

FORM 6-K
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Report of Foreign Issuer

Pursuant to Rule 13a-16 or 15d-16

of the Securities Exchange Act of 1934

For the Month of April 2010

ELRON ELECTRONIC INDUSTRIES LTD.
(Translation of Registrant's Name into English)

3Azrieli Center, Triangle Building, 42nd Floor, Tel Aviv • ISRAEL

(Address of Principal Corporate Offices)

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

Form 20-F

Form 40-F

Translation of Registrant's Immediate Release issued to the Tel-Aviv Stock Exchange on April 15, 2010.

SIGNATURE

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.

ELRON ELECTRONIC INDUSTRIES LTD.
(Registrant)

By: /s/Yaron Elad
Yaron Elad
VP & CFO

Dated: April 15, 2010

-FOR IMMEDIATE RELEASE

Tel Aviv, April 15, 2010 – Elron Electronic Industries Ltd. (TASE: ELRN) today updated its previous announcement of February 11, 2010 in relation to the commencement of negotiations for the sale of all of the outstanding shares of Teledata Networks Ltd. ("Teledata"), held 21% by Elron, by way of merger (the "Transaction"), to a foreign (non-Israeli) publicly traded company (the "Acquirer"). Following negotiations between the parties and following discussions between the shareholders of Teledata, today, a definitive merger agreement was signed between Teledata, its principal shareholders, including Elron ("Major Shareholders") and the Acquirer, including, inter alia, the following principal terms: (i) upon completion of the Transaction, consideration will be received in the aggregate amount of \$50 million, including \$10 million payable in cash, \$10 million payable in non-tradable bonds of the Acquirer and \$30 million payable in tradable shares of the Acquirer. Of this consideration, shares of the Acquirer equivalent to \$5 million will be deposited in escrow for a period of up to 12 months to cover, mainly, possible indemnification which may become due to the Acquirer in connection with breaches, if any, of the merger agreement by any of the other parties thereto and possible future claims relating to Teledata, if any, (ii) upon completion of the Transaction all outstanding shareholders' loans granted to Teledata by Elron (in the aggregate amount of approximately \$1 million as of the date of this release, and which are convertible into Teledata shares) shall be assigned to the Acquirer. The abovementioned consideration includes the consideration for such assignment, (iii) each of the Major Shareholders shall only be liable for part of the indemnification amounts that may become due to the Acquirer, each according to its share of the consideration, and will not be liable for any breaches of the merger agreement by any other Major Shareholders. The liability of each Major Shareholder's liability for its representations and obligations towards the Acquirer will be limited to its share of the aggregate consideration, while its liability for representations and obligations relating to Teledata shall be limited (except in certain matters) to each such shareholder's share of the consideration held in escrow described above, (iv) any shares of the Acquirer to be received as part of the consideration shall be subject to a lock-up period of 6 to 12 months commencing from the closing date of the Transaction, (v) on the closing date of the Transaction, all shareholders' guarantees granted by the Major Shareholders to Teledata, and all obligations of the Major Shareholders to grant shareholders guarantees or collaterals for loans to Teledata shall be cancelled. As of the date of this release, the aggregate amount of such obligations granted by Elron is approximately \$4 million (including actual guarantees granted by Elron to Teledata as of the date of this release in the aggregate amount of approximately \$2 million), (vi) during the interim period between the execution of the definitive merger agreement and the completion of the Transaction, certain activities of Teledata, not in the ordinary course of business, will require consent of the Acquirer as customary in transactions of such type, (vii) the completion of the Transaction will be subject, inter alia, to obtaining required regulatory approvals and other approvals required by law and agreements with certain third parties. Should the merger not be completed by December 31, 2010, each party to the Transaction shall have the right to terminate it, subject to postponement of this date in certain circumstances set forth in the merger agreement.

In the event of completion of the Transaction:

1. Elron expects to receive aggregate proceeds of approximately \$24 million, including approximately \$3 million payable in cash, approximately \$4 million payable in bonds of the Acquirer and approximately \$17 million payable in shares of the Acquirer (of which shares of the Acquirer in an amount equivalent to approximately \$2 million will be held in escrow).
2. Elron would record a net gain, estimated at this stage, to be between \$23 million and \$25 million. Elron estimates at this stage, that out of the said aggregate net gain, upon the completion of the Transaction, a net gain of approximately \$23 million would be recorded. The balance of the said aggregate net gain may be recorded in later stages, or not at all, taking into consideration certain future events which may affect the amount of shares to be released to Elron from the shares in escrow.

It is noted that the Acquirer is Enablence Technologies Inc., (TSX-V: ENA) a Canadian publicly traded company traded on the TSX-V in Canada which designs, manufactures and sells optical components, subsystems and systems to a global customer base.

There is no assurance as to the completion of the Transaction and the timing thereof.

About Elron Electronic Industries:

Elron Electronic Industries Ltd. (TASE: ELRN), a member of the IDB Holding group, is a technology holding company traded on the Tel-Aviv Stock Exchange. Elron's group companies currently comprise public and privately held companies engaged in a diverse range of technological activities. These companies, at various levels of maturity and progress, are primarily in the fields of medical devices, information & communications technology and clean technology, and have the potential to be technology leaders, each in their respective fields. Elron focuses on identifying and developing unique technology companies. Current group companies include Given Imaging, Medingo, BrainsGate, NuLens, Aqwise and Starling, and in the past included Elbit Systems, NetVision and Partner Communications. For further information, please visit www.elron.com.



Company Contact:

Lauren Duke, Assistant to CFO
Elron Electronic Industries Ltd.

Tel. 972-3-6075555
elron@elron.com

Any statements in this press release that may be considered forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially. These risks include, but are not limited to the impact of: the global financial crisis and economic downturn on Elron and its group companies, any decrease in the market value of Given Imaging, the continuing losses incurred by certain group companies, the need of Elron's group companies for additional capital in order to reach profitability, the possibility of further impairment charges and other risk factors detailed from time to time in the Company's Annual Report on Form 20-F and other periodic reports filed by the Company with the Securities and Exchange Commission, which the Company urges investors to consider. The restricted availability of financing for young technology companies, the limited availability of profitable "exits" and the increased volatility in the securities markets may affect Elron's business results and compliance with bank covenants. Elron assumes no obligation to update the information in this press release and disclaims any obligation to publicly update or revise any such forward-looking statements to reflect any change in its expectations or in events, conditions, or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Reference to Elron's website above does not constitute incorporation of any of the information thereon into this press release.

The Triangle Building, 42nd Floor, 3 Azrieli Center, Tel-Aviv 67023, Israel
Tel. 972-3-6075555, Fax. 972-3-6075556 www.elron.com