NETWORK 1 SECURITY SOLUTIONS INC
Form S-3
June 21, 2005

As filed with the Securities and Exchange Commission on June 21, 2005
REGISTRATION NO. 333-_____

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SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

NETWORK-1 SECURITY SOLUTIONS, INC.
(Exact Name of Registrant as Specified in its Charter)

DELAWARE	11-3027591
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification number)

445 PARK AVENUE, SUITE 1028
NEW YORK, NEW YORK 10022
(212) 829-5700
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

COREY M. HOROWITZ
CHAIRMAN AND CHIEF EXECUTIVE OFFICER
445 PARK AVENUE, SUITE 1028
NEW YORK, NEW YORK 10022
(212) 829-5700
(Name, address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO:
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845 THIRD AVENUE
NEW YORK, NEW YORK 10022
(212) 752-1000

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO PUBLIC: From time to time after the effective date of this Registration Statement.

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 1993, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: |X|

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 post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: |_| _____

If the delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box: |_|

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(2)	PROPOSED MAXIMUM PER SHARE OFFERING PRICE (3)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (3)	AMOUNT OF REGISTRATIO FEE
Common Stock, par value $.01 per share	16,836,267(1)	$.73	$12,240,475	$1,446.59

(1) Includes the registration for resale of the following: (i) 2,685,000 shares of common stock and 2,063,750 shares of common stock issuable upon exercise of warrants issued in a private offering in December 2004 and January 2005, (ii) 8,471,679 shares of common stock, (iii) 1,352,152 shares of common stock issuable upon exercise of warrants issued as part of a private offering in December 1999 and (iv) 2,263,686 shares of common stock issuable upon exercise of certain other outstanding warrants and options.

(2) Pursuant to Rule 416 promulgated under the Securities Act of 1933, as amended, this Registration Statement includes an indeterminate number of additional shares of common stock as from time to time become issuable upon the exercise of certain warrants by reason of stock splits, stock dividends and other similar transactions.

(3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended, and based on the average of the bid and asked prices of the common stock on the OTC Bulletin Board on June 15, 2005 in accordance with Rule 457(c) under the Securities Act of 1933, as amended.

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 SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

NETWORK-1 SECURITY SOLUTIONS, INC.

16,836,267 SHARES OF COMMON STOCK

- The selling stockholders listed on pages 14 to 18 of this Prospectus are offering and selling up to 16,836,267 shares of our common stock.
- We will not receive any proceeds from the sale of these shares of common stock. We will receive proceeds if warrants and options to purchase common stock are exercised by payment of cash and those proceeds will be used for our general corporate purposes.
- Our common stock is traded on the OTC Bulletin Board under the symbol "NSSI.OB".
- On June 15, 2005, the average of the bid and ask prices for our common stock was $.73.
- This prospectus relates to the resale from time to time of:
  - 2,685,000 shares of common stock and 2,063,750 shares of common stock issuable upon exercise of warrants issued in our private offering in December 2004 and January 2005;
  - 8,471,679 shares of common stock owned by certain of our stockholders;
  - 1,352,152 shares of common stock issuable upon the exercise of outstanding warrants issued as part of our private offering in December 1999; and
  - 2,263,686 shares of common stock issuable upon exercise of certain other warrants and options.

THE SECURITIES OFFERED IN THIS PROSPECTUS INVOLVE A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE FACTORS DESCRIBED UNDER THE HEADING "RISK FACTORS" BEGINNING ON PAGE 7 OF THIS PROSPECTUS.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

THE DATE OF THIS PROSPECTUS IS JUNE _____, 2005

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PROSPECTUS SUMMARY

This summary represents a summary of all material terms of the offering and only highlights the more detailed information that appears elsewhere, or is incorporated by reference, in this prospectus. This prospectus may not contain all the information important to you as an investor. Accordingly, you should carefully read this entire prospectus together with all other information incorporated by reference in this prospectus before deciding whether to invest in our common stock, especially the risks of investing in our common stock discussed under the caption "Risk Factors".

Unless the context otherwise requires, all references to "we," "us," "our," or the "Company" in this prospectus refer to Network-1 Security Solutions, Inc., a Delaware corporation.

THE COMPANY

Our principal business is the acquisition, development, licensing and protection of our intellectual property. We presently own six patents covering various telecommunications and data networking technologies. Our strategy is to pursue licensing and strategic business alliances with companies in industries that manufacture and sell products that make use of the technologies underlying our patents as well as with other users of the technologies who benefit directly from the technologies including corporate, educational and governmental entities.

On November 18, 2003, we acquired a portfolio of telecommunications and data networking patents (the "Patent Portfolio") from Merlot Communications, Inc., a broadband communications solutions provider. The Patent Portfolio

consists of six patents issued by the U.S. Patent Office that relate to various telecommunications and data networking technologies and includes, among other things, patents covering (i) the control of power delivery over Ethernet networks for the purpose of remotely powering network devices and (ii) systems and methods for the transmission of audio, video and data over local area networks (LANs) in order to achieve higher quality of service.

Our future success is largely dependent upon our proprietary technologies, our ability to protect our intellectual property rights and enter into license agreements for our technology. The complexity of patent and common law, combined with our limited resources, create risk that our efforts to protect our proprietary technologies may not be successful. We cannot be assured that our patents will be upheld, or that third parties will not invalidate our patents. In March 2004, PowerDsine Inc. commenced litigation against us seeking, among other things, a declaratory judgment that our patent covering remote delivery of power over Ethernet cables (U.S. Patent No. 6,218,930) is invalid (See "Risk Factors - We face uncertainty as to the outcome of litigation with PowerDsine").

In February 2004, we initiated licensing efforts relating to our patent (U.S. Patent No. 6,218,930) covering the control of power delivery over Ethernet cables (the "Remote Power Patent"). The Remote Power Patent application was filed on March 11, 1999 and the patent was granted by the U.S. Office of Patent and Trademark on April 21, 2001. The Remote Power Patent expires on March 11, 2019. The Remote Power Patent relates to, among other things, several key technologies underlying the IEEE 802.3af Power Over Ethernet ("PoE") standard

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that was approved on June 13, 2003 by the Institute of Electrical and Electronic Engineers ("IEEE"). This standard governs the delivery of power over Ethernet cables in order to remotely power network connected devices, including wireless switches, wireless access points, FRID card readers, VOIP telephones, enterprise LAN switches and network cameras.

On November 30, 2004, we entered into a Master Services Agreement (the "Agreement") with ThinkFire Services USA, Ltd. ("ThinkFire") pursuant to which we granted ThinkFire the exclusive (except for our direct efforts) worldwide rights to negotiate license agreements for our Remote Power Patent with respect to certain potential licensees agreed to between the parties. We or ThinkFire may terminate the Agreement upon 60 days notice for any reason or upon 30 days notice in the event of a material breach. We have agreed to pay ThinkFire a fee not to exceed 20% of the royalty payments received from license agreements consummated by ThinkFire on its behalf.

As of May 31, 2005, we transmitted letters to approximately 85 companies offering licenses to the Remote Power Patent. To date we have not entered into any license agreements with third parties with respect to our Remote Power Patent or any of our other patents.

MARKET OVERVIEW

We have determined that our initial licensing efforts will be focused on our Remote Power Patent. Our Remote Power Patent relates to several technologies that describe a methodology for controlling the delivery of power to certain devices over an Ethernet network.

