

BOS BETTER ONLINE SOLUTIONS LTD

Form F-3

August 23, 2010

As filed with the Securities and Exchange Commission on August 23, 2010

Registration No. _____

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM F-3
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

B.O.S BETTER ONLINE SOLUTIONS LTD.
(Exact name of Registrant as specified in its charter)

Israel
(State or other jurisdiction of
incorporation or organization)

Not Applicable
(I.R.S. Employer
Identification No.)

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(+972) 3-954-1000
(Address and Telephone Number of Registrant's principal executive offices)

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Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, please check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities to be Registered | Amount to be Registered(1) | Proposed Maximum Offering Price Per Share(2) | Proposed Maximum Aggregate Offering Price | Amount of Registration Fee |
|--|----------------------------|--|---|----------------------------|
| Ordinary Shares, nominal value NIS 20.00 per share | 772,643 (3) | \$ 3.25 | \$ 2,511,089.75 | \$ 179.04 |
| Ordinary Shares, nominal value NIS 20.00 per share | 772,643 (4) | \$ 2.75 | \$ 2,124,768.25 | \$ 151.50 |
| Ordinary Shares, nominal value NIS 20.00 per share | 69,096 (5) | \$ 4.00 | \$ 276,384.00 | \$ 19.71 |
| Total | 1,614,382 | | \$ 4,912,242.00 | \$ 350.25 |

(1) Represents up to 1,614,382 ordinary shares that may be sold from time to time pursuant to this registration statement by the selling shareholders named herein. Pursuant to Rule 416 of the Securities Act of 1933, as amended, this Registration Statement also includes additional ordinary shares issuable upon stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(g) under the Securities Act.

(3) Represents ordinary shares issuable upon conversion of convertible loans.

(4) Represents shares issuable upon exercise of warrants that were issued to the selling shareholders. The warrants' exercise price is \$2.75 per ordinary share.

(5) Represents ordinary shares issuable upon exercise of warrants that were issued to a selling shareholder. The warrants' exercise price until August 3, 2011 is \$3.25 per ordinary share and thereafter, the exercise price shall be increased to \$4.00 per ordinary share.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED August 23, 2010

1,614,382 of Ordinary Shares Offered by Selling Shareholders

PROSPECTUS

B.O.S BETTER ONLINE SOLUTIONS LTD.

The selling shareholders identified in this prospectus, may offer to sell up to 1,614,382 ordinary shares issuable upon the conversion of convertible loans extended to B.O.S Better Online Solutions Ltd. ("BOS") in July 2009 and February 2010 and upon the exercise of warrants issued by BOS in connection with the convertible loans.

BOS is filing the registration statement of which this prospectus is a part at this time to fulfill a contractual obligation to do so, which the Company undertook.

We will not receive any of the proceeds from the sale of the ordinary shares by the selling shareholders other than the exercise price payable to us upon the exercise of the warrants held by the selling shareholders. We have agreed to bear all of the expenses in connection with the registration and sale of these ordinary shares other than underwriting discounts and sales commissions.

Our ordinary shares are traded on the NASDAQ Capital Market under the symbol "BOSC". On August 20, 2010, the last reported sale price of our ordinary shares on the NASDAQ Capital Market was \$1.38 per share. You are urged to obtain current market quotations for the ordinary shares.

You should read both this prospectus and any prospectus supplement, together with the additional information described under the heading "Incorporation of Certain Documents by Reference" before you decide to invest in our ordinary shares.

INVESTING IN OUR ORDINARY SHARES INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 4 OF THIS PROSPECTUS TO READ ABOUT FACTORS YOU SHOULD CONSIDER BEFORE PURCHASING OUR ORDINARY SHARES.

Neither the Securities and Exchange Commission nor any state securities commission or the Israeli Securities Authority has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2010

TABLE OF CONTENTS

| Item | Page |
|--|------|
| <u>Prospectus Summary</u> | 3 |
| <u>The Offering</u> | 4 |
| <u>Risk Factors</u> | 4 |
| <u>Forward-Looking Statements</u> | 15 |
| <u>Capitalization and Indebtedness</u> | 16 |
| <u>Use of Proceeds</u> | 16 |
| <u>Selling Shareholders</u> | 17 |
| <u>Description of Ordinary Shares</u> | 19 |
| <u>Plan of Distribution</u> | 20 |
| <u>Offering Expenses</u> | 22 |
| <u>Validity of Securities</u> | 23 |
| <u>Experts</u> | 23 |
| <u>Where You Can Find More Information</u> | 23 |
| <u>Incorporation of Certain Documents by Reference</u> | 24 |
| <u>Enforceability of Civil Liabilities</u> | 25 |

You should rely only on the information contained or incorporated by reference in this prospectus or any supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and any underwriter or agent is not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

PROSPECTUS SUMMARY

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf process, the selling shareholders referred to in this prospectus may sell up to 1,614,382 ordinary shares, from time to time, in one or more offerings in any manner described under the section in this prospectus entitled “Plan of Distribution”.

This prospectus does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. Accordingly, you should refer to the registration statement and its exhibits for further information about us and our ordinary shares. Copies of the registration statement and its exhibits are on file with the SEC. Statements contained in this prospectus concerning the documents we have filed with the SEC are not intended to be comprehensive, and in each instance we refer you to a copy of the actual document filed as an exhibit to the registration statement or otherwise filed with the SEC.

We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. The selling shareholders are offering to sell, and seeking offers to buy our ordinary shares only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of ordinary shares.

Unless the context otherwise requires, all references in this prospectus to “BOS,” “we,” “our,” “our company,” “us” and “Company” refer to B.O.S Better Online Solutions Ltd. and its consolidated subsidiaries.

All references in this prospectus to “ordinary shares” refer to our ordinary shares, nominal value NIS 20.00 per share.

All references in this prospectus to “dollars” or “\$” are to United States Dollars.

All references in this prospectus to “shekels” or “NIS” are to New Israeli Shekels.

THE COMPANY

We were incorporated in Israel in 1990 and are subject to the Israeli Companies Law 1999 - 5759. Our executive offices and engineering, development, testing, shipping and service operations are located in Israel and the United States.

Our telephone number is 972-3-954-1000 and our website address is www.boscorporate.com. Our subsidiaries' websites are: BOS-Odem Ltd. ("Odem") - www.odem.co.il; Odem also maintains a website showcasing our services in the field of RFID - www.yourfid.com; BOS-Dimex Ltd. ("Dimex") - www.dimex.co.il and BOS - Supply Chain Solutions (Summit), Inc. ("Summit") - www.summitradio.com. The information contained on, or linked from, our websites is not a part of this prospectus.

We operate our business through two segments:

- Supply Chain Solutions – conducted through two wholly owned subsidiaries: Odem and Summit. Our Supply Chain Solutions business offers a wide range of electronic components to customers in the aviation and aerospace industry that prefer to consolidate their component acquisitions through a supplier that is able to provide a comprehensive solution to their components-supply needs.

- RFID and Mobile Solutions – conducted through our wholly owned subsidiary, Dimex. Our RFID and Mobile Solutions offerings form a comprehensive turn-key solution, combining mobile infrastructure of manufacturers that we represent, middleware software and a software application.

THE OFFERING

This prospectus relates to the offering by selling shareholders of up to 1,614,382 ordinary shares as follows:

- up to 772,643 ordinary shares that are issuable upon conversion of convertible loans extended to the Company in July 2009 and February 2010; and
- up to 841,739 ordinary shares issuable to the selling shareholders upon the exercise of warrants that were issued in the July 2009 and the February 2010 debt financing.

For additional details see “Selling Shareholders”.

BOS is filing the registration statement of which this prospectus is a part at this time to fulfill its contractual obligation to do so. Registration of the ordinary shares does not necessarily mean that all or any portion of such ordinary shares will be offered for sale by the selling shareholders.

RISK FACTORS

You should carefully consider the risks described below and all the information contained or incorporated by reference into this prospectus before making an investment decision regarding our ordinary shares. The risks described below are not the only risks facing our company. Additional risks and uncertainties that we are not aware of or that we currently believe are immaterial may also adversely affect our business, financial condition, results of operation and liquidity. The trading price of our ordinary shares could decline due to any of these risks, and you may lose all or part of your investment.

Risks relating to our financial results and capital structure:

The global economic slowdown has and may continue to have an adverse impact on our financial results.

We, like other companies, have been and are subject to the effects of market slowdowns. If general economic conditions fail to improve, or if they continue to deteriorate, our revenues, operating results and financial condition would be adversely affected. Our revenues for year 2009 decreased by 35% to \$33.2 million from \$50.8 million in year 2008, which reflects the impact of the economic slowdown on our business. The sharpest decrease in revenues was in our subsidiary, BOS - Supply Chain Solutions (Summit) Inc. (“Summit”), whose revenues decreased from \$17 million in year 2008 to \$8.6 million in year 2009, a 49% decrease. These results reflect the sharp decline experienced by the aviation and aerospace industry in 2009.

