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 January 2023

Commission file number: 001-41334

RAIL VISION LTD.

(Translation of registrant's name into English)

15 Ha'Tidhar St Ra'anana, 4366517 Israel

(Address of 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 ⊠ Form 40-F □

CONTENTS

Attached hereto and incorporated herein is the Registrant's press release issued on January 19, 2023, titled "Rail Vision Appoints Rail Industry Veteran Mark Cleobury as Chairman."

The first, second, third, fourth and seventh paragraphs and the section titled "Forward-Looking Statements" in the press release attached as Exhibit 99.1 are incorporated by reference into the Registrant's Registration Statement on Form S-8 (File No. 333-265968), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

Exhibit No. 99.1 Press release issued by Rail Vision Ltd. on January 19, 2023, titled "Rail Vision Appoints Rail Industry Veteran Mark Cleobury as Chairman."

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.

Rail Vision Ltd.

Date: January 19, 2023 By: /s/ Ofer Naveh

Name: Ofer Naveh

Rail Vision Appoints Rail Industry Veteran Mark Cleobury as Chairman

Cleobury is currently Senior VP of Knorr-Bremse's Rail Systems Division

Ra'anana, Israel, Jan. 19, 2023 (GLOBE NEWSWIRE) -- Rail Vision Ltd. (the "Company") (Nasdaq: RVSN), a technology company that is seeking to revolutionize railway safety and the data-related market, today announced the appointment of an existing director, Mark Cleobury, as Chairman of the Board

Cleobury brings more than four decades of global experience in the rail industry. He currently serves as Senior Vice President of Knorr-Bremse's Rail Systems Division, and previously held positions of increasing responsibility at Knorr-Bremse, including serving as a Member of the Management Board of Knorr-Bremse Systems for Rail, Vice President Sales and Systems for Client Management Trains, Manager Sales and Systems Trains, Key Account Manager, and Project Manager.

In addition to executive roles during his 20-year tenure at Knorr-Bremse, Cleobury held several global directorship roles within the group, including serving as Vice President for the Knorr-Bremse Company in the U.S., a Director of Knorr-Bremse Investment (UK) Ltd in the UK, Chairman of Knorr-Bremse Nordic Rail Services in Sweden, a Director of Knorr-Bremse Rail Systems (UK) Ltd in the UK, a Member of the Board of Knorr-Bremse Rail Systems Italia S.r.L in Italy, a Member of the Supervisory Board of Knorr-Bremse systemy Kolejowe Polska Sp. Zoo in Poland, a Director of Knorr-Bremse Systemse Ferroviares France SA in France, Consiglio D'Amministrazione at Microelettrica Scientifica s.p.a in Italy, a Director of Knorr-Bremse Systems for Railways in Russia, and a Director of Knorr-Bremse 1520 in Russia.

Prior to joining Knorr-Bremse, Cleobury served as Head of Sales and Project Planning at ZF Bahntechnik GmbH in Friedrichshafen Germany, Head of Sales and Prokurist at ZF Hurth Gotha GmbH in Gotha Germany, and several roles at Hurth (GB) Ltd, in Leamington Spa, England, including Sales Manager and Company Secretary, Manager Transmission Division, and Specialist Sales Engineer.

"Mark's appointment to Chairman of the Board comes at a transformational time for Rail Vision as we enter a period of expected accelerated growth," commented Rail Vision CEO Shahar Hania. "I believe Mark's wealth of experience will prove invaluable to Rail Vision as we continue to drive our mission of becoming a global leader in railway obstacle detection and data solutions."

Commenting on his appointment, Cleobury said, "I am honored to accept this role at such an exciting time for the Company. Rail Vision is at the forefront of technology that is providing increased safety and efficiency to rail operators around the world, while also reducing their cost and environmental footprint. I look forward to contributing my expertise in the rail industry to drive further success for our customers and shareholders."

Cleobury succeeds Shmuel Donnerstein who has served as Rail Vision's Chairman since 2020. Donnerstein will continue to serve Rail Vision as a board member.

"I'm confident that Mark is the right person to take Rail Vision into the future as we accelerate our commercialization strategy," commented Donnerstein. "Mark is bringing his vast experience and reputation in the rail industry, and I believe he has the ability to guide Rail Vision to market leadership using our current technology innovations."

"We want to thank Shmuel for his valuable contributions to Rail Vision. As Chairman over the past two and half years, he helped us raise the necessary capital to further the development of our technology solutions and played an instrumental role on our path to commercialization," added Hania.

About Rail Vision Ltd.

Rail Vision is a technology company that is seeking to revolutionize railway safety and the data-related market. The Company has developed cutting-edge, artificial intelligence based, industry-leading technology specifically designed for railways. The Company has developed its railway detection and systems to save lives, increase efficiency, and dramatically reduce expenses for the railway operators. Rail Vision believes that its technology will significantly increase railway safety around the world, while creating significant benefits and adding value to everyone who relies on the train ecosystem: from passengers using trains for transportation to companies that use railways to deliver goods and services. In addition, the company believes that its technology has the potential to advance the revolutionary concept of autonomous trains into a practical reality. For more information please visit https://www.railvision.io/

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act and other securities laws. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses entering a period of expected accelerated growth, Cleobury's expected contribution to the company, driving further success for customers and shareholders, and accelerating commercialization strategy. Forward-looking statements are not historical facts, and are based upon management's current expectations, beliefs and projections, many of which, by their nature, are inherently uncertain. Such expectations, beliefs and projections are expressed in good faith. However, there can be no assurance that management's expectations, beliefs and projections will be achieved, and actual results may differ materially from what is expressed in or indicated by the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. For a more detailed description of the risks and uncertainties affecting the Company, reference is made to the Company's reports filed from time to time with the Securities and Exchange Commission ("SEC"), including, but not limited to, the risks detailed in the Company's annual report on Form 20-F filed with the SEC on May 16, 2022. Forwardlooking statements speak only as of the date the statements are made. The Company assumes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References and links to websites have been provided as a convenience, and the information contained on such websites is not incorporated by reference into this press release. Rail Vision is not responsible for the contents of third-party websites.

Contacts

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SOURCE: Rail Vision Ltd.