The Institute of Electrical and Electronic Engineers (IEEE) is a non-profit, technical professional association of more than 360,000 individual members in approximately 175 countries. The Standards Association of the IEEE is responsible for the creation of global industry standards for a broad range of

technology industries. In 1999, at the urging of several industry vendors, the IEEE formed a task force to facilitate the adoption of a standardized methodology for the delivery of remote power over Ethernet networks which would insure interoperability among vendors of switches and terminal devices. On June 13, 2003 the IEEE Standards Association approved the 802.3af Power Over Ethernet standard (the "Standard"), which covers technologies deployed in delivering power over Ethernet cables. The Standard provides for the Power Sourcing Equipment (PSE) to be deployed in switches or as standalone midspan hubs to provide power to remote devices such as wireless access points, IP phones and network based cameras. The technology is commonly referred to as Power Over Ethernet ("PoE"). We believe our Remote Power Patent covers several of the key technologies covered by the Standard.

Ethernet is the leading local area networking technology in use today. PoE technology allows for the delivery of power over Ethernet cables rather than by separate power cords. As a result, a variety of network devices, including IP telephones, wireless LAN Access Points, web-based network security cameras, data collection terminals and other network devices, will be able to receive power over existing data cables without the need to modify the existing infrastructure to facilitate the provision of power for such devices through traditional AC outlets. Advantages such as lower installation costs, remote management capabilities, lower maintenance costs, centralized power backup, and flexibility of device location as well as the advent of worldwide power compatibility create the possibility of PoE becoming widely adopted in networks throughout the world.

PoE provides numerous benefits including quantifiable returns on investment. The cost of hiring electricians to pull power cable to remote locations used for access points or security cameras can rival or exceed the cost of the devices. Another key benefit is the need for Voice over IP power reliability in the face of power failures. Using PoE enables data center UPS systems to ensure on-going power - a function that would be difficult and expensive to implement if each phone required AC outlets.

These and other advantages such as remote management capabilities, lower maintenance costs, and flexibility of device location have led to forecasts that PoE will be widely adopted in networks throughout the world. International Data Corporation (IDC) forecasts that annual PoE sales will reach 134 million PSE switch ports (not including midspan ports) by 2008, which equates to a 5 year compound annual growth rate of 63%. A recent Gartner report estimates that PoE port shipments more than tripled in 2004 and that price premiums for such ports ranged from $45 to $65 per port and that 18% of all wiring closet switch ports shipped in 2004 were PoE-enabled.

The VOIP market is currently one of the fastest growing segments in the telecommunications industry. VOIP traffic has steadily increased over the last several years and is being deployed by service providers and carriers worldwide. IDC, a market research firm, estimates that worldwide IP telephone unit sales are set to grow from 1.5 million units in 2003 to nearly 5 million units in 2007 and overall voice-over IP equipment, which in 2003 represented a market of $3.3 billion, is expected to grow at a compound annual growth rate of 45.0% to $15.1 billion by 2007.

The ability to supply power to end-devices through Ethernet cables can be applied to other end-devices, such as advanced security cameras, RFID card readers, laptop computers, personal digital assistants and portable digital music players. As the desire to connect more end-devices to the Ethernet network grows, we believe that PoE technology will become more widely used as a method to power these end-devices.

We also own five (5) additional patents covering various methodologies that provide for allocating bandwidth and establishing Quality of Service for delay sensitive data, such as voice, on packet data networks. Quality of Service issues become important when data networks carry packets that contain audio and video which may require priority over data packets traveling over the same network. Covered within these patents are also technologies that establish bi-directional communications control channels between network-connected devices in order to support advanced applications on traditional data networks. We believe that potential licensees of the technologies contained in these patents would be vendors deploying applications that require the low latency transport of delay sensitive data such as video over data networks.

We were incorporated under the laws of the State of Delaware in July 1990. Our executive offices are located at 445 Park Avenue, Suite 1028, New York, New York 10022 and our telephone number at that address is (212) 829-5700. Our web site can be found at http://www.network-1.com.

SHARES BEING OFFERED

This prospectus relates to the offering by the selling shareholders of an aggregate of 16,836,267 shares of our common stock, consisting of (i) 2,685,000 shares of our common stock and 2,063,750 shares of our common stock issuable upon exercise of warrants issued in our private offering in December 2004 and January 2005, (ii) 8,471,679 shares of common stock owned by certain of our stockholders, (iii) 1,352,152 shares of our common stock issuable upon exercise of warrants issued to such selling stockholders as part of our private offering in December 1999 and (iv) 2,263,686 shares of our common stock issuable upon exercise of certain other outstanding warrants and options.

RISK FACTORS

AN INVESTMENT IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. THE RISK FACTORS LISTED BELOW ARE THOSE THAT WE CONSIDER TO BE MATERIAL TO AN INVESTMENT IN OUR COMMON STOCK AND THOSE WHICH, IF REALIZED, COULD HAVE MATERIAL ADVERSE EFFECTS ON OUR BUSINESS, FINANCIAL CONDITION OR RESULTS OF OPERATIONS AS SPECIFICALLY DISCUSSED BELOW. IN SUCH AN EVENT, THE TRADING PRICE OF OUR COMMON STOCK COULD DECLINE, AND YOU COULD LOSE ALL OR PART OF YOUR INVESTMENT. BEFORE YOU INVEST IN OUR COMMON STOCK, YOU SHOULD BE AWARE OF VARIOUS RISKS, INCLUDING THOSE DESCRIBED BELOW. YOU SHOULD CAREFULLY CONSIDER THESE RISK FACTORS, TOGETHER WITH ALL OF THE OTHER INFORMATION INCLUDED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS, BEFORE YOU DECIDE WHETHER TO PURCHASE OUR COMMON STOCK. THIS SECTION INCLUDES OR REFERS TO CERTAIN FORWARD-LOOKING STATEMENTS. YOU SHOULD REFER TO THE EXPLANATION OF THE QUALIFICATIONS AND LIMITATIONS ON SUCH FORWARD-LOOKING STATEMENTS DISCUSSED ON PAGE 13.

WE HAVE A HISTORY OF LOSSES AND NO REVENUE FROM CURRENT OPERATIONS.

We have incurred substantial operating losses since our inception, which has resulted in an accumulated deficit of $(43,720,000) as of March 31, 2005. For the years ended December 31, 2004 and 2003, we incurred net losses of $(1,953,000) and $(614,000), respectively. For the three months ended March 31, 2005, we incurred a net loss of $(731,000). We have financed our operations

primarily by sales of equity securities as well as the sale of our CyberWall PLUS security software technology in May 2003. Since December 2002, when we discontinued our security software products and following the commencement of our new technology licensing business in November 2003, we have not had material revenue from operations and for the year ended December 31, 2004 and the three months ended March 31, 2005, we had no revenue from operations. Our ability to achieve revenue and generate positive cash flow from operations is dependent upon consummating licensing agreements with respect to our patented technology. We may not be successful in achieving licensing agreements with third parties and our failure to do so would have a material adverse effect on our business, financial condition and results of operations. We may not be able to achieve revenue or generate positive cash flow from operations from our new licensing business.

WE COULD BE REQUIRED TO STOP OPERATIONS IF WE ARE UNABLE TO DEVELOP OUR TECHNOLOGY LICENSING BUSINESS OR RAISE CAPITAL WHEN NEEDED.

We anticipate, based on our currently proposed plans and assumptions relating to our operations (including the timetable of costs and expenses associated with our continued operations), that our current cash position will more likely than not be sufficient to satisfy our operations and capital requirements until September 2006. However, we may expend our funds prior thereto. In the event our plans change, or our assumptions change or prove to be inaccurate (due to unanticipated expenses, difficulties, delays or otherwise), we could have insufficient funds to support our operations prior to September 2006. Our inability to obtain additional financing when needed, absent generating sufficient cash from licensing arrangements, would have a material adverse effect on the Company, requiring us to curtail or possibly cease our operations. In addition, any additional equity financing may involve substantial dilution to the interests of our then existing stockholders.

