

CAPTION SHEET

CASE MANAGEMENT SYSTEM

1. REPORT DATE: 00/00/00 :
 2. BUREAU: FUS :
 3. SECTION(S) : 4. PUBLIC MEETING DATE:
 5. APPROVED BY: : 00/00/00
 DIRECTOR: :
 SUPERVISOR: :
 6. PERSON IN CHARGE: : 7. DATE FILED: 04/02/99
 8. DOCKET NO: A-310818 F0003 : 9. EFFECTIVE DATE: 00/00/00

PARTY/COMPLAINANT:

RESPONDENT/APPLICANT: HARVARDNET, INC

COMP/APP COUNTY:

UTILITY CODE: 310818

ALLEGATION OR SUBJECT

APPLICATION OF HARVARDNET, INC., FOR APPROVAL TO OFFER, RENDER, FURNISH OR SUPPLY TELECOMMUNICATION SERVICES AS A COMPETITIVE ACCESS PROVIDER TO THE PUBLIC IN THE COMMONWEALTH OF PENNSYLVANIA.

DOCUMENT
FOLDER

DOCKETED
MAY 14 1999

ORIGINAL

LEVINE, BLASZAK, BLOCK & BOOTHBY, LLP

2001 L STREET, NW., SUITE 900
WASHINGTON, D.C. 20036
PHONE (202) 857-2550
FAX (202) 223-0833

April 2, 1999

RECEIVED

APR 2 1999

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Office of the Secretary
Pennsylvania Public Utility Commission
B-20, North Office Building
Harrisburg, PA 17105-3265

A-310818F0003

Re: Application of HarvardNet, Inc. to Offer, Render, Furnish, or Supply
Telecommunications Service to the Public in the Commonwealth of
Pennsylvania

To the Commission's Secretary's Office:

On behalf of HarvardNet, Inc. ("HarvardNet"), please find enclosed for filing HarvardNet's application to operate (a) as a competitive local exchange carrier (b) as an interexchange carrier and (c) as a competitive access provider. Please note that in response to Item 15 of each of the enclosed applications, HarvardNet requests, pursuant to 52 Pa. Code § 5.423, confidential treatment of certain financial information, appended to each application as Attachment C. In light of its requests for confidentiality, and pursuant to PUC instructions, HarvardNet has enclosed for each application (1) an original of the complete application, including the financial information for which HarvardNet seeks confidential treatment, appended as Attachment C and marked confidential (this version should not be disclosed to the public) and (2) an original and three copies of the application without Attachment C, suitable for public disclosure.

DOCUMENT
FOLDER

Please date stamp the enclosed, designated, additional copy of each filing and return it in the self-addressed, stamped envelope provided.

Pursuant to Item 14, HarvardNet is providing a proposed Initial Tariff (attached to each Application) that covers the competitive local exchange carrier, interexchange carrier and competitive access dedicated services that HarvardNet intends to offer in the State of Pennsylvania. The Tariff includes rates, terms and conditions applicable to HarvardNet's offering of such services and is consistent with a HarvardNet tariff already filed and approved in another jurisdiction.

Because HarvardNet does not yet have a negotiated interconnection agreement with Bell Atlantic, HarvardNet may be required to amend the rates, terms and conditions set forth in the attached Initial Tariff, consistent with applicable State rules and regulations, prior to HarvardNet's offering of services in Pennsylvania.

Finally, pursuant to 52 Pa. Code § 5.43, HarvardNet respectfully petitions the Commission to authorize payment of a single application fee for these applications as contemplated in 52 Pa. Code § 1.34(a). In accordance therewith, HarvardNet has enclosed a check in the amount of \$250, made payable to the Pennsylvania Public Utility Commission, for the associated filing fees.

If you have any questions concerning this matter or if you require additional copies of the above documentation, please do not hesitate to contact me.

Respectfully submitted,



Laura H. McDonald
Levine Blaszak Block & Boothby LLP
2001 L Street, NW, Suite 900
Washington, DC 20036
(202) 857-2550

Counsel for HarvardNet, Inc.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of HarvardNet, Inc
for approval to offer, render, furnish,
or supply telecommunication services
as a Competitive Access Provider
to the public In the Commonwealth of Pennsylvania
To the Pennsylvania Public Utility Commission:

Application Docket No. A-310818 RECEIVED
F 0003
19 _____ APR 2 1999

PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

1. **IDENTITY OF THE APPLICANT:** The name, address, telephone number, and FAX number of the Applicant are:

**HarvardNet, Inc.
500 Rutherford Ave.
Charlestown, MA 02129
(617) 262-4200 Phone
(617) 242-6991 Fax**

Please identify any predecessor(s) of the Applicant and provide other names under which the Applicant has operated within the preceding five (5) years, including name, address, and telephone number.

HarvardNet is a Delaware corporation, incorporated in 1992 as Imageware Incorporated (later changed to Harvard Toolworks, Inc.). In May of 1997, its name was changed to HarvardNet, Inc. In November of 1997, it acquired Internet Maine, Inc. In January of 1999, HarvardNet acquired the assets of the Network Services Division of Comstor Corporation. Comstor's Network Services Division was created from the assets and personnel of the Network Services Division of Management Analysis, Inc. (MAI). The addresses for the above-referenced companies are identified below. Telephone numbers for Imageware, Harvard Toolworks and Internet Maine, Inc. are no longer in existence.

**For Imageware, Inc./Harvard Toolworks: HarvardToolworks
91 Ann Lee Road
Harvard, MA 01450**

DOCKETED
MAY 14 1999

**For Internet Maine, Inc.: IME
449 Forest Avenue
Portland, ME 04101**

**For Comstor Corporation: Comstor Corporation (Network Services Division)
7925 West Park Drive
McLean, VA 22102
703-506-6845**

**JULIEN
FOLDER**

7925 West Park Drive
McLean, VA 22102
703-506-6845

2. **CONTACT PERSON:** The name, title, address, telephone number, and FAX number of the person to whom questions about this Application should be addressed are:

Melanie Haratunian, Esq.
General Counsel and Director of Regulatory Affairs
500 Rutherford Ave.
Charlestown, MA 02129
(617) 262-4200 Phone
(617) 531-3080 Fax

3. **ATTORNEY:** If applicable, the name, address, telephone number, and FAX number of the Applicant's attorney are:

Laura H. McDonald, Esq.
Janine F. Goodman, Esq.
Levine, Blaszak, Block & Boothby, LLP
2001 L Street, NW., Suite 900
Washington, DC 20036
(202) 857-2550 Phone
(202) 223-0833 Fax

Lloyd R. Persun, Esq.
Mette, Evans & Woodside
P.O. Box 5950
Harrisburg, PA 17110-0950
(717) 232-5000 Phone
(717) 236-1816 Fax

4. **FICTITIOUS NAME:** (select and complete appropriate statement)

The Applicant will be using a fictitious name or doing business as ("d/b/a"):

Attach to the Application a copy of the Applicant's filing with the Commonwealths Department of State pursuant to 54 Pa. C.S. §311. Form PA-953.

OR

The Applicant will not be using a fictitious name.

5. **BUSINESS ENTITY AND DEPARTMENT OF STATE FILINGS:** (select and complete appropriate statement)

- The Applicant is a sole proprietor.

If the Applicant is located outside the Commonwealth, provide proof of compliance with 15 Pa. C.S. §4124 relating to Department of State filing requirements.

OR

- The Applicant is a:

- domestic general partnership(*)
- domestic limited partnership (15 Pa. C.S. §8511)
- foreign general or limited partnership (15 Pa. C.S. §4124)
- domestic limited liability partnership (15 Pa. C.S. §8201)
- foreign limited liability general partnership (15 Pa. C.S. §8211)
- foreign limited liability limited partnership (15 Pa. C.S. §8211)

Provide proof of compliance with appropriate Department of State filing requirements as indicated above.

Give name, d/b/a, and address of partners. If any partner is not an individual, identify the business nature of the partner entity and identify its partners or officers.

- *If a corporate partner in the Applicant's domestic partnership is not domiciled in Pennsylvania, attach a copy of the Applicant's Department of State filing pursuant to 15 Pa. C.S. §4124.

or

- The Applicant is a:

- domestic corporation (none)
- foreign corporation (15 Pa. C.S. §4124)
- domestic limited liability company (15 Pa. C.S. §8913)
- foreign limited liability company (15 Pa. C.S. §8981)

Provide proof of compliance with appropriate Department of State filing requirements as indicated above. Additionally, provide a copy of the Applicant's Articles of Incorporation.

The Department of State filing and HarvardNet's Articles of Incorporation are attached as Attachment A.

Give name and address of officers.

<u>Name</u>	<u>Title</u>	<u>Address</u>
Mark Washburn	Chief Executive Officer	500 Rutherford Ave Charlestown, MA 02129
Chip Ach	Chief Technical Officer	Same
Todd DeSisto	Chief Financial Officer	Same
Pete Peterson	Vice President of Sales	Same
Jim Newman	Vice President of Operations	Same
Melanie Haratunian	General Counsel and Director of Regulatory Affairs	Same

The Applicant is incorporated in the state of **Delaware**.

6. **AFFILIATES AND PREDECESSORS WITHIN PENNSYLVANIA:** (select and complete appropriate statement)

Affiliate(s) of the Applicant doing business in Pennsylvania are:

Give name and address of the affiliate(s) and state whether the affiliate(s) are jurisdictional public utilities.

Give the docket numbers for the authority of any jurisdictional affiliate(s).

If the Applicant or an affiliate has a predecessor who has done business within Pennsylvania, give name and address of the predecessor(s) and state whether the predecessor(s) were jurisdictional public utilities. Give the docket numbers for the authority of any Jurisdictional predecessor(s).

The division of Comstor Corporation whose assets HarvardNet purchased in January 1999 provided Internet access in Pennsylvania. As such, it was not a jurisdictional public utility. The address of the Comstor division is provided in Paragraph 1 above.

OR

The Applicant has no affiliates doing business in Pennsylvania or predecessors which have done business in Pennsylvania.

7. **AFFILIATES AND PREDECESSORS RENDERING PUBLIC UTILITY SERVICE OUTSIDE PENNSYLVANIA:** (select and complete the appropriate statement)

- Affiliate(s) of the Applicant rendering public utility service in any jurisdiction other than Pennsylvania are:

Give name and address of the affiliate(s).

- Predecessor(s) of the Applicant which rendered public utility service in any jurisdiction other than Pennsylvania are:

Give name and address of the predecessor(s).

OR

- The Applicant has no affiliates rendering or predecessors which rendered public utility service outside Pennsylvania.

At this time, HarvardNet has no affiliates operating as a public utility outside of Pennsylvania. HarvardNet will update the PUC should HarvardNet's status change in this regard.

8. **TRANSACTIONS WITH AFFILIATES:** (select and complete the appropriate statement).

Identify any affiliate(s) which provide services to or receive services from the Applicant. Describe the nature of the services and how the transactions between or among affiliates will be handled.

OR

- The Applicant has no affiliate(s) providing service to or receiving services from the Applicant.

9. **APPLICANT'S PRESENT OPERATIONS:** (select and complete the appropriate statement)

- The Applicant is presently doing business in Pennsylvania as a jurisdictional public utility pursuant to authority at Docket No. _____ as a :
- Reseller of Toll Services, e.g., MTS, 1+, 800 & 888, Out WATS, Travel Cards, Debit Cards, etc.
 - Competitive Access Provider, e.g., dedicated point-to-point service or IXC transporter.
 - Interexchange Carrier, e.g., providing toll services as a facilities-based carrier."
 - Competitive Local Exchange Carrier, e.g., providing local exchange service as a facilities-based carrier or as a reseller in an area previously served by an Incumbent local exchange carrier.

- Local Exchange Carrier, providing local exchange service as a facilities-based carrier within a defined service territory.
- Other. (Identify the nature of public utility service being rendered.)

or

The Applicant is not presently doing business in Pennsylvania as a public utility.

10. **APPLICANTS PROPOSED OPERATIONS:** The Applicant proposes to operate as a:
- Reseller of Toll Services, e.g., MTS, 1+, 800 & 888, Out WATS, Travel Cards, Debit Cards, etc.
 - Competitive Access Provider, e.g., dedicated point-to-point service or IXC transporter.
 - Interexchange Carrier, e.g., providing toll services as a facilities-based carrier.
 - Competitive Local Exchange Carrier, e.g., providing local exchange service as a facilities-based carrier or as a reseller.
 - Other. (Identify the nature of public utility service to be rendered.)

Concurrent with the filing of this application, HarvardNet also is filing for authority to operate as a [CLEC/IXC] in Pennsylvania.

The Applicant should file a separate application for each category of operation. If the Applicant files multiple applications simultaneously, the applications should cross reference each other. At the time of filing, the Applicant may petition to the Commission, pursuant to Section 5.43 of the Commission's Regulations, 52 Pa. Code §5.43, to waive the provisions of Sections 1.34 and 1.43, 52 Pa. Code §§1.34 and 1.43, which require a separate application fee for each application (i.e., multiple fee), and to seek authorization for the payment of one application fee.

11. **PROPOSED SERVICES:** Describe the services which the Applicant proposes to offer.

HarvardNet seeks authorization to provide competitive local and intrastate toll telecommunications service throughout the service territories of Bell Atlantic in the State of Pennsylvania both through its own facilities and on a resale basis.

HarvardNet will be constructing, leasing, and operating facilities. The facilities constructed by the applicant may be used separately or in conjunction with similar facilities provided by or obtained from Bell Atlantic and/or other entities. Where it is unable to provide facilities-based services, HarvardNet will subscribe to and resell various types of Bell Atlantic local exchange, intra-LATA, and inter-LATA interstate services and facilities.

HarvardNet's entry into the facilities-based and resale common carrier telecommunications marketplaces will enhance competition in the provision of advanced telecommunications services in Pennsylvania. HarvardNet proposes to provide services with specialized functions that serve the unique needs of its customers. Customers will benefit from new, innovative services, such as xDSL, at reduced prices and increased speed and functionality. As a result, HarvardNet's service will lead to greater efficiencies and more rapid introduction of telecommunications technologies to its service area and to entities in the

State. A grant of this Petition will therefore promote competition in the telephone services market in the State of Pennsylvania and will be in the public interest.

