AMENDMENT NO. 1 (this "Amendment") dated as of December 14, 1999, to the AMENDED AND RESTATED AGREEMENT OF LIMITED PARTNERSHIP dated as of December 8, 1999 (the "Partnership Agreement"), of CROSS ATLANTIC TECHNOLOGY FUND, L.P., a Delaware limited partnership (the "Partnership").

The parties wish to amend the Partnership Agreement to the extent set forth herein.

NOW, THEREFORE, the parties hereby agree as follows:

- 1. The first clause of the definition of "Cause Event" in Section 1.1 of the Partnership Agreement is hereby amended to read as follows:
- "Cause Event" means the occurrence of any of the following events to the extent that such event would be reasonably likely to result in a material adverse effect on the business, operations, tax liability, affairs or condition (financial or otherwise) of the General Partner, the Partnership or the Investment Manager:
- 2. The definition of "Insolvency" in Section 1.1 of the Partnership Agreement is hereby amended to read in its entirety as follows:
- "Insolvency" means the admission by the General Partner, Investment Manager or the Partnership in writing that it is unable to pay its debts generally as they come due, the taking by the General Partner, Investment Manager or the Partnership of any action in furtherance of any petition, application or proceeding relating to itself under any bankruptcy, reorganization, arrangement or similar law, the General Partner, Investment Manager or the Partnership becoming insolvent or being unable to pay its obligations and debts when they become due or the entry of an order for relief in any involuntary case against the General Partner, the Investment Manager, or the Partnership under any bankruptcy, reorganization, arrangement or similar law.
- 3. The definition of "Key Person" in Section 1.1 of the Partnership Agreement is hereby amended to read in its entirety as follows:
- "Key Person" shall mean Donald Caldwell and any other individual who shall succeed Mr. Caldwell as a Key Person, with the consent of the Valuation Committee, including the consent of the designee of each of PSERS and SERS on the Valuation Committee.
- 4. The definition of "Valuation Committee" in Section 1.1 of the Partnership Agreement is hereby amended to read in its entirety as follows:
- "Valuation Committee" shall mean that committee consisting of up to a maximum of up to five members, one of whom shall be a designee of PSERS for so long as PSERS shall be a Limited Partner, one of whom shall be a designee of SERS for so long as SERS shall be a Limited Partner, and the balance of whom shall be individuals who are representatives of the Limited Partners (other than Affiliates of the General Partner) who shall be

designated by the General Partner and approved by a Majority in Interest of the Limited Partners, which members shall initially be John Lane (PSERS' designee), Diane Sterthous (SERS' designee), Ed Hyde, Ted McCaffrey and Nick Zarcone; provided, however, that the General Partner, with the consent of a majority of remaining Valuation Committee members or a Majority in Interest of the Limited Partners, may at any time remove any person from the Valuation Committee (other than the person designated by PSERS or SERS), and any substitute or additional members of the Valuation Committee (other than the person designated by PSERS or SERS) shall be designated by the General Partner and approved by vote of a majority of the remaining Valuation Committee members or a Majority in Interest of the Limited Partners.

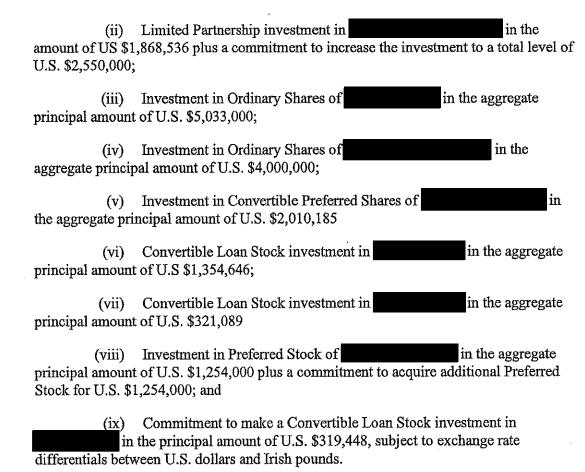
- 5. Section 1.1 of the Partnership Agreement is hereby amended by adding thereto the following definitions in alphabetical order:
- "BHCA" shall mean the Bank Holding Company Act of 1956, as amended, and the rules and regulations promulgated thereunder.
- "SERS" shall mean Commonwealth of Pennsylvania State Employees' Retirement System.
- 6. Section 1.7(b)(iii) of the Partnership Agreement is hereby amended to read in its entirety as follows:
  - (iii) [Intentionally Omitted];
- 7. Section 1.7(b)(vii) of the Partnership Agreement is hereby amended to read in its entirety as follows:
  - (vii) [Intentionally Omitted];
- 8. Section 1.7(b)(x) of the Partnership Agreement is hereby amended to read in its entirety as follows:
  - (x) [Intentionally Omitted];
- 9. Section 1.7 of the Partnership Agreement is hereby amended by adding thereto the following paragraph (c):
- (c) Notwithstanding any other provision of this Section 1.7, the Partnership shall not:
- (i) allow any assets of the Partnership to become commingled with the assets of the General Partner, the Investment Manager, any Affiliate of the General Partner or the Investment Manager, or any officer, director, manager or direct or indirect partner, stockholder or other equity holder of the General Partner or the Investment Manager;
  - (ii) elect to be taxable as a corporation for U.S. federal income tax purposes;