OUR NEW LICENSING BUSINESS MAY NOT BE SUCCESSFUL.

In November 2003, we entered the technology licensing business following our acquisition of six patents relating to various telecommunications and data networking technologies including, among others, patents covering the delivery of remote power over Ethernet and the transmission of audio, video and data over computer and telephony networks. Accordingly, we have a very limited history in the technology licensing business upon which an evaluation of our prospects and future performance can be made. Our prospects must be considered in light of the risks, expenses and difficulties frequently encountered in the development, operation and expansion of a new business based on patented technologies in a highly specialized and competitive market. We may not be able to achieve revenue or profitable operations from our new licensing business.

OUR FUTURE SOURCE OF LICENSING REVENUE IS UNCERTAIN.

In February 2004, we initiated our first licensing efforts relating to the technologies in our remote power patent (U.S. Patent No. 6,218,930) (the "Remote Power Patent"). To date, we have not entered into any licensing agreements with third parties with respect to our Remote Power Patent or our other patented technologies. Our inability to consummate licensing agreements and achieve revenue from our patented technologies would have a material adverse effect on our operations and our ability to continue our business. In addition, in the event we consummate license arrangements with third parties, such arrangements are not likely to produce a stable or predictable stream of revenue in the foreseeable future. Furthermore, the success of our licensing efforts depends upon the strength of our intellectual property rights.

WE ARE CURRENTLY RELYING UPON THE EFFORTS OF THINKFIRE TO CONSUMMATE LICENSING AGREEMENTS FOR OUR REMOTE POWER PATENT WITH CERTAIN SELECT POTENTIAL LICENSEES.

On November 30, 2004, we entered into a Master Services Agreement (the "Agreement") with ThinkFire Services USA, Ltd. ("ThinkFire") pursuant to which we granted ThinkFire the exclusive (except for us and related companies) worldwide rights to negotiate license agreements for the Remote Power Patent with respect to certain potential licensees agreed between the parties. Either we or ThinkFire can terminate the Agreement upon 60 days notice for any reason or upon 30 days notice in the event of a material breach. We have agreed to pay ThinkFire a fee not to exceed 20% of the royalty payments received from license agreements consummated by ThinkFire on our behalf. ThinkFire may not be successful in consummating license agreements on our behalf or even if it does, such license agreements may not result in significant royalty payments to us.

OUR SUCCESS IS DEPENDENT UPON OUR ABILITY TO PROTECT OUR PROPRIETARY TECHNOLOGIES.

Our success is substantially dependent upon our proprietary technologies and our ability to protect our intellectual property rights. We currently hold 6 patents issued by the U.S. Patent Office that relate to various telecommunications and data networking technologies and include

among other things, patents covering the transmission of audio, voice and data over computer and telephony networks and the delivery of remote PoE networks. We rely upon our patents and trade secret laws, non-disclosure agreements with our employees, consultants and third parties to protect our intellectual property rights. The complexity of patent and common law, combined with our limited resources, create risk that our efforts to protect our proprietary technologies may not be successful. We cannot assure you that our patents will be upheld or that third parties will not invalidate our patent rights. In the event our intellectual property rights are not upheld, such an event would have a material adverse effect on our company.

ANY LITIGATION TO PROTECT OUR INTELLECTUAL PROPERTY OR ANY THIRD PARTY CLAIMS TO INVALIDATE OUR PATENTS COULD HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS.

Our success depends on our ability to protect our intellectual property rights. In the future, it may be necessary for us to commence patent litigation against third parties whom we believe require a license to our patents. In addition, we may be subject to third-party claims seeking to invalidate our patents, as is the case with the action commenced by PowerDsine relating to our Remote Power Patent as discussed below. These types of claims may subject us to costly litigation. In addition, based on our limited financial resources, we may not be able to pursue litigation as aggressively as others with substantially greater financial resources. Based on our limited financial resources, it may be necessary for us to engage third party professionals on a contingency basis pursuant to which such parties would be entitled to share in the proceeds of any successful enforcement of our intellectual property rights. If third parties making claims against us seeking to invalidate our patent are successful, they may be able to obtain injunctive or other equitable relief, which effectively could block our ability to license or otherwise capitalize on our proprietary technologies. Successful litigation against us resulting in a determination that our patents are invalid would have a material adverse effect on our company.

WE FACE UNCERTAINTY AS TO THE OUTCOME OF LITIGATION WITH POWERDSINE.

On March 31, 2004, PowerDsine Inc. ("PowerDsine") commenced an action against us in the United District Court, Southern District of New York (Civil Action No. 04 CV 2502) seeking a declaratory judgment that our Remote Power Patent is invalid and is not infringed by PowerDsine and/or its customers. PowerDsine further seeks an order permanently enjoining us (i) from making any claims to any person or entity that PowerDsine's products infringe the Remote Power Patent or contribute to infringement of the patent, (ii) from interfering with or threatening to interfere with the importation, sale, license or use of PowerDsine's PoE components or products, and (iii) from instituting or prosecuting any lawsuit or proceeding placing at issue the right of PowerDsine, its customers, licensees, successors, or assigns to import, use or sell PowerDsine's PoE components or products. We believe our Remote Power Patent is valid and that we have meritorious defenses to the action. On December 1, 2004, we moved to dismiss the declaratory judgment action asserting, among other things, that there is no actual case or controversy because PowerDsine did not have reasonable apprehension of suit at the time the case was filed, and therefore, the court lacks jurisdiction over the matter. On January 21, 2005 our motion to dismiss was denied. We have engaged in settlement discussions with PowerDsine in an effort to resolve the litigation. In the event that we are unable to settle the litigation, we intend to vigorously defend the lawsuit and take whatever actions are necessary to protect our intellectual property. In the event, however, that the Court granted the declaratory

judgment sought by PowerDsine and our Remote Power Patent was determined to be invalid, such a determination would have a material adverse effect on us. Regardless of the outcome, this litigation may subject us to significant costs and diversion of management time.

MATERIAL LICENSING REVENUES FROM OUR REMOTE POWER PATENT MAY BE DEPENDENT UPON THE APPLICABILITY OF THE IEEE STANDARD.

The Institute of Electrical and Electronic Engineers (IEEE) is a non-profit, technical professional association of more than 360,000 individual members in approximately 175 countries. The Standards Association of the IEEE is responsible for the creation of global industry standards for a broad range of technology industries. In 1999, at the urging of several industry vendors, the IEEE formed a task force to facilitate the adoption of a standardized methodology for the delivery of remote power over Ethernet networks which would insure interoperability among vendors of switches and terminal devices. In June 2003, the IEEE Standards Association approved the 802.3af Power Over Ethernet standard (the "Standard"), which covers technologies deployed in delivering power over Ethernet cables including whether deployed in switches or as standalone midspan hubs both of which provide power to remote devices including wireless access points, IP phones and network based cameras. The technology is commonly referred to as Power Over Ethernet ("PoE"). We believe our Remote Power Patent covers several of the key technologies covered by the Standard. However, there is a risk that as a result of litigation a court may determine otherwise and such a determination would have a material adverse effect on our ability to enter into license agreements and achieve revenue and profits from our Remote Power Patent.

WE FACE INTENSE COMPETITION AND WE MAY NOT BE ABLE TO SUCCESSFULLY COMPETE.

The telecommunications and data networking market is characterized by intense competition and rapidly changing business conditions, customer requirements and technologies. Our current and potential competitors have longer operating histories, greater name recognition and possess substantially greater financial, technical, marketing and other competitive resources than us. Although we believe that we have rights to enforceable patents relating to

telecommunications and data networking, there can be no assurance that third parties will not invalidate any or all of our patents. In addition, the telecommunications and data networking industries may develop technologies that may be more effective than our proprietary technologies or that render our technologies less marketable or obsolete.