Our intangible assets as of December 31, 2009 amounted to \$6.2 million. Following the economic slowdown we recorded a goodwill impairment charge of \$1.9 million in 2008 and an additional goodwill impairment charge of \$1.2 million in 2009, both related to our Supply Chain Solutions segment. As a result, as of December 31, 2009, the Supply Chain Solutions segments’ goodwill was fully impaired. If general economic conditions fail to improve, we may be required to record additional impairment charges in respect of other intangible assets.

Our customers’ debt is derived from sales to customers located primarily in Israel, South America, North America and Europe. We do not have any collateral or credit insurance in respect of the customers debt. The balance of allowance for bad debt as of December 31, 2009 amounted to \$214,000, which was determined by the management to be

sufficient. If general economic conditions fail to improve, we may be required to record additional and significant allowances for bad debts.

We have had a history of losses and our future levels of sales and ability to achieve profitability are unpredictable.

As of June 30, 2010, we had an accumulated deficit of \$66 million. In 2009, we had a net loss of \$9.1 million. In the first six months of 2010 we had a net profit of \$15,000. Our ability to maintain and improve future levels of sales and achieve profitability depends on many factors, which include:

- improvement in world economic conditions in general and in the aerospace industry in particular;
 - increased demand for our existing products;
- developing and selling new RFID and Mobile Solutions products to meet customer needs;
 - controlling costs and successfully implementing our business strategy;
 - manufacturing and delivering products in a timely manner; and
- having access to sufficient working capital financing to support our operations.

There can be no assurance that we will be able to meet our challenges and experience any growth in sales or achieve profitability in the future, that the levels of historic sales or will continue in the future or that our net losses will not increase in the future.

We may be unable to maintain our gross profit margins.

Our sales and profitability may vary in any given year, and from quarter to quarter. In order to increase sales or to enter into new markets with new products we may find it necessary to decrease prices in order to be competitive. Additionally, our gross profit margin tends to fluctuate mainly due to variety and mix of products of the Supply Chain Solutions segment. We may not be able to maintain current gross profit margins in the future, which would have a material adverse effect on our business.

We require a significant amount of cash to satisfy our debt obligations. If we fail to generate sufficient cash flow from operations, we may need to renegotiate or refinance our debt, obtain additional financing, postpone capital expenditures or sell assets.

As of June 30, 2010 we had \$10.9 million of short term bank loans drawn under a revolving credit facility, \$464,000 current maturities of long term loans and \$578,000 of long terms bank loans. In addition, as of June 30, 2010 we had \$2.2 million of long term convertible notes and short term and long term in total amount of \$829,481 debt to Dimex Systems (1988) Ltd. ("Dimex Systems"). We depend mainly on cash generated by continuing operating activities to make payments on our debt. We cannot assure that we will generate sufficient cash flow from operations to make the scheduled payments on our debt. Our ability to meet our debt obligations will depend on whether we can successfully implement our business strategy, as well as on economic, financial, competitive and technical factors.

Some of the factors are beyond our control, such as economic conditions in the markets where we operate or intend to operate, changes in our customers' demand for our products, and pressure from existing and new competitors. Also, because part of our loans bear interest at floating rates, we are susceptible to an increase in interest rates.

If we cannot generate sufficient cash flow from operations to make scheduled payments on our debt obligations, we may need to renegotiate the terms of our debt, refinance our debt, obtain additional financing, delay planned capital expenditures or sell assets.

If our lenders decline to renegotiate the terms of our debt in these circumstances, the lenders could declare all amounts borrowed and all amounts due to them under the agreements due and payable.

5

In addition, our short and long term bank loans contain certain provisions, restrictions and financial covenants, which if violated, could result in the full principal amounts together with interest and other amounts becoming immediately due and payable in cash. One of the restrictions is on the transfer of funds between our Israeli and U.S. subsidiaries.

If we do not have the cash resources to repay our indebtedness in such circumstances, our bank lenders could foreclose on our assets that are subject to liens and sell our assets to satisfy the debt.

We depend on two banks which provide our short and long term loans.

The Company manages its loans in two banks: (i) Bank Leumi Le Israel Ltd. (“Bank Leumi”) which provides credit to the Company and its Israeli subsidiaries and (ii) JPMorgan Chase Bank (“JPMorgan Chase”) which provides credit to Summit. Our credit line with JPMorgan Chase expires at the end of August 2010. The Company is in discussions with JPMorgan Chase for the renewal of the credit line and expects that it will be renewed for a period or periods and on terms as shall be agreed between the parties. In case of the termination or expiration of our credit lines, a deterioration in our relations with our banks or adverse changes in the financial position of either of these banks, our liquidity could be materially adversely affected.

Our assets are subject to security interests in favor of our bank lenders. Our failure to repay the bank loans, if required, could result in legal action against us, which could require the sale of all of our assets.

The repayment of our bank debt is secured by a first priority floating charge on all of our Company’s assets, present and future as they may be changing from time to time, and by a first priority fixed charge on all of the Company’s issued and unpaid-for share capital, its goodwill and its shares of Dimex, Summit and Odem. In addition, the Company and its Israeli subsidiaries entered into a series of inter company guarantees in favor of our bank lenders.

If we are unable to repay the bank loans when due, our lenders could foreclose on our assets in order to recover the amounts due. Any such action would require us to curtail or cease operations.

Our debt obligations may hinder our growth and put us at a competitive disadvantage.

Our debt obligations require us to use a substantial portion of our operating cash flow to repay the principal and interest on our loans. This reduces funds available to grow and expand our business, limits our ability to pursue business opportunities and makes us more vulnerable to economic and industry downturns. The existence of debt obligations and covenants also limits our ability to obtain additional financing on favorable terms.

Due to restrictions in our loan agreements, we may not be able to operate our business as we desire.

Our loan agreements contain a number of conditions and limitations on the way in which we can operate our business, including limitations on our ability to raise debt, sell or acquire assets and pay dividends. Our loan agreements also contain various covenants, which require that we maintain certain financial ratios related to shareholder's equity and operating results. These limitations and covenants may force us to pursue less than optimal business strategies or forgo business arrangements which could have been financially advantageous to our shareholders and us. Our failure to comply with the covenants and restrictions contained in our loan agreements could lead to a default under the terms of these agreements.

Risks related to our business:

We depend on key personnel for the success of our business.

Our success depends, to a significant extent, on the continued active participation of our executive officers and other key personnel. In addition, there is significant competition for employees with technical expertise in our industry. In order to succeed we would need to be able to:

- retain the executive officers and key technical personnel who have been involved in the development of our two divisions;

- attract and retain additional qualified personnel to provide technological depth and support to enhance existing products and develop new products; and
 - attract and retain highly skilled computer operating, marketing and financial personnel.

We cannot make assurances that we will be successful in attracting, integrating, motivating and retaining key personnel. If we are unable to retain our key personnel and attract additional qualified personnel as and when needed, our business may be adversely affected.

We have substantially decreased the number of our employees and due to the reduced staff we may be unable to meet our revenue objectives.

Starting from the end of 2008 and through June 2010, our workforce was reduced from 154 employees to 107 employees, a reduction of 30% of our workforce. This decrease was related to the economic slow down, which affected our revenues. With the decreased staff, we may be unable to meet our revenue targets. If we need to further reduce the number of employees, our ability to grow, and achieve our business and operational goals may be hindered.

Integration of our acquisitions requires significant financial and management resources and there is no assurance that the acquisitions may prove successful.

In recent years we have completed two major acquisitions, of the U.S. based Summit, in November 2007, and of the assets of the Israeli based Dimex Systems, in March 2008.

Our growth increases the complexity of our operations, places significant demands on our management and our operational, financial and marketing resources and involves a number of challenges, including:

- managing geographically dispersed operations;
- retaining and motivating key personnel of the acquired businesses;
- assimilating different corporate cultures;
- preserving the business relationships with existing key customers and suppliers;
- maintaining uniform standards, controls, procedures and policies; and
- introducing joint products and service offerings.

There can be no assurance that we will be able to successfully integrate and manage our acquisitions in order to maintain and grow the combined business and maximize the potential synergies.

Further, once integrated, on acquisitions may not achieve comparable levels of revenues, profitability or productivity as were prior to the acquisition or otherwise perform as expected. The occurrence of any of these events could harm our business, financial condition or results of operations.

We may be unable to effectively manage our growth and expansion, and as a result, our business results may be adversely affected.

Our goal is to grow significantly over the next few years. The management of our growth, if any, will require the continued expansion of our operational and financial control systems, as well as a significant increase in our financial resources and in our delivery and service capabilities. These factors could place a significant strain on our resources.

Our inability to meet our delivery commitments in a timely manner (as a result of unexpected increases in orders, for example) could result in losses of sales, our exposure to contractual penalties, costs or expenses, as well as damage to our reputation in the marketplace.

Our inability to manage growth effectively could have a material adverse effect on our business, financial condition and results of operations.

If our efforts to raise capital do not succeed, our efforts to increase our business may be seriously jeopardized.

A significant part of the revenues of our supply chain business are from two major customers: Israel Aircraft Industries (“IAI”) and a strategic Latin American customer (the “Strategic Customer”).