HarvardNet currently is certified as a local exchange carrier in Massachusetts and its certification applications in New Hampshire and Rhode Island were recently approved. In Massachusetts, HarvardNet is one of the oldest established digital subscriber line (DSL) providers and has one of the largest installed base of DSL lines of any competitive local exchange carrier. In addition, its senior management team collectively has over 100 years of experience in telecommunications and information technology, and HarvardNet is in the process of hiring additional qualified and experienced staff to help provide high quality service in the Mid-Atlantic States and in New England.

In addition to this Petition, HarvardNet presently is seeking authority to provide local exchange and toll telecommunications services in Maine, Maryland, New Jersey and New York. HarvardNet may seek authority to provide local and toll telecommunications services in other jurisdictions in the near future.

12. **SERVICE AREA:** Describe the geographic service area in which the Applicant proposes to offer services.

HarvardNet's operations will be conducted in the regions served by Bell Atlantic.

Additionally, the Applicant asserts that it **will not** be a rural telephone company. State which provision of the federal Telecommunications Act of 1996 is applicable to the Applicant's status if the Applicant is a rural telephone company.

13. **MARKET:** Describe the customer base to which the Applicant proposes to market its services.

HarvardNet will provide local and toll services to all business and residence customers that request such service under the terms of HarvardNet's tariff, and will initially focus on providing high speed data services to Pennsylvania business users and to telecommuters.

14. **INITIAL TARIFF:** Attach to the Application a proposed Initial Tariff setting forth the rates, rules, and regulations of the Applicant. The tariff shall state on its cover sheet the nature of the Applicant's operations as identified in Item 10, above.

A proposed Initial Tariff is attached as Attachment B.

15. **FINANCIAL:** Provide a general description of the Applicant's capitalization and, if applicable, its corporate stock structure.

HarvardNet certifies that it has cash and other financial resources available to meet any obligations regarding the provision of telecommunication services, customer advances and deposits, and to pay any required intrastate access charges and interconnection charges on all intrastate telecommunications services in Pennsylvania. In support thereof HarvardNet, pursuant to the confidentiality request below, is filing Attachment C. Attachment C contains confidential and proprietary information on: HarvardNet's capitalization and corporate stock structure; a 1997 audited balance sheet; and a tentative 1999, 2000 and 2001 budget income statement, which includes the first year of operations in Pennsylvania. HarvardNet anticipates receipt of its 1998 audited financials by the end of June 1999 and will, upon the Commission's request (and subject to confidential treatment), provide such information to the Commission.

HarvardNet respectfully requests proprietary and confidential treatment of the financial information identified above pursuant to 52 Pa. Code § 5.423. HarvardNet is not a publicly traded company, and the enclosed information is not a matter of public record or published outside the company. HarvardNet treats this information as privileged and confidential and has taken all reasonable measures to prevent the inadvertent disclosure of such information to the public in the ordinary course of business by strictly limiting access to such information. While this information would provide little benefit to the public, its disclosure would place HarvardNet at a material disadvantage vis-à-vis its competitors and would likely cause substantial economic and/or competitive damage to HarvardNet. Please note that similar information was provided to New Hampshire in HarvardNet's New Hampshire Application, pursuant to a request for confidentiality. Based on this information, the New Hampshire Public Utilities Commission found that the information supported HarvardNet's assertion of financial resources. See *Order NIS/ Order Granting Authority, Order No. 23,094* (issued December 21, 1998).

Attach to the Application a tentative operating balance sheet and a projected income statement for the first year of operation within the Commonwealth of Pennsylvania.

See above response.

The name, title, address, telephone number, and FAX number of the Applicant's custodian for its accounting records and supporting documentation are:

**Todd DeSisto
CFO
500 Rutherford Ave.
Charlestown, MA 02129
(617) 262-4200 Phone
(617) 242-6991 Fax**

The Applicant's accounting records and supporting documentation are, or will be, maintained at:

**500 Rutherford Ave.
Charlestown, MA 02129**

16. **START DATE:** The Applicant proposes to begin offering services **as soon as possible after grant of regulatory authority and approval of its interconnection agreement.**

17. **FURTHER DEVELOPMENTS:** Attach to the Application a statement of further developments, *planned or contemplated, to which the present Application is preliminary or with which it forms a part, together with a reference to any related proceeding before the Commission.*

The Applicant is under a continuing obligation to amend this Application if any matter asserted herein changes during the pendency of the Application or while the Applicant is providing public utility service within the Commonwealth.

HarvardNet currently has no plans for further developments that would require authorization from the Commission. Should information contained on this application change, HarvardNet will notify the Commission.

18. **NOTICE:** Pursuant to Section 5.14 of the Commission's Regulations, 52 Pa. Code §5.14, serve a copy of the signed and verified Application with attachments on the following:

Irwin A. Popowsky
Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120

Bernard A. Ryan, Jr.
Small Business Advocate
Commerce Building, Suite 1102
300 North Second Street
Harrisburg, PA 17101

Office of the Attorney General
Bureau of Consumer Protection
Strawberry Square, 14th Floor
Harrisburg, PA 17120

Office of Trial Staff - 1 copy
Office of Special Assistants - 1 copy
Bureau of Consumer Services - 1 copy
Bureau of Fixed Utility Services - 1 copy
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Pursuant to Sections 1.57 and 1.58 of the Commission's Regulations, 52 Pa. Code §§1.57 and 1.58, *attach Proof of Service of the Application and attachments upon the above named parties. Upon review of the Application, further notice may be required pursuant to Section 5.14 of the Commission's Regulations, 52 Pa. Code §5.14.*

19. **AFFIDAVIT:** Attach to the Application an affidavit as follows:

AFFIDAVIT

Commonwealth of Massachusetts :
: ss.

County of Suffolk :

Mark Washburn, Affiant, being duly affirmed according to law, deposes and says that:

He is the Chief Executive Officer of HarvardNet, Inc.;

That he is authorized to and does make this affidavit for said corporation;

That HarvardNet, Inc., the Applicant herein, acknowledges that it may have an obligation to serve or to continue to serve the public by virtue of the Applicant commencing the rendering of service pursuant to this Application consistent with the Public Utility Code of the Commonwealth of Pennsylvania, Title 66 of the Pennsylvania Consolidated Statutes; with the federal Telecommunications Act of 1996, signed February 6, 1996; or with other applicable statutes or regulations;

That HarvardNet, Inc., the Applicant herein, asserts that it possesses the requisite technical, managerial, and financial fitness to render public utility service within the Commonwealth of Pennsylvania and that the Applicant will abide by all applicable federal and state laws and regulations and by the decisions of the Pennsylvania Public Utility Commission.

That the facts above set forth are true and correct to the best of his knowledge, information, and belief and that he expects said corporation to be able to prove the same at any hearing hereof.

Mark M. Washburn

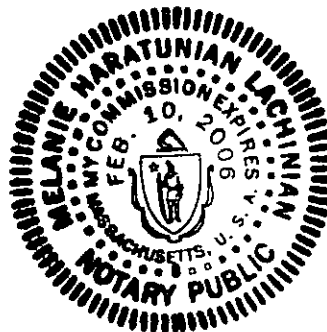
Signature of Affiant

Sworn and subscribed before me this 1st day of April, 1999.

Mrs. Janet Carl

Signature of official administering oath

My commission expires 2.10.06.



20. **FEDERAL TELECOMMUNICATIONS ACT OF 1996:** State whether the Applicant claims a particular status pursuant to the federal Telecommunications Act of 1996. Provide supporting facts.

HarvardNet qualifies as a telecommunications carrier pursuant to Section 153(44) of the Telecommunications Act of 1996.

21. **COMPLIANCE:** State specifically whether the Applicant, an affiliate, a predecessor of either, or a person identified in this Application has been convicted of a crime involving fraud or similar activity. Identify all proceedings, limited to proceedings dealing with business operations, in the last five (5) years, whether before an administrative body or in a judicial forum, in which the Applicant, an affiliate, a predecessor of either, or a person identified herein has been a defendant or a respondent. Provide a statement as to the resolution or present status of any such proceedings.

Neither HarvardNet nor its affiliates have committed a crime involving fraud or a similar activity. To the best of the Applicant's knowledge, no entity identified in this application has committed such a crime.

22. **CONTACT FOR RESOLVING COMPLAINTS:** Provide the name, address, telephone number, and FAX number for the person and an Alternate person responsible for addressing customer complaints. These persons will ordinarily be the initial point(s) of contact for resolving complaints and queries filed with the Public Utility Commission or other agencies.

HarvardNet will provide, twenty-four hour a day, 365 days a year, technical support to address any operational issues that may arise for customers. Customers can access such support by calling HarvardNet at 1-800-772-6771 or by e-mail via HarvardNet's website (<http://harvard.net>). In addition, each customer will be assigned a dedicated account representative with whom they can register questions or concerns they may have. HarvardNet's point of contact for inquiries from the Commission is:

**Melanie Haratunian, Esq.
General Counsel and Director of Regulatory Affairs
500 Rutherford Ave.
Charlestown, MA 02129
(617) 262-4200 x 607 Phone
(617) 531-3080 Fax**

23. **FALSIFICATION:** The Applicant understands that the making of false statement(s) herein may be grounds for denying the Application or, if later discovered, for revoking any authority granted pursuant to the Application. This Application is subject to 18 Pa. C.S. §§4903 and 4904, relating to perjury and falsification in official matters.

24. **CESSATION:** The Applicant understands that if it plans to cease doing business within the Commonwealth of Pennsylvania, it is under a duty to request authority from the Commission for permission prior to ceasing business.

Applicant: HarvardNet, Inc.

By: Mark M. Washel

Title: President + CEO

VERIFICATION

Commonwealth of Massachusetts :
: ss.

County of Suffolk :

Mark Washburn, Affiant, being duly affirmed according to law, deposes and says that:

He is the Chief Executive Officer of HarvardNet, Inc.;

That he is authorized to and does make this affidavit for said corporation;

That the facts above set forth are true and correct to the best of his knowledge, information, and belief and that he expects said corporation to be able to prove the same at any hearing hereof.

Mark M. Washburn

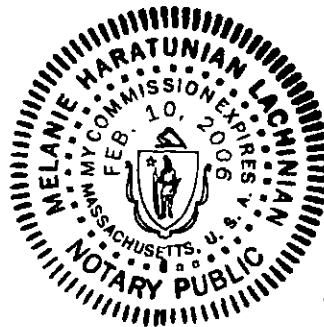
Signature of Affiant

Sworn and subscribed before me this 1st day of April 1999.

Melanie Haratunian

Signature of official administering oath

My commission expires 2.10.06.



ATTACHMENT A

DEPARTMENT OF STATE FILING AND ARTICLES OF INCORPORATION

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF STATE

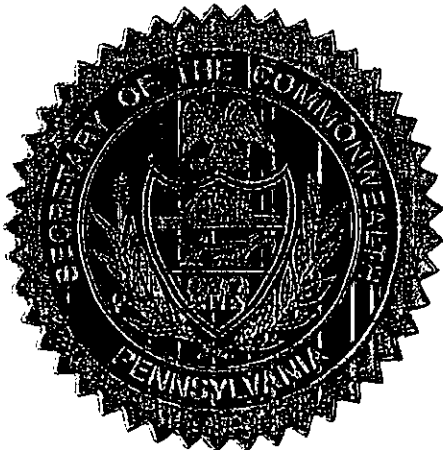
FEBRUARY 22, 1999.

TO ALL WHOM THESE PRESENTS SHALL COME, GREETING:

HAVARDNET INC.

I, Kim Pizzingrilli, Acting Secretary of the Commonwealth of Pennsylvania do hereby certify that the foregoing and annexed is a true and correct photocopy of Certificate of Authority

which appear of record in this department



IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the Seal of the Secretary's Office to be affixed, the day and year above written.

Kim Pizzingrilli

ACTING Secretary of the Commonwealth

DPOS

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE, OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "HARVARDNET INC.", FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF NOVEMBER, A.D. 1998, AT 4:30 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



A handwritten signature in cursive script that reads "Edward J. Freel".

Edward J. Freel, Secretary of State

2315468 8100

981441084

AUTHENTICATION: 9409477

DATE: 11-17-98

CERTIFICATE OF AMENDMENT OF
RESTATED AND AMENDED CERTIFICATE OF INCORPORATION OF
HARVARDNET INC.

Pursuant to Section 242 of the General Corporation Law of the State of Delaware

HARVARDNET INC. (hereinafter called the "Corporation"), organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

By written action of the Board of Directors of the corporation resolutions were duly adopted, pursuant to Sections 141 and 242 of the General Corporation Law of the State of Delaware, setting forth an amendment to the Restated and Amended Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the General Corporation Law of the State of Delaware, and written notice of such consent has been or will be given to all stockholders who have not consented in writing to said amendment. The resolution setting forth the amendment is as follows:

RESOLVED: That Article IV of the Restated and Amended Certificate of Incorporation of the Corporation be and hereby is amended by deleting the first sentence of Article IV and by inserting the following in lieu thereof:

"The total number of shares of capital stock that the Corporation shall have authority to issue is 41,000,000 shares, each of which shall have a par value of \$.01 per share and of which (i) 13,749,440 shares are hereby designated as Series A Preferred Stock ("Series A Preferred Stock"), (ii) 22,764,310 shares are hereby designated as Common Stock ("Common Stock"), and (iii) 4,486,250 shares are hereby designated as Class B Stock ("Class B Stock").

The Corporation is authorized to issue, from time to time, all or any portion of the capital stock of the Corporation that is authorized but not issued, to such person or persons and for such lawful consideration as it may deem appropriate, and generally in its absolute discretion to determine the terms and manner of any disposition of such authorized but unissued capital stock.

IN WITNESS WHEREOF, the Corporation has caused its corporate seal to be affixed hereto and this Certificate of Amendment to be signed by its President as of the 16th day of November, 1998.



William H. Southworth, President

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "HARVARDNET INC.", FILED IN THIS OFFICE ON THE TWENTY-THIRD DAY OF OCTOBER, A.D. 1998, AT 4:30 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



2315468 8100

981410467

A handwritten signature in cursive script, reading "Edward J. Freel".

Edward J. Freel, Secretary of State

AUTHENTICATION:

9371000

DATE:

10-26-98

RESTATED AND AMENDED
CERTIFICATE OF INCORPORATION
OF
HARVARDNET INC.