OUR MARKETS ARE SUBJECT TO RAPID TECHNOLOGICAL CHANGE AND OUR TECHNOLOGIES FACE POTENTIAL TECHNOLOGY OBSOLESCENCE.

The telecommunications and data networking technology market including, transmission of audio, video and data over computer and telephony networks and the delivery of remote power over Ethernet markets, are characterized by rapid technological changes, changing customer requirements, frequent new product introductions and enhancements, and evolving industry standards. The introduction of products embodying new technologies and the emergence of new industry standards may render our technologies obsolete or less marketable. To the extent we are able to achieve revenue in the future, such revenue will be derived from licensing our technologies based on existing and evolving industry standards.

DEPENDENCE UPON CEO AND CHAIRMAN.

Our success will largely be dependent upon the personal efforts of Corey M. Horowitz, Chairman and Chief Executive Officer and Chairman of the Board of Directors. On November 26, 2004, we entered into a two (2) year employment agreement with Mr. Horowitz pursuant to which he serves as our Chairman and Chief Executive Officer. We do not maintain key man life insurance on the life of Mr. Horowitz. The loss of the services of Mr. Horowitz would have a material adverse effect on our business and prospects.

RISKS RELATED TO LOW PRICED STOCKS.

Our common stock currently trades on the OTC Bulletin Board under the symbol NSSI.OB. Since the trading price of our common stock is below $5.00 per share, our common stock is considered a penny stock. SEC regulations generally define a penny stock to be an equity security that is not listed on Nasdaq or a national securities exchange and that has a market value of less than $5.00 per share, subject to certain exceptions. SEC regulations require broker-dealers to deliver to a purchaser of our common stock a disclosure schedule explaining the penny stock market and the risks associated with it. Various sales practice requirements are also imposed on broker-dealers who sell penny stocks to persons other than established customers and accredited investors (generally institutions). Broker-dealers must also provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and monthly account statements disclosing recent price information for the penny stock held in the customer's account.

THE SIGNIFICANT NUMBER OF OPTIONS AND WARRANTS OUTSTANDING MAY ADVERSELY EFFECT THE MARKET PRICE FOR OUR COMMON STOCK.

As of May 31, 2005, there are outstanding (i) options and warrants to purchase an aggregate of 11,017,244 shares of our common stock at exercise prices ranging from $.12 to $10.13, and (ii) 207,630 additional shares of our common stock which may be issued in the future under our stock option plan. To the extent that outstanding options and warrants are exercised, stockholder percentage ownership will be diluted and any sales in the public market of the common stock underlying such options may adversely affect prevailing market prices for our common stock.

WE HAVE A SIGNIFICANT AMOUNT OF AUTHORIZED BUT UNISSUED PREFERRED STOCK, WHICH MAY AFFECT THE LIKELIHOOD OF A CHANGE OF CONTROL IN OUR COMPANY.

Our Board of Directors has the authority, without further action by the stockholders, to issue 10,000,000 shares of preferred stock on such terms and with such rights, preferences and designations as our Board of Directors may determine. Such terms may include restricting dividends on our common stock, dilution of the voting power of our common stock or impairing the liquidation rights of the holders of our common stock. Issuance of such preferred stock, depending on the rights, preferences and designations thereof, may have the effect of delaying, deterring or preventing a change in control. In addition, certain "anti-takeover" provisions in

Delaware law may restrict the ability of our stockholders to authorize a merger, business combination or change of control.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The SEC has prescribed rates for copying. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to you on the SEC's Internet site at http://www.sec.gov.

This prospectus is part of a Registration Statement on Form S-3 filed by us with the SEC under the Securities Act and therefore omits certain information in the Registration Statement. We have also filed exhibits with the Registration Statement that are not included in this prospectus, and you should refer to the applicable exhibit for a complete description of any statement referring to any document. You can inspect a copy of the Registration Statement and its exhibits, without charge, at the SEC's Public Reference Room, and can copy such material upon paying the SEC's prescribed rates.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information in this prospectus. Accordingly, we incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934:

1. our Annual Report on Form 10-KSB for the year ended December 31, 2004 (filed April 14, 2005);

2. our Quarterly Report on Form 10-QSB for the three months ended March 31, 2005 (filed May 16, 2005);

3. our Quarterly Report on Form 10-QSB/A for the three months ended March 31 2005 (filed June 14, 2005);

4. our Current Report on Form 8-K/A (filed January 24, 2005);

5. our Current Report on Form 8-K (filed January 20, 2005); and

6. the description of our common stock incorporated by reference in our Registration Statement on Form 8-A (filed October 9, 1998), as amended on November 3, 1998.

We will provide at no cost to each person to whom this prospectus is delivered, upon written or oral request, a copy of any of these filings including any and all information that has been incorporated by reference in this Prospectus. You should direct such requests to us at 445 Park Avenue, Suite 1028, New York, New York 10022, attention: Corey M. Horowitz, Chairman and Chief Executive Officer, telephone number (212) 829-5700.

You should rely only on the information and representations provided in this prospectus or on the information incorporated by reference in this prospectus. Neither we nor the selling stockholders have authorized anyone to provide you with different information. Neither we nor the selling stockholders are making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front of this document.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements are statements that include information based upon beliefs of our management, as well as assumptions made by and information available to our management. Statements containing terms such as "believes," "expects," "anticipates," "intends" or similar words are intended to identify forward-looking statements.

Our management, based upon assumptions they consider reasonable, has compiled these forward-looking statements. Such statements reflect our current views with respect to future events. These statements involve known and unknown risks and uncertainties that may cause our actual results in future periods to differ materially from what is currently anticipated. We make cautionary statements in certain sections of this prospectus, including under "Risk Factors." You should read these cautionary statements as being applicable to all related forward-looking statements wherever they appear in this prospectus, the materials referred to in this prospectus or the materials incorporated by reference into this prospectus.

You are cautioned that no forward-looking statement is a guarantee of future performance and you should not place undue reliance on any forward-looking statement. Such statements speak only as of the date of this prospectus and we are not undertaking any obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of our common stock by the selling stockholders. All proceeds from the sale of such shares will be for the accounts of the selling stockholders. We will receive approximately $8,079,119 in proceeds, equal to the aggregate exercise price of all warrants and options to purchase an aggregate of 5,679,588 shares of our

common stock, if the holders of all of the warrants and options referenced in this prospectus exercise such securities into shares of our common stock for cash. Warrants to purchase 550,000

shares of our common stock at an aggregate exercise price of $580,000 may be exercised on a cashless basis (by payment of the exercise price in shares rather than a cash payment). Any cash proceeds that we may receive upon exercise of the warrants and options will be used for working capital purposes.

SELLING STOCKHOLDERS

The following table sets forth information, as of June 15, 2005, with respect to the common stock beneficially owned by each selling stockholder. The selling stockholders are not obligated to sell any of the shares offered by this prospectus. The number of shares sold by each selling stockholder may depend on a number of factors, such as the market price of our common stock.

We are registering 16,836,267 shares of our common stock for resale by the selling stockholders. We agreed to file a registration statement under the Securities Act of 1933, as amended (the "Securities Act") with the Securities and Exchange Commission, of which this prospectus is a part, with respect to the resale of:

- 2,685,000 shares of our common stock and 2,063,750 shares of our common stock issuable upon exercise of warrants issued in our private offering completed in December 2004 and January 2005;
- 8,471,679 additional shares of our common stock issued to certain of our stockholders, and
- 1,352,152 shares of our common stock issuable upon the exercise of warrants issued as part of our private offering completed in December 1999; and
- 2,263,686 shares of our common stock issuable upon exercise of certain other outstanding warrants and options, all as disclosed in the table below.