Sales to IAI and the Strategic Customer accounted for 12% and 6% of our year 2009 revenues, and for 7% and 9% of our second quarter of 2010 revenues, respectively. An interruption in our business relationship with either of these customers would result in a significant reduction in our revenues, backlog and in a write-off of inventory, and would have a material adverse effect on our business and results of operations. Our long term sales agreement with IAI will end by December 2010. In July 2008, we signed a contract for the sale of components to the Strategic Customer. The contract provides for a framework for orders during an initial term (until 2012). The contract may be extended for additional five-year terms. Pursuant to the contracts with IAI and the Strategic Customer, we committed to a fixed components sale price through the respective contract periods. Hence significant appreciation in the cost price of electronic components may materially adversely impact our financial results.

Under the agreements with IAI and the Strategic Customer, we are obligated to hold inventory of products necessary for three months of production. This requires us to incur the costs of purchasing inventory without having an outstanding purchase order for the products. Each of our agreements with IAI and the Strategic Customer subjects us to the following risks:

- We may not be able to finance the purchasing for three months of production, as required under these agreements, due to deficiency in working capital. Meeting the inventory requirements under these agreements may adversely effect our financial position.
- If we are unable to sell products that are purchased to be held in inventory, we may incur difficulties in working capital, write-offs and write-downs as a result of slow-moving items, technological obsolescence, excess inventories, discontinued products and products with market prices lower than cost. Such write-offs, write-downs and difficulties in working capital could adversely affect our operating results and financial condition.

Supply Chain Solutions programs of electronic components accommodate the preference of customers to work with a limited number of suppliers that will be able to provide a wide range of electronic components under one order. In the event we are not able to provide certain of the components ordered, the customer could elect to terminate the entire order before its delivery. This could cause us to remain with excess and obsolete inventory and would adversely affect our results of operations.

The continued growth of our RFID and Mobile Solutions segment depends on our ability to expand sales abroad.

In 2009, and in the first six months of 2010, our RFID and Mobile Solutions revenues that were generated from sales outside of Israel accounted for 9% and 2% of our entire RFID and Mobile Solutions revenues in the respective periods. Continued growth of this segment depends on our ability to further increase our sales abroad. There can be no assurance that we will be able to maintain and increase our revenues from these markets.

Certain customers of our Supply Chain Solutions may cancel purchase orders they placed before the delivery.

Certain purchase orders of our Supply Chain Solutions provide that they may be cancelled by the customer before delivery. In the event substantial orders are so cancelled, there is no assurance that we will be able to sell the pre-purchased inventory at a profit, or at all. This could result in excess and obsolete inventory and could have a material adverse effect on our results of operations.

The Company's subsidiary, Summit, engages in a number of business activities governed by Federal Regulations, which if violated, could subject the Company to civil or criminal fines and penalties.

The Company's subsidiary, Summit, engages in a number of business activities governed by U.S. Government procurement laws and regulations, regulations relating to import-export control and technology transfer restrictions. Failure by us or our sales representatives to comply with these laws and regulations could result in administrative, civil, or criminal liabilities and could, in the extreme case, result in suspension or debarment from government contracts or suspension of Summit's export privileges, which could have a material adverse effect on us.

We are required to make additional payments towards the acquisition of the assets of Dimex Systems.

In March 2009, the Company entered into an amendment to the 2008 Dimex Systems Asset Purchase Agreement that revised the payment schedule of the approximately NIS 10 million payable in three semi-annual installments through June 2010. The amendment provided for a NIS 3.5 million payment in March 2009, NIS 4 million to be paid in 6 equal monthly installments each, starting on January 15, 2010, and the remaining approximately NIS 2.5 million was converted into the same type of convertible debentures subsequently issued by the Company in July 2009. On February 4, 2010, the Company entered into an additional amendment to the Dimex Systems Asset Purchase Agreement, further revising the schedule of remaining payments to Dimex Systems. The amendment provides for payment of NIS 300,000 in January 2010 and NIS 3.1 million to be paid, together with interest, in monthly installments commencing July 2010 through December 2013. NIS 600,000 were converted into the same long-term convertible debentures, into which NIS 2.5 million were previously converted, and in connection with such conversion the Company issued to Dimex Systems a warrant to purchase 49,721 ordinary shares at exercise price of \$2.75 per ordinary share. In addition, the Company issued to Dimex Systems a warrant to purchase 69,096 ordinary shares at an exercise price of \$3.25 per ordinary shares during the first 18 months commencing August 3, 2011 and \$4.00 per ordinary share thereafter. Following this amendment, Dimex Systems holds a total of NIS 3.1 million long-term convertible debt.

If we are unable to make these payments, we will be in breach of contract and our financial position, and results of operation could be adversely affected.

We rely on certain key suppliers.

Most of our sales rely on products of certain key suppliers, which represent 18% of our first six months of 2010 Supply Chain Solutions segment purchases were sourced from five key suppliers and 55% of our first six months of 2010 RFID and Mobile Solutions segment purchases were sourced from five key suppliers.

In the event that any of our key suppliers becomes unable to fulfill our requirements in a timely manner or if we cease our business relationship with these suppliers, we may experience an interruption in delivery and a decrease in our business until an alternative source of supply can be obtained.

Future changes in industry standards may have an adverse effect on our business.

New industry standards in the aviation and defense industry could cause a portion of our Supply Chain Solution segment's inventory to become obsolete and unmarketable which would adversely affect our results of operations.

If revenue levels for any quarter fall below our expectations, our results of operations will be adversely affected.

Our revenues in any quarter are substantially dependent on orders received and delivered in that quarter. We base our decisions regarding our operating expenses on anticipated revenue trends, and our expenses levels are relatively fixed, or require some time for adjustment. As a result, revenue levels below our expectations will adversely affect our results of operations.

The rate of inflation in Israel may negatively impact our costs if it exceeds the rate of devaluation of the NIS against the U.S. dollar. Similarly, the U.S. dollar cost of our operations in Israel will increase to the extent increases in the rate of inflation in Israel are not offset by a devaluation of the NIS in relation to the U.S. dollar.

A substantial amount of our revenues is denominated in U.S. dollars ("U.S. dollars" or "dollars") or is U.S. dollar-linked, but we incur a significant portion of our expenses, principally salaries and related personnel expenses in Israel and rent for our facilities in Israel, in NIS. As a result, we are exposed to the risk that the rate of inflation in Israel will exceed the rate of devaluation of the NIS in relation to the U.S. dollar or that the timing of this devaluation lags behind inflation in Israel. In that event, the U.S. dollar cost of our operations in Israel will increase and our U.S. dollar-measured results of operations will be adversely affected.

Similarly, we are exposed to the risk that the NIS, after adjustment for inflation in Israel, will appreciate in relation to the U.S. dollar. In that event, the dollar-measured cost of our operations in Israel will increase and our dollar-measured results of operations will be adversely affected. During 2007, 2008 and 2009, the inflation adjusted NIS appreciated against the U.S. dollar, which raised the U.S. dollar cost of our Israeli operations. We cannot predict whether in the future the NIS will appreciate against the U.S. dollar or vice versa. Any increase in the rate of inflation in Israel, unless the increase is offset on a timely basis by a devaluation of the NIS in relation to the U.S. dollar, will increase our labor and other costs, which will increase the U.S. dollar cost of our operations in Israel and harm our results of operations.

We may be unable to maintain and continue developing marketing and distribution arrangements and expand our reach into overseas markets.

Sales outside Israel accounted for 33% of our total sales in the first six months of 2010, for 32% in 2009 and for 42% in 2008. If we are not able to maintain our existing distribution channels and expand to new international markets, our operating results may be materially adversely affected.

If we are unsuccessful in developing and introducing new products, we may be unable to expand our business.

The market for some of our products is characterized by rapidly changing technology and evolving industry standards. The introduction of products embodying new technology and the emergence of new industry standards can render existing products obsolete and unmarketable and can exert price pressures on existing products.

Our ability to anticipate changes in technology and industry standards and successfully develop and introduce new and enhanced products as well as additional applications for existing products, in each case on a timely basis, will be critical in our ability to grow and remain competitive. Although these products are related to, and even incorporate our existing products, there can be no assurance that we will be able to successfully develop and market any such new

products. If we are unable, for technological or other reasons, to develop products that are competitive in technology and price and responsive to customer needs, our business will be materially adversely affected.

We have significant sales worldwide and could encounter problems if conditions change in the places where we market our products.

We have sold and intend to continue to sell our products in North and South America, Europe, China and Asia Pacific.

A number of risks are inherent in engaging in international transactions, including:

- possible problems in collecting receivables;
- imposition of governmental controls, or export license requirements;
- political and economic instability in foreign companies;
- trade restrictions or changes in tariffs being imposed; and
- laws and legal issues concerning foreign countries.

If we should encounter such difficulties in conducting our international operations, it may adversely affect our business condition and results of operations.

We may be unable to successfully defend ourselves against claims brought against us.

We are defendants in a number of lawsuits filed against us, and from time to time in the normal course of our business, may receive written demands for payments from prospective plaintiffs. Legal proceedings can be expensive, lengthy and disruptive to normal business operations, and can require extensive management attention and resources regardless of their merit. Moreover, we cannot predict the results of all proceedings and there can be no assurance that we will be successful in defending ourselves against them. An unfavorable resolution of a lawsuit or proceeding could materially adversely affect our business, results of operations and financial condition.