HarvardNet, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

1. The name of the Corporation is HarvardNet, Inc. The name under which the corporation was incorporated originally was "Imageware Incorporated." The date of the filing of the Corporation's original Certificate of Incorporation with the Secretary of State of the State of Delaware was November 10, 1992.

2. This Restated and Amended Certificate of Incorporation amends, restates and integrates the provisions of the Corporation's certificate of incorporation, as previously restated and amended and (i) was duly adopted by the Board of Directors in accordance with the provisions of Section 245 of the General Corporation Law of the State of Delaware (the "DGCL"), (ii) was declared by the Board of Directors to be advisable and in the best interests of the Corporation and was directed by the Board of Directors to be submitted to and be considered by the stockholders of the Corporation entitled to vote thereon for approval by the affirmative vote of such stockholders in accordance with Section 247 of the DGCL and (iii) was duly adopted by a stockholder consent in lieu of a meeting of the stockholders, with the holders of a majority of the outstanding shares of the Corporation's Common Stock consenting to the adoption of this Restated and Amended Certificate of Incorporation in accordance with the provisions of Sections 228 and 242 of the DGCL and the terms of the Corporation's certificate of incorporation, as previously restated and amended and as in effect prior to the effective time hereof, such holders being a majority of the holders of the Corporation's capital stock entitled to vote thereon.

3. The text of the Corporation's certificate of incorporation is hereby amended and restated in its entirety to provide as follows:

ARTICLE I

NAME

The name of the corporation is HarvardNet, Inc. (the "Corporation").

ARTICLE II

REGISTERED OFFICE

The address of the registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

PURPOSES

The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "GCCL").

ARTICLE IV

CAPITAL SECURITIES

The total number of shares of capital stock that the Corporation shall have authority to issue is 4,100,000 shares, each of which shall have a par value of \$0.01 per share and of which (i) 1,374,944 shares are hereby designated as Series A Preferred Stock ("Series A Preferred Stock"), (ii) 2,276,431 shares are hereby designated as Common Stock ("Common Stock"), and (iii) 448,625 shares are hereby designated as Class B Stock ("Class B Stock"). The Corporation is authorized to issue, from time to time, all or any portion of the capital stock of the Corporation that is authorized but not issued, to such person or persons and for such lawful consideration as it may deem appropriate, and generally in its absolute discretion to determine the terms and manner of any disposition of such authorized but unissued capital stock.

Any and all such shares issued for which the full consideration has been paid or delivered shall be deemed fully paid shares of capital stock, and the holder of such shares shall not be liable for any further call or assessment or any other payment thereon.

The voting powers, designations, preferences, privileges and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions of each class of capital stock of the Corporation shall be as hereafter provided in this Article IV.

A. SERIES A PREFERRED STOCK

1. Voting

(a) Voting Generally. The holder of each share of Series A Preferred Stock shall be entitled to the number of votes equal to the largest number of shares of Common Stock into which each share of Series A Preferred Stock may be converted pursuant to Section A.5 on the record date for the vote or for written consent of stockholders, as applicable. The holder of each share of Series A Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the by-laws of the Corporation and shall vote together with holders of the Common Stock and Class B Stock, voting together as single class, upon all matters submitted to a vote of stockholders at all meetings of stockholders (and written actions in lieu of meetings). Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares of Common Stock into which shares of Series A Preferred Stock held by each holder may be converted) shall be rounded to the nearest whole number (with one-half rounded upward to one).

(b) Special Approval Rights. Without limitation of the foregoing provisions of this Section A.1, the affirmative vote of the holders of not less than 60% of the issued and outstanding Series A Preferred Stock, acting by written consent or voting separately as a single class in person or by proxy, at a special or annual meeting of stockholders called for the purpose, shall be necessary to authorize the Corporation to take any of the following actions:

(A) authorize or increase, or permit any Subsidiary to authorize or increase, the authorized number of shares of, or issue any class or series of the Corporation's or any Subsidiary's capital stock or options, warrants or other rights to acquire any such capital stock other than Excluded Securities;

(B) amend, repeal or change, directly or indirectly, any of the provisions of this Restated and Amended Certificate of Incorporation or the by-laws of the Corporation;

(C) authorize or effect, or permit any Subsidiary to authorize or effect, the sale, lease, license, abandonment or other disposition of all or any substantial portion of the assets of the Corporation or any Subsidiary (except as otherwise provided in the Stockholder's Agreement);

(D) authorize or effect, or permit any Subsidiary to authorize or effect, the merger or consolidation of the Corporation or any Subsidiary with any other Person (except as otherwise provided in the Stockholder's Agreement);

(E) authorize or effect, or permit any Subsidiary to authorize or effect, the liquidation (whether complete or partial), dissolution or winding up of the Corporation or any Subsidiary (except as otherwise provided in the Stockholder's Agreement);

(F) authorize the Corporation, or permit any Subsidiary, to incur, create, assume, become or be liable, directly, indirectly or contingently, in any manner with respect to, or permit to exist, any indebtedness or liability for borrowed money, including, without limitation, indebtedness under capital leases or the like, if the aggregate of all such indebtedness and liabilities of the Corporation or any Subsidiary exceeds the principal amount of \$250,000; or to amend or modify in any material respect the terms of any such indebtedness or liability;

(G) authorize or effect, or permit any Subsidiary to authorize or effect, the acquisition in any manner, directly or indirectly, of a business unit, going concern or all or a substantial portion of the Capital Securities or assets of any Person by the Corporation or any Subsidiary;

(H) authorize or enter into, or permit any Subsidiary to authorize or enter into, any transaction, including, without limitation, the purchase, sale or exchange of property or assets or the rendering or accepting of any service with or to any Affiliate of the Corporation, or to amend any agreement between the Corporation and such Affiliates, or waive any substantial right thereof, except in the ordinary course of business and pursuant to the reasonable requirements of its business and upon terms not less favorable to the Corporation than it could obtain in a comparable arm's length transaction with a third party other than such Affiliate;

(I) authorize or effect the declaration or payment of dividends or other distributions upon, or the redemption or repurchase of, any equity securities of the Corporation other than repurchase of Common Stock from departing employees pursuant to the terms of any stock option or ownership plan that has been approved by the Board of Directors and as contemplated by the Redemption Agreements, and other than the redemption of Series A Preferred Stock as herein provided; and

(J) authorize or effect, or permit any Subsidiary to authorize or effect any of the following: (i) the organization of any new or indirect subsidiaries, joint ventures, partnerships or similar arrangements or the material amendment or modification of any joint venture or partnership agreement to which the Corporation or any Subsidiary is a party; (ii) the Corporation or any Subsidiary becoming a general partner of any partnership or a member of any limited liability company; and (iii) the reorganization or recapitalization of the Corporation or any Subsidiary.

2. Dividends. (a) Subject to the provisions of Section A.2(c), the holders of Series A Preferred Stock shall be entitled, in preference to the holders of any and all other classes of capital stock of the Corporation, to receive on each share of Series A Preferred Stock, out of funds legally available therefor, cumulative cash dividends payable at the rate of 12.5% per annum on the sum of \$13.4551 (such amount, as adjusted from time to time in accordance with Section A.2(b) is referred to as the "Series A Purchase Price"). Such dividends will be calculated and compounded annually in arrears on December 31 of each year in respect of the prior twelve month period (prorated on a daily basis for partial periods). Such dividends shall commence to accrue on each share of Series A Preferred Stock from the date of issuance thereof, whether or not declared by the Board of Directors and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends, and shall continue to accrue until the Series A Liquidation Preference (as defined in Section A.3(a)) is paid in full in cash or until the conversion of the Series A Preferred Stock in accordance with Section A.5 (such dividends being referred to as the "Series A Dividends"). Series A Dividends shall be due and payable with respect to any share of Series A Preferred Stock as provided in Sections A.3 and A.4. Series A Dividends paid in cash in an amount less than the total amount of such dividends at the time accumulated and payable on all outstanding shares of Series A Preferred Stock shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. At any time when shares of Series A Preferred Stock are outstanding and the Series A Dividends have not been paid in full in cash, (a) no dividend whatsoever shall be paid or declared, and no distribution shall be made, on any share of the Corporation's Capital Securities ranking junior to the Series A Preferred Stock, and (b) the Corporation shall not, and shall not permit any Subsidiary to, purchase, redeem or acquire any Capital Securities of the Corporation ranking junior to the Series A Preferred Stock, any Convertible Securities or any Capital Securities of any Subsidiary, and no monies shall be paid into or set aside or made available for a sinking or other analogous fund for the purchase, redemption or acquisition thereof; provided, however, that the Corporation and its Subsidiaries may purchase, redeem or acquire shares of Common Stock, Class B Stock and Convertible Securities issued to employees, officers or directors of, or consultants or other service providers to, the Corporation or its Subsidiaries pursuant to equity

incentive plans or other arrangements approved by the Board of Directors and as contemplated by the Redemption Agreements.

(b) All numbers relating to the calculation of dividends pursuant to this Section A.2 shall be equitably adjusted to reflect any stock split, stock dividend, combination, reorganization, recapitalization, reclassification or other similar event involving the Series A Preferred Stock.

(c) Notwithstanding anything in this Section A.2 to the contrary, all of the accumulated Series A Dividends shall be canceled upon the conversion of the Series A Preferred Stock into shares of Common Stock in accordance with Section A.5.

3. Liquidation.

(a) Liquidation Preference. Upon a Sale of the Corporation or any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary (a Sale of the Corporation or any such liquidation, dissolution or winding up being referred to as a "Liquidation Event"), each holder of outstanding shares of Series A Preferred Stock shall be entitled to be paid with respect to each share of Series A Preferred Stock out of the assets of the Corporation available for distribution to stockholders, whether such assets are capital, surplus or earnings, and before any amount shall be paid or distributed to the holders of Common Stock, Class B Stock or of any other Capital Securities ranking junior to the Series A Preferred Stock, an amount in cash equal to the sum of (i) the Series A Purchase Price plus (ii) any accumulated but unpaid dividends to which such holder of outstanding shares of Series A Preferred Stock is then entitled pursuant to Sections A.2 and A.4(d) hereof, plus (iii) any interest accrued pursuant to Section A.4(c) (such sum being referred to as the "Series A Liquidation Preference"); provided, however, that if upon any Liquidation Event, the amounts payable with respect to the issued and outstanding Series A Preferred Stock are not paid in full, the amounts available for distribution shall be distributed ratably among the holders of Series A Preferred Stock in accordance with their relative holdings thereof. Notwithstanding the foregoing, a Sale of the Corporation shall not be deemed to be a Liquidation Event for the purposes of this Section A.3 if the holders of not less than 60% of the issued and outstanding Series A Preferred Stock waive in writing the provisions of this Section A.3 with respect to such transaction. Any reorganization of the Corporation required by any court or administrative body in order to comply with any provision of law shall be deemed to be a Liquidation Event for all purposes hereof unless the preferences, qualifications, limitations, restrictions and special or relative rights granted to or imposed upon the holders of Series A Preferred Stock are not adversely affected by such reorganization.

(b) The provisions of this Section A.3 shall not in any way limit the right of the holders of Series A Preferred Stock to elect to convert their shares of Series A Preferred Stock into shares of Common Stock pursuant to Section A.5 below prior to or in connection with any Liquidation Event.

(c) Holders of Series A Preferred Stock shall not be entitled to any additional distribution on account of their Series A Preferred Stock upon the occurrence of any Liquidation Event in excess of the Series A Liquidation Preference.

4. Redemption.

(a) Holder's Election. At the request of any holder or holders of issued and outstanding Series A Preferred Stock made at any time on or after September 1, 2003, the Corporation shall redeem all (and not less than all, other than pursuant to Section A.4(c) below) of the outstanding shares of Series A Preferred Stock held by such requesting holder or holders on or before the date set for redemption thereof as provided below at the redemption price specified in Section A.4(b). The foregoing election shall be made by such holders delivering to the Corporation and each of the other holders of Series A Preferred Stock not less than thirty (30) days' prior written notice, which notice thereof shall set forth the date for such redemption that will not be less than thirty (30) days nor more than sixty (60) days from the date of such written notice.

(b) Redemption Date; Redemption Price. Any date upon which a redemption is to occur as specified in a notice thereof in accordance with Section A.4(a) is referred to as a "Series A Redemption Date." The redemption price for each share of Series A Preferred Stock redeemed pursuant to Section A.4 shall be the Series A Liquidation Preference as of the date such share of Series A Preferred Stock is redeemed in full in cash. Such redemption price shall be payable in cash in immediately available funds on the Series A Redemption Date. Until the full redemption price has been paid in cash for all shares of Series A Preferred Stock for which a redemption notice has been provided pursuant to Section A.4(a), (A) no dividend whatsoever shall be paid or declared, and no distribution shall be made, on any share of the Corporation's Capital Securities ranking junior to the Series A Preferred Stock and (B) the Corporation shall not, and shall not permit any Subsidiary to, purchase, redeem or acquire any Capital Securities of the Corporation (other than the Series A Preferred Stock in accordance with this Section A.4), any Convertible Securities or any Capital Securities of any Subsidiary, and no monies shall be paid into or set aside or made available for a sinking or other analogous fund for the purchase, redemption or acquisition thereof; provided, however, that the Corporation and its Subsidiaries may purchase, redeem or acquire shares of Common Stock, Class B Stock and Convertible Securities issued to employees, officers or directors of, or consultants or other service providers to, the Corporation or its Subsidiaries pursuant to equity incentive plans or other arrangements approved by the Board of Directors.