The number of shares of our common stock shown in the following table as being offered by the selling stockholders do not include such presently indeterminate number of additional shares of our common stock that may be issuable as a result of stock splits, stock dividends and similar transactions. Pursuant to Rule 416 under the Securities Act, however, such shares are included in the Registration Statement of which this prospectus is a part.

The selling stockholders may sell any or all of their shares listed below from time to time. Accordingly, we cannot estimate how many shares the selling stockholders will own upon consummation of any such sales. Also, the selling stockholders may have sold, transferred or otherwise disposed of all or a portion of their shares since the date on which the information was provided in transactions exempt from the registration requirements of the Securities Act.

None of the selling stockholders has had a material relationship with us within the past three years other than as a result of the ownership of our securities except: (i) Corey M. Horowitz is our Chairman and Chief Executive

Officer and (ii) CHM Capital Management Corp., the sole shareholder, director and officer of which is Mr. Horowitz, performed consulting services for us prior to Mr. Horowitz becoming our Chairman and Chief Executive Officer in December 2003.

NAME	NUMBER OF SHARES BENEFICIALLY OWNED PRIOR TO OFFERING(1)	NUMBER OF SHARES BEING OFFERED	NUMBER OF SH BENEFICIALLY AFTER OFFERING
Barry Rubenstein	3,792,915 (3)	3,745,415	47,50
Irwin Lieber	2,098,002 (4)	2,050,502	47,50
Barry Fingerhut	2,008,598 (5)	2,008,598	
Seth Lieber	1,632,300 (6)	1,632,300	
Jonathan Lieber	1,630,748 (7)	1,630,748	
Wheatley Partners II, L.P.	1,280,207 (8)	1,280,207	
Wheatley Partners, L.P.	194,280	194,280	
Wheatley Foreign Partners, L.P.	16,868	16,868	
Woodland Venture Fund	829,226	829,226	
Seneca Ventures	619,983	619,983	
Woodland Partners	309,316	309,316	
Brookwood Partners, L.P.	294,810	294,810	
Marilyn Rubenstein	1,049	1,049	
Corey M. Horowitz	8,591,945 (9)	4,854,084	3,737,86
CMH Capital Management Corp.	4,167,800 (10)	4,167,800	
Donna Slavitt	78,720	78,720	
Logan Zev Horowitz 1999 Trust	15,000	15,000	
Dylan Max Horowitz 1989 Trust	15,000	15,000	
Corey M. Horowitz Custodian for Zachary Jordon Horowitz	15,000	15,000	
FalconStor Software, Inc.	650,000 (11)	650,000	
Emigrant Capital Corporation	1,312,500 (12)	1,312,500	

NAME	NUMBER OF SHARES BENEFICIALLY OWNED PRIOR TO OFFERING(1)	NUMBER OF SHARES BEING OFFERED	NUMBER OF SH BENEFICIALLY AFTER OFFERING

Singer Opportunity Fund, L.P.	784,125 (13)	625,625	158,50
Singer Fund, L.P.	282,355 (14)	249,375	32,98
David M. Seldin	474,000 (15)	455,000	19,00
Robert Graifman	279,777 (16)	175,000	104,77
Gilbert S. Stein	175,000 (17)	175,000	
John R. Hart	175,000 (18)	175,000	
Granite Bridge Fund, L.P.	131,250 (19)	131,250	
CGA Resources, LLC	87,500 (20)	87,500	
Barry S. Friedberg	87,500 (21)	87,500	
Dasa Sada, LLC	87,500 (22)	87,500	
Steven Ackerman	87,500 (23)	87,500	
Francis May	43,750 (24)	43,750	
Matthew Balk	17,500 (25)	17,500	
Kenneth L. Walters	17,500 (26)	17,500	
Jeb Investment Ltd.	175,450 (27)	166,250	9,20
Jeb Partners, L.P.	175,050 (28)	166,250	8,80
Manchester Explorer Limited Partnership	115,200 (29)	105,000	10,20
Steve Heinman	175,000 (30)	175,000	
Brian Eng	112,500 (31)	87,500	25,00
Brad Reifler	13,125 (32)	13,125	
Steven Goldfarb	8,750 (33)	8,750	
Hilary Bergman	13,125 (34)	13,125	
Samuel Solomon	17,500 (35)	17,500	
Jeffrey Finkle	105,000 (36)	105,000	
Edward Sussi	35,000 (37)	35,000	

NAME	NUMBER OF SHARES BENEFICIALLY OWNED PRIOR TO OFFERING(1)	NUMBER OF SHARES BEING OFFERED	NUMBER OF SH BENEFICIALLY AFTER OFFERING

Alan Friedman	35,000 (38)	35,000	
Alan Weiner	43,750 (39)	43,750	
Laurent Ohana	50,000 (40)	50,000	
Philip Bloom	586,526 (41)	586,526	
New Dimensions Trading, LTD	114,554 (42)	114,554	
Eli Oxenhorn	95,073 (43)	95,073	
Aaron Wolfson	76,472 (44)	76,472	
Avi Fogel	44,857 (45)	44,857	
Jack Erlanger	44,855 (46)	44,855	
Abraham Wolfson	38,186 (47)	38,186	
William Walters	38,186 (48)	38,186	
Gerald Josephson	36,355 (49)	36,355	
MW Partnership	34,066 (50)	34,066	
Gyenes and Co.	31,139 (51)	22,707	8,43
Jeffrey Rubinstein	29,518 (52)	29,518	
Sandler Company Investment Partners	24,665 (53)	24,665	
Maurice Shamah	22,707 (54)	22,707	
Larry Altman	22,707 (55)	22,707	
G.E.R. Family Partnership	16,862 (56)	16,862	
Patrick McBrien	12,267 (57)	12,267	
Scott Zelnick	12,267 (58)	12,267	
Levitan Family Charitable Trust	12,154 (59)	12,153	
Abbey Oxenhorn	11,351 (60)	11,351	
Seth Oxenhorn	11,351 (61)	11,351	
Emanuel Pearlman	8,677 (62)	4,098	4,57

NAME	NUMBER OF SHARES BENEFICIALLY OWNED PRIOR TO OFFERING(1)	NUMBER OF SHARES BEING OFFERED	NUMBER OF SH BENEFICIALLY AFTER OFFERING
Brad Zelnick	4,812 (63)	4,812	

Sage Alliances Inc.	135,462 (64)	135,462	
Jim McNeil	37,248 (65)	37,248	
Sam Schwartz	38,412 (66)	2,328	36,08
Roy Martin	2,328 (67)	2,328	
Malcolm Taub	2,328 (68)	2,328	

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* Less than 1%

(1) Except as otherwise indicated, the address for each beneficial owner is c/o Network-1 Security Solutions, Inc., 445 Park Avenue, Suite 1028, New York, New York 10022.

(2) Unless otherwise indicated, the Company believes that all persons named in the above table have sole voting and investment power with respect to all shares of common stock beneficially owned by them. A person is deemed to be the beneficial owner of securities that can be acquired by such person within 60 days from the date hereof upon the exercise of options, warrants or convertible securities. Each beneficial owner's percentage ownership is determined by assuming that options, warrants and convertible securities held by such person (but not those held by any other person) and which are exercisable or convertible within 60 days have been exercised and converted. Assumes a base of 17,697,572 shares of common stock outstanding.

