UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

PC CONNECTION, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

(I.R.S. Employer Identification No.)

03054

02-0513618

730 Milford Road, Merrimack, New Hampshire

(Address of Principal Executive Offices)

(Zip Code)

Amended and Restated 1997 Employee Stock Purchase Plan

(Full Title of the Plan)

Timothy McGrath
Chief Executive Officer
PC Connection, Inc.
730 Milford Road
Merrimack, New Hampshire 03054
(Name and Address of Agent For Service)

(603) 683-2000

(Telephone Number, Including Area Code, of Agent For Service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

| Large accelerated filer \square | Accelerated filer \boxtimes |
|--------------------------------------|------------------------------------|
| Non-accelerated filer $\ \square$ | Smaller reporting company $\ \Box$ |
| | Emerging growth company $\ \Box$ |
| hock if a smaller reporting company) | |

(Do not check if a smaller reporting company) $\,$

CALCULATION OF REGISTRATION FEE

| Title of Securities | Amount to be | Proposed Maximum | Proposed Maximum | Amount of Registration |
|--|-------------------|--------------------------|--------------------------|------------------------|
| to be Registered | Registered (1) | Offering Price Per Share | Aggregate Offering Price | Fee |
| Common Stock, \$0.01 par value per share | 25,000 shares (2) | \$26.105 (3) | \$652,625 (3) | \$81.26 |

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Consists of 25,000 shares issuable under the Amended and Restated 1997 Employee Stock Purchase Plan pursuant to the terms of such plan.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Global Select Market on March 8, 2018.

STATEMENT OF INCORPORATION BY REFERENCE

Except as otherwise set forth below, this registration statement on Form S-8 incorporates by reference the contents of the registration statements on Form S-8, File Nos. 333-202642, 333-179796, 333-161172, and 333-130389 relating to the Registrant's Amended and Restated 1997 Employee Stock Purchase Plan.

On February 13, 2018, the Board of Directors of the Registrant approved, subject to stockholder approval, an amendment to increase, in aggregate, the number of shares available for issuance under the Registrant's Amended and Restated 1997 Employee Stock Purchase Plan, as amended, by 25,000 shares. The Registrant intends to seek stockholder approval for such increase, but does not expect to obtain such approval prior to the date of the 2018 Annual Meeting of Stockholders of the Registrant, and cannot assure participants that such approval will ever be obtained. While the Registrant may grant options relating to the additional 25,000 shares prior to obtaining stockholder approval for the increase, such options will not become exercisable unless and until stockholders approve the increase. In the event stockholder approval is not obtained, such options will be cancelled and become null and void.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The Exhibit Index immediately preceding the exhibits is incorporated by reference.

INDEX TO EXHIBITS

| Number | Description |
|--|---|
| 4.1 (1) | Amended and Restated Certificate of Incorporation of the Registrant, as amended |
| 4.2 (2) | Amended and Restated By-Laws of the Registrant |
| 5.1 | Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant |
| 23.1 | Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1) |
| 23.2 | Consent of Deloitte & Touche LLP |
| 24.1 | Power of attorney (included on the signature pages of this registration statement) |
| 99.1 (3) | Amended and Restated 1997 Employee Stock Purchase Plan, as amended |
| (1) Incorporated by reference from the exhibits filed with the Company's registration statement (333-63272) on Form S-4 filed under the Securities Act of 1933 on June 19, 2001. | |
| (2) | Previously filed with the Securities and Exchange Commission as an Exhibit to the Registrant's current report on Form 8-K, filed on January 9, 2008. |
| (3) | Previously filed with the Securities and Exchange Commission as an Annex to the Registrant's proxy statement pursuant to Section 14(a), filed on April 9, 2015. |

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Merrimack, State of New Hampshire, on this 15th day of March 2018.

PC CONNECTION, INC.

By:/s/ TIMOTHY MCGRATH
Timothy McGrath
Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of PC Connection, Inc., hereby severally constitute and appoint Patricia Gallup and David Hall, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable PC Connection, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|---|---|----------------|
| /s/ TIMOTHY MCGRATH Timothy McGrath | President and Chief Executive Officer (Principal Executive Officer) | March 15, 2018 |
| /S/ G. WILLIAM SCHULZE G.William Schulze | Vice President and Interim Treasurer and Chief Financial Officer (Principal Financial and Accounting Officer) | March 15, 2018 |
| /S/ PATRICIA GALLUP Patricia Gallup | Chairman of the Board | March 15, 2018 |
| /S/ JOSEPH BAUTE Joseph Baute | Vice Chairman of the Board | March 15, 2018 |
| /S/ DAVID BEFFA-NEGRINI David Beffa-Negrini | Director | March 15, 2018 |
| /S/ BARBARA DUCKETT Barbara Duckett | Director | March 15, 2018 |
| /S/ JACK FERGUSON Jack Ferguson | Director | March 15, 2018 |
| /S/ DAVID HALL David Hall | Director | March 15, 2018 |

WILMERHALE

March 15, 2018

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PC Connection, Inc. 730 Milford Road Merrimack, New Hampshire 03054

Re: Amended and Restated 1997 Stock Incentive Plan

Ladies and Gentlemen:

Berlin

Beijing

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 25,000 shares of common stock, \$0.01 par value per share (the "Shares"), of PC Connection, Inc., a Delaware corporation (the "Company"), issuable under the Company's Amended and Restated 1997 Employee Stock Purchase Plan (the "Plan").

We have examined the Certificate of Incorporation and By-Laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Boston Brussels Frankfurt London Los Angeles New York Oxford Palo Alto Waltham Washington



PC Connection, Inc. March 15, 2018 Page 2

Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ JAY BOTHWICK

Jay Bothwick, Partner

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our reports dated March 9, 2018, relating to the consolidated financial statements and financial statement schedule of PC Connection, Inc., and the effectiveness of PC Connection, Inc.'s internal control over financial reporting, appearing in the Annual Report on Form 10-K of PC Connection, Inc. for the year ended December 31, 2017.

| /s/ Deloitte & Touche LLP | |
|---------------------------|--|
| | |

Boston, Massachusetts March 15, 2018