(c) Redemption Prohibited. If, at a Series A Preferred Redemption Date, the Corporation is prohibited under the DGCL or other applicable law from redeeming all shares of Series A Preferred Stock for which redemption is required hereunder, then it shall redeem such shares on a pro rata basis among the holders of Series A Preferred Stock in proportion to the full respective redemption amounts to which they are entitled hereunder to the extent the Corporation is not so legally prohibited from doing so and shall redeem the remaining shares to be redeemed as soon as the Corporation is not legally prohibited from redeeming some or all of such shares. Any shares of Series A Preferred Stock not redeemed shall remain outstanding and entitled to all of the rights and preferences provided in this Article IV. In the event that the Corporation fails to redeem shares for which redemption is required pursuant to Section A.4(a), then during the period from the applicable Series A Redemption Date through the date on which such shares are redeemed, the applicable redemption price of such shares plus additional dividends that

accumulate in respect of such shares under Section A.4(d) shall bear interest at the rate of 10% per annum, compounded annually. Without limitation of the foregoing, the Corporation shall take such action as shall be necessary or appropriate to remove promptly any impediments to its ability to redeem Series A Preferred Stock under the circumstances contemplated by this Section A.4. Any successor to the Corporation shall agree, as a condition to such succession, to carry out and observe the obligations of the Corporation hereunder with respect to the Series A Preferred Stock.

(d) Dividend After Convertible Preferred Redemption Date. From and after a Series A Redemption Date, no shares of Series A Preferred Stock subject to redemption shall be entitled to dividends as provided in Section A.2; provided, however, that in the event that shares of Series A Preferred Stock are not for any reason redeemed and continue to be outstanding after the Series A Redemption Date, such shares shall continue to be entitled to dividends as provided in Section A.2 and interest as provided in Section A.4(c) until the date on which such shares are actually redeemed by the Corporation in full cash.

(e) Surrender of Certificates. Upon receipt of the applicable redemption price therefor, each holder of shares of Series A Preferred Stock so redeemed shall surrender the certificate or certificates representing such shares so redeemed to the Corporation, duly assigned or endorsed for transfer (or accompanied by duly executed stock powers relating thereto), or shall deliver an affidavit or agreement satisfactory to the Corporation to indemnify the Corporation (in the case of holders that are financial institutions, without the need to post any bond or other security for such obligation) from any loss incurred by it in connection therewith (such an affidavit or agreement with respect to any share certificate issued by the Corporation is referred to as an "Affidavit of Loss") with respect to such certificates at the principal executive office of the Corporation or the office of the transfer agent for the Series A Preferred Stock or such office or offices in the continental United States of an agent for redemption as may from time to time be designated by notice to the holders of Series A Preferred Stock, and each surrendered certificate shall be canceled and retired.

5. Conversion into Common Stock. The holders of the Series A Preferred Stock shall have the following conversion rights:

(a) Voluntary Conversion. (i) At any time, each holder of shares of Series A Preferred Stock shall be entitled, without the payment of any additional consideration, to cause each outstanding share of Series A Preferred Stock held by such holder (but not less than all of such shares) to be converted into a number of shares of fully paid and nonassessable Common Stock determined as hereafter provided in this Section A.5(a).

(ii) The number of shares of Common Stock issuable per share of Series A Preferred Stock held by each holder thereof shall equal the product of (i) the quotient of (x) the difference (but not less than zero) between (A) the aggregate number of shares of Series A Preferred Stock that such holder shall have committed to purchase from the Corporation as specified under the heading "Total Number of Shares of Series A Preferred Stock Committed to be Purchased" on Schedule 2.1(a) to the Securities Purchase Agreement minus (B) the number of

shares of Common Stock into which previously outstanding shares of Series A Preferred Stock held by such holder have theretofore been converted in accordance with this Section A.5, divided by (y) the number of issued and outstanding shares of Series A Preferred Stock held by such holder as of the date of conversion, including, without limitation, those shares of Series A Preferred Stock being converted by such holder on such date, multiplied by (ii) the quotient of (x) the Series A Purchase Price divided by (y) the Conversion Price (as defined below) per share, both as in effect at the time of conversion.

(iii) Notwithstanding the provisions of the preceding paragraph (ii) to the contrary: (A) the number of shares of Common Stock issuable per share of Series A Preferred Stock held by any holder thereof who has breached its obligations to the Company in accordance with Section 2.1(c) of the Securities Purchase Agreement to purchase shares of Series A Preferred Stock shall be equal to the quotient of (x) the Series A Purchase Price divided by (y) the Conversion Price per share, both as in effect at the time conversion; and (B) if a holder of Series A Preferred Stock shall have converted such shares into Common Stock in accordance with this Section A.5 and thereafter breaches such holder's obligation to make capital contributions to the Corporation in accordance with Section 2.1(d) of the Securities Purchase Agreement, then, upon such breach and until such time as such holder makes such capital contributions to the Corporation, the number of shares of Common Stock that shall be deemed to have been issued to such holder for all purposes by reason of any such prior conversion of Series A Preferred Stock shall equal the product (rounded up to the nearest whole number of shares) of (x) the quotient of (1) the aggregate amount of cash theretofore paid by such holder to the Corporation in accordance with the Securities Purchase Agreement for shares of Series A Preferred Stock and in satisfaction of such holders obligation to make capital contributions to the Corporation divided by (2) the Series A Purchase Price as of the date of such breach, multiplied by (y) the quotient of (1) the Series A Purchase Price, divided by (2) the Conversion Price per share, both as in effect as of the date of such breach. Notwithstanding clause (B) of the preceding sentence, unless the Corporation specifically enforces its rights to receive capital contributions in accordance with Section 2.1(d) of the Securities Purchase Agreement, a holder that breaches its obligation to make a capital contribution in accordance with Section 2.1(d) of the Securities Purchase Agreement shall not have the right to cure such breach by making such capital contribution after the 30th day following the date such capital contribution is due, and thereafter the number of shares of Common Stock that shall be deemed to have been issued to such holder for all purposes by reason of the prior conversion of such holders shares of Series A Preferred Stock shall be equal to the product specified in clause (B) of the preceding sentence. If at any time by operation of this Section A.5(a)(iii) the number of shares of Common Stock deemed issued upon a prior conversion of Series A Preferred Stock is reduced, the holder of the stock certificates evidencing the shares of Common Stock initially issued upon such prior conversion of Series A Preferred Stock shall immediately surrender such certificates to the Corporation, duly endorsed to the Corporation for transfer, in exchange for new certificates issued by the Corporation evidencing the reduced number of shares of Common Stock to which such holder is entitled in accordance with this Section A.5(a)(iii).

(iv) Upon the filing of this Restated and Amended Certificate of Incorporation with the Delaware Secretary of State, the initial "Conversion Price" per share of Series A Preferred Stock shall be the Series A Purchase Price.

(v) The number of shares of Common Stock into which shares of Series A Preferred Stock are convertible and the Conversion Price are subject to adjustment from time to time as provided in Section A.9 hereof.

(vi) In addition to the voluntary conversions contemplated by paragraph (i) of this Section, all outstanding shares of Series A Preferred Stock shall be automatically converted into shares of Common Stock immediately upon the conversion of 60% or more of the outstanding Series A Preferred Stock in accordance with this Section A.5(a).

(b) Automatic Conversion Upon Qualified Public Offering or Sale of the Company. Each share of Series A Preferred Stock shall automatically be converted, without the payment of any additional consideration, into the number of shares of Common Stock provided for in Section A.5(a) as of the date of, and in all cases subject to, the consummation of either of the following: (A) the Corporation's first underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, that is consummated on or before September 1, 2003 and where (i) the aggregate gross proceeds attributable to sales for the account of the Corporation in such public offering equal or exceed \$20,000,000, (ii) the price per share for which shares of Common Stock are sold in such public offering is not less than four (4) times the Series A Purchase Price as in effect on such date (as equitably adjusted to reflect any stock split, stock dividend, combination, reorganization, recapitalization, reclassification or other similar event involving the Series A Preferred Stock), and (iii) after giving effect to which shares of Common Stock are listed on a national securities exchange or the NASDAQ National Market System (a "Qualified Public Offering"); or (B) the consummation of a Sale of the Corporation on or before September 1, 2003 where the consideration payable on or with respect to each share of Common Stock (after giving effect to the conversion of all Series A Preferred Stock) is not less than four (4) times the Series A Purchase Price as in effect on such date (as equitably adjusted to reflect any stock split, stock dividend, combination, reorganization, recapitalization, reclassification or other similar event involving the Series A Preferred Stock (a "Qualified Sale"). Notwithstanding the foregoing if a Qualified Public Offering or a Qualified Sale is consummated, all outstanding shares of Series A Preferred Stock shall be deemed to have been converted into shares of Common Stock as provided in this Section A.5 immediately prior to such consummation.

(c) Procedure for Voluntary Conversion: Effective Date. Upon the election to convert the Series A Preferred Stock made in accordance with Section A.5(a), the holders of the Series A Preferred Stock making such election shall provide written notice of such conversion (the "Series A Voluntary Conversion Notice") to the Corporation and each other holder of Series A Preferred Stock that does not sign such notice. On the date the Series A Voluntary Conversion Notice is delivered to the Corporation, all outstanding shares of Series A Preferred Stock held by the electing holders (and in the case where the holders of 60% or more of the then outstanding Series A Preferred Stock elect to convert their Series A Preferred Stock,

then all outstanding shares of Series A Preferred Stock held by all holders thereof) shall thereupon be converted, without further action, into the number of shares of Common Stock provided for in Section A.5(a), and such number of shares of Common Stock into which the Series A Preferred Stock is converted shall thereupon be deemed to have been issued to such holders of Series A Preferred Stock. Such holders shall as soon as "practicable thereafter surrender to the Corporation at the Corporation's principal executive office the certificate or certificates evidencing Series A Preferred Stock, duly assigned or endorsed for transfer to the Corporation (or accompanied by duly executed stock powers relating thereto), or an Affidavit of Loss with respect thereto. Upon surrender of such certificates or delivery of an Affidavit of Loss with respect thereto, the Corporation shall issue and deliver to the holder so surrendering such certificates or to such holder's designee, at an address designated by such holder, certificates for the number of shares of Common Stock into which such holder's Series A Preferred Stock shall have been converted. The issuance of certificates for shares of Common Stock upon conversion of Series A Preferred Stock will be made without charge to the holders of such shares for any issuance tax in respect thereof or other costs incurred by the Corporation in connection with such conversion and the related issuance of such stock, provided, that the holder shall be required to pay any tax liability that it incurs in respect of any transfer effected in connection with the issuance or delivery of any share certificates in a name other than such holder. Notwithstanding anything to the contrary set forth in this Section A.5(c), in the event that holders of shares of Series A Preferred Stock elect to convert such shares pursuant to Section A.5(a) in connection with any Liquidation Event or Public Offering (not including the Qualified Public Offering), (i) such conversion may at the election of such holders be conditioned upon the consummation of such Liquidation Event or Public Offering, in which case, such conversion shall not be deemed to be effective until the consummation of such Liquidation Event or Public Offering and (ii) if such Liquidation Event or Public Offering occurs, the shares of Series A Preferred Stock to be converted subject to the consummation of such Liquidating Event or Public Offering shall be deemed to have been converted into shares of Common Stock immediately prior thereto, provided that the Corporation shall make appropriate provisions for the Common Stock issued upon such conversion to be treated on the same basis as all other Common Stock in such Liquidation Event or Public Offering.

(d) Procedure for Automatic Conversion. As of the date of, and in all cases subject to, the consummation of the Qualified Public Offering, all outstanding shares of Series A Preferred Stock shall be converted automatically, without further action, into the number of shares of Common Stock provided for in Section A.5(a), and such number of shares of Common Stock into which the Series A Preferred Stock is converted shall be deemed to have been issued to the holders of Series A Preferred Stock. Such holders shall as soon as practicable thereafter surrender the certificate or certificates evidencing the Series A Preferred Stock, duly assigned or endorsed for transfer to the Corporation (or accompanied by duly executed stock powers relating thereto) or an Affidavit of Loss with respect thereto. Upon surrender of such certificates or delivery of an Affidavit of Loss with respect thereto, the Corporation shall issue and deliver to such holder so surrendering such certificates or to such holder's designee, promptly (and in any event in such time as is sufficient to enable such holder to participate in such Qualified Public Offering) at an address designated by such holder, certificates for the number of shares of Common Stock into which such holder's Series A Preferred Stock shall have been converted.

6. Notice.

(a) Liquidation Events, Extraordinary Transactions, Etc. In the event (i) the Corporation establishes a record date to determine the holders of any class of securities who are entitled to receive any dividend or other distribution or who are entitled to vote at a meeting (or by written consent) in connection with any of the transactions identified in clause (ii) hereof, or (ii) any Liquidation Event, or any Public Offering, including without limitation, a Qualified Public Offering, becomes reasonably likely to occur or the Corporation enters into any agreement with respect thereto, the Corporation shall mail or cause to be mailed by first class mail (postage prepaid) to each holder of Series A Preferred Stock at least thirty (30) days prior to such record date specified therein or the expected effective date of any such transaction, a notice specifying (A) the date of such record date for the purpose of such dividend or distribution or meeting or consent and a description of such dividend or distribution or the action to be taken at such meeting or by such consent, (B) the date on which any such Liquidation Event, or Public Offering is expected to become effective and, in the case of a Sale of the Corporation, the identity of the parties thereto, and (C) the date on which the books of the Corporation shall close or a record shall be taken with respect to any such event.

(b) Waiver of Notice. The holder or holders of not less than 60% of the combined voting power of the outstanding shares of Series A Preferred Stock may, at any time upon written notice to the Corporation, waive, either prospectively or retrospectively, any notice provisions specified herein, and any such waiver shall be effective as to all holders of Series A Preferred Stock.

(c) General. In the event that the Corporation provides any notice, report or statement to any holder of Common Stock, the Corporation shall at the same time provide a copy of any such notice, report or statement to each holder of outstanding shares of Series A Preferred Stock.

7. 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 Series A 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 Series A Preferred Stock, and 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 Series A Preferred Stock into Common Stock, the Corporation will take all such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

8. Valuation of Distribution Securities. Any securities or other consideration to be delivered to the holders of the Series A Preferred Stock, upon any Liquidation Event in accordance with the terms hereof shall be valued as follows:

(i) If traded on a nationally recognized securities exchange or interdealer quotation system, the value shall be deemed to be the average of the closing prices of

the securities on such exchange or system over the 30-day period ending three (3) business days prior to the closing;

(ii) If traded over-the-counter, the value shall be deemed to be the average of the closing bid prices over the 30-day period ending three (3) business days prior to the closing; and

(iii) If there is no active public market, the value shall be the fair market value thereof, as mutually determined by the Corporation and the holders of not less than 60% of the combined voting power of the issued and outstanding shares of Series A Preferred Stock; provided that if the Corporation and the holders of such percentage of the combined voting power of the issued and outstanding shares of Series A Preferred Stock are unable to reach agreement, then by independent appraisal by an investment banker hired and paid by the Corporation, but reasonably acceptable to the holders of such percentage of the combined voting power of the issued and outstanding shares of Series A Preferred Stock.

