Stock. All share and per-share information contained in and accompanying this Information Statement reflects the occurrence of that reverse stock split.

PROPOSAL AMENDMENT OF THE COMPANY'S CERTIFICATE OF INCORPORATION

The Board of Directors has unanimously adopted, subject to stockholder approval, Amendment No. 2 to the Fourth Amended and Restated Certificate of Incorporation of the Company, as amended, a copy of which is attached hereto as Appendix A (the "Charter Amendment") in connection with the authorization and issuance of Series K Preferred Stock and the authorization and issuance of Series L Preferred Stock. On the Consent Date, stockholders holding capital stock of the Company representing a number of votes sufficient to approve the proposal gave their written consent to approve the adoption of the Charter Amendment.

The Charter Amendment will (1) amend each of the certificates of designation of the Series G Preferred Stock and the Series H Preferred Stock to exclude from the definition of "Additional Shares of Common Stock" the issuance of the Series K Preferred Stock and the Series L Preferred Stock and (2) increase the number of shares of authorized Common Stock from 600,000,000 to 750,000,000 and the number of shares of authorized preferred stock from 170,000 to 200,000.

The Charter Amendment will become effective upon its filing with the Secretary of State of the State of Delaware. Except as described herein and in the public offering of Common Stock described in the Company's registration statement on Form S-1 filed on May 18, as amended (No. 333-115589), the Company has no current plan, proposal or arrangement, written or otherwise, to issue the additional Common Stock or the undesignated preferred stock. However, the Company may from time to time issue some or all of the additional Common Stock or undesignated preferred stock in connection with one or more acquisitions, financings or other transactions deemed to be in the Company's best interests.

DESCRIPTION OF OUR BUSINESS

We are a leading facilities-based provider of low-cost, high-speed Internet access and Internet Protocol connectivity. Our network has been designed and optimized to transmit data using Internet Protocol, which provides us with significant cost and performance advantages over legacy networks. We deliver our services to more than 5,000 small and medium-sized businesses, communications service providers, and other bandwidth-intensive organizations in North America and Europe. Our primary service is providing Internet access at a speed of 100 Megabits per second, much faster than typical Internet access currently offered to businesses, and is delivered through our own facilities running all the way to our customers' premises.

Our network is comprised of in-building riser facilities, metropolitan optical fiber networks, metropolitan traffic aggregation points and intercity transport facilities. The network is physically connected entirely through our facilities to over 950 buildings in which we provide our "on-net" services, including over 800 multi-tenant office buildings. The term "on-net" means services provided to customers or buildings that are directly connected to our fiber optic network, utilizing Ethernet interfaces. We also provide on-net services in carrier-neutral colocation facilities, data centers and single-tenant office buildings. Because of our network architecture, we are not dependent on local telephone companies to serve our on-net customers. In addition to providing our on-net services, we also provide Internet connectivity to customers that are not located in buildings directly connected to our network. We serve these "off-net" customers using other carriers' facilities to provide the last mile portion of the link from our customers' premises to our network.

Our network allows us to respond to the growing demand for low-cost, high-speed Internet connectivity. On average, we currently serve approximately 4% of the tenants in each of our multi-tenant on-net buildings. We believe our multi-tenant on-net buildings have an average of 45 tenants. In addition, we currently serve less than 1% of the approximate 172,000 small and medium-sized businesses in the geographic regions in which we offer our off-net services. We also operate 29 data centers comprising over 300,000 square feet throughout North America and Europe that allow customers to colocate their equipment and access our network. We intend to continue to expand our addressable market by selectively adding buildings to our network.

DESCRIPTION OF THE TRANSACTIONS

The Merger

In the second quarter of 2004, the Company learned of an opportunity to acquire substantially all of the assets of Unlimited Fiber Optics, Inc., a Delaware corporation ("UFO"). UFO's customer base is comprised of data service customers and its network is comprised of fiber optic facilities located in San Francisco, Los Angeles and Chicago. As the initial step in the acquisition transaction, Paladin Capital and Kline Hawkes and certain of their affiliates invested an aggregate amount of approximately \$3.0 million into a newly formed entity, UFO Group, Inc., in exchange for all the authorized and issued shares of common stock of UFO Group in the aggregate amount of \$950,000, assuming the liabilities of UFO and issuing to UFO 550 shares of UFO Group common stock. Subsequently, on August 12, 2004, a wholly-owned subsidiary of the Company merged with and into UFO Group, whereby all of the outstanding shares of UFO Group common stock were converted into 2,600 shares of Series K Preferred Stock on a one for one basis. The 2,600 shares of the Series K Preferred Stock will be convertible into approximately 16.1 million shares of Common Stock upon filing the Charter Amendments.

The assets acquired in the Merger included net cash of approximately \$2.0 million, all of UFO's customer contracts, customer accounts receivable and certain network equipment. Assumed liabilities include certain vendor relationships and accounts payable. The Company intends to integrate these acquired assets into its operations and onto its broadband network.

The Asset Purchase

In the third quarter of 2004, the Company learned of an opportunity to acquire substantially all of the assets of Global Access Telecommunications, Inc., a German internet access provider ("Global Access"). Global Access's customer base is comprised of approximately 400 dedicated access customers and its network includes two data centers located in Frankfurt and Hamburg. On September 15, 2004, a whollyowned subsidiary of the Company acquired substantially all the assets of Global Access, in exchange for 185.4 shares of Series L Preferred Stock. The 185.4 shares of Series L Preferred Stock will be convertible into approximately 5.8 million shares of Common Stock upon filing the Charter Amendments. The Company intends to integrate these acquired assets into its operations and onto its broadband network.

Terms of the Series K Preferred Stock and the Series L Preferred Stock

A summary of certain of the rights and preferences of the Series K Preferred Stock and the Series L Preferred Stock is set forth below. The complete designation of the rights and preferences of the Series K Preferred Stock and the Series L Preferred Stock is set forth in the certificates of designation in the forms attached hereto as Appendices B and C.

Dividends

The holders of the Series K Preferred Stock and the Series L Preferred Stock will be entitled to receive out of legally available funds, dividends (on an as-converted-to-Common-Stock basis) payable when and if dividends are declared by the Board of Directors with respect to the Common Stock. The Company has no current plan, proposal or arrangement, written or otherwise, to pay dividends with respect to the Common Stock.



Conversion

Each share of the Series K Preferred Stock and the Series L Preferred Stock may be converted into shares of Common Stock at the election of its holder at any time after the Charter Amendment becomes effective (the "Convertibility Date").

After the Convertibility Date, each share of the Series K Preferred Stock will be automatically converted into approximately 6,200 shares of Common Stock upon the affirmative election of the holders of at least two thirds of the outstanding shares of the Series K Preferred Stock. Each share of the Series K Preferred Stock is convertible into approximately 6,200 shares of Common Stock and will be convertible into an aggregate of approximately 16.1 million shares of Common Stock representing 2.9% of the fully diluted authorized and outstanding shares of Common Stock as of the completion of the Merger (assuming conversion of all of the Company's issued and outstanding securities that are convertible into Common Stock and exercise of all outstanding options and warrants or any other rights to purchase or acquire other equity interests in the Company).

After the Convertibility Date, each share of the Series L Preferred Stock will be automatically converted into approximately 30,998 shares of Common Stock upon the affirmative election of the holders of at least two thirds of the outstanding shares of the Series L Preferred Stock. Each share of the Series L Preferred Stock is convertible into approximately 30,998 shares of Common Stock and will be convertible into an aggregate of approximately 5.8 million shares of Common Stock representing 1.0% of the fully diluted authorized and outstanding shares of Common Stock as of the completion of the Asset Purchase (assuming conversion of all of the Company's issued and outstanding securities that are convertible into Common Stock and exercise of all outstanding options and warrants or any other rights to purchase or acquire other equity interests in the Company).

The conversion price will be subject to adjustment as provided in the paragraph below (relating to antidilution). The Series K Preferred Stock and the Series L Preferred Stock will be automatically converted into Common Stock, at their then applicable conversion rates in the event of an underwritten public offering of shares of the Company at a total offering of not less than \$50 million at a post-money valuation of the Company of \$500 million (a "Qualifying PO").

Sinking Fund Provisions

Neither the Series K Preferred Stock nor the Series L Preferred Stock are subject to sinking fund provisions.

Restrictions on Alienability

Neither the Series K Preferred Stock nor the Series L Preferred Stock are subject to restrictions on alienability.

Antidilution

Proportional adjustments will be made for stock splits, stock dividends, recapitalizations, and the like. The conversion price of the Series K Preferred Stock and the Series L Preferred Stock will be adjusted on a weighted average basis for issuances of additional equity securities at a purchase price below the then-effective applicable conversion price of the Series K Preferred Stock and the Series L Preferred Stock (subject to exceptions). In addition, if there is an adjustment to the conversion price of the Series F Preferred Stock, the Series G Preferred Stock, the Series H Preferred Stock, the Series I Preferred Stock, the Series J Preferred Stock, the Series K Preferred Stock or the Series L Preferred Stock, then all such series of preferred stock shall receive the same proportional adjustment.

Voting Rights and Protective Provisions

After the Convertibility Date, the Series K Preferred Stock will vote together with the Common Stock and not as a separate class, except as required by law with respect to any amendment or waiver of any provisions of the Company's proposed Charter Amendment or bylaws that adversely affects the rights, preferences and privileges of the Series K Preferred Stock. Each share of the Series K Preferred Stock will have a number of votes equal to the number of shares of Common Stock then issuable upon conversion of such share on all matters except for the election of directors for which the Series K Preferred Stock will have no vote.

After the Convertibility Date, the Series L Preferred Stock will not have any voting rights, except as required by Delaware Law.

Liquidation Preference; Participation

Upon an acquisition, dissolution, liquidation, or winding up of the Company, the holders of the Series K Preferred Stock and the Series L Preferred Stock and the other holders of preferred stock of the Company shall be entitled to receive, out of the assets of the Company remaining after all of the Company's debts and liabilities have been paid or otherwise provided for, but before any payments have been made to the holders of Common Stock, an amount payable in cash on account of each share of Series K Preferred Stock and Series L Preferred Stock plus any declared but unpaid dividends amounts equal to and with the preference as follows: (1) the holders of the Series F Preferred Stock, Series G Preferred Stock, Series J Preferred Stock, Series K Preferred Stock and Series L Preferred Stock will be entitled to receive on a *pari passu* basis a return of an amount equal to the amount paid, or deemed to have been paid, for such preferred stock; (2) the holders of the Series G Preferred Stock will be entitled to series J Preferred Stock will be entitled to receive \$38.9 million, the holders of Series K Preferred Stock will be entitled to receive \$5.2 million, the holders of Series L Preferred Stock will be entitled to receive \$9.1 million; (3) the holders of the Series F Preferred Stock, Series J Preferred Stock, Series G Preferred Stock, series J Preferred Stock, series F Preferred Stock will be entitled to receive \$3.9 million, the holders of Series L Preferred Stock will be entitled to receive \$38.9 million, the holders of Series K Preferred Stock shall receive \$18.1 million; and (4) the holders of the Series F Preferred Stock, Series J Preferred Stock, Series S Preferred Stock, Se

An "acquisition" includes a merger, consolidation, or sale of all or substantially all of the assets of the Company in any transaction or series of related transactions in which the stockholders of the Company do not own 50% of the voting power of the surviving corporation.

Redemption

Neither the Series K Preferred Stock nor the Series L Preferred Stock will be redeemable.

Registration Rights Agreement and Stockholders Agreement

The holders of the Series F Preferred Stock, Series G Preferred Stock, Series I Preferred Stock, Series J Preferred, Series K Preferred Stock and the Series L Preferred Stock are parties to a Fifth Amended and Restated Registration Rights Agreement with the Company, that provides for, among other things, registration rights with respect to Common Stock issued to the parties to the agreement. The holders of the Series F Preferred Stock, Series G Preferred Stock, Series I Preferred Stock, Series J Preferred Stock, Series K Preferred Stock and the Series L Preferred Stock are also parties to a Fourth Amended and Restated Stockholders Agreement, that provides for, among other things, an agreement by these parties to vote shares of Common Stock held by them for directors of the Company so as to elect as directors of the Company persons designated by certain of the parties to



such agreement as well as the right to participate on a proportional basis in any future equity offerings by the Company.

Dilutive Effect on Holders of Common Stock

Due to the issuance of the Series K Preferred Stock in connection with the Merger and the issuance of the Series L Preferred Stock in connection with the Asset Purchase, the equity interests of our existing Common Stockholders and Preferred Stockholders, as a percentage of the total number of shares of the Company's Common Stock assuming conversion of the preferred stock, has been diluted.