We may be obligated to indemnify our directors and officers.

The Company has agreements with its directors and senior officers which provide, subject to Israeli law, indemnification by the Company of directors and senior officers for: (a) monetary liability imposed upon them in favor of a third party by a judgment, including a settlement or an arbitral award confirmed by the court, as a result of an act or omission of such person in its capacity as a director or officer of the Company, (b) reasonable litigation expenses, including attorney's fees, incurred by them pursuant to an investigation or a proceeding commenced against them by a competent authority if it was terminated without an indictment and without having a monetary charge imposed on them in exchange for a criminal procedure (as such terms are defined in the Israeli Companies Law 1999 – 5759 (the "Israeli Companies Law")), or that was terminated without an indictment but with a monetary charge imposed on them in exchange for a criminal procedure in a crime that does not require proof of criminal intent, as a result of an act or omission of such person in its capacity as a director or officer of the Company, and (c) reasonable litigation expenses, including attorney's fees, incurred by such a director or officer or imposed on him by a court, in a proceeding brought against him by or on behalf of the Company or by a third party, or in a criminal action in which he was acquitted, or in a criminal action which does not require criminal intent in which he was convicted, in each case relating to acts or omissions of such person in its capacity as a director or officer of the Company. Payment pursuant to such indemnification may materially adversely affect our financial condition.

The measures we take in order to protect our intellectual property may not be effective or sufficient.

Our success is dependent upon our proprietary rights and technology. We currently rely on a combination of trade secrets, copyright and trademark law, together with non-disclosure and invention assignment agreements, to establish and protect the proprietary rights and technology used in our products. We generally enter into confidentiality agreements with our employees, consultants, customers and potential customers and limit the access to and the distribution of our proprietary information. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use our technology without authorization, or to develop similar technology independently. We do not believe that our products and proprietary rights infringe upon the proprietary rights of others. However, there can be no assurance that any other party will not argue otherwise. The cost of responding and adequately protecting ourselves against any such assertion may be material, whether or not the assertion is valid. Further, the laws of certain countries in which we sell our products do not protect our intellectual property rights to the same extent as do the laws of the United States. Substantial unauthorized use of our products could have a material adverse effect on our business. We cannot make assurances that our means of protecting our proprietary rights will be adequate or that our competitors will not independently develop similar technology. Additionally, there are risks that arise from the use of intranet networks and the Internet. Although we utilize firewalls and protection software, we cannot be sure that our proprietary information is secured against penetration. Such penetration, if occurs, could have an adverse effect on our business.

There can be no assurance that we will not be classified as a passive foreign investment company (a “PFIC”).

Based upon our current and projected income, assets and activities, we do not believe that at this time BOS is a passive foreign investment company for U.S. federal income tax purposes, but there can be no assurance that we will not be classified as such in the future. Such classification may have grave tax consequences for U.S. shareholders. One method of avoiding such tax consequences is by making a “qualified electing fund” election for the first taxable year in which the Company is a PFIC. However, such an election is conditioned upon our furnishing U.S. shareholders annually with certain tax information. We do not presently prepare or provide such information, and such information may not be available to U.S. shareholders if we are subsequently determined to be a PFIC. You are advised to consult with your own tax advisor regarding the particular tax consequences related to the ownership and disposition of our ordinary shares under your own particular factual circumstances.

Risks related to our ordinary shares:

Our share price has been and may continue to be volatile, which could result in substantial losses for individual shareholders.

The market price of our ordinary shares has been and may continue to be highly volatile and subject to wide fluctuations. From January 2009 through July 15, 2010, the daily closing price of our ordinary shares in NASDAQ (post reverse-split) has ranged from \$0.77 to \$3.30 per share. We believe that these fluctuations have been in response to a number of factors including the following, some of which are beyond our control:

- adverse world economic and capital market conditions;
- downturn in the aviation and aerospace industry;
- actual or anticipated variations in our quarterly operating results;
- increase in our bank debts;

- the acquisition of Summit and of the assets of Dimex Systems;
 - additions or departures of key personnel;
- changes in our target markets, especially in the aviation industry; and
 - sales of securities in private placements.

In addition, the stock market in general, and stocks of technology companies in particular, have from time to time experienced extreme price and volume fluctuations. This volatility is often unrelated or disproportionate to the operating performance of these companies. These broad market fluctuations may adversely affect the market price of our ordinary shares, regardless of our actual operating performance.

The Company's shares may be delisted from the NASDAQ Capital Market if it does not meet NASDAQ's continued listing requirements.

In past years, the Company has received several notices from the NASDAQ Stock Market advising it of non-compliance of its shares for continued listing on the market. Most recently in September 2009, the Company received notices, from the NASDAQ Stock Market that its ordinary shares were subject to delisting from the NASDAQ Global Market for failure to meet NASDAQ's minimum bid price, the minimum market value of publicly held shares requirement (\$5 million) and the shareholders' equity requirements (\$10 million) for continued listing on the Global Market.

Consequently, the Company had applied for a transfer of its listing from The Nasdaq Global Market to The Nasdaq Capital Market.

The Company had received approval from The Nasdaq Stock Market to transfer the listing, and its ordinary shares are listed on The Nasdaq Capital Market as of October 16, 2009. At that time, the Company satisfied all of The Nasdaq Capital Market continued listing standards other than the \$1.00 minimum bid price requirement for which it had until March 15, 2010 to regain compliance.

As such, following the recommendation of the Board of Directors, the shareholders of the Company resolved on December 23, 2009 to effect a reverse-split with a 1:5 ratio.

On January 12, 2010 the Company effected a 1:5 share reverse split, pursuant to which each five ordinary shares of the Company NIS 4.00 nominal value each, were consolidated into one ordinary share, of NIS 20.00 nominal value.

On January 27, 2010 the Company received notice from the Nasdaq Stock Market advising that it has regained compliance with the Nasdaq Capital Market's minimum bid price requirement. However, there can be no assurance that the Company will continue to qualify for listing on the Nasdaq Capital Market.

If the Company's ordinary shares are delisted from the Nasdaq Capital Market, trading in its ordinary shares could be conducted on an electronic bulletin board such as the OTC Bulletin Board. In addition, if the Company's ordinary shares were delisted from the Nasdaq Capital Market, it would be subject to the so-called penny stock rules that impose restrictive sales practice requirements on broker-dealers who sell those securities. Consequently, de-listing, if it occurred, could affect the ability of the shareholders to sell their ordinary shares in the secondary market. The restrictions applicable to shares that are de-listed, as well as the lack of liquidity for shares that are traded on an electronic bulletin board, may adversely affect the market price of such shares.

Risks related to our location in Israel:

Political, economic, and security conditions in Israel affect our operations and may limit our ability to produce and sell our products or provide our services.

We are incorporated under the laws of the State of Israel, where we also maintain our headquarters and our principal research and development and sales and marketing facilities. Political, economic, security and military conditions in Israel directly influence us. We could be adversely affected by any major hostilities involving Israel, the interruption

or curtailment of trade between Israel and its trading partners or a significant downturn in the economic or financial condition of Israel. In January 2006, Hamas, an Islamic movement responsible for many attacks against Israelis, won the majority of the seats in the Parliament of the Palestinian Authority. The election of a majority of Hamas-supported candidates is a major obstacle to relations between Israel and the Palestinian Authority, as well as to the stability in the Middle East as a whole. In addition, the future of the “peace process” with the Palestinians is uncertain and has deteriorated due to Palestinian violence, with the threat of a large-scale attack by Palestinians on Israeli civilians and key infrastructure remaining a constant concern. The past few years of renewed terrorist attacks by the Palestinians has severely affected the Israeli economy in many ways. In June 2007, there was an escalation in violence in the Gaza Strip resulting in Hamas effectively controlling the Gaza Strip and a further escalation in violence has occurred during the first few months of 2008. In July 2006, Israel became involved in a major military conflict with the Hizbullah organization in Lebanon, which subjected the north of Israel to missile attacks. In December 2008, Israel was involved in a military conflict with Hamas, which subjected the South of Israel to missile attacks. Ongoing violence between Israel and the Palestinians as well as tension between Israel and the neighboring Syria and Lebanon may have a material adverse effect on our business, financial condition and results of operations. In addition, several countries still restrict business with Israel and with companies doing business in Israel. We could be adversely affected by adverse developments in the “peace process” or by restrictive laws or policies directed towards Israel or Israeli businesses.

Generally, all nonexempt male adult citizens and permanent residents of Israel, are obligated to perform military reserve duty annually, and are subject to being called to active duty at any time under emergency circumstances. While we have operated effectively under these requirements since our incorporation, we cannot predict the full impact of such conditions on us in the future, particularly if emergency circumstances occur. If many of our employees are called for active duty, our business may be adversely affected.