9. Adjustments.

(a) Adjustments for Subdivisions, Combinations or Consolidation of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided by stock split, stock dividends or otherwise, into a greater number of shares of Common Stock, the Conversion Price then in effect shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, the Conversion Price then in effect shall, concurrently with the effectiveness of such combination or consolidation, be proportionately increased.

(b) Adjustments for Stock Dividends and Other Distributions. In the event the Corporation at any time or from time to time makes, or fixes a record date for the determination of holders of Common Stock entitled to receive any distribution (excluding any repurchases of securities by the Corporation not made on a pro rata basis from all holders of any class of the Corporation's securities) payable in property or in securities of the Corporation other than shares of Common Stock, and other than as otherwise adjusted in accordance herewith, then and in each such event the holders of Series A Preferred Stock shall receive at the time of such distribution, the amount of property or the number of securities of the Corporation that they would have received had their Series A Preferred Stock been converted into Common Stock on the date of such event.

(c) Adjustments for Reclassification, Exchange and Substitution. If the Common Stock issuable upon conversion of the Series A Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or other transaction (other than a subdivision or combination of shares provided for above), each share of Series A Preferred Stock shall thereafter be convertible into the number of shares of stock or other securities or property to which a holder of the number of shares of Common Stock of the Corporation deliverable upon conversion of such share of

Series A Preferred Stock shall have been entitled upon such reorganization, reclassification or other transaction.

(d) Adjustments of the Conversion Price. If and whenever on or after the date the first share of Series A Preferred Stock is issued the Corporation issues or sells, or in accordance with Section A.9(e) is deemed to have issued or sold, any shares of its Common Stock or Convertible Securities for a consideration per share less than the Conversion Price in effect immediately prior to the time of such issue or sale, then upon such issue or sale, the Conversion Price shall be reduced to an amount determined by dividing (a) the sum of (1) the product derived by multiplying (i) the Conversion Price in effect immediately prior to such issue or sale times (ii) the number of shares of Common Stock Deemed Outstanding immediately prior to such issue or sale, plus (2) the consideration, if any, received (or deemed received) by the Corporation upon such issue or sale, by (b) the number of shares of Common Stock Deemed Outstanding immediately after such issue or sale.

(e) Effect of Certain Events on Conversion Price. For purposes of determining the adjusted Conversion Price under Section A.9(d), the following shall be applicable:

(i) Issuance of Convertible Securities. If the Corporation in any manner issues or sells any Convertible Securities, whether or not the rights to exercise, convert or exchange any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon such conversion or exchange is less than the Conversion Price in effect immediately prior to the time of such issue or sale, then the maximum number of shares of Common Stock issuable upon the exercise, conversion or exchange of such Convertible Securities shall be deemed to be outstanding and to have been issued and sold by the Corporation at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this paragraph, the "price per share for which Common Stock is issuable" shall be determined by dividing (a) the total amount received or receivable by the Corporation as consideration for the issue or sale of such Convertible Securities, plus the cumulative minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the exercise, conversion or exchange thereof and, if applicable, the exercise, conversion and exchange of any other Convertible Securities that such Convertible Securities may be converted into or exercised or exchanged for (in each case, as set forth in the instruments and agreements relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration), by (b) the total maximum number of shares of Common Stock issuable upon the exercise, conversion or exchange of all such Convertible Securities (as set forth in the instruments and agreements relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number). No further adjustment of the Conversion Price shall be made when Common Stock and, if applicable, any other Convertible Securities, are actually issued upon the exercise, conversion or exchange of such Convertible Securities.

(ii) Change in Exercise Price or Conversion Rate. If the additional consideration payable to the Corporation upon the exercise, conversion or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or

exchangeable for Common Stock should change at any time, the Conversion Price in effect at the time of such change shall be readjusted to the Conversion Price that would have been in effect at such time had such Convertible Securities that are still outstanding provided for such changed additional consideration or changed conversion rate, as the case may be, at the time such Convertible Securities were initially granted, issued or sold; and on the termination date of any right to exercise, convert or exchange such Convertible Securities without such right having been duly exercised, the Conversion Price then in effect hereunder shall be increased to the Conversion Price that would have been in effect at the time of such termination had such Convertible Securities, to the extent outstanding immediately prior to such termination, never been issued.

(iii) Exceptions for Excluded Securities. Notwithstanding the foregoing, no adjustments shall be made under this Section A.9(e) with respect to the issuance of any Excluded Securities.

(iv) Valuation of Non-Cash Consideration. The consideration received by the Corporation for the issue of any shares of Common Stock, Convertible Securities or any other Convertible Securities that such Convertible Securities may be converted into or exercised or exchanged for shall be computed as follows:

(A) insofar as such consideration consists of cash, such consideration shall equal the aggregate amount of cash received by the Corporation prior to amounts paid or payable for accrued interest or accrued dividends and prior to any commissions or expenses paid by the Corporation;

(B) insofar as such consideration consists of property other than cash, such consideration shall be calculated at the fair value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event shares of Common Stock, Convertible Securities or any other Convertible Securities that such Convertible Securities may be converted into or exercised or exchanged for are issued together with other securities or other assets of the Corporation for consideration that is allocable to both such Common Stock and Convertible Securities, and to such other securities and assets, the portion of such consideration allocable to such Common Stock or Convertible Securities shall be that set forth in the instruments and agreements issued or entered into in connection with such transaction, and if no such allocation is so set forth, then the portion of such consideration allocable to such Common Stock or Convertible Securities, calculated as provided in clauses (A) and (B) above, as determined in good faith by the Board of Directors.

(f) Other Dilutive Issuances. If an event not specified in this Section A.9 occurs that has substantially the same economic effect on the Series A Preferred Stock as those specifically enumerated, then this Section A.9 shall be construed liberally, mutatis mutandis, in order to give the holders of Series A Preferred Stock the intended benefit of the protections provided under this Section A.9. In such event, the Corporation's Board of Directors shall make an appropriate

adjustment in the Conversion Price so as to protect the rights of the holders of Series A Preferred Stock; provided that no such adjustment shall increase the Conversion Price as otherwise determined pursuant to this Section A.9 or decrease the number of shares of Common Stock issuable upon conversion of each share of Series A Preferred Stock. "

(g) No Impairment. The Corporation will not, by amendment of its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, and will at all times in good faith assist in the carrying out of all the provisions of this Section A.9 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of Series A Preferred Stock against impairment.

(h) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section A.9, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of the affected class of Series A Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Series A Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect, and (iii) the number of shares of Common Stock and the amount, if any, of other property that at the time would be received upon the conversion of such holder's Series A Preferred Stock.

10. No Closing of Transfer Books. The Corporation shall not close its books against the transfer of shares of Series A Preferred Stock in any manner that would interfere with the timely conversion of any shares of Series A Preferred Stock.

11. No Reissuance of Series A Preferred Stock. No share or shares of Series A Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be canceled, retired and eliminated from the shares that the Corporation shall be authorized to issue.

B. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of Series A Preferred Stock as specified herein.

2. Voting. The holder of each share of Common Stock shall be entitled to one vote for each share thereof held by such holder at all meetings of stockholders (and written actions in lieu of meetings). The holder of each share of Common Stock shall be entitled to notice any stockholders' meeting in accordance with the by-laws of the Corporation and shall vote together with holders of Series A Preferred Stock and Class B Stock, voting together as a single class upon all matters submitted to a vote of stockholders. There shall be no cumulative voting.

3. Dividends. Dividends may be declared and paid on the Common Stock from funds lawfully available therefor as and when determined by the Board of Directors and approved by the holders of Series A Preferred Stock as provided in Section A.1(b)(J), and subject to any preferential dividend rights of any then outstanding shares of Series A Preferred Stock and any other class of the Company's Capital Securities that may hereafter be authorized and issued having preferred dividend rights senior to the rights of holders of Common Stock, and subject also to the dividend rights of the holders of any then outstanding shares of Class B Stock under Section C.3.

4. Liquidation. Upon the occurrence of a Liquidation Event, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to the rights and preferences of any then outstanding shares of Series A Preferred Stock and any other class of the Company's Capital Securities that may hereafter be authorized and issued having preferred rights upon the occurrence of a Liquidation Event senior to the rights of holders of Common Stock, and subject also to the rights in liquidation of the holders of any the outstanding shares of Class B Stock under Section C.4.

C. CLASS B STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Class B Stock are subject to and qualified by the rights of the holders of Series A Preferred Stock and Common Stock as specified herein.

2. Voting. The holder of each share of Class B Stock shall be entitled to one vote for each share thereof held by such holder at all meetings of stockholders (and written actions in lieu of meetings). The holder of each share of Class B Stock shall be entitled to notice of any stockholders' meeting in accordance with the by-laws of the Corporation and shall vote together with holders of Series A Preferred Stock and Common Stock, voting together as a single class, upon all matters submitted to a vote of stockholders. There shall be no cumulative voting.

3. Dividends. After the Corporation has paid dividends, made distributions in liquidation or otherwise distributed to the holders of Series A Preferred Stock and Common Stock an amount in the aggregate equal to the Minimum Enterprise Value, the holders of Class B Stock shall share, *pari passu* with the holders of Common Stock, in all dividends declared and paid on the Common Stock in accordance with Section B.3, such that the amount of any dividends declared and paid on account of each share of Common Stock and Class B Stock shall be equal.

4. Liquidation. Upon the occurrence of a Liquidation Event and after a the Corporation has paid dividends, made distributions in liquidation or otherwise distributed to holders of Series A Preferred Stock and Common Stock in accordance with Section A.3 and B.4, respectively, an amount in the aggregate equal to the Minimum Enterprise Value, holders of Class B Stock will be entitled to receive, *pari passu* with the holders of Common Stock, all assets of the Corporation available for distribution to its stockholders, subject to the rights and preferences of any then outstanding shares of Series A Preferred Stock and any other class of the Company's Capital Securities that may hereafter be authorized and issued having preferred rights

upon the occurrence of a Liquidation Event senior to the rights of holders of Common Stock, such that the amount paid or distributed on account of each share of Common Stock and Class B Stock shall be equal.

5. Voluntary Conversion of Class B Stock into Common Stock. At any time, each holder of shares of Class B Stock shall be entitled, upon the payment to the Corporation in cash of \$13.4551 (as adjusted in accordance with Section C.8, the "Class B Conversion Price") for each such share of Class B Stock to be converted, to cause each outstanding share of Class B Stock held by such holder (but not less than all of such shares) to be converted into one (1) share of fully paid and nonassessable Common Stock. Holders of Class B Stock may pay the Class B Conversion Price payable in connection with any such conversion by surrendering to the Corporation such number of additional shares of Class B Stock that such Holder and the Company's Board of Directors agree have a fair market value at least equal to the Class B Conversion Price payable in connection with such conversion.

6. Mandatory Conversion of Class B Stock into Common Stock.

(a) Each share of Class B Stock shall automatically be converted, without the payment of any additional consideration, into the number of shares of Common Stock provided for in Section C.6(b) immediately prior to the date of the consummation of a Qualified Public Offering.

(b) The number of shares of Common Stock issuable per share of Class B Stock held by each holder thereof shall equal the product of (i) the aggregate number of shares of Class B Stock held by such holder as of the date of conversion, multiplied by (ii) the quotient of (x) the difference (but not less than zero) between (aa) the price per share for which shares of the Common Stock are sold in such Qualified Public Offering (as stated on the cover page of the prospectus relating thereto) minus (bb) the Class B Conversion Price at the time of such conversion, divided by (y) the price per share for which shares of the Common Stock are sold in such Qualified Public Offering (as stated on the cover page of the prospectus relating thereto).

(c) As of the date of the consummation of a Public Offering, all outstanding shares of Class B Stock shall be converted automatically, without further action, into the number of shares of Common Stock provided for in Section C.6(b), and such number of shares of Common Stock into which the Class B Stock is converted shall be deemed to have been issued to the holders of Class B Stock. Such holders shall as soon as practicable thereafter surrender the certificate or certificates evidencing the Class B Stock, duly assigned or endorsed for transfer to the Corporation (or accompanied by duly executed stock powers relating thereto) or an Affidavit of Loss with respect thereto. Upon surrender of such certificates or delivery of an Affidavit of Loss with respect thereto, the Corporation shall issue and deliver to such holder so surrendering such certificates or to such holder's designee, promptly (and in any event in such time as is sufficient to enable such holder to participate in such Public Offering) at an address designated by such holder, certificates for the number of shares of Common Stock into which such holder's Class B Stock shall have been converted.

7. 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 Class B 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 Class B Stock, and 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 Class B Stock, the Corporation will take all such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

8. Adjustments.

(a) Subdivisions, Combinations or Consolidation of Common Stock. The Corporation shall not subdivide by stock split, stock dividends or otherwise shares of Common Stock into a greater number of shares of Common Stock unless it shall also, concurrently therewith, subdivide shares of Class B Stock in the same manner and in the same proportion as shares of Common Stock. In the event of any such Subdivision of shares of Class B Stock into a greater number of shares of Class B Stock, the Class B Conversion Price then in effect shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. The Corporation shall not combine or consolidate shares of Common Stock into a lesser number of shares of Common Stock unless it shall also, concurrently therewith, combine or consolidate shares of Class B Stock in the same manner and in the same proportion as shares of Common Stock. In the event of any such combination or consolidation of shares of Class B Stock into a lesser number of shares of Class B Stock, the Class B Conversion Price then in effect shall, concurrently with the effectiveness of such consolidation or combination, be proportionately increased.

(b) Adjustments for Reclassification, Exchange and Substitution. If the Common Stock issuable upon conversion of the Class B Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or other transaction (other than a subdivision or combination of shares provided for above), each share of Class B Stock shall thereafter be convertible into the number of shares of stock or other securities or property to which a holder of the number of shares of Common Stock of the Corporation deliverable upon conversion of such share of Class B Stock shall have been entitled upon such reorganization, reclassification or other transaction.