	Percentage of Outstanding Common Stock Owned (Assuming Conversion of Preferred Stock)			
Existing Class of Equity Securities	Before Issuance of Series K Preferred Stock and Series L Preferred Stock	After Issuance of Series K Preferred Stock and Series L Preferred Stock (assuming no anti- dilution adjustment to Series G and Series H Preferred Stock)	After Issuance of Series K Preferred Stock and Series L Preferred Stock (assuming anti- dilution adjustment to Series G and Series H Preferred Stock)	
Common Stock	3.15%	3.02%	3.02%	
Preferred Stock	96.80%	92.84%	92.85%	
Series K Preferred Stock		3.02%	3.01%	
Series L Preferred Stock		1.08%	1.07%	

Additionally, in the event of any dissolution, liquidation, or winding up of the Company, at least \$2.7 million will be paid in cash to holders of the Series L Preferred Stock, at least \$7.7 million will be paid in cash to holders of the Series K Preferred Stock, at least \$7.7 million will be paid in cash to holders of the Series J Preferred Stock, at least \$29.1 million will be paid in cash to the holders of the Series F Preferred Stock, at least \$123.0 million will be paid in cash to the holders of the Series G Preferred Stock and at least \$7.9 million will be paid in cash to the holders of the Series G Preferred Stock and at least \$7.9 million will be paid in cash to the holders of the Series G Preferred Stock and at least \$7.9 million will be paid in cash to the holders of the Series G Preferred Stock and at least \$7.9 million will be paid in cash to the holders of the Series H Preferred Stock before any payment is made to the holders of Common Stock.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of shares of the Company's capital stock as of September 15, 2004, (1) assuming that the Series K Preferred Stock and the Series L Preferred Stock were convertible on that date and (2) assuming conversion of all of the shares of the Series F Preferred Stock, Series G Preferred Stock, Series H Preferred Stock, Series I Preferred Stock, Series J Preferred Stock, Series K Preferred Stock and Series L Preferred Stock into Common Stock at their then effective conversion rates, by:

each stockholder known to us to be a beneficial owner of more than 5% of any class of voting capital stock;

each of our directors;

each of our named executive officers; and

all of our executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares subject to options, warrants and securities convertible into common stock held by that person that are exercisable as of September 15, 2004 or exercisable within 60 days thereof are deemed beneficially owned. Except as indicated in the footnotes to this table, we believe that each stockholder named in the following table has sole voting and investment power with respect to the shares set forth opposite such stockholder's name, except to the extent shared by a spouse under applicable law. This table is based on information supplied by officers, directors and principal stockholders. As of September 15, 2004, assuming conversion of all of the Series F Preferred Stock, Series G Preferred Stock, Series H Preferred Stock, Series I Preferred Stock and Series J Preferred Stock into Common Stock at their then effective conversion rates, there would have been 511.9 million shares of Common Stock outstanding preferred stock of the Company, including the Series K Preferred Stock and the Series L Preferred Stock had been convertible as of September 15, 2004, and assuming conversion of all of the outstanding preferred stock of the Company, including the Series K Preferred Stock and the Series L Preferred Stock had been convertible as of September 15, 2004, and assuming conversion of all of the outstanding preferred stock of the Company, including the Series K Preferred Stock and the Series L Preferred Stock had been 533.7 million shares of Common Stock outstanding.

Unless otherwise noted, the address for each stockholder below is: c/o Cogent Communications Group, Inc., 1015 31st Street, N.W., Washington D.C. 20007.

Name and Address	Number of Shares	Percent Ownership as of September 15, 2004	Number of Shares after convertibility of Series K Preferred Stock and Series L Preferred Stock	Percent Ownership after convertibility of Series K Preferred Stock and Series L Preferred Stock
Entities affiliated with Jerusalem Venture Partners				
Building One Mahla,				
Jerusalem 91487(1)	98,632,617	18.4%	98,632,617	17.6%
Entities affiliated with Oak Investment Partners IX, LP				
One Gorham Island				
Westport, CT 06880(2)	79,300,901	14.8	79,300,901	14.2
Entities affiliated with BNP Europe Telecom & Media				
Fund II, LP(3)	77,495,350	14.4	77,495,350	13.9
Entities affiliated with Worldview Technology Partners				
435 Tasso Street, #120				
Palo Alto, CA 94301(4)	66,105,487	12.3	66,105,487	11.8
Entities affiliated with BCP Capital (previously				
Broadview Capital Partners)				
One Maritime Plaza, Suite 2525(5)				
San Francisco, CA	40,230,837	7.5	40,230,837	7.2
Cisco Systems Capital Corporation(6)	68,199,901	12.7	68,199,901	12.2
David Schaeffer(7)	20,574,996	3.8	20,574,996	3.7
Erel Margalit(1)	98,632,617	18.4	98,632,617	17.6
Michael Carus(1)	98,632,617	18.4	98,632,617	17.6
Edward Glassmeyer(2)	79,300,901	14.8	79,300,901	14.2
Jean-Jacques Bertrand(3)	77,495,350	14.4	77,495,350	13.9
Timothy Weingarten(4)	66,105,487	12.3	66,105,487	11.8
Steven Brooks(5)	40,230,837	7.5	40,230,837	7.2
Mark Schleifer(8)	230,000	*	230,000	*
Robert Beury(9)	230,000	*	230,000	*
R. Reed Harrison III(10)	675,236	*	675,236	*
Directors and executive officers as a group	294 266 291	71.5	294 266 291	(0.7
14 persons) (11)	384,366,281	71.5	384,366,281	68.7

^{*}

Less than 1%

(1)

Includes shares held by entities affiliated with Jerusalem Venture Partners, of which Mr. Margalit is Managing General Partner and Mr. Carus is a General Partner and CFO, including: (a) JVP III, LP, (b) JVP III (Israel) LP, (c) JVP Entrepreneurs Fund LP, (d) JVP IV, LP, (e) JVP-IV-A LP, and (f) JVP IV (Israel) LP. Messrs. Margalit and Carus disclaim beneficial ownership of such shares.

(2)

Includes shares held by entities affiliated with Oak Investment Partners, of which Mr. Glassmeyer is a director, including: (a) Oak Investment Partners IX, LP, (b) Oak IX Affiliates Fund, LP, and (c) Oak IX Affiliates (Annex), LP. Mr. Glassmeyer disclaims beneficial ownership of such shares.

(3)

Includes shares held by Natio Vie Developpement3, Fonds Communde Placement a Risque ("NVD3"), and BNP Europe Telecom & Media Fund II ("BNP ETMF"). BNP ETMF may be deemed to beneficially own the shares owned by NVD3 by virtue of their relationship, whereby BNP Private Equity SA ("BNP PE") is the management company of NVD 3 and BNP PE shares

certain common directors with General Business Finance and Investments Ltd ("GBFI"), the general partner of BNP ETMF. Pursuant to the terms of the merger agreement pursuant to which the Series I and Series J preferred stock were issued, Jean Jacques Bertrand became a member of the Company's Board of Directors. Mr. Bertrand is a member of the Board of Directors of BNP PE and is a director and one of the shareholders of GBFI. Mr. Bertrand disclaims beneficial ownership of the shares held by NVD3 and BNP ETMF.

(4)

Includes shares held by entities affiliated with Worldview Technology Partners, of which Mr. Weingarten is an employee, including:
(a) Worldview Technology Partners III, LP, (b) Worldview Technology International III, LP, (c) Worldview Strategy III, LP,
(d) Worldview III Carrier Fund, LP, (e) Worldview Technology Partners IV, LP, (f) Worldview Technology International IV, LP, and
(g) Worldview Strategic Partners IV, LP. Mr. Weingarten disclaims beneficial ownership of such shares.

(5)

(6)

(7)

Includes shares held by entities affiliated with BCP Capital, of which Mr. Brooks is Managing Director, including: (a) BCI Holdings LP, (b) Broadview Holdings LLP, (c) Broadview BCPSBS Fund, (d) BCP Associates Fund LLC (previously known as Broadview Capital Partners Affiliates Fund LLC), (e) BCP General LLC (previously known as Broadview Capital Partners Management LLC), and (f) BCP Capital QPF, L.P. (previously known as Broadview Capital Partners Qualified Purchaser Fund L.P.). Mr. Brooks disclaims beneficial ownership of such shares.

Includes 295,424 shares of Common Stock, 160,424 of which are owned directly by Mr. Schaeffer and 135,000 shares of which are held by the Schaeffer Descendant's Trust. Mr. Schaeffer disclaims beneficial ownership of such shares. Also includes 200 shares of Series G Preferred Stock convertible into 3,923,409 shares of Common Stock and 21,263 shares of Series H Preferred Stock, convertible into 16,356,163 shares of Common Stock.

- (8) Includes 351 shares of Series H Preferred Stock, convertible into 270,000 shares of Common Stock.
 - Includes 351 shares of Series H Preferred Stock, convertible into 270,000 shares of Common Stock.

(10)

(9)

Includes options for 878 shares of Series H Preferred Stock, convertible into 675,236 shares of Common Stock.

(11)

See footnotes (1) through (9) above. Consists of Dave Schaeffer, Mark Schleifer, Robert Beury, Erel Margalit, Edward Glassmeyer, Timothy Weingarten, Steven Brooks, Michael Carus, Jean-Jacques Bertrand, R. Brad Kummer, Timothy O'Neill, R. Reed Harrison III, Warren Thrasher and Thaddeus Weed.

Includes 11,000 shares of Series F Preferred Stock, convertible into 68,199,901 shares of Common Stock.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING INFORMATION

You should read this Information Statement together with the financial statements and related notes and other information accompanying this Information Statement. The results discussed therein are not necessarily indicative of the results to be expected in any future periods. Certain matters discussed therein are forward-looking statements. This Information Statement may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements other than statements of historical fact are "forward-looking statements" for purposes of federal and state securities laws, including any projections of earnings, revenues or other financial items; any statements of the plans, strategies and objectives of management for future operations; any statements of belief; and any statements of assumptions underlying any of the foregoing. Forward-looking statements may include the words "may," "will," "estimate," "intend," "continue," "believe," "expect" or "anticipate" and other similar words.

Although we believe that the expectations reflected in any of our forward-looking statements are reasonable, actual results could differ materially from those projected or assumed in any of our forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to change and to inherent risks and uncertainties. Key risks to our Company are described in our registration statement on Form S-1 filed on May 18, 2004, as amended, (No. 333-115589) and our other documents filed from time to time with the Securities and Exchange Commission. We do not intend, and undertake no obligation, to update any forward-looking statement.

By Order of the Board of Directors

Dated: October 6, 2004 Washington, D.C. David Schaeffer, Chairman and Chief Executive Officer

APPENDIX A

AMENDMENT NO. 2 TO THE FOURTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

Cogent Communications Group, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"),

DOES HEREBY CERTIFY:

1.

The name of the Corporation is Cogent Communications Group, Inc.

2.

The Fourth Amended and Restated Certificate of Incorporation of the Corporation, which was filed with the Secretary of State of the State of Delaware on July 31, 2003 and amended pursuant to a Certificate of Amendment filed with the Secretary of State of the State of Delaware on May 28, 2004, (as amended, the "Existing Charter"), is hereby amended in the form of Amendment No. 2 as follows:

a.

Article 4.A. Authorized Shares the first paragraph of the current text reads as follows:

"The total number of shares of capital stock of all classes that the Corporation will have the authority to issue is six hundred million one hundred seventy thousand (600,170,000) shares, of which: (i) six hundred million (600,000,000) shares, of a par value of \$.001 per share, shall be of a class designated "Common Stock"; and (ii) one hundred seventy thousand (170,000) shares, of a par value of \$.001 per share, of authorized Preferred Stock, of which 110,519 shares have been issued and designated pursuant to several Certificates of Designations, and of which 59,481 shares shall be unissued and undesignated."

Such text shall be replaced with the following text:

"The total number of shares of capital stock of all classes that the Corporation will have the authority to issue is seven hundred million one hundred seventy thousand (750,200,000) shares, of which: (i) seven hundred million (750,000,000) shares, of a par value of \$.001 per share, shall be of a class designated "Common Stock"; and (ii) two hundred thousand (200,000) shares, of a par value of \$.001 per share, of authorized Preferred Stock, of which designated pursuant to several Certificates of Designations, and of which shares shall be unissued and undesignated."

b.

Section 4(i)(4) of each of the Certificates of Designations, Preferences and Relative, Participating, Optional and Other Special Rights of Preferred Stock and Qualifications, Limitations and Restrictions Thereof of the following sub-series of Series G Participating Convertible Preferred Stock (such subseries collectively, the "Series G Preferred Stock") shall be amended to read in their entirety as set forth in *Exhibit A* in order to exclude from the definition of "Additional Shares of Common Stock" shares of Common Stock issuable upon the conversion of any shares of Series K Participating Convertible Preferred Stock or Series L Participating Convertible Preferred Stock:

- i.
- Series G-1 Convertible Participating Preferred Stock,
 Series G-2 Convertible Participating Preferred Stock,
 Series G-3 Convertible Participating Preferred Stock,
 Series G-4 Convertible Participating Preferred Stock,
 Series G-5 Convertible Participating Preferred Stock,
 Series G-6 Convertible Participating Preferred Stock,
 Series G-7 Convertible Participating Preferred Stock,

ix.	Series G-8 Convertible Participating Preferred Stock,
	Series G-9 Convertible Participating Preferred Stock,
х.	Series G-10 Convertible Participating Preferred Stock,
xi. xii.	Series G-11 Convertible Participating Preferred Stock,
хш.	Series G-12 Convertible Participating Preferred Stock,

xiii.	
xiv.	Series G-13 Convertible Participating Preferred Stock,
	Series G-14 Convertible Participating Preferred Stock,
XV.	Series G-15 Convertible Participating Preferred Stock,
xvi.	Series G-15 Convertible 1 and pauling 1 referred block,
	Series G-16 Convertible Participating Preferred Stock,
xvii.	Series G-17 Convertible Participating Preferred Stock, and
xviii.	Series 0-17 Convertible 1 articipating 1 referred Stock, and
	Series G-18 Convertible Participating Preferred Stock.

c.