(3) Includes (i) 1,280,207 shares of common stock held by Wheatley Partners II, L.P., (ii) 194,280 shares of common stock held by Wheatley Partners, L.P., (iii) 16,868 shares of common stock held by Wheatley Foreign Partners, L.P., (iv) 150,012 shares of common stock held by Mr. Rubenstein, (v) 47,500 shares of common stock subject to currently exercisable stock options held by Mr. Rubenstein, (vi) 49,664 shares of common stock subject to currently exercisable warrants held by Mr. Rubenstein, (vii) 829,226, 619,983, 309,316, 294,810 and 1,049 shares of common stock held by Woodland Venture Fund, Seneca Ventures, Woodland Partners, Brookwood Partners, L.P. and Marilyn Rubenstein, respectively. Does not include options to purchase 11,875 shares of common stock held by Mr. Rubenstein which are not currently exercisable. The aforementioned beneficial ownership by Mr. Rubenstein is based upon Amendment No. 6 to Schedule 13D jointly filed by Mr. Rubenstein and related parties with the Securities and Exchange Commission on January 3, 2005 and Form 4s filed by Mr. Rubenstein with the Securities and Exchange Commission on December 21, 2004 and February 17, 2005. Barry Rubenstein is a general partner of Wheatley Partners II, L.P. and a member of the general partner of

each of Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P. Barry Rubenstein and Woodland Services Corp. are the general partners of Woodland Venture Fund and Seneca Ventures. Barry Rubenstein is the President and sole director of Woodland Services Corp. Marilyn Rubenstein is the wife of Barry Rubenstein. Mr. Rubenstein disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein.

The address of Barry Rubenstein is 68 Wheatley Road, Brookville, New York 11545. The address of Wheatley Partners II, L.P. and Wheatley Partners, L.P. is 60 Cuttermill Road, Great Neck, New York 11021. The address of Wheatley Foreign Partners, L.P. is c/o Fiduciary Trust, One Capital Place, Snedden Road, P.O. Box 162, Grand Cayman, British West Indies. The address for Woodland Venture Fund, Seneca Ventures, Brookwood Partners, L.P. and Woodland Partners is c/o Barry Rubenstein, 68 Wheatley Road, Brookville, New York 11545.

(4) Includes (i) 1,280,207 shares of common stock held by Wheatley Partners II, L.P., (ii) 194,280 shares of common stock held by Wheatley Partners, L.P., (iii) 16,868 shares of common stock held by Wheatley Foreign Partners, L.P., (iv) 509,483 shares of common stock owned by Mr. Lieber, (v) 47,500 shares of common stock subject to currently exercisable stock options owned by Mr. Lieber, and (vi) 49,664 shares of common stock subject to currently exercisable warrants owned by Mr. Lieber. Does not include options to purchase 11,875 shares of Common stock owned by Mr. Lieber which are not currently exercisable. The aforementioned beneficial ownership by Mr. Lieber is based upon Amendment No. 6 to Schedule 13D jointly filed by Mr. Lieber and related parties with Securities and Exchange Commission on January 3, 2005 and Form 4s filed with the Securities and Exchange Commission on December 21, 2004 and February 17, 2005. Mr. Lieber disclaims beneficial ownership of the shares of Common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein. The address of Irwin Lieber is c/o Wheatley Partners, II, L.P., 80 Cuttermill Road, Great Neck, New York 11021.

(5) Includes (i) 1,280,207 shares of common stock held by Wheatley Partners, II, L.P., (ii) 194,280 shares of common stock held by Wheatley Partners, L.P., (iii) 16,868 shares of common stock held by Wheatley Foreign Partners, L.P., and (iv) 517,243 shares of common stock owned by Mr. Fingerhut. Mr. Fingerhut disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein. The address of Barry Fingerhut is c/o Wheatley Partners, II, L.P., 80 Cuttermill Road, Great Neck, New York 11021.

(6) Includes (i) 1,280,207 shares of common stock held by Wheatley Partners, II, L.P., (ii) 194,280 shares of common stock held by Wheatley Partners, L.P., (iii) 16,868 shares of common stock held by Wheatley Foreign Partners, L.P., and (iv)140,945 shares of common stock owned by Mr. Lieber. Mr. Lieber disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein. The address of Seth Lieber is c/o Wheatley Partners, II, L.P., 80 Cuttermill Road, Great Neck, New York 11021.

(7) Includes (i) 1,280,207 shares of common stock held by Wheatley Partners, II, L.P., (ii) 194,280 shares of common stock held by Wheatley Partners, L.P., (iii) 16,868 shares of common stock held by Wheatley Foreign Partners, L.P., and (iv)139,393 shares of common stock owned by Mr. Lieber. Mr. Lieber disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein. The address of Jonathan

Lieber is c/o Wheatley Partners, II, L.P., 80 Cuttermill Road, Great Neck, New York 11021.

(8) Includes 1,280,207 shares of common stock. Wheatley Partners II, L.P.'s business address is 80 Cuttermill Road, Great Neck, New York 11021.

(9) Includes (i) 475,053 shares of common stock held by Mr. Horowitz, (ii) 3,737,861 shares of common stock subject to currently exercisable stock options held by Mr. Horowitz, (iii) 2,867,800 shares of common stock held by CMH Capital Management Corp. ("CMH"), (iv) 550,000 shares of common stock subject to currently exercisable warrants held by CMH, (v) 750,000 shares of common stock subject to currently exercisable options held by CMH, (vi) 85,220 shares of common stock subject to currently exercisable warrants held by Mr. Horowitz, (vii) 78,720 shares of common stock owned by Donna Slavitt, the wife of Mr. Horowitz (viii) 45,000 shares of common stock held by two trusts and a custodian account for the benefit of Mr. Horowitz's three children and (ix) 2,291 shares of common stock held by Horowitz Partners, a general partnership of which Mr. Horowitz is a partner. Does not include options to purchase 610,625 shares of common stock which are not currently exercisable. The address of CMH Capital Management Corp. is 445 Park Avenue, New York, New York 10022.

(10) Includes (i) 2,867,800 shares of common stock, (ii) 550,000 shares of common stock subject to currently exercisable warrants and (iii) 750,000 shares of common stock subject to currently exercisable options.

(11) Includes 650,000 shares of common stock subject to currently exercisable warrants. The address of FalconStor Software, Inc. is 2 Huntington Quadrangle, Suite 2500, Melville, New York 11747.

(12) Includes (i) 750,000 shares of common stock and (ii) 562,500 shares of common stock subject to currently exercisable warrants. The address of Emigrant Capital Corporation is 6 East 43rd Street, New York, New York 10017.

(13) Includes (i) 516,000 shares of Common Stock and (ii) 268,125 shares of Common Stock subject to currently exercisable warrants owned by Singer Opportunity Fund, L.P. The address of Singer Opportunity Fund, L.P. is 650 Fifth Avenue, New York, New York 10019.

(14) Includes (i) 175,480 shares of Common Stock and (ii) 106,875 shares of Common Stock subject to currently exercisable warrants owned by Singer Fund, L.P., The address of Singer Fund, L.P. is 650 Fifth Avenue, New York, New York 10019.

(15) Includes (i) 279,000 shares of common stock and (ii) 195,000 shares of common stock subject to currently exercisable warrants.

(16) Includes (i) 154,777 shares of common stock and (ii) 75,000 shares of common stock subject to currently exercisable warrants and (iii) 50,000 shares subject to currently exercisable stock options.

(17) Includes (i) 100,000 shares of common stock and (ii) 75,000 shares of common stock subject to currently exercisable warrants.

(18) Includes (i) 100,000 shares of common stock and (ii) 75,000 shares of

common stock subject to currently exercisable warrants.

(19) Includes (i) 75,000 shares of common stock and (ii) 56,250 shares of common stock subject to currently exercisable warrants.