ARTICLE V

PERPETUAL EXISTENCE

The Corporation is to have perpetual existence.

ARTICLE VI

LIMITATION OF LIABILITY

To the fullest extent permitted by the DGCL, Director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director, except for liability (i) for any breach of the Director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the Director derived an improper personal benefit. If the DGCL is amended after the effective date of this Amended and Restated Certificate of Incorporation to authorize corporate action further eliminating or limiting the personal liability of Directors, then the liability of a Director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Any repeal or modification of this Article VI by either of (i) the stockholders of the Corporation or (ii) an amendment to the DGCL, shall not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a person serving as a Director at the time of such repeal or modification.

ARTICLE VII

AMENDMENT OF BY-LAWS

1. Amendment by Directors.

Except as otherwise provided by law, the by-laws of the Corporation may be amended or repealed by the Board of Directors.

2. Amendment by Stockholders.

The by-laws of the Corporation may be amended or repealed at any annual meeting of stockholders, or special meeting of stockholders called for such purpose, by the affirmative vote of at least two-thirds of the total votes eligible to be cast on such amendment or repeal by holders of voting stock, voting together as a single class; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of a majority of the total votes eligible to be cast on such amendment or repeal by holders of voting stock, voting together as a single class.

ARTICLE VIII

INTERPRETATION

All references to "Sections" contained herein, unless otherwise specified, are references to Sections of Article IV. The words "herein", "hereof" and the like refer to the entirety of this Restated and Amended Certificate of Incorporation and not to any specific article or section hereof.

ARTICLE IX

DEFINITIONS

The following terms are used herein with the meanings indicated:

"Affidavit of Loss" has the meaning set forth in Article IV, Section A.4(e).

"Affiliate or affiliate" means with respect to any Person, any other Person that would be considered to be an affiliate of such Person under Rule 144(a) of the rules of regulations of the Securities and Exchange Commission, as in effect on the date hereof.

"Capital Securities" means, as to any Person that is a corporation, the authorized shares of such Person's capital stock, including all classes of common, preferred, voting and non voting capital stock, and, as to any Person that is not a corporation or an individual, the ownership interests in such Person, including, without limitation, the right to share in profits and losses, the right to receive distributions of cash and property, and the right to receive allocations of items of income, gain, loss, deduction and credit and similar items from such Person, whether or not such interests include voting or similar rights entitling the holder thereof to exercise control over such Person.

"Class B Conversion Price" has the meaning set forth in Article IV, Section C.5.

"Class B Stock" has the meaning set forth in Article IV (introductory paragraph).

"Common Stock" has the meaning set forth in Article IV (introductory paragraph).

"Common Stock Deemed Outstanding" means, at any given time, the number of shares of Common Stock actually outstanding at such time, plus the number of shares of Common Stock issuable upon conversion of the Series A Preferred Stock, plus the number of shares of Common Stock issuable upon the exercise in full of all Convertible Securities whether or not such Convertible Securities are convertible into Common Stock at such time.

"Conversion Price" has the meaning set forth in Article IV, Section A.5(a).

"Convertible Securities" means securities or obligations that are exercisable for, convertible into or exchangeable for shares of Common Stock. The term includes options, warrants or other rights to subscribe for or purchase Common Stock or to subscribe for or

purchase other securities or obligations that are convertible into or exchangeable for Common Stock.

"DGCL" means the General Corporation Law of the State of Delaware.

"Excluded Securities" means (i) Capital Securities sold by the Corporation in a Qualified Public Offering, (ii) shares of Class B Stock and Convertible Securities that are options to purchase shares of Common Stock or shares of Class B Stock, in either case, issued to employees or Directors of, or consultants or other service providers to, the Corporation pursuant to any incentive stock plan or other form of incentive compensation plan approved by the Corporation's Board of Directors, and the issuance of Common Stock or Class B Stock upon the exercise or conversion of any such Convertible Securities or conversion of any such Class B Stock, (iii) shares of Common Stock issuable upon the conversion of Series A Preferred Stock and (iv) shares of the Corporation's Capital Securities issued in connection with a stock split, stock dividend, combination, reorganization, recapitalization or other similar event for which adjustment is made in accordance with Article IV, Section A.9(a) through (c).

"Liquidation Event" has the meaning set forth in Article IV, Section A.3(a).

"Minimum Enterprise Value" means \$24,144,164 plus, unless the Series A Dividends have been canceled in accordance with Article IV, Section A.2(c), the amount of any accumulated but unpaid Series A Dividends.

"Person" or "person" means an individual, partnership, corporation, limited liability company, association, trust, joint venture, unincorporated organization and any government, governmental department or agency or political subdivision thereof.

"Public Offering" means any offering by the Corporation of its equity securities to the public pursuant to an effective registration statement under the Securities Act of 1933 or any comparable statement under any similar federal statute then in force, other than an offering of shares being issued as consideration in a business acquisition or combination or an offering in connection with an employee benefit plan.

"Qualified Public Offering" has the meaning set forth in Article IV, Section A.5(b).

"Qualified Sale" has the meaning set forth in Article IV, Section A.5(b).

"Redemption Agreements" means, collectively, (i) the Redemption and Noncompetition Agreement dated as of September 1, 1998 between the Corporation and William Southworth, (ii) the Redemption and Severance Agreement dated as of September 1, 1998 between the Corporation and Brent Paine, (iii) the Redemption Agreement dated as of September 1, 1998 between the Corporation and Scott Balfour and (iv) the Redemption Agreement dated as of September 1, 1998 between the Corporation and Peter M. Kendrick.

"Sale of the Corporation" means (a) a merger or consolidation of the Corporation into or with any other Person or Persons who are not affiliates of the Corporation in which more than

50% of the voting power of the surviving entity is held, directly or indirectly, by persons who are not stockholders of the Corporation or affiliates thereof prior to the consummation of such transaction or (b) a single transaction or a series of transactions pursuant to which a Person or Persons who are not stockholders of the Corporation or affiliates thereof prior to such transaction or transactions acquire either of the following: (i) capital stock of the Corporation possessing the voting power to elect a majority of the Corporation's board of directors (whether by merger, consolidation or sale or transfer of the Corporation's capital stock; provided, however, that a Qualified Public Offering that results in an acquisition of such voting power shall not be a "Sale of the Corporation"); or (ii) all or substantially all of the Corporation's assets determined on a consolidated basis.

"Securities Purchase Agreement" means the Securities Purchase Agreement dated as of September 1, 1998 among the Company and its stockholders as of such date.

"Series A Dividends" has the meaning set forth in Article IV, Section A.2(a).

"Series A Liquidation Preference" has the meaning set forth in Article IV, Section A.3(a).

"Series A Preferred Stock" has the meaning set forth in Article IV (introductory paragraph).

"Series A Purchase Price" shall have the meaning set forth in Article IV, Section A.5(a).

"Series A Redemption Date" shall have the meaning set forth in Article IV, Section A.4(b).

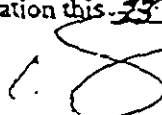
"Series A Voluntary Conversion Notice" has the meaning set forth in Article IV, Section A.5(c).

"Stockholders' Agreement" means the Stockholders' Agreement dated as of September 1, 1998 among the Corporation and the stockholders thereof, as the same may be amended from time to time.

"Subsidiary"/"Subsidiaries" means any corporation, partnership, limited liability company, association or other business entity of which (i) if a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by the Corporation or one or more of the other Subsidiaries of the Corporation or a combination thereof, or (ii) if a partnership, limited liability company, association or other business entity, a majority of the ownership interests therein is at the time owned or controlled, directly or indirectly, by the Corporation or one or more Subsidiaries of that person or a combination thereof. For purposes hereof, the Corporation shall be deemed to have a majority ownership interest in a partnership, limited liability company, association or other business entity if the Corporation shall be allocated a majority of partnership, limited liability company, association or other business entity gains or losses or shall be or control the-managing

general partner of such partnership, association or other business entity or a manager of such limited liability company.

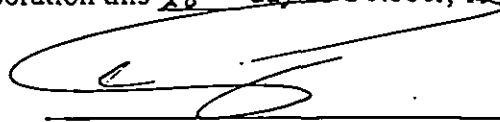
I, William Southworth, the Chairman of the Board and Chief Executive Officer of the Corporation, for the purpose of restating and amending the Corporation's certificate of incorporation pursuant to the DGCL, do make this certificate, hereby declaring and certifying that this is my act and deed on behalf of the Corporation this ~~23rd~~^{23rd} day of October, 1998.



William Southworth, Chairman of the Board
and Chief Executive Officer

general partner of such partnership, association or other business entity or a manager of such limited liability company.

I, William Southworth, the Chairman of the Board and Chief Executive Officer of the Corporation, for the purpose of restating and amending the Corporation's certificate of incorporation pursuant to the DGCL, do make this certificate, hereby declaring and certifying that this is my act and deed on behalf of the Corporation this 28th day of October, 1998.



William Southworth, Chairman of the Board
and Chief Executive Officer

ATTACHMENT B

ILLUSTRATIVE TARIFF

TARIFF SCHEDULES
APPLICABLE TO
TELECOMMUNICATION SERVICES
FURNISHED BY
HARVARDNET, INC.
WITHIN THE STATE OF PENNSYLVANIA

This tariff contains the descriptions, regulations and rates applicable to telecommunications services provided within the state of Pennsylvania by HarvardNet, Inc. ("HarvardNet"). Copies of this tariff may be inspected, during normal business hours at the Company's headquarters at 500 Rutherford Avenue, Charlestown, MA 02129 or at the Pennsylvania Public Utilities Commission. Currently, HarvardNet, Inc. ("Company")'s tariffed offerings are limited to dedicated services offered on a facilities and/or resale basis. Company does not provide facilities-based switched Telecommunications services at this time.

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STATE OF PENNSYLVANIA
TELECOMMUNICATIONS SERVICES
TARIFF

INTRODUCTION

HarvardNet, Inc. ("Company")'s Telecommunication Services provide high-speed dedicated services on a facilities and/or resale basis calls within the state of Pennsylvania. Services, features and functions will be provided where facilities and billing capability are available.

The provision of Telecommunications Services is subject to existing regulations, terms and conditions specified in this Tariff, and may be revised, added to or supplemented. When Telecommunications Services are provided in conjunction with intrastate and interstate services, the intrastate and interstate services are subject to existing regulations, terms and conditions specified in the company's current toll tariffs as revised, added to or supplemented.

1. TERMS AND CONDITIONS

Customers may be required to enter into written service orders which shall contain or reference a specific description of the service ordered, the rates to be charged, the duration of the services, and the terms and conditions stated herein. The Customer may also be required to execute any other documents as may reasonably be requested by the Company in connection with the provisioning of Telecommunications Service.

1.1 Provision of Equipment and Facilities

The Customer shall be responsible for the payment of service charges, as set forth herein, for visits by the Company's agents or employees to the premises of the Customer when the service difficulty or trouble report results from the use of equipment or facilities provided by any party other than the Company, including but not limited to the Customer.

1.2 Customer Equipment

The Customer may transmit or receive information or signals via the facilities of the Company by use of Customer-provided equipment.

Customer-provided equipment on the Customer premises, and the electric power consumed by such equipment, shall be provided by and maintained at the expense of the Customer.

The Customer is responsible for ensuring that Customer-provided equipment and wiring connected to Company equipment and facilities is compatible with such Company-provided equipment and facilities. The magnitude and character of the voltages and currents impressed on Company-provided equipment and facilities by the connection, operation or maintenance of such Customer-provided equipment and wiring must be such as not to cause damage to the

Company-provided equipment and facilities or injury to the Company's employees or other persons. If the Company, in its sole discretion, reasonably determines that additional protective equipment is required to prevent such damage or injury, it shall be provided at the Customer's expense.

1.3 Inspections

Upon reasonable notification to the Customer, and at a reasonable time, the Company may make such tests and inspections at the Customer's premises as may be necessary to determine that the Customer is complying with the requirements set forth in this tariff.

If the protective requirements for Customer-provided equipment are not being complied with, the Company may take such action, as it deems necessary to protect its facilities, equipment and personnel. The Company may immediately and without notice deny service when the Customer (a) subjects the Company or non-Company personnel to hazardous conditions, (b) circumvents the Company's ability to charge for its services, prevent and protect against fraud or acts in a way that may cause immediate harm to the Telecommunications network or other company services.

1.4 Service Liability

The Company's liability, if any, for its willful misconduct is not limited by this tariff.

With respect to any other claim or suit, by a Customer or by any others, for damages associated with the installation, provision, termination, maintenance, repair, interruption or restoration of a service, and subject to the provisions following, the Company's liability, if any, shall not exceed an amount equal to the initial period charge provided for under this tariff.

This liability for damages shall be in addition to any amounts that may otherwise be due the Customer under this tariff as a Credit Allowance for Interruptions and Service Quality Guarantees.

In no event shall the Company be liable for special, reliance, consequential or other such damages. The Company is not liable for damages associated with service, channels, or equipment which it does not furnish.

The Company is not liable for damages to premises resulting from the furnishing of service including the installation and removal of equipment or facilities and associated wiring, unless the damage is caused by the Company's negligence.

The Company shall be indemnified, defended and held harmless by the Customer and User against all claims, losses, or damages arising from the use of service furnished pursuant to this tariff, involving:

1. Claims for libel, slander, invasion of privacy, or infringement of copyright arising from any communication;

2. Claims for patent infringement arising from combining or using services furnished by the Company in connection with facilities or equipment furnished by others; or
3. All other claims arising out of any act or omission of others relating to services provided pursuant to this tariff.

The Company does not guarantee or make any warranty with respect to services when used in an explosive atmosphere. The Company shall be indemnified, defended, and held harmless by the Customer and User against all claims, losses or damages by any person relating to services provided pursuant to this tariff when used in an explosive atmosphere.

No license under patents (other than the limited license to use) is granted by the Company or shall be implied or arise by estoppel, with respect to any service offered under this tariff. The Company will defend the Customer and User against claims of patent infringement arising solely from the use by the Customer or User of services offered under this tariff and will indemnify such Customer or User for any damages awarded based solely on such claims.

The Company's failure to provide or maintain service under this tariff shall be excused by labor difficulties, governmental orders, civil commotions, natural catastrophe, and other circumstances beyond the Company's reasonable control.