Section 4(i)(4) of the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights of Preferred Stock and Qualifications, Limitations and Restrictions Thereof of the Series H Participating Convertible Preferred Stock (the "Series H Preferred Stock") shall be amended to read in its entirety as set forth in *Exhibit B* in order to exclude from the definition of "Additional Shares of Common Stock" shares of Common Stock issuable upon the conversion of any shares of Series K Participating Convertible Preferred Stock or Series L Participating Convertible Preferred Stock.

d.

Section 4(i)(4) of the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights of Preferred Stock and Qualifications, Limitations and Restrictions Thereof of the Series I Participating Convertible Preferred Stock (the "Series I Preferred Stock") shall be amended to read in its entirety as set forth in *Exhibit C* in order to exclude from the definition of "Additional Shares of Common Stock" shares of Common Stock issuable upon the conversion of any shares of Series K Participating Convertible Preferred Stock or Series L Participating Convertible Preferred Stock.

e.

Section 4(i)(4) of the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights of Preferred Stock and Qualifications, Limitations and Restrictions Thereof of the Series J Participating Convertible Preferred Stock (the "Series J Preferred Stock") shall be amended to read in its entirety as set forth in *Exhibit D* in order to exclude from the definition of "Additional Shares of Common Stock" shares of Common Stock issuable upon the conversion of any shares of Series K Participating Convertible Preferred Stock or Series L Participating Convertible Preferred Stock.

f.

Section 4(i)(4) of the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights of Preferred Stock and Qualifications, Limitations and Restrictions Thereof of the Series K Participating Convertible Preferred Stock (the "Series K Preferred Stock,") shall be amended to read in its entirety as set forth in *Exhibit E* in order to exclude from the definition of "Additional Shares of Common Stock" shares of Common Stock issuable upon the conversion of any shares of Series K Participating Convertible Preferred Stock or Series L Participating Convertible Preferred Stock.

The remaining text of the Existing Charter shall remain unchanged.

3.

This Certificate of Amendment was duly adopted by the stockholders of the Corporation in accordance with the Certificate of Incorporation of the Corporation and Section 242 of the Delaware General Corporation Law.

Exhibit A

(4) "Additional Shares of Common Stock" shall mean, with respect to any shares of Series G Preferred Stock, all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Article 4(i), whether or not subsequently reacquired or retired by the Corporation other than (1) shares of Common Stock issued upon conversion of any Preferred Stock, (2) up to 10,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to employees, officers or directors of, or consultants or advisors to the Corporation or any Subsidiary pursuant to stock purchase or stock option plans or other arrangements that are approved by the Board of Directors, (3) up to 2,000,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to investors in or lenders to the Corporation, (4) additional convertible debt or equity issued in exchange for, upon conversion of, or as paid-in-kind interest payment on, the 7.50% convertible notes due 2007 of Allied Riser Communications Corporation outstanding on the Original Issue Date and in accordance with the terms of such convertible notes as in effect on the Original Issue Date, (5) up to 3,000 shares of Series I Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, (7) up to 2,600 shares of Series K Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, and (8) up to 185.4 shares of Series L Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof.

Exhibit B

(4) "Additional Shares of Common Stock" shall mean, with respect to any shares of Series H Preferred Stock, all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Article 4(i), whether or not subsequently reacquired or retired by the Corporation other than (1) shares of Common Stock issued upon conversion of any Preferred Stock, (2) up to 10,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to employees, officers or directors of, or consultants or advisors to the Corporation or any Subsidiary pursuant to stock purchase or stock option plans or other arrangements that are approved by the Board of Directors, (3) up to 2,000,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to investors in or lenders to the Corporation, (4) additional convertible debt or equity issued in exchange for, upon conversion of, or as paid-in-kind interest payment on, the 7.50% convertible notes due 2007 of Allied Riser Communications Corporation outstanding on the Original Issue Date and in accordance with the terms of such convertible notes as in effect on the Original Issue Date, (5) up to 3,000 shares of Series I Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, (7) up to 2,600 shares of Series K Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof.

Exhibit C

(4) "Additional Shares of Common Stock" shall mean, with respect to shares of Series I Preferred Stock, all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Article 4(i), whether or not subsequently reacquired or retired by the Corporation other than (1) shares of Common Stock issued upon conversion of any Preferred Stock, (2) up to 10,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to employees, officers or directors of, or consultants or advisors to the Corporation or any Subsidiary pursuant to stock purchase or stock option plans or other arrangements that are approved by the Board of Directors, (3) up to 2,000,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to investors in or lenders to the Corporation, (4) additional convertible debt or equity issued in exchange for, upon conversion of, or as paid-in-kind interest payment on, the 7.50% convertible notes due 2007 of Allied Riser Communications Corporation outstanding on the Original Issue Date and in accordance with the terms of such convertible notes as in effect on the Original Issue Date, (5) up to 3,000 shares of Series I Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, (7) up to 2,600 shares of Series K Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof.

Exhibit D

(4) "Additional Shares of Common Stock" shall mean, with respect to shares of Series J Preferred Stock, all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Article 4(i), whether or not subsequently reacquired or retired by the Corporation other than (1) shares of Common Stock issued upon conversion of any Preferred Stock, (2) up to 10,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to employees, officers or directors of, or consultants or advisors to the Corporation or any Subsidiary pursuant to stock purchase or stock option plans or other arrangements that are approved by the Board of Directors, (3) up to 2,000,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to investors in or lenders to the Corporation, (4) additional convertible debt or equity issued in exchange for, upon conversion of, or as paid-in-kind interest payment on, the 7.50% convertible notes due 2007 of Allied Riser Communications Corporation outstanding on the Original Issue Date and in accordance with the terms of such convertible notes as in effect on the Original Issue Date, (5) up to 3,000 shares of Series I Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, (7) up to 2,600 shares of Series K Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof.

Exhibit E

(4) "Additional Shares of Common Stock" shall mean, with respect to shares of Series K Preferred Stock, all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Article 4(i), whether or not subsequently reacquired or retired by the Corporation other than (1) shares of Common Stock issued upon conversion of any Preferred Stock, (2) up to 10,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to employees, officers or directors of, or consultants or advisors to the Corporation or any Subsidiary pursuant to stock purchase or stock option plans or other arrangements that are approved by the Board of Directors, (3) up to 2,000,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to investors in or lenders to the Corporation, (4) additional convertible debt or equity issued in exchange for, upon conversion of, or as paid-in-kind interest payment on, the 7.50% convertible notes due 2007 of Allied Riser Communications Corporation outstanding on the Original Issue Date and in accordance with the terms of such convertible notes as in effect on the Original Issue Date, (5) up to 3,000 shares of Series I Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, (7) up to 2,600 shares of Series K Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, and (8) up to 185.4 shares of Series L Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof.

IN WITNESS WHEREOF, the undersigned has executed this certificate this day of September, 2004, and hereby affirms that this Certificate of Amendment is the act and deed of the Corporation and that the facts stated herein are true.

By:

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Name: David Schaeffer Title: President

APPENDIX B

CERTIFICATE OF DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL AND OTHER SPECIAL RIGHTS AND QUALIFICATIONS, LIMITATIONS AND RESTRICTIONS

OF

SERIES K PARTICIPATING CONVERTIBLE PREFERRED STOCK

OF

COGENT COMMUNICATIONS GROUP, INC.

PURSUANT TO SECTION 151 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE

Cogent Communications Group, Inc., a Delaware corporation (the "*Corporation*"), hereby certifies that, pursuant to the authority contained in Article IV of its Certificate of Incorporation (the "*Certificate of Incorporation*") and in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware, the Board of Directors of the Corporation (the "*Board*"), on July 30, 2004 duly adopted resolutions, which resolutions remain in full force and effect as of the date hereof, establishing, in accordance with the provisions set forth in Article IV of the Corporation's Certificate of Incorporation, a series of authorized preferred stock of the Corporation having a par value of \$0.001 per share, which series shall (i) be issuable as "Series K Participating Convertible Preferred Stock" (the "*Series K Preferred Stock*"), (ii) consist of a total of 2,600 shares, and (iii) have the following voting powers, preferences and relative, participating, optional and other special rights, and qualifications, limitations and restrictions thereof:

1. Certain Definitions.

Unless the context otherwise requires, the terms defined in this Section 1 shall have, for all purposes of this resolution, the meanings herein specified.

"Common Stock" shall mean the common stock, par value \$0.001 per share, of the Corporation.

"*Convertibility Date*" shall mean the earlier of December 10, 2004 and the date on which the corporation files an amendment to its Certificate of Incorporation amending the terms of each sub-series of its Series G Participating Convertible Preferred Stock providing that the issuance of shares of its Series K Preferred Stock or the conversion of such shares into Common Stock shall not be deemed an issuance of "Additional Shares of Common Stock" as that term is defined in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of such sub-series of Series G Participating Convertible Preferred Stock.

"Junior Stock Primary" shall mean the Series J Participating Convertible Preferred Stock with respect to the Series J Secondary Liquidation Preference, Series I Participating Convertible Preferred Stock with respect to the Series I Secondary Liquidation Preference, Series H Participating Convertible Preferred Stock with respect to the Series H Primary Liquidation Preference, the Series G Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series F Participating Convertible Preferred Stock with respect to the Series F Secondary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date (as defined herein) ranking junior to the Series K Preferred Stock in respect of the right to receive dividends or, with respect to the Primary Liquidation Preference (as defined herein), to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Junior Stock Secondary" shall mean the Series F Participating Convertible Preferred Stock with respect to the Series F Secondary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking junior to the Series K Preferred Stock in respect of the right to receive dividends or, with respect to the Secondary Liquidation Preference (as defined herein), to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Junior Stock" shall mean the Junior Stock Primary and the Junior Stock-Secondary, collectively.

"Pari Passu Stock Primary" shall mean the Series J Participating Convertible Preferred Stock with respect to the Series J Primary Liquidation Preference, Series I Participating Convertible Preferred Stock with respect to the Series I Primary Liquidation Preference, Series G Participating Convertible Preferred Stock with respect to the Series G Primary Liquidation Preference, the Series F Participating Convertible Preferred Stock with respect to the Series F Primary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking *pari passu* with the Series K Preferred Stock in respect of the right to receive dividends or, with respect to the Primary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Pari Passu Stock Secondary" shall mean the Series J Participating Convertible Preferred Stock with respect to the Series J Secondary Liquidation Preference, Series I Participating Convertible Preferred Stock with respect to the Series I Secondary Liquidation Preference, Series G Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series H Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series H Participating Convertible Preferred Stock with respect to the Series H Primary Liquidation Preference, and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking *pari passu* with the Series K Preferred Stock in respect of the right to receive dividends or, with respect to the Secondary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Pari Passu Stock" shall mean the Pari Passu Stock Primary and the Pari Passu Stock - Secondary, collectively.

"*Participating Preferred Stock*" shall mean the Series F, G, H, I, J and K Participating Convertible Preferred Stock, par value \$0.001 per share, and any other series of Preferred Stock of the Corporation that participates with the Common Stock in liquidation after payment of all liquidation preferences.

"Preferred Stock" shall mean the preferred stock, par value \$0.001 per share, of the Corporation, however designated.

"Senior Stock Primary" shall mean any class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking senior to the Series K Preferred Stock in respect of the right to receive dividends or, with respect to the Primary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Senior Stock Secondary" shall mean the Series F Participating Convertible Preferred Stock with respect to the Series F Primary Liquidation Preference, the Series G Participating Convertible Preferred Stock with respect to the Series G Primary Liquidation Preference, the Series I Participating Convertible Preferred Stock with respect to the Series I Primary Liquidation Preference, the Series J Participating Convertible Preferred Stock with respect to the Series J Primary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking senior to the Series K Preferred Stock in respect of the right to receive dividends or, with respect to the Secondary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable. "Senior Stock" shall mean the Senior Stock Primary and the Senior Stock -Secondary, collectively.

"Series F Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series F Participating Convertible Preferred Stock.

"Series F Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series F Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series F Participating Convertible Preferred Stock.

"Series F Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series F Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series F Participating Convertible Preferred Stock.

"Series G Controlling Adjustment Factor" shall mean the smallest fraction designated as "Adjustment Factor" in the various Certificates of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of each of the sub-series of the Series G Participating Convertible Preferred Stock.

"Series G Primary Liquidation Preference" shall mean the liquidation proceeds payable to each of the sub-series of the Series G Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series G Participating Convertible Preferred Stock.

"Series G Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series G Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series G Participating Convertible Preferred Stock.

"Series H Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series H Participating Convertible Preferred Stock.

"Series H Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series H Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series H Participating Convertible Preferred Stock.

"Series I Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series I Participating Convertible Preferred Stock.

"Series I Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series I Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating,

Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series I Participating Convertible Preferred Stock.

"Series I Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series I Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series I Participating Convertible Preferred Stock.

"Series J Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series J Participating Convertible Preferred Stock.

"Series J Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series J Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series J Participating Convertible Preferred Stock.

"Series J Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series J Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series J Participating Convertible Preferred Stock.