Additionally, in recent years Israel has been going through periods of recession in economic activity, resulting in low growth rates and growing unemployment. Our operations could be adversely affected if the economic conditions in Israel deteriorate. Furthermore, Israel is a party to certain trade agreements with other countries, and material changes to these agreements could have an adverse effect on our business.

The anti-takeover effects of Israeli laws may delay or deter a change of control of the Company.

Under the Israeli Companies Law, a merger is generally required to be approved by the shareholders and Board of Directors of each of the merging companies. Shares held by a party to the merger and certain of its affiliates are not counted towards the required approval. If the share capital of the company that will not be the surviving company is divided into different classes of shares, the approval of each class is also required. A merger may not be approved if the surviving company will not be able to satisfy its obligations. At the request of a creditor, a court may block a merger on this ground. In addition, a merger can be completed only after all approvals have been submitted to the Israeli Registrar of Companies, provided that 30 days have elapsed since shareholder approval was received and 50 days have passed from the time that a proposal for approval of the merger was filed with the Registrar.

The Israeli Companies Law provides that an acquisition of shares in a public company must be made by means of a tender offer, if as a result of the acquisition, the purchaser would become a holder of 25% or more of the voting power at general meetings, and no other shareholder owns a 25% stake in the company. Similarly, the Israeli Companies Law provides that an acquisition of shares in a public company must be made by means of a tender offer if, as a result of the acquisition, the purchaser would become a holder of 45% or more of the voting power at general meetings, unless someone else already holds 45% of the voting power. An acquisition from a 25% or 45% holder, which results in the purchaser becoming a 25% or 45% holder respectively, does not require a tender offer. An exception to the tender offer requirement may also apply when the additional voting power is obtained by means of a private placement approved by the general meeting of shareholders. These rules also do not apply if the acquisition is made by way of a merger.

The Israeli Companies Law also provides specific rules and procedures for the acquisition of shares held by minority shareholders, if the majority shareholder shall hold more than 90% of the outstanding shares.

These laws may have the effect of delaying or deterring a change in control of the Company, thereby limiting the opportunity for shareholders to receive a premium for their shares and possibly affecting the price that some investors are willing to pay for the Company's securities.

All of our directors and most of our officers are non-U.S. residents and enforceability of civil liabilities against them is uncertain.

All of our directors and most of our officers reside outside of the United States. Service of process upon them may be difficult to effect within the United States. Furthermore, because the majority of our assets are located in Israel, any judgment obtained in the United States against us or any of our directors and non-U.S. officers may not be collectible within the United States.

FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates by reference forward-looking statements that are intended to be, and are hereby identified as, forward looking statements for the purposes of the safe harbor provisions of the Private Securities Reform Act of 1995. These statements address, among other things: our strategy; the anticipated development of our products; the results of completed acquisitions and our ability to make future acquisitions; our anticipated use of proceeds; our projected capital expenditures and liquidity; our development of additional revenue sources; our development and expansion of relationships; the market acceptance of our products; and our technological advancement. Actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including all the risks discussed above and elsewhere in this prospectus. You should therefore not rely on these forward-looking statements, which are applicable only as of the date hereof.

We urge you to consider that statements which use the terms "believe", "do not believe", "expect", "plan", "intend", "estimate", "anticipate", "projections", "forecast" and similar expressions are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. Except as required by applicable law, including the federal securities laws of the United States, we do not intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. We disclaim any obligation to publicly revise any such statements to reflect any change in expectations or in events, conditions, or circumstances on which any such statements may be based.

Market data and forecasts used in this prospectus have been obtained from independent industry sources. We have not independently verified the data obtained from these sources and we cannot assure you of the accuracy or completeness of the data. Forecasts and other forward-looking information obtained from these sources are subject to the same qualifications and additional uncertainties accompanying any estimates of future market size.

CAPITALIZATION AND INDEBTEDNESS

The table below sets forth our condensed consolidated current liabilities and capitalization at June 30, 2010 on an actual basis. This table was prepared in accordance with the U.S. Generally Accepted Accounting Principles.

Consolidated Capitalization (in US thousands of dollars)

| | June 30, 2010 (unaudited) |
|---------------------------------------|------------------------------|
| Short term debt | |
| Secured | \$ 11,397 |
| Unsecured | \$ 7,199 |
| Total short term debt | \$ 18,596 |
| Long term debt | |
| Secured | \$ 578 |
| Unsecured | \$ 3,930 |
| Total long term debt | \$ 4,508 |
| Shareholders equity | |
| Share capital: Ordinary Shares issued | |
| 2,622,971 ordinary shares nominal | |
| value NIS 20.00 per share | \$ 13,225 |
| Additional paid-in Capital | \$ 57,182 |
| Accumulated other comprehensive loss | \$ (325) |
| Accumulated deficit | \$ (66,453) |
| Total shareholders equity | \$ 3,629 |

USE OF PROCEEDS

All of the proceeds from the sale of the ordinary shares offered under this prospectus by selling shareholders are for the account of the selling shareholder. Accordingly, we will not receive any proceeds from the sales of these shares other than the exercise price payable to us upon the exercise of warrants held by the selling shareholders.

SELLING SHAREHOLDERS

This prospectus relates to the offering by selling shareholders of up to 1,614,382 ordinary shares as follows:

July 2009 Debt Financing

- 515,325 ordinary shares issuable to seven non-U.S. investors upon the conversion of a convertible loan, pursuant to Loan Agreements entered into in July 2009. The ordinary shares are convertible at a price per share of \$3.25 commencing as of their respective loan date, subject to 30 days prior notice to the Company.
- 515,325 ordinary shares issuable to the seven non-U.S. investors upon the exercise of warrants that were issued to them in connection with the convertible loan. The warrants are exercisable, in whole or in part, from 18 months to 36 months from grant, at an exercise price per ordinary share of \$2.75.

Conversion of Debt to Dimex Systems

- 257,318 ordinary shares issuable to Dimex Systems, upon conversion of a convertible loan outstanding pursuant to Loan Agreements entered into in July 2009 and February 2010. The loans are convertible at a price per share of \$3.25 commencing as of their respective loan date, subject to 30 days prior notice to the Company.
- 257,318 ordinary shares issuable to Dimex Systems upon the exercise of warrants that were issued to it in connection with July 2009 and February 2010 convertible loans. The warrants are exercisable, in whole or in part, from 18 months to 36 months from grant, at an exercise price per ordinary share of \$2.75.
- 69,096 shares issuable to Dimex Systems upon the exercise of warrants that were issued to it in February 2010. The warrants are exercisable, in whole or in part from July 2010 through December 2013. The exercise price of the warrants is \$3.25 per ordinary shares until August 3, 2011 and \$4.00 per ordinary share thereafter.

The table below sets forth certain information concerning the number of ordinary shares and warrants owned by the selling shareholders as of July 15, 2010, and the number of ordinary shares and warrants that may be offered from time to time by the selling shareholders under this prospectus. Because the selling shareholders may offer all or some portion of the ordinary shares, BOS has assumed for the purposes of the table below that each of the selling shareholders will sell all of the ordinary shares offered.

| | Shares Owned or | | | Shares | | Shares Beneficially | | |
|--|-----------------|------------------------|--|-------------|--|---------------------|-------------|--|
| | Underlying | Convertible Securities | | | | Being | Owned | |
| | Number | Percent (4) | | Offered(2) | | Number | Percent (4) | |
| Catalyst Fund 3 Daniel Frish St. Tel Aviv 64731, Israel (5) | 477,633 | 17.84 % | | 326,154 (6) | | 477,633 | 15.90 % | |
| SITA S.A. 27, RTE DE GY 1252 Meinier, Geneva, Switzerland (7) | 175,734 | 6.70 % | | 345,724 (8) | | 175,734 | 5.92 % | |
| Bellite Pty Limited 7 Beresford Road, Rose Bay 2029, NSW, Australia (9) | 244,899 | 9.05 % | | 230,770 | | 244,899 | 8.34 % | |
| Telegraph Hill Capital Fund I, LLC 582 Market Street, Suite 700 San Francisco, California 94104 (10) | 14,400 | 0.55 % | | 123,078 | | 14,400 | 0.52 % | |
| Dimex Systems (1988) Ltd. 3 Tvuot Ha'aretz Street, Tel Aviv 69546, Israel(11) | 0 | 0 % | | 583,731 | | 0 | 0 % | |
| Yuval Viner c/o B.O.S Better Online Solutions Ltd. 20 Freiman Street Rishon LeZion, 75100, Israel(12) | 49,839 | 1.87 % | | 2,154 | | 49,839 | 1.87 % | |
| Avidan Zelikvosky c/o B.O.S Better Online Solutions Ltd. 20 Freiman Street Rishon LeZion, 75100, Israel(13) | 113,750 | 4.18 % | | 2,154 | | 113,750 | 4.18 % | |
| Eyal Cohen c/o B.O.S Better Online Solutions Ltd. 20 Freiman Street Rishon LeZion, 75100, Israel(14) | 27,252 | 1.03 % | | 616 | | 27,252 | 1.03 % | |

(1) Does not include ordinary shares underlying convertible loans and warrants, that are not convertible or exercisable within 60 days of the date of this prospectus.