2. OBLIGATIONS OF THE CUSTOMER

The Customer shall be responsible for:

The payment of all applicable charges pursuant to this tariff;

Damage to or loss of the Company's facilities or equipment caused by the acts or omissions of the Customer or the noncompliance by the Customer with these regulations, or by fire or theft or other casualty on the Customer premises, unless caused by the negligence or willful misconduct of the employees or agents of the Company;

Providing at no charge, as specified from time to time by the Company, any needed personnel, equipment, space and power to operate Company facilities and equipment installed on the premises of the Customer, and the level of heating and air conditioning necessary to maintain the proper operating environment or such premises;

Obtaining, maintaining, and otherwise having full responsibility for all rights-of-way and conduit necessary for installation of any associated equipment or facilities used to provide Telecommunications Services to the Customer from the cable building entrance or property line to the location of the equipment or facilities space described above. Any costs associated with obtaining and maintaining the rights-of-way described herein, including the costs of altering the structure to permit installation of the Company-provided equipment or facilities, shall be borne entirely by, and may be charged by the Company to the Customer;

Providing a safe place to work and complying with all laws and regulations regarding the working conditions on the premises at which Company employees, agents and/or suppliers shall be installing or maintaining the Company's facilities and equipment. The Customer may be required to install and maintain Company facilities and equipment within a hazardous area if, in the Company's opinion, injury or damage to the Company's employees or property might result from installation or maintenance in such area by the Company. The Customer shall be responsible for identifying, monitoring, removing and disposing of any hazardous material (e.g. asbestos) prior to any construction or installation work;

Complying with all laws and regulations applicable to, and obtaining all consents, approvals, licenses and permits as may be required with respect to the location of Company facilities and equipment in any Customer premises or the rights-of-way for which the Customer is responsible under this section; and granting or obtaining permission for Company employees, agents and/or suppliers to enter the premises of the Customer for the purpose of installing, inspecting, maintaining, repairing, or upon termination of service as stated herein, removing the facilities or equipment of the Company; and not creating or allowing to be placed, any liens or other encumbrances on the Company's equipment or facilities.

2.1 Claims Against the Company

With respect to any service or facility provided by the Company, the Customer shall indemnify, defend and hold harmless the Company from and against all claims, actions, damages, liabilities, costs and expenses, including reasonable attorneys' fees for:

1. Any loss, destruction or damage to property of the Company or any third party, or the death or injury to persons, including, but not limited to, employees or invitees of either party, to the extent caused by or resulting from the negligent or intentional act or omission of the Customer, its employees, agents, representatives or invitees; or
2. Any claim, loss, damage, expense, or liability for infringement of any copyright, patent, trade secret, or any proprietary or intellectual property right of any third party, arising from any act or omission by the Customer, including, without limitation, use of the Company's services and facilities in a manner not contemplated by the agreement between the Customer and the Company.

2.2 Resale

1. All Company Telecommunications Services are available for resale unless otherwise specifically indicated.
2. Customers, who subscribe to Telecommunications Service and resell this service to others, shall be the Customer of Record. The Customer of Record shall be responsible for complying with all laws and regulations of the State of Pennsylvania which relate in any way to the Customer of Record's provision of local telephone service, including, but not limited to, laws and regulations regarding consumer protection, billing and collection practices, tariffing obligations, and the payment of applicable taxes.

3. The Company will bill the Customer of Record who is at all times responsible for payment of the full amount of all charges incurred. The Company is not responsible for the allocation of usage or charges for resold services. The Customer of Record is responsible for allocating charges to its end-users.
4. The Company will communicate with the Customer of Record with respect to ordering, provisioning, maintenance, repair, billing, collection, and other matters relating to Telecommunication Services. The Company has no obligation to provide notice to, or communicate with the Customer of Record's end-users.
5. With respect to resold services, applications for service as well as requests for additions, rearrangements or discontinuances of service will be accepted only from the Customer of Record.
6. In connection with the marketing of its services, the Customer of Record may not directly or indirectly (1) use the Company's trade names, trademarks, service marks, registered marks or other indicia of origin (or confusingly similar names, marks or other indicia) in a manner that may cause third parties (including the Customer of Record's end-users) to believe that service provided by the Customer of Record is the Company's Telecommunication service; or (2) use the Company's corporate logos, or trade dress (or confusingly similar logos or trade dress).

2.3 Violation of Regulations

When any terminal equipment or communications system is used with Telecommunication Services in violation of any of the provisions of this Tariff, the Company will notify the Customer promptly and take immediate action, appropriate to the circumstances, to protect its services or interests. Such action may include disconnection of the service.

The Customer, upon receipt of written notification from the Company that a violation of Tariff provision and/or improper use is occurring, shall discontinue such violation and/or improper use and give written confirmation to the Company within 10 days that such violation and/or improper use has ceased.

Failure to discontinue such violation and/or improper use and failure to give the written confirmation required within the time stated shall result in disconnection of the Customer's service until the Customer discontinues the violation and/or improper use and complies with the provisions of this Tariff.

3. PAYMENTS AND CHARGES

3.1 Establishment and Reestablishment of Credit

A Customer whose service has been discontinued by the Company for non-payment of past due bills for any telecommunications service will be required to pay all past due bills for telecommunications services or make other arrangements satisfactory to the Company and to

re-establish credit before service is restored or any service started.

3.2 Billing and Collection

The Customer is responsible for payment of all charges for equipment or facilities and services furnished by the Company to the Customer.

The Company will establish a monthly billing date for each Customer account and shall bill all charges incurred by, and credits due to the Customer under this tariff. Recurring charges may be billed in advance of the month(s) in which service is provided in those cases where a surety bond is posted. Usage sensitive charges will be billed for the preceding billing period. Recurring charges and usage sensitive charges for the Federal Government will be billed in arrears. Bill payment is due by the payment date shown on the bill.

When service does not begin on the first day of the billing cycle, or end on the last day of the billing cycle, the charge for the fraction of the billing cycle in which service was furnished will be calculated on a pro rata basis, assuming a 30 day month.

3.3 Billing Disputes

The Customer is responsible for notifying the company of any charges in dispute and the specific basis of such dispute. The Company reserves the right to require such notice to be in writing. All charges not in dispute shall be paid by the Customer by the payment due date. Upon notification of a dispute, the Company shall undertake an investigation of the disputed charges. At the conclusion of the investigation, the Company shall notify the Customer of any amount determined by the Company to be correctly charged and such amount shall become immediately due and owing. Amounts determined by the Company to be correctly charged shall be subject to the late payment charge.

The Customer must provide the Company with notice of a dispute within one hundred twenty (120) days from the bill date unless otherwise provided by law.

3.4 Advance Payments

The Company may require a Customer or Applicant to make an advance payment as a condition of continued or new service, if a surety bond is posted. Advance payments may be required for recurring and nonrecurring charges, estimated usage charges, and other charges and guarantees in such amount as may be deemed necessary by the Company for safeguarding its interests. In addition, where special construction is involved, advance payment of the construction charges quoted may be required at the time of application. The advance payment shall only be applied to any indebtedness for the service and facilities for which the advance payment is made.

3.5 Deposits

The Company may require a deposit, in those cases where a surety bond is posted, or third-party guarantee, of a Customer who cannot establish a credit standing satisfactory to the Company. If

the actual bills of the Customer subsequently rendered prove that the deposit is either insufficient or excessive, the deposit or third-party guarantee may be changed in accordance with the facts. The deposit required by the Company may be equal to the estimated amount of charges for services provided for any period of two high use months exclusive of the highest use month in the past twelve months.

Any such deposit may be held or such third-party guarantee maintained during the continuance of the service until all bills have been paid without arrearage for 12 consecutive months for residential Customers and 24 months for non-residential Customers as security for the payment of any and all amounts accruing for the service. Simple interest is credited to the Customer annually, or upon termination of the service, or upon the return of the deposit by the Company. The rate of interest for Customer deposits is accrued at a rate equal to the prime rate.

A deposit and accrued interest is returned to the Customer, less any amounts due the Company when service is discontinued. Even though a deposit is made, the Customer must still pay bills, including any advance payments, when requested. A Customer's payment of a deposit does not waive or modify the Company's practice of disconnecting service for failure to pay any bills.

3.6 Returned Check Charges

In addition to any late payment charges specified in this tariff, the Customer will be assessed a charge of \$5.00 or the actual administrative cost of recovery (maximum \$25.00) whichever is greater for each check, draft, or electronic funds transfer submitted by the Customer to the Company which a financial institution refuses to honor.

3.7 Period Charge

Except as may otherwise be specified in the Tariff, the minimum period for service is one month. When a service is discontinued prior to the expiration of the minimum period, the minimum period charge will apply. In addition, all nonrecurring charges associated with the provision of the service will be billed.

3.8 Late Payment Charge

All amounts outstanding 25 days or more from the date on which the bill for such amounts is mailed are subject to a late payment charge of .797% for residence Customers and 1.388% for business Customers, compounded monthly. The imposition of the late payment charge in no way alters existing collection and deposit policies. The late payment charge does not apply to the following items:

- any disputed amount; however it is applicable to all undisputed portions of a bill on which a dispute is pending.
- final accounts; however any late payment charges included in the balance on a final statement are still due.

4. CANCELLATION, DISCONTINUANCE AND CHANGES

4.1 Cancellation of Service

When a Customer cancels an application for service prior to the start of service or prior to any special construction, no charges will be imposed except for those specified below.

When, prior to cancellation by the Customer, the Company incurs any expenses in installing the service or in preparing to install the service that it otherwise would not have incurred, a charge equal to the costs the Company incurred, less net salvage, shall apply. In no case shall this charge exceed the sum of the charge for the minimum period of services ordered, including installation charges, and all charges others levy against the Company that would have been chargeable to the Customer had service begun.

When prior to cancellation by the Customer, the Company incurs an expense in connection with special construction, or special arrangements of facilities or equipment, a charge equal to the costs incurred, less net salvage, applies.

The charges described above will be calculated and applied on a case-by-case basis.

If a Customer cancels service before the completion of the term for any reason whatsoever, the Customer agrees to pay to the Company the following:

1. All non-recurring charges reasonably expended by the Company to establish service to the Customer; and
2. Any disconnection, early cancellation, or termination charges reasonably incurred and paid to third parties by the Company; and
3. All recurring charges specified in the applicable tariff for the balance of the then current term.

The above sums shall become due and owing as of the effective date of the cancellation and be payable by the due date on the bill.

4.2 Discontinuance of Service

The Company may discontinue or refuse to furnish any and/or all service(s) to the Customer or Applicant for service without incurring any liability if the Company deems that such action is necessary to prevent or to protect against fraud or to otherwise protect its personnel, agents, facilities, equipment, assets, or services.

The Company may, without incurring any liability, discontinue or suspend service without notice, or refuse service, if:

1. The Customer has undertaken an action or a situation has been created with respect to the Customer's service which creates a danger to life or immediate risk of significant property loss and disconnection will lessen or eliminate the risk or danger; or
2. The Company determines that the Customer has engaged in fraudulent use of its telephone service.

The Company may, without incurring any liability, discontinue or suspend service upon written notice given at least five days in advance for non-residential Customers and twelve days in advance for residential Customers, or refuse service, if:

1. The Customer uses service without payment for the service or the Customer fails to pay any amounts owing to the Company for services to which the Customer subscribes or had subscribed or used; or
2. The Customer has violated a condition established in this Tariff.

The discontinuance of service(s) by the Company pursuant to this Section does not relieve the customer of any obligation to pay the Company for charges due and owing for service(s) furnished up to the time of discontinuance. Such charges are immediately due and payable.

In the event the Company incurs fees or expenses including attorney's fees in collecting or attempting to collect any charges owed the Company, the Customer will be liable to the Company for the payment of all such fees and expenses reasonably incurred.

4.3 Changes in Service

If the Customer makes or requests material changes in circuit engineering, equipment or facility specifications, service parameters, premises locations, or otherwise materially modifies any provision of the application for service, Customer charges shall be adjusted accordingly.

4.4 Restoration of Service

When a Customer's service has been disconnected in accordance with this tariff and the service has been terminated through the completion of a Company service order, service will be re-established only upon the basis of an application for new service.

If any Customer's service is reconnected after having been disconnected in accordance with this tariff but a Company service order to terminate such service has not been completed when such service is reconnected, the Customer may be required to pay a restoration of service charge.

If a service has been suspended or terminated for nonpayment, service will be reconnected when the reason for the disconnect has been removed, which includes charges for services and facilities during the period of suspension and which may include a service restoral fee. If the Customer has a history of payments returned for insufficient funds, the Company may require payment by cash, money order or certified check. If such payment is made by personal check,

service will be restored only upon bank clearance of the check.

4.5 Assignment Or Transfer of Service

The Customer may not assign or transfer its rights or duties in connection with the services and equipment or facilities provided by the Company without the written consent of the Company. The Company may assign its rights and duties without prior notice to or consent of the Customer (a) to any subsidiary, parent company, or affiliate of the Company, (b) pursuant to any sale or transfer of substantially all the assets of the Company, or (c) pursuant to any financing, merger or reorganization of the Company.

5. NOTICES AND COMMUNICATIONS

All notices or other communications required to be given pursuant to this tariff will be in writing except where notice is provided in this tariff. Notices and other communications of either party, and all bills mailed by the Company, shall be presumed to have been delivered to the other party on the third business day following placement of the notice, communication, or bill with the U.S. Mail or a private delivery service, postage prepaid and properly addressed, or when actually received or refused by the addressee, whichever occurs first.

The Company or the Customer shall advise the other party of any changes to the addresses designated for notices, billing or other communications.

6. PROVISION FOR CERTAIN LOCAL TAXES AND FEES

Any assessments, franchise fees, privilege, license, occupation, excise, or other similar fees or taxes whether in a lump sum or at a flat rate, or based on receipts, or based on poles, wire or other utility property units, imposed upon the Company by any governmental authority may be added pro rata, insofar as practical, to the rates and charges stated in the Company's standard schedules, in amounts which in the aggregate for the Company's Customers of any political entity shall be equal to the amount of any such fee or tax upon the Company. Company may, so long as any such tax or fee is in effect, add to the bills of the Customers in such political entity pro rata on the basis of the revenue derived by Company from each such Customer, an amount sufficient to recover any such tax or fee.