2. Voting.

(a) Except as otherwise required by the General Corporation Law or provided in this Certificate, the shares of Series K Preferred Stock shall be voted together with the shares of the Common Stock without distinction as to class or series at each annual or special meeting of stockholders of the Corporation, and may act by written consent in the same manner as the Common Stock, upon the following basis: each holder of a share of Series K Preferred Stock will be entitled to one vote for each share of Common Stock such holder of Series K Preferred Stock would receive upon conversion of such share of Series K Preferred Stock held by such stockholder into Common Stock. Such determination shall be made (1) with respect to a meeting of the stockholders of the Corporation on the record date fixed for meeting, or (2) with respect to a written consent of the stockholders of the Corporation, on the effective date of such written consent.

(b) For so long as at least 20% of the shares of Series K Preferred Stock outstanding as of the Original Issue Date remains outstanding, the Corporation shall not make an underwritten public offering of its stock pursuant to an effective registration statement under the Securities Act of 1933, as amended, other than a Qualified Offering (as defined herein) without the consent of holders of at least 80% of the Series G Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock and the Series K Preferred Stock (on an as if converted to Common Stock basis) taken together and, in each case, then outstanding.

3. Preferences on Liquidation, Dissolution etc.

(a) Liquidation Preference.

(i) Upon any dissolution, liquidation, or winding up of the Corporation, whether voluntary or involuntary, after payment of all amounts owing to holders of any Senior Stock Primary, the holders of outstanding shares of Series K Preferred Stock will be entitled to

receive, out of the assets of the Corporation remaining after all of the Corporation's debts and liabilities have been paid or otherwise provided for, but before any payments have been made to the holders of Common Stock, the Series F Participating Convertible Preferred Stock with respect to the Series F Secondary Liquidation Preference, the Series G Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series H Participating Convertible Preferred Stock with respect to the Series H Primary Liquidation Preference, the Series I Participating Convertible Preferred Stock with respect to the Series I Secondary Liquidation Preference, the Series J Participating Convertible Preferred Stock with respect to the Series J Secondary Liquidation Preference, or any other Junior Stock Primary or Pari-Passu Stock Secondary, an amount equal to \$1,000 per share, subject to appropriate adjustment for stock splits, stock dividends, recapitalizations, reclassifications and similar events which increase or decrease the number of outstanding shares of Series K Preferred Stock (the "Primary Liquidation Preference"). If upon any such dissolution, liquidation, or winding up of the affairs of the Corporation, whether voluntary or involuntary, the assets of the Corporation available to be distributed as aforesaid among the holders of the Series K Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series F Participating Convertible Preferred Stock and any other Pari Passu Stock Primary shall be insufficient to permit the payment in full to them of the Primary Liquidation Preference, the Series F Primary Liquidation Preference, the Series G Primary Liquidation Preference, the Series I Primary Liquidation Preference, the Series J Primary Liquidation Preference, and any other liquidation preferences ranking pari passu therewith and owing with respect to any other Pari Passu Stock Primary, then the entire assets of the Corporation so to be distributed shall be distributed ratably based upon their respective pari passu liquidation preferences among such holders of the Series K Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series F Participating Convertible Preferred Stock and any other Pari Passu Stock Primary.

(ii) Upon any dissolution, liquidation, or winding up of the Corporation, whether voluntary or involuntary, after payment of the Primary Liquidation Preference, the Series F Primary Liquidation Preference, the Series G Primary Liquidation Preference, the Series I Primary Liquidation Preference, the Series J Primary Liquidation Preference and any other amounts owing to holders of any other Pari Passu Stock Primary and Senior Stock Secondary, the holders of outstanding shares of Series K Preferred Stock will be entitled to receive, out of the assets of the Corporation remaining after all of the Corporation's debts and liabilities have been paid or otherwise provided for, but before any payments have been made to the holders of Common Stock or any Junior Stock, an amount equal to \$2,000 per share, subject to appropriate adjustment for stock splits, stock dividends, recapitalizations, reclassifications and similar events which increase or decrease the number of outstanding shares of Series K Preferred Stock (the "Secondary Liquidation Preference" and together with the Primary Liquidation Preference, the "Liquidation Preferences"). If upon any such dissolution, liquidation, or winding up of the affairs of the Corporation, whether voluntary or involuntary, the assets of the Corporation available to be distributed as aforesaid among the holders of the Series K Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series H Participating Convertible Preferred Stock and any other Pari Passu Stock Secondary shall be insufficient to permit the payment in full to them of the Secondary Liquidation Preference, the Series J Secondary Liquidation Preference, the Series I Secondary Liquidation Preference, the Series G Secondary Liquidation Preference and the Series H Primary Liquidation Preference and any other liquidation preferences ranking pari

passu therewith and owing with respect to any other Pari Passu Stock Secondary, then the entire assets of the Corporation so to be distributed shall be distributed ratably based upon their respective *pari passu* liquidation preferences among such holders of the Series K Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series H Participating Convertible Preferred Stock and any other Pari Passu Stock Secondary.

(b) *Remaining Liquidating Distributions*. After payment has been made in full to the holders of Series K Preferred Stock, the Senior Stock, the Pari Passu Stock and any Junior Stock of their liquidation preferences, all remaining assets of the Corporation available for distribution shall be distributed ratably to the holders of the Participating Preferred Stock and the holders of the Common Stock, assuming for purposes of such calculation that all outstanding shares of Participating Preferred Stock are converted into shares of Common Stock at their then applicable conversion rates and that the Convertibility Date shall have occurred.

(c) Assets other than Cash. If assets other than cash are to be distributed to any holders of Series K Preferred Stock or Common Stock pursuant to Article 3 hereof, the amount received by such holders upon receipt of those assets shall be deemed to be the fair market value of such assets as determined in good faith by the Board of Directors of the Corporation in accordance with sound financial practice. If shares of stock or other securities are distributed to any holders of Series K Preferred Stock or Common Stock pursuant to Article 3 hereof, the fair market value shall mean per share or unit of such security, at any date, the average of the daily market prices for the twenty trading business days ending on the second trading day immediately preceding the date of distribution. The market price for each such business day shall be the last sales price on such day as reported on the consolidated transaction reporting system for the principal securities exchange on which the shares of stock or other securities being distributed pursuant to Article 3 hereof is then listed or admitted to trading (or, if applicable, the last sale price reported by the National Association of Securities Dealers Automated Quotation Service ("NASDAQ") National Market System), or, if no sale takes place on such day on any such exchange or no such sale is quoted on such system, the average of the closing bid and asked prices on such day as so reported, or, if such securities are not then listed or admitted to trading on any stock exchange, the market price for each such business day shall be the average of the reported closing bid and asked prices on such day in the over-the-counter market, as reported by NASDAQ. If no market prices are reported, then the market price shall be the fair market value as determined in good faith by the Board of Directors. If such securities are subject to an agreement or other restriction limiting their free marketability, the loss of that marketability shall be considered by the Board of Directors in making its determination of fair market value.

(d) Amount Payable in Mergers, etc. The following events shall be treated as a liquidation, dissolution or winding up within the meaning of this Article 3: (i) a consolidation, merger or reorganization of the Corporation with or into any other corporation or corporations in which the stockholders of the Corporation immediately before such event shall own fifty percent (50%) or less (calculated on an as converted basis, fully diluted) of the voting securities of the surviving corporation, (ii) any transaction or series of related transactions in which at least fifty percent (50%) of the Corporation's voting power is transferred, (iii) the sale, transfer or lease of all or substantially all of the assets of the Corporation or (iv) any acquisition of shares of capital stock of the Corporation (whether through a direct issuance by the Corporation, negotiated stock purchase, a tender for such shares, merger, consolidation or otherwise) by any party or group that did not beneficially own a majority of the voting power of the outstanding shares of capital stock of the Corporation immediately prior to such purchase, the effect of which is that such party or group beneficially owns at least a majority of such voting power immediately after such event (each a

"Change of Control Transaction"). All consideration payable to the stockholders of the Corporation in connection with any such Change of Control Transaction, or all consideration payable to the Corporation and distributable to its stockholders, together with all other available assets of the Corporation (net of obligations owed by the Corporation that are senior to the Series K Preferred Stock), in connection with any such Change of Control Transaction, shall be, as applicable, paid by the purchaser to the holders of, or distributed by the Corporation in redemption (out of funds legally available therefor) of, the Series K Preferred Stock, the Pari Passu Stock and any Junior Stock in accordance with the preferences and priorities set forth in Articles 3(a) and 3(b) above, with such preferences and priorities specifically intended to be applicable in any such Change of Control Transaction as if such transaction were a liquidation, dissolution or winding up within the meaning of this Article 3. In furtherance of the foregoing, the Corporation shall take such actions as are necessary to give effect to the provisions of this Article 3(d), including causing the definitive agreement relating to such Change of Control Transaction to provide for a rate at which the shares of Series K Preferred Stock are converted into or exchanged for cash, new securities or other property that gives effect to the provisions of this Article 3, or otherwise causing such shares to be redeemed in a manner consistent with the provisions of this Article 3. The amount deemed distributed to the holders of Series K Preferred Stock upon any such transaction shall be the cash or the value of the property, rights or securities distributed to such holders by the Corporation or the acquiring person, firm or other entity, as applicable. The provisions of this Article 3(d) shall not apply to any reorganization, merger or consolidation involving (1) only a change in the state of incorporation of the Corporation or (2) a merger of the Corporation with or into a wholly-owned subsidiary of the Corporation which is incorporated in the United States of America which does not change the rights, privileges or preferences or the relative proportions of the stockholders as to each other as to before such event.

(e) *Election to Convert*. Notwithstanding anything contained herein to the contrary, a holder of shares of Series K Preferred Stock may elect to convert any or all of such shares of Series K Preferred Stock into Common Stock at any time after the Convertibility Date prior to close of business of the Company on the date prior to the day on which any liquidation preference provided for in this Article 3 is to be paid. Any such conversion shall be at the then Applicable Conversion Rate and on the other terms and conditions set forth in Article 4 below.

4. *Conversion Rights.* Conversion of the Series K Preferred Stock into shares of Common Stock shall be subject to the following provisions:

(a) *Optional Conversion*. Subject to and in compliance with the provisions of this Article 4, any shares of Series K Preferred Stock may, at the option of the holder, be converted at any time from and after the Convertibility Date into fully-paid and nonassessable shares of Common Stock. The number of shares of Common Stock to which a holder of Series K Preferred Stock shall be entitled upon conversion shall be the product obtained by multiplying the "Conversion Rate" then in effect (determined as provided in Article 4(b)) by the number of shares of Series K Preferred Stock being converted.

(b) *Conversion Rates.* The conversion rate in effect at any time for conversion of the Series K Preferred Stock (the "*Conversion Rate*") shall be the quotient obtained by dividing \$1,000 by the "Conversion Price," calculated as provided in Article 4(c).

(c) *Applicable Conversion Prices*. The Conversion Price shall initially be \$0.16130000 (the "*Conversion Price*"). The initial Conversion Price shall be adjusted from time to time in accordance with this Article 4. All references to a Conversion Price herein shall mean the Conversion Price as so adjusted.

(d) *Mechanics of Conversion.* Each holder of Series K Preferred Stock who wishes to convert the same into shares of Common Stock pursuant to this Article 4 shall surrender the certificate or



certificates therefor, duly endorsed, at the office of the Corporation or any transfer agent for the Series K Preferred Stock, and shall give written notice to the Corporation at such office that such holder elects to convert the same. Such notice shall state the number of shares of Series K Preferred Stock being converted. Thereupon, the Corporation shall promptly issue and deliver at such office to such holder a certificate or certificates for the number of shares of Common Stock to which such holder is entitled and shall promptly pay in cash or, to the extent sufficient funds are not available therefor, in Common Stock (at the Common Stock's fair market value as determined by the Board of Directors as of the date of such conversion) any declared and unpaid dividends on the shares of Series K Preferred Stock being converted. Such conversion shall be deemed to have been made at the close of business on the date of such surrender of the certificates representing the shares of Series K Preferred Stock to be converted, and the person entitled to receive the shares of Common Stock on such date. Upon conversion shall be treated for all purposes as the record holder of such shares of Common Stock on such date. Upon conversion shall issue and deliver to or upon the written order of the holder of the certificate surrendered for conversion, at the expense of the Corporation, a new certificate covering the number of shares of Series K Preferred Stock representing the unconverted portion of the certificate so surrendered.

(e) Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the date that the first share of the Series K Preferred Stock is issued (the "Original Issue Date") effect a subdivision of the outstanding Common Stock without a corresponding subdivision of the Series K Preferred Stock, the Conversion Price in effect immediately before that subdivision with respect to the Series K Preferred Stock shall be proportionately decreased. Conversely, if the Corporation shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock into a smaller number of shares without a corresponding combination of the Series K Preferred Stock, the Conversion Price in effect immediately before the combination with respect to the Series K Preferred Stock shall be proportionately increased. Any adjustment under this Article 4(e) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(f) Adjustment for Common Stock Dividends and Distributions. If the Corporation at any time or from time to time after the Original Issue Date makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in additional shares of Common Stock, in each such event, unless an equivalent dividend is paid to the holders of the Series K Preferred Stock in respect of such stock, the Conversion Prices that are then in effect shall be decreased as of the time of such issuance or, in the event such record date is fixed, as of the close of business on such record date, to the price determined by multiplying each Conversion Price then in effect by a fraction (1) the numerator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and (2) the denominator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution; provided, however, that if such record date is fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, each Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter each Conversion Price shall be adjusted pursuant to this Article 4(f) to reflect the actual payment of such dividend or distribution; and provided further, that if an adjustment has been made to any Conversion Price on the fixing of the record date for a dividend or distribution, no additional adjustment shall be made when such dividend is paid or distribution is made.