(2) Number of shares being offered includes the maximum number of shares that may be received by the selling shareholders upon the full conversion of the convertible loans and the full exercise of warrants they hold, into ordinary shares, which includes shares underlying convertible loans and warrants that are not convertible or exercisable within 60 days of the date of this prospectus.

(3) It is assumed with respect to each selling shareholder that all of the shares being offered under this Registration Statement have been sold.

(4) Calculated based upon 2,622,971 ordinary shares outstanding as of July 15, 2010.

(5) "Catalyst Fund" refers collectively to Catalyst Fund L.P., Catalyst Fund II L.P. and Catalyst Fund III, L.P., all of which are limited partnerships organized and existing under the laws of the State of Israel, and which share the same general partner, Catalyst Investments and to Catalyst Private Equity Partners (Israel) II L.P. ("Catalyst Private Equity"), an Israeli limited partnership whose general partner is Catalyst Investments II L.P. ("Catalyst Investments II"). Mr. Edouard Cukierman may be deemed to have sole voting and dispositive power with respect to shares held by Catalyst

Fund. Mr. Cukierman disclaims beneficial ownership in such shares, except to the extent of his proportionate interest in them as an indirect shareholder in the general partner of Catalyst Fund. Includes 216,145 ordinary shares held by Catalyst Investment L.P. the general partner of Catalyst Catalyst Investments. The shares being offered include 163,077 ordinary shares underlying a convertible loan extended by Catalyst Private Equity and 163,077 ordinary shares underlying a warrant granted to Catalyst Private Equity. Mr. Edouard Cukierman may be deemed to share voting and dispositive power with respect to shares held by Catalyst Private Equity. Mr. Cukierman disclaims beneficial ownership in such shares except to the extent of his proportionate interest in them as an indirect shareholder in the general partner of Catalyst Investments II.

(6) Includes 9,231 ordinary shares, issuable upon conversion of \$30,000, which are fees for services rendered to the Company by Cukierman & Co. Investment House Ltd. (“CIH”), an affiliate of Catalyst Fund, in connection with the July 2009 debt financing. CIH has assigned the right to receive such fees to Catalyst Private Equity, which in turn applied this amount towards the convertible loan.

(7) Mr. Gérard Limat, a member of our board of directors, is the Chairman of SITA and may be deemed to have sole voting and dispositive power with respect to the shares held by SITA.

(8) Includes 9,785 ordinary shares, issuable upon conversion of \$31,800, which are fees for services rendered to the Company by CIH, an affiliate of Catalyst Fund, in connection with the July 2009 debt financing in connection with such conversion the Company issued to SITA a warrant to purchase 9,785 ordinary shares. CIH has assigned the right to receive such fees to SITA, which in turn applied this amount towards the convertible loan.

(9) Mr. Les Szekely may be deemed to have sole voting and dispositive power with respect to the shares held by Bellite Pty Limited.

(10) Clarence Wesley and Luis Gutierrez Roy may be deemed to have sole voting and dispositive power with respect to the shares held by Telegraph Hill Capital Fund Ltd.

(11) Gabriela Jacobs may be deemed to have sole voting and dispositive power with respect to the shares held by Dimex Systems. Does not include 91,449 ordinary shares held by M.T.A.Y Holdings Ltd., which is the controlling shareholder of Dimex Systems.

(12) Mr. Viner is the Chief Executive Officer of BOS.

(13) Mr. Zelikvosky is the President of BOS.

(14) Mr. Cohen is the Chief Financial Officer of BOS.

DESCRIPTION OF ORDINARY SHARES

The following is a summary description of our Ordinary Shares under our Articles of Association.

Dividend and Liquidation Rights. All holders of paid-up Ordinary Shares of the Company have an equal right to participate in a distribution of (i) dividends, whether by cash or by bonus shares; (ii) Company assets; and (iii) the Company's surplus assets upon winding up, all pro rata to the nominal value of the shares held by them.

The Board of Directors may issue shares and other securities, which are convertible or exercisable into shares, up to the limit of the Company's authorized share capital.

The Company's Board of Directors is the organ authorized to decide upon the distribution of dividends or bonus shares.

Voting, Shareholders' Meetings, Notices and Resolutions. Holders of paid-up Ordinary Shares have one vote for each share held on all matters submitted to a vote of shareholders. Such voting rights may be affected in the future by the grant of any special voting rights to the holders of a class of shares with preferential rights.

The quorum required for a general meeting of shareholders (whether annual or special) consists of at least two shareholders present in person or by proxy/voting instrument and holding, or representing, at least 33 % of the voting rights of the issued share capital. A meeting adjourned for lack of quorum shall be postponed by one week, to the same day, time and place, or to a later time if stated in the invitation to the meeting or in the notice of the meeting. The quorum for the commencement of the adjourned meeting shall be any number of participants.

Unless otherwise determined by the Israeli Companies Law 1999 or the Company's Articles of Association, a resolution requires approval by the holders of a majority of the shares represented at the meeting, in person or by proxy, and voting thereon.

The Companies Law 1999 requires that certain transactions, actions and arrangements be approved by shareholders, including (i) arrangements with a director as to the terms of his office and compensation and arrangements for insurance, exemption and indemnity of directors; (ii) certain Extraordinary Transactions (as defined in the Companies Law) of the Company with its controlling shareholders or any Extraordinary Transaction in which a controlling

shareholder has a personal interest; (iii) certain private placements; and (iv) any action or Extraordinary Transaction in which the majority of the members of the Board of Directors have a personal interest.

Each shareholder of record is entitled to receive at least a 21 day prior notice of shareholders' meetings. The accidental omission to give notice of a meeting to any member, or the non receipt of notice sent to such member, shall not invalidate the proceedings at such meeting. For purposes of determining the shareholders entitled to notice and to vote, the Board of Directors may fix a record date subject to the provisions of the law. Currently, Israeli law provides that the record date not be any earlier than 40 days prior to the meeting.

Transfer of Shares. Subject to applicable securities laws, fully paid Ordinary Shares may be transferred freely. The transfer of Ordinary Shares not fully paid up requires the approval of the Board of Directors.

Modification of Class Rights. Subject to the provisions of any law, the rights attached to any class (unless otherwise provided by the terms of issue of such class), such as voting, rights to dividends and the like, may be altered after a resolution is passed by the Company, with the approval of a resolution passed by a majority of the voting power present by person or proxy and voting hereon at a general meeting of the holders of the shares of such class, or the written agreement of all the class holders. The rights vested in the holders of shares of a particular class that were issued with special rights shall not be deemed to have been altered by the creation or issue of further shares ranking equally with them, unless otherwise provided in such shares' issue terms.

Election of Directors. The Company's directors are elected by the shareholders at a shareholders' meeting. The Ordinary Shares do not have cumulative voting rights in the election of directors. The holders of Ordinary Shares conferring more than 50% of the voting power present by person or by proxy at the shareholders' meeting, have the power to elect the directors. The directors elected shall hold office until the next annual meeting, or sooner if they cease to hold office pursuant to the provisions of the Company's Articles. In addition, the Board of Directors may appoint a director (to fill a vacancy or otherwise) between shareholder meetings, and such appointment shall be valid until the next annual meeting or until such appointee ceases to hold office pursuant to the provisions of the Company's Articles. In compliance with the Companies Law, the Company has two external directors. The external directors are also appointed by the shareholders and their term of office is three years.

PLAN OF DISTRIBUTION

The selling shareholders, and any of their respective pledgees, donees, assignees, transferees, and successors in interest, may sell any or all of their securities from time to time on any stock exchange or automated interdealer quotation system on which the securities are listed, in the over-the-counter market, in privately negotiated transactions or otherwise, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at prices otherwise negotiated. The selling shareholders may sell the securities by one or more of the following methods, without limitation:

- block trades in which the broker or dealer so engaged will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by the broker or dealer for its own account pursuant to this prospectus;
- an exchange distribution in accordance with the rules of any stock exchange on which the securities are listed;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchases, which may include long sales or short sales effected after the effective date of the prospectus of which this registration statement is part;
- privately negotiated transactions;

- “at the market” or through market makers or into an existing market for the shares;
- through the writing or settlement of options or other hedging transactions on the securities, whether through an options exchange or otherwise;
 - through the distribution of the securities by the selling shareholder to its partners, members or shareholders;
 - one or more underwritten offerings on a firm commitment or best efforts basis;
 - any combination of any of these methods of sale; and
 - any other method permitted pursuant to applicable law.

The selling shareholders may also transfer the securities by gift. We do not know of any arrangements by the selling shareholders for the sale of any of the securities.

The selling shareholders may engage brokers and dealers, and any brokers or dealers may arrange for other brokers or dealers to participate in effecting sales of the securities. These brokers, dealers or underwriters may act as principals, or as agents. Broker-dealers may agree to sell a specified number of the securities at a stipulated price per security. If the broker-dealer is unable to sell securities acting as agent, it may purchase as principal any unsold securities at the stipulated price. Broker-dealers who acquire securities as principals may thereafter resell the securities from time to time in transactions in any stock exchange or automated interdealer quotation system on which the securities are then listed, at prices and on terms then prevailing at the time of sale, at prices related to the then-current market price or in negotiated transactions. Broker-dealers may use block transactions and sales to and through broker-dealers, including transactions of the nature described above. The selling shareholders may also sell the securities in accordance with Rule 144 under the Securities Act, rather than pursuant to this prospectus, regardless of whether the securities are covered by this prospectus.