7. RATES

Service	NRC	MRC
Connectivity		
144K DSL	\$995	\$159
256K DSL	\$995	\$299
384K DSL	\$995	\$499
512K DSL	\$995	\$599
768K DSL	\$995	\$699

Issued: 04-05-99 Effective: 04-06-99

Issued By: HarvardNet, Inc., 500 Rutherford Avenue, Charlestown, MA 02129
Melanie Haratunian, General Counsel and Director of Regulatory Relations

1.54MBPS \$995 \$1,199

Fractional T1 & T1

128K	\$1,325	\$250
256K	\$1,325	\$370
384K	\$1,325	\$500
512K	\$1,325	\$600
768K	\$1,325	\$700
1.54MBPS	\$1,325	\$1,100

Frame Relay

56K	\$300	\$175
384K	\$300	\$500
1.54MBPS	\$1,325	\$1,100

Availability depends on proximity to Central Office and condition of copper.

ATTACHMENT C

**FINANCIAL RECORDS
(SUBJECT TO SEAL OF CONFIDENTIALITY)**

CERTIFICATE OF SERVICE

I, Anthony J. Mangino hereby certify that true and correct copies of the preceding Petition for Public Convenience and Necessity were served this 2nd day of April, 1999 via Federal Express to the following parties.

Irwin A. Popowsky
Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120

Bernard A. Ryan, Jr.
Small Business Advocate
Commerce Building, Suite 1102
300 North Second Street
Harrisburg, PA 17101

Office of the Attorney General
Bureau of Consumer Protection
Strawberry Square, 14th Floor
Harrisburg, PA 17120

Office of Trial Staff
Office of Special Assistants
Bureau of Consumer Services
Bureau of Fixed Utility Services
Pennsylvania Public Utility
Commission
P.O. Box 3265
Harrisburg, PA 17105-3265



Anthony J. Mangino

ORIGINAL

LEVINE, BLASZAK, BLOCK & BOOTHBY, LLP

2001 L STREET, NW., SUITE 900

WASHINGTON, D.C. 20036

PHONE (202) 857-2550

FAX (202) 223-0833

April 23, 1999

RECEIVED

Office of the Secretary
Pennsylvania Public Utility Commission
B-20, North Office Building
Harrisburg, PA 17105-3265

APR 23 1999

A-310818 F0003

PA PUBLIC UTILITY COMMISSIO
SECRETARY'S BUREAU

Re: Applications of HarvardNet, Inc. to Offer, Render, Furnish, or
Supply Telecommunications Service to the Public in the
Commonwealth of Pennsylvania

To the Commission's Secretary's Office:

On behalf of HarvardNet, Inc. ("HarvardNet"), please find enclosed replacement pages to the Initial Tariff filed in conjunction with HarvardNet's applications to operate as a competitive local exchange carrier, an interexchange carrier and a competitive access provider in Pennsylvania, all of which were filed on April 2, 1999. Pursuant to Item 14 of each application, HarvardNet provided a proposed Initial Tariff (attached to each Application) that covers the services that HarvardNet intends to offer in the State of Pennsylvania. HarvardNet recently discovered that the Initial Tariff filing contained errors on the Original Title Page and Original Pages 3, 11, 12 and 13. HarvardNet is therefore filing herewith an original and three copies of the corrected pages in connection with each application as well as a courtesy copy of the complete, corrected Tariff for each application. Please destroy the tariff pages containing the errors and replace

DOCUMENT
FOLDER

45

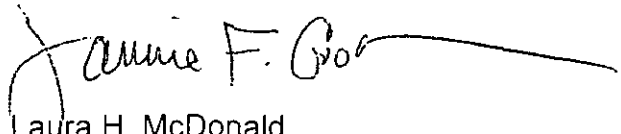
LEVINE, BLASZAK, BLOCK & BOOTHBY, LLP

them with the corrected pages. A copy of this filing also is being forwarded to the parties on the attached service list.

Please date stamp the enclosed, designated, additional copy of this filing and return it in the self-addressed, stamped envelope provided.

If you have any questions concerning this matter, please do not hesitate to contact the undersigned.

Respectfully submitted,

A handwritten signature in black ink that reads "Janine F. Goodman". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Laura H. McDonald
Janine F. Goodman
Levine Blaszak Block & Boothby LLP
2001 L Street, NW, Suite 900
Washington, DC 20036
(202) 857-2550

Counsel for HarvardNet, Inc.

Certificate of Service

I, Anthony J. Mangino, hereby certify that true and correct copies of the Tariff revisions of HarvardNet, Inc. in conjunction with its applications to operate as a competitive local exchange carrier, an interexchange carrier and a competitive access provider were served this April 23, 1999, via Federal Express, upon the following parties:

RECEIVED

APR 23 1999


Office of the Secretary
PA PUC
B-20, North Office Building
Harrisburg, PA 17105-3265

Office of Trial Staff
Office of Special Assistants
Bureau of Consumer Services
Bureau of Fixed Utility Services
PA PUC
B-20, North Office Building
Harrisburg, PA 17105-3265

Bernard A. Ryan Jr.
Small Business Advocate
Commerce Building, Suite 1102
300 North Second Street
Harrisburg, PA 17101

Office of the Attorney General
Bureau of Consumer Protection
Strawberry Square, 14th Floor
Harrisburg, PA 17120

Irwin A. Popowsky
Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923



Anthony J. Mangino

Date
4/23/99

TARIFF SCHEDULES
APPLICABLE TO
TELECOMMUNICATION SERVICES
FURNISHED BY
HARVARDNET, INC.

RECEIVED

APR 23 1999

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

WITHIN THE STATE OF PENNSYLVANIA

This tariff contains the descriptions, regulations and rates applicable to telecommunications services provided within the state of Pennsylvania by HarvardNet, Inc. ("HarvardNet"). Copies of this tariff may be inspected, during normal business hours at the Company's headquarters at 500 Rutherford Avenue, Charlestown, MA 02129 or at the Pennsylvania Public Utilities Commission. Currently, HarvardNet, Inc. ("Company")'s tariffed offerings are limited to dedicated services offered on a facilities and/or resale basis. Company does not provide service to residential customers or switched Telecommunications services at this time.

STATE OF PENNSYLVANIA
TELECOMMUNICATIONS SERVICES
TARIFF

INTRODUCTION

HarvardNet, Inc. ("Company")'s Telecommunication Services provide high-speed dedicated services on a facilities and/or resale basis within the state of Pennsylvania. Services, features and functions will be provided where facilities and billing capability are available.

The provision of Telecommunications Services is subject to existing regulations, terms and conditions specified in this Tariff, and may be revised, added to or supplemented. When Telecommunications Services are provided in conjunction with intrastate and interstate services, the intrastate and interstate services are subject to existing regulations, terms and conditions specified in the company's current toll tariffs as revised, added to or supplemented.

1. TERMS AND CONDITIONS

Customers may be required to enter into written service orders which shall contain or reference a specific description of the service ordered, the rates to be charged, the duration of the services, and the terms and conditions stated herein. The Customer may also be required to execute any other documents as may reasonably be requested by the Company in connection with the provisioning of Telecommunications Service.

1.1 Provision of Equipment and Facilities

The Customer shall be responsible for the payment of service charges, as set forth herein, for visits by the Company's agents or employees to the premises of the Customer when the service difficulty or trouble report results from the use of equipment or facilities provided by any party other than the Company, including but not limited to the Customer.

1.2 Customer Equipment

The Customer may transmit or receive information or signals via the facilities of the Company by use of Customer-provided equipment.

Customer-provided equipment on the Customer premises, and the electric power consumed by such equipment, shall be provided by and maintained at the expense of the Customer.

The Customer is responsible for ensuring that Customer-provided equipment and wiring connected to Company equipment and facilities is compatible with such Company-provided equipment and facilities. The magnitude and character of the voltages and currents impressed on Company-provided equipment and facilities by the connection, operation or maintenance of such Customer-provided equipment and wiring must be such as not to cause damage to the

1. The Customer has undertaken an action or a situation has been created with respect to the Customer's service which creates a danger to life or immediate risk of significant property loss and disconnection will lessen or eliminate the risk or danger; or
2. The Company determines that the Customer has engaged in fraudulent use of its telephone service.

The Company may, without incurring any liability, discontinue or suspend service upon written notice given at least five days in advance, or refuse service, if:

1. The Customer uses service without payment for the service or the Customer fails to pay any amounts owing to the Company for services to which the Customer subscribes or had subscribed or used; or
2. The Customer has violated a condition established in this Tariff.

The discontinuance of service(s) by the Company pursuant to this Section does not relieve the customer of any obligation to pay the Company for charges due and owing for service(s) furnished up to the time of discontinuance. Such charges are immediately due and payable.

In the event the Company incurs fees or expenses including attorney's fees in collecting or attempting to collect any charges owed the Company, the Customer will be liable to the Company for the payment of all such fees and expenses reasonably incurred.

4.3 Changes in Service

If the Customer makes or requests material changes in circuit engineering, equipment or facility specifications, service parameters, premises locations, or otherwise materially modifies any provision of the application for service, Customer charges shall be adjusted accordingly.

4.4 Restoration of Service

When a Customer's service has been disconnected in accordance with this tariff and the service has been terminated through the completion of a Company service order, service will be re-established only upon the basis of an application for new service.

If any Customer's service is reconnected after having been disconnected in accordance with this tariff but a Company service order to terminate such service has not been completed when such service is reconnected, the Customer may be required to pay a restoration of service charge.

~~If a service has been suspended or terminated for nonpayment, service will be reconnected when the reason for the disconnect has been removed, which includes charges for services and facilities during the period of suspension and which may include a service restoral fee. If the Customer has a history of payments returned for insufficient funds, the Company may require payment by cash, money order or certified check. If such payment is made by personal check,~~

service will be restored only upon bank clearance of the check.

4.5 Assignment Or Transfer of Service

The Customer may not assign or transfer its rights or duties in connection with the services and equipment or facilities provided by the Company without the written consent of the Company. The Company may assign its rights and duties without prior notice to or consent of the Customer (a) to any subsidiary, parent company, or affiliate of the Company, (b) pursuant to any sale or transfer of substantially all the assets of the Company, or (c) pursuant to any financing, merger or reorganization of the Company.

5. NOTICES AND COMMUNICATIONS

All notices or other communications required to be given pursuant to this tariff will be in writing except where notice is provided in this tariff. Notices and other communications of either party, and all bills mailed by the Company, shall be presumed to have been delivered to the other party on the third business day following placement of the notice, communication, or bill with the U.S. Mail or a private delivery service, postage prepaid and properly addressed, or when actually received or refused by the addressee, whichever occurs first.

The Company or the Customer shall advise the other party of any changes to the addresses designated for notices, billing or other communications.

6. PROVISION FOR CERTAIN LOCAL TAXES AND FEES

Any assessments, franchise fees, privilege, license, occupation, excise, or other similar fees or taxes whether in a lump sum or at a flat rate, or based on receipts, or based on poles, wire or other utility property units, imposed upon the Company by any governmental authority may be added pro rata, insofar as practical, to the rates and charges stated in the Company's standard schedules, in amounts which in the aggregate for the Company's Customers of any political entity shall be equal to the amount of any such fee or tax upon the Company. Company may, so long as any such tax or fee is in effect, add to the bills of the Customers in such political entity pro rata on the basis of the revenue derived by Company from each such Customer, an amount sufficient to recover any such tax or fee.

7. RATES

Data Rate	Monthly Port Charge	Installation
256k	\$119	\$200
384k	\$139	\$200
512k	\$159	\$200
768k	\$199	\$200
1.54Mbps	\$249	\$200

Issued: 04-05-99 Effective: 04-06-99

Issued By: HarvardNet, Inc., 500 Rutherford Avenue, Charlestown, MA 02129
 Melanie Haratunian, General Counsel and Director of Regulatory Relations

Availability depends on proximity to Central Office and condition of copper.

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P. O. BOX 3265, HARRISBURG PA 17105-3265

May 14, 1999

IN REPLY PLEASE
REFER TO OUR FILE

A-310818
A-310818F0002
A-310818F0003

Laura H. McDonald, Esq.
Janine F. Goodman, Esq.
Levine, Laszak, Block & Boothby, L.L.P.
2001 L Street, N.W., Suite 900
Washington, DC 20036

Dear Ms. McDonald:

Please be advised that the Application of Harvardnet, Inc., for approval to provide telecommunications services as an Interexchange Carrier, Competitive Local Exchange Carrier and a Competitive Access Provider, to the public in the Commonwealth of Pennsylvania, has been reviewed and found to be in compliance with the filing requirements of the Commission's Opinion and Order entered June 3, 1996, at Docket Number M-00960799.

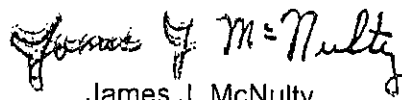
The protest period for this application expired on April 17, 1999.

Since no protests have been received within the time period, this matter is being referred to the Bureau of Fixed Utility Services to schedule it for consideration by the Commission at Public Meeting.

Please be advised that you now have provisional authority to do business in Pennsylvania.

Should you have any further questions concerning this matter, please do not hesitate to contact me.

Sincerely,


James J. McNulty
Secretary

JJM:ddt

cc: Melanie Haratunian, Esq.
Lloyd R. Persun, Esq.

DOCUMENT
FOLDER

DOCKETED
MAY 14 1999

COMMONWEALTH OF PENNSYLVANIA

DATE: May 14, 1999

SUBJECT: A-310818
A-310818 F0002
A-310818 F0003

TO: Bureau of Fixed Utility Services

FROM: James J. McNulty, Secretary *ddt*

Application of HarvardNet, Inc

We attach hereto a copy of the Application of HarvardNet, Inc., for approval to provide telecommunication services as an Interexchange Carrier, Competitive Local Exchange Carrier and Competitive Access Provider to the public in the Commonwealth of Pennsylvania, which has been captioned and docketed to the above number.

The Protest period for this application expired on April 17, 1999.

Since no protests have been received within this time period, this matter is being referred to your Bureau to schedule it for consideration by the Commission at Public Meeting.

ddt

Attachment

DOCKETED
MAY 14 1999

**DOCUMENT
FOLDER**