(g) Adjustments for Other Dividends and Distributions. If the Corporation at any time or from time to time after the Original Issue Date makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation other than shares of Common Stock, in each such event, unless an equivalent dividend is paid to the holders of the Series K Preferred Stock in respect of such stock, provision shall be made so that the holders of Series K Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the amount of other securities of the Corporation which they would have received had their shares of Series K Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the conversion date, retained such securities receivable by them as aforesaid during such period, subject to all other adjustments called for during such period under this Article 4 with respect to the rights of the holders of such shares of Series K Preferred Stock or with respect to such other securities by their terms; provided, however, that if such a provision has been made on the fixing of the record date for a dividend or distribution, no additional provision shall be made when such dividend is paid or distribution is made.

(h) Adjustment for Reclassification. Exchange and Substitution. If at any time or from time to time after the Original Issue Date, the Common Stock issuable upon the conversion of the Series K Preferred Stock is changed into the same or a different number of shares of any class or classes of stock, whether by recapitalization, reclassification or otherwise (other than a subdivision or combination of shares or stock dividend or a reorganization, merger, consolidation or sale of assets provided for elsewhere in this Article 4), in any such event each holder of shares of Series K Preferred Stock shall have the right thereafter to convert such stock into the kind and amount of stock and other securities and property receivable upon such recapitalization, reclassification or other change by holders of the maximum number of shares of Common Stock into which such Series K Preferred Stock could have been converted immediately prior to such recapitalization, reclassification or change, all subject to further adjustment as provided herein or with respect to such other securities or property by the terms thereof.

(i) Sale of Shares Below Applicable Conversion Price.

(1) If at any time or from time to time after the Original Issue Date, the Corporation issues or sells, or is deemed by the express provisions of this subsection (i) to have issued or sold, Additional Shares of Common Stock (as hereinafter defined), other than (i) pursuant to a transaction described in Articles 4(e)-(h) above for which adjustment was made as provided in the applicable Article or (ii) the issuance of Common Stock, or options or warrants to purchase Common Stock, issued to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions, as approved by two-thirds (2/3rds) of the then sitting members of the Board of Directors, in any event for an Effective Price (as hereinafter defined) less than the then-effective Conversion Price, then in each such case the then existing Conversion Price shall be reduced, as of the opening of business on the date of such issue or sale (or such deemed issuance or sale), to a price determined by multiplying the then Conversion Price by a fraction (the "*Adjustment Factor*") (i) the numerator of which shall be (A) the number of shares of Common Stock deemed outstanding (as defined below) immediately prior to such issue or sale, plus (B) the number of shares of Common Stock which the Aggregate Consideration received (as defined in subsection (j)(2)) by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at such Conversion Price and (ii) the denominator of which shall be the number of shares of Common Stock deemed outstanding (as defined below) immediately prior to such issue or sale. For the purposes of the preceding sentence, the number of shares

of Common Stock deemed to be outstanding as of a given date shall be the sum of (A) the number of shares of Common Stock actually outstanding and (B) the number of shares of Common Stock issuable upon conversion of the then outstanding Preferred Stock and the exercise of all outstanding rights, warrants and options to purchase Common Stock or Convertible Securities (as defined below). Notwithstanding the foregoing, if at any time or from time to time after the Original Issue Date, the Corporation adjusts the conversion price of the Series F Participating Convertible Preferred Stock, any sub-series of the Series G Participating Convertible Preferred Stock, the Series H Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock or the Series J Participating Convertible Preferred Stock or pursuant to Article 4(i)(1) of the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of such Preferred Stock, the Conversion Price shall be reduced (in lieu of any applicable adjustment pursuant to the first sentence of this subsection (i)(1)), as of the opening of business on the date of such adjustment, to a price determined by multiplying the Conversion Price in effect prior to the applicable issue or sale (or deemed issue or sale) by the smallest of the Adjustment Factor, the Series F Adjustment Factor, the Series G Controlling Adjustment Factor, the Series H Adjustment Factor, the Series J Adjustment Factor, as applicable.

(2) For the purpose of making any adjustment required under this Article 4(i), the "Aggregate Consideration" received by the Corporation for any issue or sale of securities shall (A) to the extent it consists of cash, be computed at the net amount of cash received by the Corporation after deduction of any underwriting or similar commissions, compensation or concessions paid or allowed by the Corporation in connection with such issue or sale but without deduction of any expenses payable by the Corporation, (B) to the extent it consists of property other than cash, be computed at the fair value of that property as determined in good faith by the Board of Directors, and (C) if Additional Shares of Common Stock, Convertible Securities are issued or sold together with other stock or securities or other assets of the Corporation for a consideration which covers both, be computed as the portion of the consideration so received that may be reasonably determined in good faith by the Board of Directors to be allocable to such Additional Shares of Common Stock, Convertible Securities or rights or options.

(3) For the purpose of the adjustment required under this Article 4(i), if the Corporation issues or sells any rights or options for the purchase of, or stock or other securities convertible into, Additional Shares of Common Stock (such convertible stock or securities being herein referred to as "*Convertible Securities*") and if the Effective Price of such Additional Shares of Common Stock is less than the effective Conversion Price, the Corporation shall be deemed to have issued at the time of the issuance of such rights or options or Convertible Securities the maximum number of Additional Shares of Common Stock issuable upon exercise or conversion thereof and to have received as consideration for the issuance of such shares an amount equal to the total amount of the consideration, if any, received by the Corporation for the issuance of such rights or options or Convertible Securities, plus, in the case of such rights or options, the minimum amounts of consideration, if any, payable to the Corporation upon the exercise of such rights or options, plus, in the case of Convertible Securities, the minimum amounts of consideration, if any, payable to the Corporation upon the conversion thereof (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities); provided that if in the case of Convertible Securities the minimum amounts of such consideration cannot be ascertained, but are a function of antidilution or similar protective clauses, the Corporation shall be deemed to have received the minimum amounts of consideration without reference to such clauses;

provided further that if the minimum amount of consideration payable to the Corporation upon the exercise or conversion of rights, options or Convertible Securities is reduced over time or on the occurrence or non-occurrence of specified events other than by reason of antidilution adjustments, the Effective Price shall be recalculated using the figure to which such minimum amount of consideration is reduced; provided further that if the minimum amount of consideration payable to the Corporation upon the exercise or conversion of such rights, options or Convertible Securities is subsequently increased, the Effective Price shall be again recalculated using the increased minimum amount of consideration payable to the Corporation upon the exercise or conversion of such rights, options or Convertible Securities. No readjustment in respect of any rights, options or Convertible Securities pursuant to this Article 4(i) shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price that was in effect on the original adjustment date or (ii) the Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and the date of such readjustment for which no adjustment was made. No further adjustment of the Conversion Price, as adjusted upon the issuance of such rights, options or Convertible Securities, shall be made as a result of the actual issuance of Additional Shares of Common Stock on the exercise of any such rights or options or the conversion of any such Convertible Securities. If any such rights or options or the conversion privilege represented by any such Convertible Securities shall expire without having been exercised, the Conversion Price as adjusted upon the issuance of such rights, options or Convertible Securities shall be readjusted to the Conversion Price which would have been in effect had an adjustment been made on the basis that the only Additional Shares of Common Stock so issued were the Additional Shares of Common Stock, if any, actually issued or sold on the exercise of such rights or options or rights of conversion of such Convertible Securities, and such Additional Shares of Common Stock, if any, were issued or sold for the consideration actually received by the Corporation upon such exercise, plus the consideration, if any, actually received by the Corporation for the granting of all such rights or options, whether or not exercised, plus the consideration received for issuing or selling the Convertible Securities actually converted, plus the consideration, if any, actually received by the Corporation (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) on the conversion of such Convertible Securities, provided that such readjustment shall not apply to prior conversions of Series K Preferred Stock.

(4) "Additional Shares of Common Stock" shall mean, with respect to shares of Series K Preferred Stock, all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Article 4(i), whether or not subsequently reacquired or retired by the Corporation other than (1) shares of Common Stock issued upon conversion of any Preferred Stock, (2) up to 10,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to employees, officers or directors of, or consultants or advisors to the Corporation or any Subsidiary pursuant to stock purchase or stock option plans or other arrangements that are approved by the Board of Directors, (3) up to 2,000,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, recepitalizations and similar capital events) issued to investors in or lenders to the Corporation, (4) additional convertible debt or equity issued in exchange for, upon conversion of, or as paid-in-kind interest payment on, the 7.50% convertible notes due 2007 of Allied Riser Communications Corporation outstanding on the Original Issue Date and in accordance with the terms of such convertible notes as in effect on the Original Issue Date, (5) up to 3,000 shares of Series I Participating Convertible Preferred Stock, (6) up to 3,891 shares of Series J Participating Convertible Preferred Stock, and (7) up to 2,600 shares of Series K Preferred Stock.

(5) The "Effective Price" of Additional Shares of Common Stock shall mean the quotient determined by dividing the total number of Additional Shares of Common Stock issued or sold, or deemed to have been issued or sold by the Company under this Article 4(i), into the Aggregate Consideration received, or deemed to have been received by the Company for such issue under this Article 4(i), for such Additional Shares of Common Stock.

(j) Accountants' Certificate of Adjustment. In each case of an adjustment or readjustment of the Conversion Price for the number of shares of Common Stock or other securities issuable upon conversion of the Series K Preferred Stock, the Corporation, at its expense, shall compute such adjustment or readjustment in accordance with the provisions hereof and prepare a certificate showing such adjustment or readjustment, and shall mail such certificate, by first class mail, postage prepaid, to each registered holder of shares of Series K Preferred Stock at the holder's address as shown in the Corporation's books. The certificate shall set forth such adjustment or readjustment, showing in detail the facts upon which such adjustment or readjustment is based, including a statement of (1) the consideration received or deemed to be received by the Corporation for any Additional Shares of Common Stock issued or sold or deemed to have been issued or sold, (2) the Applicable Conversion Price for such series in effect prior to and after giving effect to such adjustment or readjustment, (3) the number of Additional Shares of Common Stock and (4) the type and amount, if any, of other property which at the time would be received upon conversion of such shares of such Series K Preferred Stock.

(k) Notices of Record Date. Upon (i) any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or (ii) any capital reorganization of the Corporation, any reclassification or recapitalization of the capital stock of the Corporation, any merger or consolidation of the Corporation with or into any other corporation, any Change of Control Transaction, any sale of all or substantially all of the Corporation's assets or any voluntary or involuntary dissolution, liquidation or winding up of the Corporation, the Corporation shall mail to each holder of Series K Preferred Stock at least twenty (20) days prior to the record date specified therein a notice specifying (1) the date on which any such record is to be taken for the purpose of such dividend or distribution and a description of such dividend or distribution, (2) the date on which any such reorganization, reclassification, consolidation, merger, dissolution, liquidation or winding up is expected to become effective, and the material terms of such transaction, and (3) the date, if any, that is to be fixed as to when the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, dissolution, liquidation or winding up.

(1) Automatic Conversion.

(1) On or after the Convertibility Date, each share of Series K Preferred Stock shall automatically be converted into shares of Common Stock, based on the Conversion Price, at any time upon the affirmative election of the holders of at least eighty percent (80%) of the outstanding shares of the Series K Preferred Stock, the Series J Participating Convertible Preferred Stock and Series G Participating Convertible Preferred Stock voting together as a single class, provided, however, that the Series K Preferred Stock shall not be converted pursuant to the first sentence of this Section 4(1)(1) unless all of the shares of the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock and the Series G Participating Convertible Preferred Stock are automatically converted into shares of Common Stock at the same time as the Series K Preferred Stock is converted. Each share of Series K Preferred Stock shall automatically be converted into shares of Common Stock based on the Conversion Price immediately upon the closing of a firmly underwritten public offering pursuant to an

effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation in which (i) the aggregate pre-money valuation of the Corporation is at least five hundred million dollars (\$500,000,000); and (ii) the gross cash proceeds (before underwriting discounts, commissions and fees) are at least fifty million dollars (\$50,000,000) (a "*Qualified Offering*"). Upon such automatic conversion, any declared and unpaid dividends shall be paid in accordance with the provisions of Article 5.

(2) On or after the Convertibility Date, upon the occurrence of an event specified in paragraph (1) above, the outstanding shares of Series K Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such conversion unless the certificates evidencing such shares of Series K Preferred Stock are either delivered to the Corporation or its transfer agent as provided below, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. Upon the occurrence of such automatic conversion of the Series K Preferred Stock the holders of Series K Preferred Stock shall surrender the certificates representing such shares at the office of the Corporation or any transfer agent for the Series K Preferred Stock. Thereupon, there shall be issued and delivered to such holder promptly at such office and in its name as shown on such surrendered certificate or certificates, a certificate or certificates for the number of shares of Common Stock into which such shares of Series K Preferred Stock surrendered were convertible on the date on which such automatic conversion occurred, and the Corporation shall promptly pay in cash or, at the option of the Corporation, Common Stock (at the Common Stock's fair market value determined by the Board as of the date of such conversion), or, at the option of the Corporation, both, all declared and unpaid dividends on such shares of Series K Preferred Stock being converted, to and including the date of such conversion.