(20) Includes (i) 50,000 shares of common stock and (ii) 37,500 shares of common stock subject to currently exercisable warrants.

(21) Includes (i) 50,000 shares of common stock and (ii) 37,500 shares of common stock subject to currently exercisable warrants.

(22) Includes (i) 50,000 shares of common stock and (ii) 37,500 shares of common stock subject to currently exercisable warrants.

(23) Includes (i) 50,000 shares of common stock and (ii) 37,500 shares of common stock subject to currently exercisable warrants.

(24) Includes (i) 25,000 shares of common stock and (ii) 18,750 shares of common stock subject to currently exercisable warrants.

(25) Includes (i) 10,000 shares of common stock and (ii) 7,500 shares of common stock subject to currently exercisable warrants.

(26) Includes (i) 10,000 shares of common stock and (ii) 7,500 shares of common stock subject to currently exercisable warrants.

(27) Includes (i) 104,200 shares of common stock and (ii) 71,250 shares of common stock subject to currently exercisable warrants.

(28) Includes (i) 103,800 shares of common stock and (ii) 71,250 shares of common stock subject to currently exercisable warrants.

(29) Includes (i) 70,200 shares of common stock and (ii) 45,000 shares of common stock subject to currently exercisable warrants.

(30) Includes (i) 100,000 shares of common stock and (ii) 75,000 shares of common stock subject to currently exercisable warrants.

(31) Includes (i) 75,000 shares of common stock and (ii) 37,500 shares of common stock subject to currently exercisable warrants.

(32) Includes (i) 7,500 shares of common stock and (ii) 5,625 shares of common stock subject to currently exercisable warrants.

(33) Includes (i) 5,000 shares of common stock and (ii) 3,750 shares of common stock subject to currently exercisable warrants.

(34) Includes (i) 7,500 shares of common stock and (ii) 5,625 shares of common stock subject to currently exercisable warrants.

(35) Includes (i) 10,000 shares of common stock and (ii) 7,500 shares of common stock subject to currently exercisable warrants.

(36) Includes (i) 60,000 shares of common stock and (ii) 45,000 shares of common stock subject to currently exercisable warrants.

(37) Includes (i) 20,000 shares of common stock and (ii) 15,000 shares of common stock subject to currently exercisable warrants.

(38) Includes (i) 20,000 shares of common stock and (ii) 15,000 shares of common stock subject to currently exercisable warrants.

(39) Includes (i) 25,000 shares of common stock and (ii) 18,750 shares of common stock subject to currently exercisable warrants.

(40) Includes 50,000 shares of common stock subject to currently exercisable warrants.

(41) Includes 586,526 shares of common stock subject to currently exercisable warrants.

(42) Includes 114,554 shares of common stock subject to currently exercisable warrants.

(43) Includes 95,073 shares of common stock subject to currently exercisable warrants.

(44) Includes 76,472 shares of common stock subject to currently exercisable warrants.

(45) Includes 44,857 shares of common stock subject to currently exercisable warrants.

(46) Includes 44,855 shares of common stock subject to currently exercisable warrants.

(47) Includes 38,186 shares of common stock subject to currently exercisable warrants.

(48) Includes 38,186 shares of common stock subject to currently exercisable warrants.

(49) Includes 36,355 shares of common stock subject to currently exercisable warrants.

(50) Includes 34,066 shares of common stock subject to currently exercisable warrants.

(51) Includes (i) 8,432 shares of common stock and (ii) 22,707 shares of common stock subject to currently exercisable warrants.

(52) Includes 29,518 shares of common stock subject to currently exercisable warrants.

(53) Includes 24,665 shares of common stock subject to currently exercisable warrants.

(54) Includes 22,707 shares of common stock subject to currently exercisable warrants.

(55) Includes 22,707 shares of common stock subject to currently exercisable warrants.

(56) Includes 16,862 shares of common stock subject to currently exercisable warrants.

(57) Includes 12,267 shares of common stock subject to currently exercisable warrants.

(58) Includes 12,267 shares of common stock subject to currently exercisable warrants.

(59) Includes 12,154 shares of common stock subject to currently exercisable warrants.

(60) Includes 11,351 shares of common stock subject to currently exercisable warrants.

(61) Includes 11,351 shares of common stock subject to currently exercisable warrants.

(62) Includes (i) 4,579 shares of common stock and (ii) 4,098 shares of common stock subject to currently exercisable warrants.

(63) Includes 4,812 shares of common stock subject to currently exercisable warrants.

(64) Includes 135,462 shares of common stock subject to currently exercisable warrants.

(65) Includes 37,248 shares of common stock subject to currently exercisable warrants.

(66) Includes (i) 23,584 shares of common stock and (ii) 14,828 shares subject to currently exercisable options and warrants.

(67) Includes 2,328 shares of common stock subject to currently exercisable warrants.

(68) Includes 2,328 shares of common stock subject to currently exercisable warrants.

PLAN OF DISTRIBUTION

This offering is self-underwritten; neither we nor the selling stockholders have employed an underwriter for the sale of common stock by the selling stockholders. We will bear all expenses in connection with the preparation of this prospectus. The selling stockholders will bear all expenses associated with the sale of their common stock.

The selling stockholders may offer their shares of common stock directly or through pledgees, donees, transferees or other successors in interest in one or more of the following transactions:

- ordinary brokerage transactions in which the broker-dealer solicits purchasers;

- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the

applicable exchange;

- privately negotiated transactions;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may offer their shares of common stock at any of the following prices:

- fixed prices that may be changed;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices; and
- at negotiated prices.

The selling stockholders may effect transactions by selling shares to or through broker-dealers, and all such broker-dealers may receive compensation in the form of discounts, concessions, or commissions from the selling stockholders and/or the purchasers of shares of common stock for whom such broker-dealers may act as agents or to whom they sell as principals, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions).

Any broker-dealer acquiring common stock from the selling stockholders may sell the shares either directly, in its normal market-making activities, through or to other brokers on a principal or agency basis or to its customers. Any such sales may be at prices then prevailing on the OTC Bulletin Board or at prices related to such prevailing market prices or at negotiated prices to its customers or a combination of such methods. The selling stockholders and any broker-dealers that act in connection with the sale of the common stock hereunder might be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act; any commission received by them and any profit on the resale of shares as principal might be deemed to be underwriting discounts and commissions under the Securities Act. Any such commissions, as well as other expenses incurred by the selling stockholders and applicable transfer taxes, are payable by the selling stockholders.

The selling stockholders reserve the right to accept, and together with any agent of the selling stockholder, to reject in whole or in part any proposed purchase of the shares of common stock. The selling stockholders will pay any sales commissions or other seller's compensation applicable to such transactions.

We have not registered or qualified offers and sales of shares of the common stock under the laws of any country other than the United States. To comply with certain states' securities laws, if applicable, the selling stockholders will offer and sell their shares of common stock in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the selling stockholders may not offer or sell shares of common stock unless we have registered or qualified such shares for sale in such states or we have complied with an available exemption from registration or qualification.

The selling stockholders with respect to any purchase or sale of shares of common stock are required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended. In general, Rule 102 under Regulation M prohibits any person connected with a distribution of securities (the "Distribution") from directly or indirectly bidding for, or purchasing for any account in which he or she has a beneficial interest, any of such securities or any right to purchase such securities, for a period of one business day before and after completion of his or her participation in the Distribution (we refer to that time period as the "Distribution Period").