- (iii) invest in Securities that are derivatives (except for the express purpose of hedging); or
- (iv) invest in Securities that are issued by an issuer whose principal place of business is located outside of, or that is organized under laws other than those of, the United States of America, England, Scotland, Wales, Northern Ireland, the Republic of Ireland, Canada or a political subdivision of the foregoing, unless the Partnership shall first obtain an opinion of counsel addressed to the Partnership and the Partners to the effect that the limited liability of the Limited Partners in respect of liabilities of the Partnership will be respected under the laws of the jurisdiction in which such principal place of business is located and such issuer is organized.

10. The last sentence of Section 2.1(a) of the Partnership Agreement is hereby amended to read in its entirety as follows:

In addition, at the request of the General Partner, and subject to prior notice to the Valuation Committee, a Limited Partner may provide advisory services to a portfolio company.

- 11. Section 2.3(b) of the Partnership Agreement is hereby amended to read in its entirety as follows:
- (b) The General Partner shall be permitted to offer to one or more persons or entities, including without limitation, Limited Partners or Affiliates of Limited Partners, the opportunity to co-invest with the Partnership from time to time in entities in which the Partnership invests; provided, however, if the Partnership shall make any co-investment opportunity available to one or more Limited Partners, then all Limited Partners shall be given the right to participate in such co-investment in an amount equal to no less than its pro rata share of such co-investment opportunity (which pro rata share shall be based on the relative Commitments of all Limited Partners); provided, further, that no such co-investment under this paragraph (b) shall be permitted unless and until the General Partner shall have determined that the Partnership has invested in any such entity the appropriate amount considered prudent by the General Partner.
- 12. Section 2.3(d) of the Partnership Agreement is hereby amended by to read in its entirety as follows:
- (d) Notwithstanding anything in this Agreement to the contrary, the Partnership shall be permitted to purchase the following Securities at cost from Affiliates of the General Partner as soon as is practicable following the first capital contribution made by the Limited Partners under this Agreement:
  - (i) Convertible Loan Stock investment in in the aggregate principal amount of U.S. \$489,273 plus a commitment to acquire an additional amount of Convertible Loan Stock for U.S. \$479,172, subject to the exchange rate differential between U.S. dollars and Irish pounds;



In lieu of purchasing the above Securities directly, each of the Partners authorizes the Partnership to purchase the Securities of one or more Affiliates of the General Partner so long as each such Affiliate shall have conducted no business other than the investment in one or more of the above Securities and the amount paid by the Partnership for the Securities of such Affiliate shall equal the cost of the underlying Securities.

13. The last sentence of Section 2.4(c) of the Partnership Agreement is hereby amended to read in its entirety as follows:

Anything contained herein to the contrary notwithstanding, the right of withdrawal of an ERISA Partner or Governmental Plan Partner under this Section 2.4(c) without penalty shall be the sole and exclusive remedy of such Partner for a breach by the General Partner of any of its agreements or covenants contained in this Section 2.4, except in the case of an intentional breach of Section 2.4(b) or a breach of Section 2.4(b) resulting from the gross negligence of the General Partner.

14. The first sentence of Section 2.4(e) of the Partnership Agreement is hereby amended by adding the following immediately after the word "withdrawal" on the eighth line of such Section: "without regard to the application of Section 4(k) of the BHCA".

- 15. Section 3.1(b) of the Partnership Agreement is hereby amended to read in its entirety as follows:
- (b) In addition, notwithstanding anything to the contrary contained herein, from and after the date on which the Partnership shall have made indemnification payments on two occasions in excess of \$500,000 to one or more Indemnified Persons in respect of two matters for which indemnification is required hereunder, neither nor PSERS nor SERS shall have any further obligation to fund any capital calls, except to the extent necessary to fund (i) Operating Expenses of the Partnership, (ii) follow-on investments and (iii) binding written commitments to make investments entered into prior to the second of such indemnification payments; and the Commitments of SERS, PSERS and shall be reduced to the extent not required to be contributed under this Section (except for purposes of calculating the Management Fee). Further, SERS, PSERS and shall have no interest in, nor receive any allocations or distributions in respect of, any Portfolio Securities acquired by the Partnership (other than investments described in clauses (ii) and (iii) above) after their obligations to contribute have been reduced hereunder.