(m) *Fractional Shares*. No fractional shares of Common Stock shall be issued upon conversion of Series K Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series K Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of any fractional share, the Corporation shall, in lieu of issuing any fractional share, pay cash equal to the product of such fraction multiplied by the Common Stock's fair market value (as determined by the Board) on the date of conversion.

(n) *Reservation of Stock Issuable Upon Conversion.* The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series K Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series K Preferred Stock. If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series K Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(o) *Notices.* Any notice required by the provisions of this Article 4 shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed telex or facsimile if sent during normal business hours of the recipient; if not,

then on the next business day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one (1) day after deposit with a nationally recognized overnight courier, having specified next day of delivery, with written verification of receipt. All notices shall be addressed to each holder of record at the address of such holder appearing on the books of the Corporation.

(p) *Payment of Taxes.* The Corporation shall pay all taxes imposed by the State of Delaware (or any other jurisdiction in which the Company is then located or conducting business) (other than taxes based upon income) and other governmental charges that may be imposed with respect to the issue or delivery of shares of Common Stock upon conversion of any shares of Preferred Stock.

(q) *Dilution or Impairment*. The Corporation shall not, without the appropriate vote of the stockholders under the General Corporation Law of the State of Delaware and Article 7 of this Certificate, amend its Certificate of Incorporation or participate in any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, for the purpose of avoiding or seeking to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, but shall at all times in good faith assist in carrying out all such action as may be reasonably necessary or appropriate in order to protect the conversion rights of the holders of the Series K Preferred Stock against dilution or other impairment.

5. Dividend Rights.

(a) In the event dividends are paid on any share of Common Stock, Pari Passu Stock or Junior Stock, the Company shall pay an additional dividend on all outstanding shares of Series K Preferred Stock in an amount equal per share (on an as-if-converted to Common Stock basis) to the amount paid or set aside for each share of Common Stock, Pari Passu Stock or Junior Stock.

(b) The provisions of Article 5(a) shall not apply to a dividend payable in Common Stock.

6. *Residual Rights.* All rights accruing to the outstanding shares of the Corporation not expressly provided for to the contrary herein or in Article IV of the Certificate of Incorporation shall be vested in the Common Stock.

7. *Amendment.* No provision of this Certificate may be amended, modified or waived without the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of the Series K Preferred Stock.

* * * * *

IN WITNESS WHEREOF, Cogent Communications Group, Inc. has caused this Certificate of Designations to be executed and delivered in its name and on its behalf on August 9, 2004.

COGENT COMMUNICATIONS GROUP, INC.

/s/ DAVID SCHAEFFER

David Schaeffer, Chief Executive Officer 14

APPENDIX C

CERTIFICATE OF DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL AND OTHER SPECIAL RIGHTS AND QUALIFICATIONS, LIMITATIONS AND RESTRICTIONS

OF

SERIES L PARTICIPATING CONVERTIBLE PREFERRED STOCK

OF

COGENT COMMUNICATIONS GROUP, INC.

PURSUANT TO SECTION 151 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE

Cogent Communications Group, Inc., a Delaware corporation (the "*Corporation*"), hereby certifies that, pursuant to the authority contained in Article IV of its Certificate of Incorporation (the "*Certificate of Incorporation*") and in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware, the Board of Directors of the Corporation (the "*Board*") on September 8, 2004 duly adopted resolutions, which resolutions remain in full force and effect as of the date hereof, establishing, in accordance with the provisions set forth in Article IV of the Corporation's Certificate of Incorporation, a series of authorized preferred stock of the Corporation having a par value of \$0.001 per share, which series shall (i) be issuable as Series L Participating Convertible Preferred Stock (the "*Series L Preferred Stock*"), (ii) consist of a total of 185.4 shares, and (iii) have the following voting powers, preferences and relative, participating, optional and other special rights, and qualifications, limitations and restrictions thereof:

1. Voting.

Unless the context otherwise requires, the terms defined in this Section 1 shall have, for all purposes of this resolution, the meanings herein specified.

"Common Stock" shall mean the common stock, par value \$0.001 per share, of the Corporation.

"*Convertibility Date*" shall mean the earlier of December 31, 2004 and the date on which the corporation files an amendment to its Certificate of Incorporation amending the terms of each sub-series of its Series G Participating Convertible Preferred Stock, providing that the issuance of shares of its Series L Preferred Stock or the conversion of such shares into Common Stock shall not be deemed an issuance of "Additional Shares of Common Stock" as that term is defined in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of such sub-series of Series G Participating Convertible Preferred Stock.

"Junior Stock Primary" shall mean the Series K Participating Convertible Preferred Stock with respect to the Series J Secondary Liquidation Preference, Series I Participating Convertible Preferred Stock with respect to the Series J Secondary Liquidation Preference, Series I Participating Convertible Preferred Stock with respect to the Series G Participating Convertible Preferred Stock with respect to the Series G Participating Convertible Preferred Stock with respect to the Series F Participating Convertible Preferred Stock with respect to the Series F Participating Convertible Preferred Stock with respect to the Series F Participating Convertible Preferred Stock with respect to the Series F Secondary Liquidation Preference, the Series F Participating Convertible Preferred Stock with respect to the Series F Secondary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date (as defined herein) ranking junior to the Series L Preferred Stock in respect of the right to receive dividends or, with respect to the Primary Liquidation Preference (as defined herein), to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Junior Stock Secondary" shall mean the Series F Participating Convertible Preferred Stock with respect to the Series F Secondary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking junior to the Series L Preferred Stock in respect of the right to receive dividends or, with respect to the Secondary Liquidation Preference (as defined herein), to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Junior Stock" shall mean the Junior Stock Primary and the Junior Stock-Secondary, collectively.

"Pari Passu Stock Primary" shall mean the Series K Participating Convertible Preferred Stock with respect to the Series K Primary Liquidation Preference, Series J Participating Convertible Preferred Stock with respect to the Series J Primary Liquidation Preference, Series I Participating Convertible Preferred Stock with respect to the Series I Primary Liquidation Preference, Series G Participating Convertible Preferred Stock with respect to the Series G Primary Liquidation Preference, the Series F Participating Convertible Preferred Stock with respect to the Series F Primary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking *pari passu* with the Series L Preferred Stock in respect of the right to receive dividends or with respect to the Primary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Pari Passu Stock Secondary" shall mean the Series K Participating Convertible Preferred Stock with respect to the Series K Secondary Liquidation Preference, Series J Participating Convertible Preferred Stock with respect to the Series I Secondary Liquidation Preference, Series G Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series H Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series H Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series H Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series G Participating Convertible Preferred Stock with respect to the Series I Preferred Stock of the Corporation authorized on or after the Original Issue Date ranking *pari passu* with the Series L Preferred Stock in respect of the right to receive dividends or with respect to the Secondary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Pari Passu Stock" shall mean the Pari Passu Stock Primary and the Pari Passu Stock - Secondary, collectively.

"*Participating Preferred Stock*" shall mean the Series F, G, H, I, J, K and L Participating Convertible Preferred Stock, par value \$0.001 per share, and any other series of Preferred Stock of the Corporation that participates with the Common Stock in liquidation after payment of all liquidation preferences.

"Preferred Stock" shall mean the preferred stock, par value \$0.001 per share, of the Corporation, however designated.

"Senior Stock Primary" shall mean any class or series of capital stock of the Corporation authorized on or after the Original Issue Date ranking senior to the Series L Preferred Stock in respect of the right to receive dividends or with respect to the Primary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Senior Stock Secondary" shall mean the Series K Participating Convertible Preferred Stock with respect to the Series K Primary Liquidation Preference, the Series J Participating Convertible Preferred Stock with respect to the Series J Primary Liquidation Preference, the Series I Participating Convertible Preferred Stock with respect to the Series I Primary Liquidation Preference, the Series G Participating Convertible Preferred Stock with respect to the Series G Primary Liquidation Preference, the Series F Participating Convertible Preferred Stock with respect to the Series G Primary Liquidation Preference, the Series F Participating Convertible Preferred Stock with respect to the Series G Primary Liquidation Preference and any other class or series of capital stock of the Corporation authorized on or after the Original

Issue Date ranking senior to the Series L Preferred Stock in respect of the right to receive dividends or with respect to the Secondary Liquidation Preference, to participate in any distribution upon liquidation, dissolution or winding-up of the affairs of the Corporation, as applicable.

"Senior Stock" shall mean the Senior Stock Primary and the Senior Stock -Secondary, collectively.

"Series F Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series F Participating Convertible Preferred Stock.

"Series F Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series F Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series F Participating Convertible Preferred Stock.

"Series F Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series F Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series F Participating Convertible Preferred Stock.

"Series G Controlling Adjustment Factor" shall mean the smallest fraction designated as "Adjustment Factor" in the various Certificates of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of each of the sub-series of the Series G Participating Convertible Preferred Stock.

"Series G Primary Liquidation Preference" shall mean the liquidation proceeds payable to each of the sub-series G Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series G Participating Convertible Preferred Stock.

"Series G Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series G Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series G Participating Convertible Preferred Stock.

"Series H Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series H Participating Convertible Preferred Stock.

"Series H Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series H Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series H Participating Convertible Preferred Stock.

"Series I Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series I Participating Convertible Preferred Stock.

"Series I Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series I Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series I Participating Convertible Preferred Stock.

"Series I Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series I Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the

Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series I Participating Convertible Preferred Stock.

"Series J Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series J Participating Convertible Preferred Stock.

"Series J Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series J Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series J Participating Convertible Preferred Stock.

"Series J Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series J Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series J Participating Convertible Preferred Stock.

"Series K Adjustment Factor" shall mean the fraction designated as "Adjustment Factor" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series K Participating Convertible Preferred Stock.

"Series K Primary Liquidation Preference" shall mean the liquidation proceeds payable to the Series K Participating Convertible Preferred Stock of the Corporation designated as "Primary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series K Participating Convertible Preferred Stock.

"Series K Secondary Liquidation Preference" shall mean the liquidation proceeds payable to the Series K Participating Convertible Preferred Stock of the Corporation designated as "Secondary Liquidation Preference" in the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of the Series K Participating Convertible Preferred Stock.

2. Voting.

Except as otherwise required by the General Corporation Law or provided in this Certificate, the shares of Series L Preferred Stock shall not be entitled to vote.



3. Preferences on Liquidation, Dissolution etc.

(a) Liquidation Preference.

(i) Upon any dissolution, liquidation, or winding up of the Corporation, whether voluntary or involuntary, after payment of all amounts owing to holders of any Senior Stock Primary, the holders of outstanding shares of Series L Preferred Stock will be entitled to receive, out of the assets of the Corporation remaining after all of the Corporation's debts and liabilities have been paid or otherwise provided for, but before any payments have been made to the holders of Common Stock, the Series F Participating Convertible Preferred Stock with respect to the Series F Secondary Liquidation Preference, the Series G Participating Convertible Preferred Stock with respect to the Series G Secondary Liquidation Preference, the Series H Participating Convertible Preferred Stock with respect to the Series H Primary Liquidation Preference, the Series I Participating Convertible Preferred Stock with respect to the Series I Secondary Liquidation Preference, the Series J Participating Convertible Preferred Stock with respect to the Series J Secondary Liquidation Preference, the Series K Participating Convertible Preferred Stock with respect to the Series K Secondary Liquidation Preference, or any other Junior Stock Primary or Pari-Passu Stock Secondary, an amount equal to \$5,000 per share, subject to appropriate adjustment for stock splits, stock dividends, recapitalizations, reclassifications and similar events which increase or decrease the number of outstanding shares of Series L Preferred Stock (the "Primary Liquidation Preference"). If upon any such dissolution, liquidation, or winding up of the affairs of the Corporation, whether voluntary or involuntary, the assets of the Corporation available to be distributed as aforesaid among the holders of the Series L Preferred Stock, the Series K Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series F Participating Convertible Preferred Stock and any other Pari Passu Stock Primary shall be insufficient to permit the payment in full to them of the Primary Liquidation Preference, the Series F Primary Liquidation Preference, the Series G Primary Liquidation Preference, the Series I Primary Liquidation Preference, the Series J Primary Liquidation Preference, the Series K Primary Liquidation Preference, and any other liquidation preferences ranking pari passu therewith and owing with respect to any other Pari Passu Stock Primary, then the entire assets of the Corporation so to be distributed shall be distributed ratably based upon their respective pari passu liquidation preferences among such holders of the Series L Preferred Stock, the Series K Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series F Participating Convertible Preferred Stock and any other Pari Passu Stock Primary.