During the Distribution Period, Rule 104 under Regulation M prohibits the selling stockholders and any other persons engaged in the Distribution from engaging in any stabilizing bid or purchasing of our common stock except for the purpose of preventing or retarding a decline in the open market price of our common stock. No such person may effect any stabilizing transaction to facilitate any offering at the market. Inasmuch as the selling shareholders will be reoffering and reselling our common stock at the market, Rule 104 prohibits them from effecting any stabilizing transaction in contravention of Rule 104 with respect of our common stock.

There can be no assurance that the selling stockholders will sell any or all of the shares offered by them hereunder or otherwise.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by the law firm of Eiseman Levine Lehrhaupt & Kakoyiannis, P.C., 845 Third Avenue, New York, New York. Sam Schwartz, a member of such firm, owns 23,584 shares of our common stock and owns warrants and options to purchase 14,828 shares of our common stock as of the date of this prospectus.

EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-KSB for the year ended December 31, 2004 have been so incorporated in reliance on the report of Eisner LLP, independent registered public accounting firm, given on the authority of said firm as experts in accounting and auditing.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Certificate of Incorporation and Bylaws provide our directors with protection for breaches of their fiduciary duties to us and our shareholders. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us, we have been advised that it is the SEC's opinion that such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person 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, we 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 Securities Act and will be governed by the final adjudication of such issue.

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NETWORK-1 SECURITY SOLUTIONS, INC.

16,836,267 SHARES
OF
COMMON STOCK

PROSPECTUS

JUNE __, 2005

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROSPECTUS. NO DEALER, SALESPERSON OR OTHER PERSON IS AUTHORIZED TO GIVE INFORMATION THAT IS NOT CONTAINED IN THIS PROSPECTUS. THIS PROSPECTUS IS NOT AN OFFER TO SELL NOR IS IT SEEKING AN OFFER TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED. THE INFORMATION CONTAINED IN THIS PROSPECTUS IS CORRECT ONLY AS OF THE DATE OF THIS PROSPECTUS, REGARDLESS OF THE TIME OF THE DELIVERY OF THIS PROSPECTUS OR ANY SALE OF THESE SECURITIES.

PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the expenses in connection with the offering described in the Registration Statement, all of which will be borne by the Company.

SEC registration fee.....	$ 1,446.59
Legal fees and expenses*.....	$15,000.00
Accounting fees and expenses*.....	$ 2,500.00
Miscellaneous expenses*.....	$ 1,000.00
TOTAL.....	$19,946.59

* Estimated.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporations Law (the "DGCL") contains provisions entitling the Company's directors and officers to indemnification from judgments, fines, amounts paid in settlement, and reasonable expenses (including attorneys' fees) as the result of an action or proceeding in which they may be involved by reason of having been a director or officer of the Company. In its Certificate of Incorporation, the Company has included a provision that limits, to the fullest extent now or hereafter permitted by the DGCL, the personal liability of its directors to the Company or its stockholders for monetary damages arising from a breach of their fiduciary duties as directors. Under the DGCL as currently in effect, this provision limits a director's liability except where such director (i) breaches his duty of loyalty to the Company or its stockholders, (ii) fails to act in good faith or engages in intentional misconduct or a knowing violation of law, (iii) authorizes payment of an unlawful dividend or stock purchase or redemption as provided in Section 174 of the DGCL, or (iv) obtains an improper personal benefit. This provision does not prevent the Company or its stockholders from seeking equitable remedies, such as injunctive relief or rescission. If equitable remedies are found not to be available to stockholders in any particular case, stockholders may not have any effective remedy against actions taken by directors that constitute negligence or gross negligence.

The Certificate of Incorporation also includes provisions to the effect that (subject to certain exceptions) the Company shall, to the maximum extent permitted from time to time under the law of the State of Delaware, indemnify, and upon request shall advance expenses to, any director or officer to the extent that such indemnification and advancement of expenses is permitted under such law, as it may from time to time be in effect. In addition, the Bylaws require the Company to indemnify, to the full extent permitted by law, any director, office, employee or agent of the

Company for acts which such person reasonably believes are not in violation of the Company's corporate purposes as set forth in the Certificate of Incorporation. At present, the DGCL provides that, in order to be entitled to indemnification, an individual must have acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the Company's best interests.

Insofar as indemnification for liabilities arising under the Securities Act

may be permitted to directors, officers and controlling persons of the Company pursuant to any charter, provision, by-law, contract, arrangement, statute or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

ITEM 16. EXHIBITS

NO.	DESCRIPTION
4.1	Form of Warrant, dated December 21, 2004, issued to certain investors pursuant to the Securities Purchase Agreement, dated December 21, 2004, between the Company and the investors listed therein. Previously filed as an exhibit to Exhibit 10.1 to the Current Report on Form 8-K filed on December 28, 2004.
4.2	Form of Warrant, dated January 13, 2005, issued to certain investors pursuant to the Securities Purchase Agreement, dated January 13, 2005, between the Company the investors listed therein. Previously filed as an exhibit to Exhibit 10.2 to the Current Report on Form 8-K filed January 20, 2005, and incorporated herein by reference.
4.3	Form of Warrant, dated December 22, 1999, issued by the Company to the holder listed thereon. Previously filed as Exhibit B to Exhibit 10.28 to the Form 8-K filed January 4, 2000, and incorporated herein by reference.
4.4	Form of Warrant issued by the Company for services rendered. Previously filed as Exhibit 4.3 to the Form S-3 Registration Statement (Registration No. 333-96189) declared effective by the SEC on March 21, 2000.
5.1	Opinion of Eiseman Levine Lehrhaupt & Kakoyiannis, P.C. regarding legality of securities being registered.
23.1	Consent of Eisner LLP, independent registered public accounting firm.
23.2	Consent of Eiseman Levine Lehrhaupt & Kakoyiannis, P.C. (included within Exhibit 5.1).
24.1	No person has signed this Registration Statement under a power of attorney. A power of attorney relating to the signing of amendments hereto is incorporated in the signature page hereof.

ITEM 17. UNDERTAKINGS

(1) The undersigned Registrant hereby undertakes that it will:

(a) File, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement to include any additional or changed material information on the plan of distribution.

(b) For determining liability under the Securities Act, treat each post-effective amendment as a new Registration Statement of the securities offered, and the offering of securities at that time to be the initial BONA FIDE offering.

(c) File a post-effective amendment to remove from registration any of

the securities that remain unsold at the end of this offering.

(2) 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 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.

(2) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant, pursuant to the foregoing provisions, 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 Securities 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 its 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 Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York.

Dated: June 21, 2005

NETWORK-1 SECURITY SOLUTIONS, INC.

By: /s/ Corey M. Horowitz
Corey M. Horowitz, Chairman and Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each director and officer whose signature appears below constitutes and appoints Corey M. Horowitz his true and lawful attorney-in-fact and agent, with full power and substitution and re-substitution, to sign in any and all capacities any and all amendments or post-effective amendments to this Registration Statement on Form S-3 and to file the same with all exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission, granting to such attorney-in-fact and agent, full power and authority to do all such other acts and execute all such other documents as he may deem necessary or desirable in connection with the foregoing, as fully as the undersigned might or could do in person, hereby

ratifying and confirming all that such attorney-in-fact and agent may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Corey M.. Horowitz Corey M. Horowitz	Chairman and Chief Executive Officer (principal executive officer)	June 21, 2005
/s/ David C. Kahn David C. Kahn	Chief Financial Officer (principal financial and accounting officer)	June 21, 2005
/s/ Robert Graifman Robert Graifman	Director	June 21, 2005
/s/ Robert Pons Robert Pons	Director	June 21, 2005

INDEX TO EXHIBITS

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23.1	Consent of Eisner LLP, independent registered public accounting firm.

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24.1 No person has signed this Registration Statement under a power of attorney. A power of attorney relating to the signing of amendments hereto is incorporated in the signature page hereof.