From time to time, a selling shareholder may pledge, hypothecate or grant a security interest in some or all of the securities owned by it. The pledgees, secured parties or persons to whom the securities have been hypothecated will, upon foreclosure in the event of default, be deemed to be selling shareholders. The number of the selling shareholders' securities offered under this prospectus will decrease as and when it takes such actions. The plan of distribution for a selling shareholder's securities will otherwise remain unchanged.

To the extent required under the Securities Act, the aggregate amount of the selling shareholders' securities being offered and the terms of the offering, the names of any agents, brokers, dealers or underwriters and any applicable commission with respect to a particular offer will be set forth in an accompanying prospectus supplement. Any underwriters, dealers, brokers or agents participating in the distribution of the securities may receive compensation in the form of underwriting discounts, concessions, commissions or fees from the selling shareholders and/or purchasers of selling shareholders' securities, for whom they may act (which compensation as to a particular broker-dealer might be in excess of customary commissions).

The selling shareholders and any underwriters, brokers, dealers or agents that participate in the distribution of the securities may be deemed to be "underwriters" within the meaning of the Securities Act, and any discounts, concessions, commissions or fees received by them and any profit on the resale of the securities sold by them may be deemed to be underwriting discounts and commissions.

The selling shareholders may enter into hedging transactions with broker-dealers and the broker-dealers may engage in short sales of the securities in the course of hedging the positions they assume with the selling shareholders,

including, without limitation, in connection with distributions of the securities by those broker-dealers.

The selling shareholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange act of 1934, as amended, or the Exchange Act, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the ordinary shares by the selling shareholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the ordinary shares to engage in market-making activities with respect to the ordinary shares. All of the foregoing may affect the marketability of the ordinary shares and the ability of any person or entity to engage in market-making activities with respect to the ordinary shares.

The selling shareholders may enter into option or other transactions with broker-dealers that involve the delivery of the securities offered hereby to the broker-dealers, who may then resell or otherwise transfer those securities. The selling shareholders may also loan or pledge the securities offered hereby to a broker-dealer and the broker-dealer may sell the securities offered hereby so loaned or upon a default may sell or otherwise transfer the pledged securities offered hereby.

If underwriters are used in an offering of offered securities, such offered securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The securities may be either offered to the public through underwriting syndicates represented by one or more managing underwriters or by one or more underwriters without a syndicate. Unless otherwise set forth in the prospectus supplement, the underwriters will not be obligated to purchase offered securities unless specified conditions are satisfied, and if the underwriters do purchase any offered securities, they will purchase all offered securities.

We have agreed to indemnify in certain circumstances the selling shareholders of the securities covered by the registration statement, against certain liabilities, including liabilities under the Securities Act. Certain selling shareholders have agreed to indemnify us in certain circumstances against certain liabilities, including liabilities under the Securities Act.

The securities offered hereby on behalf of the Selling Shareholders were originally issued to the selling shareholders pursuant to an exemption from the registration requirements of the Securities Act.

We have agreed to pay certain fees and expenses in connection with this offering, not including any selling commissions. We will not receive any proceeds from sales of any securities by the selling shareholders, other than the exercise price payable to us upon exercise of warrants held by selling shareholders.

We cannot assure you that the selling shareholders will sell all or any of the securities offered for sale under this prospectus.

OFFERING EXPENSES

The following is a statement of expenses in connection with the distribution of the securities registered. All amounts shown are estimates except for the SEC registration fee. The estimates do not include expenses related to offerings of particular securities. Each prospectus supplement describing an offering of securities will reflect the estimated expenses related to the offering of securities under that prospectus supplement.

| | |
|-------------------------|-------------|
| SEC registration fees | \$350.25 |
| Legal fees and expenses | \$10,000.00 |
| Miscellaneous expenses | \$5,000.00 |

| | |
|-------|-------------|
| TOTAL | \$15,350.25 |
|-------|-------------|

22

VALIDITY OF SECURITIES

The validity of the ordinary shares offered in this prospectus, will be passed upon for us by Amit, Pollak, Matalon & Co., our Israeli counsel. Certain other legal matters relating to United States law will be passed upon for us by Phillips Nizer LLP, New York, New York.

EXPERTS

Our consolidated financial statements, included in our Form 6-K filed with the SEC on March 29, 2010, have been audited by Kost Forer Gabbay & Kasierer, independent registered public accounting firm and a member of Ernst & Young Global as set forth in their report included therein.

The consolidated financial statements of our consolidated subsidiary BOS - Supply Chain Solutions (Lynk) Inc., for the year ended December 31, 2009, have been audited by Arik Eshel, CPA & Assoc., PC, independent registered public accounting firm, as set forth in their report thereon, included in our Form 6-K filed with the SEC on March 29, 2010.

Such consolidated statements are incorporated herein by reference in reliance upon such reports given on the authority of such firms as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form F-3 under the Securities Act, with respect to the securities offered by this prospectus. However, as is permitted by the rules and regulations of the SEC, this prospectus, which is part of our registration statement on Form F-3, omits certain non-material information, exhibits, schedules and undertakings set forth in the registration statement. For further information about us, and the securities offered by this prospectus, please refer to the registration statement.

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act that are applicable to a foreign private issuer. In accordance with the Exchange Act, we file reports, including annual reports on Form 20-F by June 30 of each year.

The registration statement on Form F-3 of which this prospectus forms a part, including the exhibits and schedules thereto, and reports and other information filed by us with the SEC may be inspected without charge and copied at prescribed rates at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Copies of this material are also available by mail from the Public Reference Section of the SEC, at 100 F. Street, N.E., Washington D.C. 20549, at prescribed rates. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers, such as us, that file electronically with the SEC (<http://www.sec.gov>).

As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of proxy statements to shareholders and our officers, directors and principal shareholders are exempt from the "short-swing profits" reporting and liability provisions contained in Section 16 of the Exchange Act and related Exchange Act rules.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with or submit to it, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be part of this prospectus, and later information filed with or submitted to the SEC will update and supersede this information. We incorporate by reference into this prospectus the documents listed below:

- (a) Our annual report on Form 20-F for the fiscal year ended December 31, 2009, filed with the SEC on June 30, 2010. (SEC File No. 001-14184);
- (b) The description of our ordinary shares contained in our registration statement on Form 8-A filed with the SEC on December 12, 2006, including any amendment or report filed which updates such description; and
- (c) Our Audited Consolidated Financial Statements as of December 31, 2009 filed with the SEC under form 6-K on March 29, 2010 and related disclosures.
- (d) Our report on form 6-K filed with the SEC on August 11, 2010.

In addition, any reports on Form 6-K submitted to the SEC by the registrant pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement that we specifically identify in such forms as being incorporated by reference into the registration statement of which this prospectus forms a part and all subsequent annual reports on Form 20-F filed after the effective date of this registration statement and prior to the termination of this offering and any reports on Form 6-K subsequently submitted to the SEC or portions thereof that we specifically identify in such forms as being incorporated by reference into the registration statement of which this prospectus forms a part, shall be considered to be incorporated into this prospectus by reference and shall be considered a part of this prospectus from the date of filing or submission of such documents.

As you read the above documents, you may find inconsistencies in information from one document to another. If you find inconsistencies between the documents and this prospectus, you should rely on the statements made in the most recent document.

We will deliver to each person (including any beneficial owner) to whom this prospectus has been delivered a copy of any or all of the information that has been incorporated by reference into this prospectus but not delivered with this prospectus. We will provide this information upon written or oral request, and at no cost to the requester. Requests should be directed to:

B.O.S. Better Online Solutions Ltd.
20 Freiman Street
Rishon LeZion, 75100, Israel
Tel.: (+972) 3-954-1000
Fax: (+972) 3-954-1001
Attn.: Eyal Cohen, CFO

ENFORCEABILITY OF CIVIL LIABILITIES

All of our directors and most of our officers reside outside of the United States. It may be difficult to enforce civil liabilities under the Securities Act and the Exchange Act in original actions instituted in Israel. However, subject to specified time limitations, Israeli courts may enforce a United States final executory judgment in a civil matter, including a monetary or compensatory judgment in a non-civil matter, obtained after due process before a court of competent jurisdiction according to the laws of the state in which the judgment is given and the rules of private international law currently prevailing in Israel. The rules of private international law currently prevailing in Israel do not prohibit the enforcement of a judgment by Israeli courts provided that:

- the judgment is enforceable in the state in which it was given;
- adequate service of process has been effected and the defendant has had a reasonable opportunity to present his arguments and evidence;
- the judgment and the enforcement of the judgment are not contrary to the law, public policy, security or sovereignty of the State of Israel;
- the judgment was not obtained by fraud and does not conflict with any other valid judgment in the same matter between the same parties; and
- an action between the same parties in the same matter is not pending in any Israeli court at the time the lawsuit is instituted in the foreign court.