(ii) Upon any dissolution, liquidation, or winding up of the Corporation, whether voluntary or involuntary, after payment of the Primary Liquidation Preference, the Series F Primary Liquidation Preference, the Series G Primary Liquidation Preference, the Series I Primary Liquidation Preference, the Series K Primary Liquidation Preference and any other amounts owing to holders of any other Pari Passu Stock Primary and Senior Stock Secondary, the holders of outstanding shares of Series L Preferred Stock will be entitled to receive, out of the assets of the Corporation remaining after all of the Corporation's debts and liabilities have been paid or otherwise provided for, but before any payments have been made to the holders of Common Stock or any Junior Stock, an amount equal to \$10,000 per share, subject to appropriate adjustment for stock splits, stock dividends, recapitalizations, reclassifications and similar events which increase or decrease the number of outstanding shares of Series L Preferred Stock (the "Secondary Liquidation Preference" and together with the Primary Liquidation Preference, the

"*Liquidation Preferences*"). If upon any such dissolution, liquidation, or winding up of the affairs of the Corporation, whether voluntary or involuntary, the assets of the Corporation available to be distributed as aforesaid among the holders of the Series L Preferred Stock, the Series K Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock, the Series G Participating Convertible Preferred Stock, the Series H Participating Convertible Preferred Stock and any other Pari Passu Stock Secondary shall be insufficient to permit the payment in full to them of the Secondary Liquidation Preference, the Series K Secondary Liquidation Preference, the Series J Secondary Liquidation Preference, the Series G Secondary Liquidation Preference and the Series H Primary Liquidation Preference and any other liquidation preferences ranking *pari passu* therewith and owing with respect to any other Pari Passu Stock Secondary, then the entire assets of the Corporation so to be distributed shall be distributed ratably based upon their respective *pari passu* liquidation preferences among such holders of the Series L Preferred Stock, the Series K Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series H Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series H Participating Conver

(b) *Remaining Liquidating Distributions.* After payment has been made in full to the holders of Series L Preferred Stock, the Senior Stock, the Pari Passu Stock and any Junior Stock of their liquidation preferences, all remaining assets of the Corporation available for distribution shall be distributed ratably to the holders of the Participating Preferred Stock and the holders of the Common Stock, assuming for purposes of such calculation that all outstanding shares of Participating Preferred Stock are converted into shares of Common Stock at their then applicable conversion rates and that the Convertibility Date shall have occurred.

(c) Assets other than Cash. If assets other than cash are to be distributed to any holders of Series L Preferred Stock or Common Stock pursuant to Article 3 hereof, the amount received by such holders upon receipt of those assets shall be deemed to be the fair market value of such assets as determined in good faith by the Board of Directors of the Corporation in accordance with sound financial practice. If shares of stock or other securities are distributed to any holders of Series L Preferred Stock or Common Stock pursuant to Article 3 hereof, the fair market value shall mean per share or unit of such security, at any date, the average of the daily market prices for the twenty trading business days ending on the second trading day immediately preceding the date of distribution. The market price for each such business day shall be the last sales price on such day as reported on the consolidated transaction reporting system for the principal securities exchange on which the shares of stock or other securities being distributed pursuant to Article 3 hereof is then listed or admitted to trading (or, if applicable, the last sale price reported by the National Association of Securities Dealers Automated Quotation Service ("NASDAQ") National Market System), or, if no sale takes place on such day on any such exchange or no such sale is quoted on such system, the average of the closing bid and asked prices on such day as so reported, or, if such securities are not then listed or admitted to trading on any stock exchange, the market price for each such business day shall be the average of the reported closing bid and asked prices on such day in the over-the-counter market, as reported by NASDAQ. If no market prices are reported, then the market price shall be the fair market value as determined in good faith by the Board of Directors. If such securities are subject to an agreement or other restriction limiting their free marketability, the loss of that marketability shall be considered by the Board of Directors in making its determination of fair market value.

(d) Amount Payable in Mergers, etc. The following events shall be treated as a liquidation, dissolution or winding up within the meaning of this Article 3: (i) a consolidation, merger or

reorganization of the Corporation with or into any other corporation or corporations in which the stockholders of the Corporation immediately before such event shall own fifty percent (50%) or less (calculated on an as converted basis, fully diluted) of the voting securities of the surviving corporation, (ii) any transaction or series of related transactions in which at least fifty percent (50%) of the Corporation's voting power is transferred, (iii) the sale, transfer or lease of all or substantially all of the assets of the Corporation or (iv) any acquisition of shares of capital stock of the Corporation (whether through a direct issuance by the Corporation, negotiated stock purchase, a tender for such shares, merger, consolidation or otherwise) by any party or group that did not beneficially own a majority of the voting power of the outstanding shares of capital stock of the Corporation immediately prior to such purchase, the effect of which is that such party or group beneficially owns at least a majority of such voting power immediately after such event (each a "Change of Control Transaction"). All consideration payable to the stockholders of the Corporation in connection with any such Change of Control Transaction, or all consideration payable to the Corporation and distributable to its stockholders, together with all other available assets of the Corporation (net of obligations owed by the Corporation that are senior to the Series L Preferred Stock), in connection with any such Change of Control Transaction, shall be, as applicable, paid by the purchaser to the holders of, or distributed by the Corporation in redemption (out of funds legally available therefor) of, the Series L Preferred Stock, the Pari Passu Stock and any Junior Stock in accordance with the preferences and priorities set forth in Articles 3(a) and 3(b) above, with such preferences and priorities specifically intended to be applicable in any such Change of Control Transaction as if such transaction were a liquidation, dissolution or winding up within the meaning of this Article 3. In furtherance of the foregoing, the Corporation shall take such actions as are necessary to give effect to the provisions of this Article 3(d), including causing the definitive agreement relating to such Change of Control Transaction to provide for a rate at which the shares of Series L Preferred Stock are converted into or exchanged for cash, new securities or other property that gives effect to the provisions of this Article 3, or otherwise causing such shares to be redeemed in a manner consistent with the provisions of this Article 3. The amount deemed distributed to the holders of Series L Preferred Stock upon any such transaction shall be the cash or the value of the property, rights or securities distributed to such holders by the Corporation or the acquiring person, firm or other entity, as applicable. The provisions of this Article 3(d) shall not apply to any reorganization, merger or consolidation involving (1) only a change in the state of incorporation of the Corporation or (2) a merger of the Corporation with or into a wholly-owned subsidiary of the Corporation which is incorporated in the United States of America which does not change the rights, privileges or preferences or the relative proportions of the stockholders as to each other as to before such event.

(e) *Election to Convert*. Notwithstanding anything contained herein to the contrary, a holder of shares of Series L Preferred Stock may elect to convert any or all of such shares of Series L Preferred Stock into Common Stock at any time after the Convertibility Date prior to close of business of the Company on the date prior to the day on which any liquidation preference provided for in this Article 3 is to be paid. Any such conversion shall be at the then Applicable Conversion Rate and on the other terms and conditions set forth in Article 4 below.

4. *Conversion Rights.* Conversion of the Series L Preferred Stock into shares of Common Stock shall be subject to the following provisions:

(a) *Optional Conversion.* Subject to and in compliance with the provisions of this Article 4, any shares of Series L Preferred Stock may, at the option of the holder, be converted at any time from and after the Convertibility Date into fully-paid and nonassessable shares of Common Stock. The number of shares of Common Stock to which a holder of Series L Preferred Stock shall be entitled upon conversion shall be the product obtained by multiplying the "Conversion Rate" then

in effect (determined as provided in Article 4(b)) by the number of shares of Series L Preferred Stock being converted.

(b) *Conversion Rates.* The conversion rate in effect at any time for conversion of the Series L Preferred Stock (the "Conversion Rate") shall be the quotient obtained by dividing \$5,000 by the "Conversion Price," calculated as provided in Article 4(c).

(c) *Applicable Conversion Prices*. The Conversion Price shall initially be \$0.16130000 (the "Conversion Price"). The initial Conversion Price shall be adjusted from time to time in accordance with this Article 4. All references to a Conversion Price herein shall mean the Conversion Price as so adjusted.

(d) *Mechanics of Conversion.* Each holder of Series L Preferred Stock who wishes to convert the same into shares of Common Stock pursuant to this Article 4 shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or any transfer agent for the Series L Preferred Stock, and shall give written notice to the Corporation at such office that such holder elects to convert the same. Such notice shall state the number of shares of Series L Preferred Stock being converted. Thereupon, the Corporation shall promptly issue and deliver at such office to such holder a certificate or certificates for the number of shares of Common Stock to which such holder is entitled and shall promptly pay in cash or, to the extent sufficient funds are not available therefor, in Common Stock (at the Common Stock's fair market value as determined by the Board of Directors as of the date of such conversion) any declared and unpaid dividends on the shares of Series L Preferred Stock being converted. Such conversion shall be deemed to have been made at the close of business on the date of such surrender of the certificates representing the shares of Series L Preferred Stock to be converted, and the person entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock on such date. Upon conversion of only a portion of the number of shares of Series L Preferred Stock represented by a certificate so surrendered for conversion, at the expense of the Corporation, a new certificate covering the number of shares of Series L Preferred Stock representing the unconverted portion of the certificate so surrendered.

(e) Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the date that the first share of the Series L Preferred Stock is issued (the "Original Issue Date") effect a subdivision of the outstanding Common Stock without a corresponding subdivision of the Series L Preferred Stock, the Conversion Price in effect immediately before that subdivision with respect to the Series L Preferred Stock shall be proportionately decreased. Conversely, if the Corporation shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock into a smaller number of shares without a corresponding combination of the Series L Preferred Stock, the Conversion Price in effect immediately before the combination with respect to the Series L Preferred Stock shall be proportionately increased. Any adjustment under this Article 4(e) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(f) Adjustment for Common Stock Dividends and Distributions. If the Corporation at any time or from time to time after the Original Issue Date makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in additional shares of Common Stock, in each such event, unless an equivalent dividend is paid to the holders of the Series L Preferred Stock in respect of such stock, the Conversion Prices that are then in effect shall be decreased as of the time of such issuance or, in the event such record date is fixed, as of the close of business on such record date, to the price determined by



multiplying each Conversion Price then in effect by a fraction (1) the numerator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and (2) the denominator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution; provided, however, that if such record date is fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, each Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter each Conversion Price shall be adjusted pursuant to this Article 4(f) to reflect the actual payment of such dividend or distribution; and provided further, that if an adjustment has been made to any Conversion Price on the fixing of the record date for a dividend or distribution, no additional adjustment shall be made when such dividend is paid or distribution is made.

(g) Adjustments for Other Dividends and Distributions. If the Corporation at any time or from time to time after the Original Issue Date makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation other than shares of Common Stock, in each such event, unless an equivalent dividend is paid to the holders of the Series L Preferred Stock in respect of such stock, provision shall be made so that the holders of Series L Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the amount of other securities of the Corporation which they would have received had their shares of Series L Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the conversion date, retained such securities receivable by them as aforesaid during such period, subject to all other adjustments called for during such period under this Article 4 with respect to the rights of the holders of such shares of Series L Preferred Stock or with respect to such other securities by their terms; provided, however, that if such a provision has been made on the fixing of the record date for a dividend or distribution, no additional provision shall be made when such dividend is paid or distribution is made.

(h) Adjustment for Reclassification. Exchange and Substitution. If at any time or from time to time after the Original Issue Date, the Common Stock issuable upon the conversion of the Series L Preferred Stock is changed into the same or a different number of shares of any class or classes of stock, whether by recapitalization, reclassification or otherwise (other than a subdivision or combination of shares or stock dividend or a reorganization, merger, consolidation or sale of assets provided for elsewhere in this Article 4), in any such event each holder of shares of Series L Preferred Stock shall have the right thereafter to convert such stock into the kind and amount of stock and other securities and property receivable upon such recapitalization, reclassification or other change by holders of the maximum number of shares of Common Stock into which such Series L Preferred Stock could have been converted immediately prior to such recapitalization, reclassification or change, all subject to further adjustment as provided herein or with respect to such other securities or property by the terms thereof.

(i) Sale of Shares Below Applicable Conversion Price.

(1) If at any time or from time to time after the Original Issue Date, the Corporation issues or sells, or is deemed by the express provisions of this subsection (i) to have issued or sold, Additional Shares of Common Stock (as hereinafter defined), other than (i) pursuant to a transaction described in Articles 4(e)-(h) above for which adjustment was made as provided in the applicable Article or (ii) the issuance of Common Stock, or options or warrants to purchase Common Stock, issued to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions, as approved by



two-thirds (2/3rds) of the then sitting members of the Board of Directors, in any event for an Effective Price (as hereinafter defined) less than the then-effective Conversion Price, then in each such case the then existing Conversion Price shall be reduced, as of the opening of business on the date of such issue or sale (or such deemed issuance or sale), to a price determined by multiplying the then Conversion Price by a fraction (the "Adjustment Factor") (i) the numerator of which shall be (A) the number of shares of Common Stock deemed outstanding (as defined below) immediately prior to such issue or sale, plus (B) the number of shares of Common Stock which the Aggregate Consideration received (as defined in subsection (j)(2) by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at such Conversion Price and (ii) the denominator of which shall be the number of shares of Common Stock deemed outstanding (as defined below) immediately prior to such issue or sale plus the total number of Additional Shares of Common Stock so issued. For the purposes of the preceding sentence, the number of shares of Common Stock deemed to be outstanding as of a given date shall be the sum of (A) the number of shares of Common Stock actually outstanding and (B) the number of shares of Common Stock issuable upon conversion of the then outstanding Preferred Stock and the exercise of all outstanding rights, warrants and options to purchase Common Stock or Convertible Securities (as defined below). Notwithstanding the foregoing, if at any time or from time to time after the Original Issue Date, the Corporation adjusts the conversion price of the Series F Participating Convertible Preferred Stock, any sub-series of the Series G Participating Convertible Preferred Stock, the Series H Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock or the Series K Participating Convertible Preferred Stock or pursuant to Article 4(i)(1) of the Certificate of Designations, Preferences and Relative, Participating, Optional and Other Special Rights and Qualifications, Limitations and Restrictions of such Preferred Stock, the Conversion Price shall be reduced (in lieu of any applicable adjustment pursuant to the first sentence of this subsection (i)(1)), as of the opening of business on the date of such adjustment, to a price determined by multiplying the Conversion Price in effect prior to the applicable issue or sale (or deemed issue or sale) by the smallest of the Adjustment Factor, the Series F Adjustment Factor, the Series G Controlling Adjustment Factor, the Series H Adjustment Factor, the Series I Adjustment Factor, the Series J Adjustment Factor and the Series K Adjustment Factor, as applicable.