- 16. Section 3.4 of the Partnership Agreement is hereby amended by adding thereto the following paragraph (c):
- (c) Anything contained in this Section 3.4 or Section 3.6 to the contrary notwithstanding, any Regulated Partner may elect not to participate in the allocation of Net Profits or Net Losses attributable to an investment made by the Partnership during the immediately preceding fiscal quarter if such Partner shall deliver to the General Partner an opinion of counsel (which counsel shall be reasonably acceptable to the General Partner, in house counsel with experience in the subject matter being acceptable) to the effect that such allocation could reasonably be expected to result in a material violation of the BHCA, without regard to Section 4(k) thereof, by such Partner. The election and legal opinion referred to in the previous sentence shall be delivered to the General Partner at any time prior to the last day of the fiscal quarter in which a Limited Partner shall be notified of the investment by the Partnership. If a Regulated Partner shall make an election under this paragraph (c) and the General Partner is not able to cure the circumstances giving rise to such election (without selling the Security giving rise to the circumstances) to the reasonable satisfaction of such Partner, then all Net Profits, Net Losses and Operating Expenses attributable to such Securities otherwise allocable to such Partner and all distributions otherwise distributable to such Partner with respect to such Securities after the delivery of such notice by such Partner shall be allocated and distributed to all other Partners (including the General Partner) in accordance with Section 3.4(a) and Section 3.6, and the Commitment of such Limited Partner shall be reduced, effective as of the date of delivery of such notice by such Partner, by an amount equal to the Partnership's cost of such Securities times the percentage determined by dividing such Partner's Commitment at the date on which such investment is made by the Commitments of all Partners on such date; and an amount equal to such reduction of such Partner's Commitment as aforesaid shall be repaid to such Partner in cash or by credit against future capital calls owing by such Partner hereunder.
- 17. Section 3.5(a)(ii) of the Partnership Agreement is hereby amended to read in its entirety as follows:

(ii) a Publicly Traded Security traded in the over-the-counter market shall be valued on any day at the average of its last bid price (or, in the case of securities listed on the Nasdaq National Market, at the last sale price) on such day and the ten preceding and succeeding trading days (except that for purposes of making any distribution of Securities in kind, such Securities shall be valued at the average of its last bid price (or, in the case of securities listed on the Nasdaq National Market, at the last sale price) on the ten trading days preceding the first business day preceding the date of distribution); and

18. The first sentence of Section 3.6(b) of the Partnership Agreement is hereby amended to read in its entirety as follows:

Subject to Section 3.6(f), the Partnership may at any time distribute Securities in kind, each such distribution to be made in the same proportion among all Partners.

- 19. Section 3.6(f) of the Partnership Agreement is hereby amended by adding immediately after the word "regulation" on the third line thereof the following: (without regard to the application of Section 4(k) of the BHCA to any Regulated Partner).
- 20. Section 4.6 of the Partnership Agreement is hereby amended by adding thereto immediately after the word "permitted" on the second line thereof the following: except as provided in Section 2.4(e).
- 21. The first sentence of Section 6.6(b) of the Partnership Agreement is hereby amended to read in its entirety as follows:

Any interest in the Partnership by a Regulated Partner, that is determined at the time of admission of that Regulated Partner to be in excess of 4.99% (or such greater percentage as may be allowed by the BHCA, but without regard to the application of Section 4(k) of the BHCA) of the interests of Limited Partners, excluding for purposes of calculating this percentage portions of other interests that are non-voting interests pursuant to this Section 6.6 (collectively, the "Non-Voting Interests"), but including for purposes of calculating this percentage Limited Partnership interests owned by any Affiliates of that Regulated Partner, shall be a Non-Voting Interest (whether or not subsequently transferred in whole or in part to any other person) except as provided in the following sentence and except that no Interest held by a Regulated Partner shall be deemed to be a Non-Voting Interest in connection with any vote or consent by the Limited Partners with respect to the issuance of additional amounts or classes of interests in the Partnership that are senior to the Interests held by the Limited Partners or the dissolution of the Partnership.

- 22. Except as amended hereby, the Partnership Agreement shall remain in full force and effect.
- 23. This Amendment may be executed in any number of counterparts and when so executed, all of such counterparts shall constitute a single instrument binding upon all parties notwithstanding the fact that all parties are not signatories to the original or to the same counterpart.

24. This Amendment shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to principals governing conflicts of laws.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

## GENERAL PARTNER:

XATF MANAGEMENT, L.P. By: Cross Atlantic Capital Partners, Inc. its General Partner

By:\_\_\_\_\_ Name:/

Title:

LIMITED PARTNERS:

## COMMONWEALTH OF PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Name: John C. Lane
Title: Chief Investment Officer

Name: Dale H. Everhart Title: Executive Director

Approved for form and legality:

Thomas E. Ross, Chief Counsel Public School

Employees' Retirement System

Chief Deputy Attorney General Office of Attorney

General

Deputy General Counsel Office of General Counsel

Chief Deputy Attorney General Office of Attorney General

Deputy General Counsel Office of General Counsel