Our subsidiary, Summit is our agent to receive service of process in any action against us in any competent court of the United States arising out of this offering or any purchase or sale of securities in connection with this offering.

If a foreign judgment is enforced by an Israeli court, it generally will be payable in Israeli currency, which can then be converted into non-Israeli currency and transferred out of Israel. The usual practice in an action before an Israeli court to recover an amount in a non-Israeli currency is for the Israeli court to issue a judgment for the equivalent amount in Israeli currency at the rate of exchange in force on the date of the judgment, but the judgment debtor may make payment in foreign currency. Pending collection, the amount of the judgment of an Israeli court stated in Israeli currency ordinarily will be linked to the Israeli consumer price index plus interest at an annual statutory rate set by Israeli regulations prevailing at the time. Judgment creditors must bear the risk of unfavorable exchange rates.

BOS BETTER ONLINE SOLUTIONS LTD.

1,614,382 of our Ordinary Shares offered by Selling Shareholders

PROSPECTUS

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 8. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Consistent with the provisions of the Israeli Companies Law, 1999 (the “Companies Law”), the amended Articles of the Registrant include provisions permitting the Registrant to procure insurance coverage for its “office holders”, exempt them from certain liabilities and indemnify them, to the maximum extent permitted by law. An “office holder” is defined in the Companies Law and the Articles as a director, managing director, chief business manager, executive vice president, vice president, other manager reporting directly to the managing director and any other person assuming the responsibilities of any of the foregoing positions without regard to such person’s title.

INSURANCE

Under the Companies Law, a company may obtain insurance for any of its office holders for: (i) a breach of his duty of care to the company or to another person; (ii) a breach of his duty of loyalty to the company provided that the office holder acted in good faith and had reasonable cause to assume that his act would not prejudice the company’s interests; or (iii) a financial liability imposed upon him in favor of another person concerning an act preformed by him in his capacity as an office holder.

The Registrant has obtained directors’ and officers’ liability insurance covering its officers and directors and those of its subsidiaries.

INDEMNIFICATION

The Companies Law provides that a company may indemnify an officer holder against: (i) a financial liability imposed on him in favor of another person by any judgment concerning an act preformed in his capacity as an office holder; (ii) reasonable litigation expenses, including attorneys’ fees, expended by the office holder or charged to him by a court relating to an act preformed in his capacity as an office holder in connection with: (a) proceedings the company institutes against him or instituted on its behalf or by another person; (b) a criminal charge from which he was acquitted; (c) a criminal charge in which he was convicted for a criminal offence that does not require proof of criminal intent; and (d) an investigation or a proceeding instituted against him by an authority competent to administrate such an investigation or proceeding that ended without the filing of an indictment against the office holder and, either without any financial obligation imposed on the office holder in lieu of criminal proceedings; or with financial obligation imposed on him in lieu of criminal proceedings, in a crime which does not require proof of criminal intent. The Articles of the Registrant authorize the Registrant to indemnify its office holders to the fullest extent permitted under the law. The Companies Law also authorizes a company to undertake in advance to indemnify an office holder with respect to events specified above, provided that, with respect to indemnification under sub-section (i) above, the undertaking: (a) is limited to events which the board of directors determines can be anticipated, based on the activity of the company at the time the undertaking is given; (b) is limited in amount or criteria determined by the board of directors to be reasonable for the circumstances; and (c) specifies the abovementioned events, amounts or criteria.

We have entered into indemnification agreements with directors and some officers providing for indemnification under certain circumstances for acts and omissions which may not be covered (or not be covered in full) by any directors’ and officers’ liability insurance. Such indemnification agreement appears in exhibit 4.1 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on June 28, 2006.

EXEMPTION

Under the Companies Law, an Israeli company may not exempt an office holder from liability for a breach of his duty of loyalty, but may exempt in advance an office holder from his liability to the company, in whole or in part, for a breach of his duty of care, provided that in no event shall the office holder be exempt from any liability for damages caused as a result of a breach of his duty of care to the company in the event of a “distribution” (as defined in the Companies Law). The Articles authorize Registrant to exempt any office holder from liability to the Registrant to the extent permitted by law.

Both the Companies Law and the Articles provide that the Registrant may not exempt or indemnify an office holder nor enter into an insurance contract which would provide coverage for liability incurred as a result of any of the following: (a) a breach by the office holder of his duty of loyalty (however, the Registrant may insure and indemnify against such breach if the office holder acted in good faith and had a reasonable basis to assume that the act would not harm the Registrant); (b) a breach by the office holder of his duty of care if the breach was done intentionally or recklessly, unless made in negligence only; (c) any act done with the intent to derive an illegal personal benefit; or (d) any fine or monetary penalty levied against the office holder.

ITEM 9. EXHIBITS

| Exhibit No. | Description |
|----------------|---|
| 4.1* | Warrant dated as of February 3, 2010 issued by the Company to Dimex Systems (1988) Ltd. |
| 4.2** | Loan Agreement by and between the Company and Dimex Systems (1988) Ltd., dated February 3, 2010; Registration Rights Agreement dated as of the February 3, 2010 by and between the Company and Dimex Systems (1988) Ltd.; Warrant dated as of February 3, 2010 issued by the Company to Dimex Systems (1988) Ltd. |
| 4.3*** | Form of Loan Agreement and Registration Rights Agreement by and among certain lenders and the Registrant. Form of Warrant issued by the Registrant to certain lenders. |
| 5.1‡ | Opinion of Amit, Pollak, Matalon & Co., Israeli counsel for B.O.S Better Online Solutions Ltd., as to the validity of the ordinary shares. |
| 23.1‡ | Consent of Amit, Pollak, Matalon & Co. (included in Exhibit 5.1). |
| 23.2‡ | Consent of Kost Forer Gabbay & Kasierer, a Member Firm of Ernst & Young Global. |
| 23.3‡ | Consent of Arik Eshel, CPA & Assoc., PC. |
| 24.1‡ | Power of Attorney (included on signature page). |

*Incorporated by reference to Exhibit 4.9 of the Company’s Annual Report on Form 20-F filed with the SEC on June 30, 2010.

**Incorporated by reference to Exhibit 4.10 of the Company’s Annual Report on Form 20-F filed with the SEC on June 30, 2010.

***Incorporated by reference to Exhibit 4.16 of the Company’s Annual Report on Form 20-F filed with the SEC on June 30, 2010.

‡ Filed herewith.

ITEM 10. UNDERTAKINGS

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the “Calculation of Registration Fee” table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that Paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) To file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A of Form 20-F at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Act need not be furnished, provided that the registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph (a)(4) and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements. Notwithstanding the foregoing, with respect to registration statements on Form F-3, a post-effective amendment need not be filed to include financial statements and information required by Section 10(a)(3) of the Act or Item 8.A of Form 20-F if such financial statements and information are contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Form F-3.

(5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B:

- A. Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- B. Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such

document immediately prior to such effective date; or

30

- (ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (6) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to the directors, officers and controlling persons of the registrant pursuant to the provisions described under "Item 8. Indemnification of Directors and Officers" above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby further undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance under Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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 F-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Rishon LeZion, in the State of Israel, on August 23, 2010.

B.O.S. Better Online Solutions Ltd.

| | | |
|--------|-------------------------|-------------------------|
| By: | /s/ Yuval Viner | /s/ Eyal Cohen |
| Name: | Yuval Viner | Eyal Cohen |
| Title: | Chief Executive Officer | Chief Financial Officer |

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Yuval Viner and Eyal Cohen, and each of them, his or her true and lawful attorneys-in-fact and agents with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to (i) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this Registration Statement, together with all schedules and exhibits thereto, and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (ii) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (iii) act on, sign and file any supplement to any prospectus filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (iv) take any and all actions which may be necessary or appropriate to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

| Signature | Title | Date |
|---|---|-----------------|
| /s/ Edouard Cukierman Mr. Edouard Cukierman | Chairman of the Board of Directors | August 23, 2010 |
| /s/ Yuval Viner Mr. Yuval Viner | Chief Executive Officer (Principal Executive Officer) | August 23, 2010 |
| /s/ Eyal Cohen Mr. Eyal Cohen | Chief Financial Officer (Principal Financial and Accounting Officer) | August 23, 2010 |

| | | |
|--|----------|-----------------|
| /s/ Ronen Zavlik Mr. Ronen Zavlik | Director | August 23, 2010 |
| Ms. Nelly Assouline | Director | |
| /s/ David Golan Mr. David Golan | Director | August 23, 2010 |
| /s/ Dan Hoz Mr. Dan Hoz | Director | August 23, 2010 |
| /s/ Jacob Neuhof Mr. Jacob Neuhof | Director | August 23, 2010 |
| Mr. Gérard Limat | Director | |
| Mr. Joel Adler | Director | |
| /s/ Guillaume Binder Mr. Guillaume Binder | Director | August 23, 2010 |

Authorized Representative in the U.S.:

BOS - Supply Chain Solutions
(Summit), Inc.

By: /s/ Yuval Viner
Name: Yuval Viner
Title: Director
Date: August 23, 2010