(2) For the purpose of making any adjustment required under this Article 4(i), the "Aggregate Consideration" received by the Corporation for any issue or sale of securities shall (A) to the extent it consists of cash, be computed at the net amount of cash received by the Corporation after deduction of any underwriting or similar commissions, compensation or concessions paid or allowed by the Corporation in connection with such issue or sale but without deduction of any expenses payable by the Corporation, (B) to the extent it consists of property other than cash, be computed at the fair value of that property as determined in good faith by the Board of Directors, and (C) if Additional Shares of Common Stock, Convertible Securities are issued or sold together with other stock or securities or other assets of the Corporation for a consideration which covers both, be computed as the portion of the consideration so received that may be reasonably determined in good faith by the Board of Directors to be allocable to such Additional Shares of Common Stock, Convertible Securities or rights or options.

(3) For the purpose of the adjustment required under this Article 4(i), if the Corporation issues or sells any rights or options for the purchase of, or stock or other securities convertible into, Additional Shares of Common Stock (such convertible stock or securities being herein referred to as "*Convertible Securities*") and if the Effective Price of such

Additional Shares of Common Stock is less than the effective Conversion Price, the Corporation shall be deemed to have issued at the time of the issuance of such rights or options or Convertible Securities the maximum number of Additional Shares of Common Stock issuable upon exercise or conversion thereof and to have received as consideration for the issuance of such shares an amount equal to the total amount of the consideration, if any, received by the Corporation for the issuance of such rights or options or Convertible Securities, plus, in the case of such rights or options, the minimum amounts of consideration, if any, payable to the Corporation upon the exercise of such rights or options, plus, in the case of Convertible Securities, the minimum amounts of consideration, if any, payable to the Corporation upon the conversion thereof (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities); provided that if in the case of Convertible Securities the minimum amounts of such consideration cannot be ascertained, but are a function of antidilution or similar protective clauses, the Corporation shall be deemed to have received the minimum amounts of consideration without reference to such clauses; provided further that if the minimum amount of consideration payable to the Corporation upon the exercise or conversion of rights, options or Convertible Securities is reduced over time or on the occurrence or non-occurrence of specified events other than by reason of antidilution adjustments, the Effective Price shall be recalculated using the figure to which such minimum amount of consideration is reduced; provided further that if the minimum amount of consideration payable to the Corporation upon the exercise or conversion of such rights, options or Convertible Securities is subsequently increased, the Effective Price shall be again recalculated using the increased minimum amount of consideration payable to the Corporation upon the exercise or conversion of such rights, options or Convertible Securities. No readjustment in respect of any rights, options or Convertible Securities pursuant to this Article 4(i) shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price that was in effect on the original adjustment date or (ii) the Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and the date of such readjustment for which no adjustment was made. No further adjustment of the Conversion Price, as adjusted upon the issuance of such rights, options or Convertible Securities, shall be made as a result of the actual issuance of Additional Shares of Common Stock on the exercise of any such rights or options or the conversion of any such Convertible Securities. If any such rights or options or the conversion privilege represented by any such Convertible Securities shall expire without having been exercised, the Conversion Price as adjusted upon the issuance of such rights, options or Convertible Securities shall be readjusted to the Conversion Price which would have been in effect had an adjustment been made on the basis that the only Additional Shares of Common Stock so issued were the Additional Shares of Common Stock, if any, actually issued or sold on the exercise of such rights or options or rights of conversion of such Convertible Securities, and such Additional Shares of Common Stock, if any, were issued or sold for the consideration actually received by the Corporation upon such exercise, plus the consideration, if any, actually received by the Corporation for the granting of all such rights or options, whether or not exercised, plus the consideration received for issuing or selling the Convertible Securities actually converted, plus the consideration, if any, actually received by the Corporation (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) on the conversion of such Convertible Securities, provided that such readjustment shall not apply to prior conversions of Series L Preferred Stock.

(4) "Additional Shares of Common Stock" shall mean, with respect to shares of Series L Preferred Stock, all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Article 4(i), whether or not subsequently reacquired or retired by the Corporation other than (1) shares of Common Stock issued upon conversion of any Preferred

Stock, (2) up to 10,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to employees, officers or directors of, or consultants or advisors to the Corporation or any Subsidiary pursuant to stock purchase or stock option plans or other arrangements that are approved by the Board of Directors, (3) up to 2,000,000 shares of Common Stock issued or issuable pursuant to options, warrants or other rights (as adjusted for any stock splits, reverse stock splits, recapitalizations and similar capital events) issued to investors in or lenders to the Corporation, (4) additional convertible debt or equity issued in exchange for, upon conversion of, or as paid-in-kind interest payment on, the 7.50% convertible notes due 2007 of Allied Riser Communications Corporation outstanding on the Original Issue Date and in accordance with the terms of such convertible notes as in effect on the Original Issue Date, (5) up to 3,000 shares of Series I Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, (6) up to 2,600 shares of Series K Participating Convertible Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof, and (8) up to 185.4 shares of Series L Preferred Stock and the shares of Common Stock issued or issuable upon the conversion thereof.

(5) The "Effective Price" of Additional Shares of Common Stock shall mean the quotient determined by dividing the total number of Additional Shares of Common Stock issued or sold, or deemed to have been issued or sold by the Company under this Article 4(i), into the Aggregate Consideration received, or deemed to have been received by the Company for such issue under this Article 4(i), for such Additional Shares of Common Stock.

(j) Accountants' Certificate of Adjustment. In each case of an adjustment or readjustment of the Conversion Price for the number of shares of Common Stock or other securities issuable upon conversion of the Series L Preferred Stock, the Corporation, at its expense, shall compute such adjustment or readjustment in accordance with the provisions hereof and prepare a certificate showing such adjustment or readjustment, and shall mail such certificate, by first class mail, postage prepaid, to each registered holder of shares of Series L Preferred Stock at the holder's address as shown in the Corporation's books. The certificate shall set forth such adjustment or readjustment, showing in detail the facts upon which such adjustment or readjustment is based, including a statement of (1) the consideration received or deemed to be received by the Corporation for any Additional Shares of Common Stock issued or sold or deemed to have been issued or sold, (2) the Applicable Conversion Price for such series in effect prior to and after giving effect to such adjustment or readjustment, (3) the number of Additional Shares of Common Stock and (4) the type and amount, if any, of other property which at the time would be received upon conversion of such shares of such Series L Preferred Stock.

(k) Notices of Record Date. Upon (i) any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or (ii) any capital reorganization of the Corporation, any reclassification or recapitalization of the capital stock of the Corporation, any merger or consolidation of the Corporation with or into any other corporation, any Change of Control Transaction, any sale of all or substantially all of the Corporation's assets or any voluntary or involuntary dissolution, liquidation or winding up of the Corporation, the Corporation shall mail to each holder of Series L Preferred Stock at least twenty (20) days prior to the record date specified therein a notice specifying (1) the date on which any such record is to be taken for the purpose of such dividend or distribution and a description of such dividend or distribution, (2) the date on which any such reorganization, reclassification, consolidation, merger, dissolution, liquidation or winding up is expected to become effective, and the material terms of such

transaction, and (3) the date, if any, that is to be fixed as to when the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, dissolution, liquidation or winding up.

(1) Automatic Conversion.

(1) On or after the Convertibility Date, each share of Series L Preferred Stock shall automatically be converted into shares of Common Stock, based on the Conversion Price, upon the affirmative election (whether made before or after the Convertibility Date) of the holders of at least eighty percent (80%) of the outstanding shares of the Series L Preferred Stock, the Series K Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock and Series G Participating Convertible Preferred Stock voting together as a single class, provided, however, that the Series L Preferred Stock shall not be converted pursuant to the first sentence of this Section 4(1)(1) unless all of the shares of the Series K Participating Convertible Preferred Stock, the Series J Participating Convertible Preferred Stock, the Series I Participating Convertible Preferred Stock and the Series G Participating Convertible Preferred Stock are automatically converted into shares of Common Stock either before or at the same time as the Series L Preferred Stock is converted. Each share of Series L Preferred Stock shall automatically be converted into shares of Common Stock based on the Conversion Price immediately upon the closing of a firmly underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation in which (i) the aggregate pre-money valuation of the Corporation is at least five hundred million dollars (\$500,000,000); and (ii) the gross cash proceeds (before underwriting discounts, commissions and fees) are at least fifty million dollars (\$50,000,000) (a "Qualified Offering"). Upon such automatic conversion, any declared and unpaid dividends shall be paid in accordance with the provisions of Article 5.

(2) On or after the Convertibility Date, upon the occurrence of an event specified in paragraph (1) above, the outstanding shares of Series L Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such conversion unless the certificates evidencing such shares of Series L Preferred Stock are either delivered to the Corporation or its transfer agent as provided below, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. Upon the occurrence of such automatic conversion of the Series L Preferred Stock the holders of Series L Preferred Stock shall surrender the certificates representing such shares at the office of the Corporation or any transfer agent for the Series L Preferred Stock. Thereupon, there shall be issued and delivered to such holder promptly at such office and in its name as shown on such surrendered certificate or certificates, a certificate or certificates for the number of shares of Common Stock into which such shares of Series L Preferred Stock surrendered were convertible on the date on which such automatic conversion occurred, and the Corporation shall promptly pay in cash or, at the option of the Corporation, Common Stock (at the Common Stock's fair market value determined by the Board as of the date of such conversion), or, at the option of the Corporation, both, all declared and unpaid dividends on such shares of Series L Preferred Stock being converted, to and including the date of such conversion.

(m) *Fractional Shares*. No fractional shares of Common Stock shall be issued upon conversion of Series L Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series L Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of any fractional share, the Corporation shall, in lieu of issuing any fractional share, pay cash equal to the product of such fraction multiplied by the Common Stock's fair market value (as determined by the Board) on the date of conversion.

(n) *Reservation of Stock Issuable Upon Conversion.* The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series L Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series L Preferred Stock. If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series L Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(o) *Notices*. Any notice required by the provisions of this Article 4 shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed telex or facsimile if sent during normal business hours of the recipient; if not, then on the next business day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one (1) day after deposit with a nationally recognized overnight courier, having specified next day of delivery, with written verification of receipt. All notices shall be addressed to each holder of record at the address of such holder appearing on the books of the Corporation.

(p) *Payment of Taxes.* The Corporation shall pay all taxes imposed by the State of Delaware (or any other jurisdiction in which the Company is then located or conducting business) (other than taxes based upon income) and other governmental charges that may be imposed with respect to the issue or delivery of shares of Common Stock upon conversion of any shares of Preferred Stock.

(q) *Dilution or Impairment*. The Corporation shall not, without the appropriate vote of the stockholders under the General Corporation Law of the State of Delaware and Article 7 of this Certificate, amend its Certificate of Incorporation or participate in any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, for the purpose of avoiding or seeking to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, but shall at all times in good faith assist in carrying out all such action as may be reasonably necessary or appropriate in order to protect the conversion rights of the holders of the Series L Preferred Stock against dilution or other impairment.

5. Dividend Rights.

(a) In the event dividends are paid on any share of Common Stock, Pari Passu Stock or Junior Stock, the Company shall pay an additional dividend on all outstanding shares of Series L Preferred Stock in an amount equal per share (on an as-if-converted to Common Stock basis) to the amount paid or set aside for each share of Common Stock, Pari Passu Stock or Junior Stock.

(b) The provisions of Article 5(a) shall not apply to a dividend payable in Common Stock.

6. *Residual Rights.* All rights accruing to the outstanding shares of the Corporation not expressly provided for to the contrary herein or in Article IV of the Certificate of Incorporation shall be vested in the Common Stock.

7. *Amendment.* No provision of this Certificate may be amended, modified or waived without the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of the Series L Preferred Stock.

IN WITNESS WHEREOF, Cogent Communications Group, Inc. has caused this Certificate of Designations to be executed and delivered in its name and on its behalf on September 15, 2004.

COGENT COMMUNICATIONS GROUP, INC.

By: /s/ DAVID SCHAEFFER

Name: David Schaeffer Title: Chief Executive Officer 15 QuickLinks

PROPOSAL AMENDMENT OF THE COMPANY'S CERTIFICATE OF INCORPORATION DESCRIPTION OF OUR BUSINESS DESCRIPTION OF THE TRANSACTIONS SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING INFORMATION APPENDIX A AMENDMENT NO. 2 TO THE FOURTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION Exhibit A Exhibit B Exhibit C Exhibit D Exhibit E APPENDIX B CERTIFICATE OF DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL AND OTHER SPECIAL RIGHTS AND QUALIFICATIONS, LIMITATIONS AND RESTRICTIONS OF SERIES K PARTICIPATING CONVERTIBLE PREFERRED STOCK OF COGENT COMMUNICATIONS GROUP, INC. APPENDIX C CERTIFICATE OF DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL AND OTHER SPECIAL RIGHTS AND QUALIFICATIONS, LIMITATIONS AND RESTRICTIONS OF SERIES L PARTICIPATING CONVERTIBLE

PREFERRED STOCK OF COGENT COMMUNICATIONS GROUP, INC.