UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of December 2019

Commission File Number: 001-35126

21Vianet Group, Inc.

Guanjie Building, Southeast 1st Floor, 10# Jiuxianqiao East Road, Chaoyang District Beijing 100016 The People's Republic of China (86 10) 8456 2121

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F x Form 40-F o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): o

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

21 Vianet Group, Inc.

By : /s/ Sharon Xiao Liu

Name : Sharon Xiao Liu

Title : Chief Financial Officer

Date: December 5, 2019

Exhibit 99.1 — Press Release

21Vianet Announces US\$20 Million Share Repurchase Program

BEIJING, December 4, 2019 (GLOBE NEWSWIRE) — 21Vianet Group, Inc. (Nasdaq: VNET) ("21Vianet" or the "Company"), a leading carrier- and cloudneutral Internet data center services provider in China, today announced that its board of directors has approved a share repurchase program to repurchase up to US\$20 million worth of its American Depositary Shares ("ADSs"), representing its Class A ordinary shares, during a 13-month period ending on December 31, 2020.

Under the share repurchase program, 21Vianet may purchase its ADSs through various means, including open market transactions, privately negotiated transactions, any combination thereof or other legally permissible means. The Company may effect repurchase transactions in compliance with Rule 10b5-1 and Rule 10b-18 of the Securities Exchange Act of 1934, as amended. The number of ADSs repurchased and the timing of repurchases will depend on a number of factors, including, but not limited to, price, trading volume and general market conditions, along with 21Vianet's working capital requirements, general business conditions and other factors. 21Vianet's board of directors will review the share repurchase program periodically, and may modify, suspend or terminate the share repurchase program at any time.

About 21Vianet

21Vianet Group, Inc. is a leading carrier- and cloud-neutral Internet data center services provider in China. 21Vianet provides hosting and related services, including IDC services, cloud services, and business VPN services to improve the reliability, security and speed of its customers' Internet infrastructure. Customers may locate their servers and equipment in 21Vianet's data centers and connect to China's Internet backbone. 21Vianet operates in more than 30 cities throughout China, servicing a diversified and loyal base of nearly 5,000 hosting and related enterprise customers that span numerous industries ranging from Internet companies to government entities and blue-chip enterprises to small- to mid-sized enterprises.

Safe Harbor Statement

This announcement contains forward-looking statements. These forward-looking statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements can be identified by terminology such as "will," "expects," "anticipates," "future," "intends," "plans," "believes," "estimates" and similar statements. Forward-looking statements involve inherent risks and uncertainties. A number of factors could cause actual results to differ materially from those contained in any forward-looking statement. Further information regarding these and other risks is included in 21Vianet's reports filed with, or furnished to, the Securities and Exchange Commission. All information provided in this press release and in the attachments is as of the date of this press release, and 21Vianet undertakes no duty to update such information, except as required under applicable law.

Investor Relations Contacts:

21Vianet Group, Inc.

Rene Jiang +86 10 8456 2121 IR@21Vianet.com

Julia Jiang +86 10 8456 2121 IR@21Vianet.com

ICR, Inc.

Jack Wang +1 (646) 405-4922 IR@21Vianet.com