UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM 10-K

FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 1997

or

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO

Commission file number ____

VASCO Data Security International, Inc. (Exact Name of Registrant as Specified in Its Charter)

DELAWARE 36-4169320 (State or Other Jurisdiction of (IRS Employer Incorporation or Organization) Identification No.)

> 1901 South Meyers Road, Suite 210 Oakbrook Terrace, Illinois 60181 (Address of Principal Executive Offices)(Zip Code)

Registrant's telephone number, including area code: (630) 932-8844

Securities registered pursuant to Section 12(b) of the Act: None Securities registered pursuant to Section 12(g) of the Act: None % f(x) = 0

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes

No

Χ*

* The registrant has been subject to such filing requirements since February 9, 1998.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. N/A

As of May 4, 1998, 20,316,585 shares of the Company's Common Stock, \$.001 par value per share ("Common Stock"), were outstanding. On that date, the aggregate market value of voting and non-voting common equity (based upon the last sale price of the registrant's Common Stock as reported on the Over-the-Counter Bulletin Board on May 4, 1998) held by non-affiliates of the registrant was \$41,071,350 (6,845,225 shares at \$6.00 per share).

DOCUMENTS INCORPORATED BY REFERENCE Portions of the registrant's definitive proxy statement for the Annual Meeting of Stockholders to be held June 15, 1998 are to be incorporated by reference into Part III of this Form 10-K.

PART I

Cautionary Statement for Purposes of the "Safe Harbor" Provisions of the Private Securities Litigation Reform Act of 1995

This Annual Report on Form 10-K, including the "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 concerning, among other things, the prospects, developments and business strategies for the Company (as defined) and its operations, including the development and marketing of certain new products and the anticipated future growth in certain markets in which the Company currently markets and sells its products or anticipates selling and marketing its products in the future. These forward-looking statements (i) are identified by their use of such terms and phrases as "expected," "expects," "believe," "believes," "will," "anticipated," "emerging," "intends," "plans," "could," "may," "estimates," "should," "objective" and "goals" and (ii) are subject to risks and uncertainties and represent the Company's present expectations or beliefs concerning future events. The Company cautions that the forward-looking statements are qualified by important factors that could cause actual results to differ materially from those in the forward-looking statements, including (a) risks of general market conditions, including demand for the Company's products and services, competition and price levels and the

Company's historical dependence on relatively few products, certain suppliers and certain key customers, and (b) risks inherent to the computer and network security industry, including rapidly changing technology, evolving industry standards, increasing numbers of patent infringement claims, changes in customer requirements, price competitive bidding, changing government regulations and potential competition from more established firms and others. Therefore, results actually achieved may differ materially from expected results included in, or implied by, these statements. See Subparagraph d. of Item 1 _ "Factors That May Affect Future Results."

Item 1 - Description of Business

a. General Development of Business

(i) General

VASCO Data Security International, Inc., a Delaware corporation (the "Company" or "VASCO"), was incorporated on July 15, 1997. Its executive office is located at 1901 South Meyers Road, Suite 210, Oakbrook Terrace, Illinois 60181; (630) 932-8844. On March 20, 1998, the Company's Common Stock, \$.001 par value per share (the "Common Stock") was approved for trading on the Over-the-Counter Bulletin Board system with the symbol: VDSI.

This report contains the following trademarks of the Company, some of which are registered: VASCO, AccessKey, VACMan Server and VACMan/CryptaPak, AuthentiCard and Digipass.

The Company, through its operating subsidiaries, designs, develops, markets and supports open standards-based hardware and software security systems which manage and secure access to information assets.

(ii) 1998 Reorganization - Exchange Offer

The Company was organized in 1997 as a subsidiary of VASCO Corp., a Delaware corporation ("VASCO Corp."). Pursuant to an exchange offer (the "Exchange Offer") by the Company for securities of VASCO Corp. that was completed March 11, 1998, the Company acquired 97.7% of the common stock of VASCO Corp. Consequently, VASCO Corp. is now a subsidiary of the Company, with the remaining 2.3% of VASCO Corp. shareholders representing a minority interest.

For the purposes of the discussion of the general business of the Company below, references to the "Company" shall refer to VASCO Corp. for periods prior to March 11, 1998, the date on which VASCO Corp. became a 97.7% owned subsidiary of VASCO.

(iii) Prior Organizational History

The Company is essentially a holding company that conducts its business through operating subsidiaries in the United States and Europe.

The Company presently has two operating subsidiaries. VASCO Data Security, Inc. ("VDS"), a Delaware corporation headquartered in Oakbrook Terrace, Illinois, is owned directly by VASCO Corp. The Company's other operating subsidiary, VASCO Data Security NV/SA ("VDS NV/SA"), is a Belgian corporation headquartered in a suburb of Brussels, Belgium. VDS NV/SA is owned by VASCO Corp.'s European holding company subsidiary, VASCO Data Security Europe SA ("VDSE"). VDS and VDS NV/SA are engaged in the design, development, marketing and support of open standards-based hardware and software based security systems which manage and secure access to data and also provide products that permit their customers to encrypt data.

[Organization Chart appears here]

* All share are held by the parent corporation, except that shares representing less than 1% are held by T. Kendall Hunt.

VDS. In November 1989, a Utah corporate predecessor of VASCO Corp. acquired an option to purchase a controlling interest in ThumbScan, Inc. ("ThumbScan"). VASCO Corp. acquired a controlling interest in ThumbScan in January 1991, and in December 1991 VASCO Corp. increased its holdings in ThumbScan. VASCO subsequently acquired the remaining shares of ThumbScan. In July 1993, ThumbScan was renamed VASCO Data Security, Inc.

VDS NV/SA. VASCO Data Security NV/SA ("VDS NV/SA") is a combination of two European companies (Lintel Security NV and Digipass SA) acquired by VASCO Corp., through VDSE, in 1996, and accounts for a substantial portion of VASCO Corp.'s consolidated revenues.

Acquisition of Lintel Security. In 1996, VASCO Corp. began a significant expansion of its computer security business by acquiring a 15% interest in Lintel Security NV ("Lintel Security"). Lintel Security, a newly formed Belgian corporation, concurrently purchased from Lintel NV, a Brussels, Belgium based company, certain assets associated with the development of security tokens and security technologies for personal computers ("PCs"), computer networks and telecommunications systems using Data Encryption Standard ("DES") and Rivest, Shamir, Adelman ("RSA") cryptographic algorithms. VASCO Corp. acquired the remaining 85% of Lintel Security in June 1996. At the time of acquisition of Lintel NV's assets by Lintel Security, Lintel NV was a competitor of VASCO Corp. in Europe. The purchase price paid for Lintel Security was approximately \$4.4 million, and was paid in cash, shares of VASCO Corp. common stock, and VASCO Corp. warrants and convertible notes.

Acquisition of Digipass. In July 1996, VASCO Corp. acquired the stock of Digipass SA ("Digipass") for an aggregate purchase price of \$8.2 million. Digipass, based in a suburb of Brussels, was also a developer of security tokens and security technologies for PCs, computer networks and telecommunications systems using the DES cryptographic algorithm. At the time of acquisition, Digipass was a competitor of VASCO Corp. in Europe.

Prior to VASCO Corp.'s acquisition of Digipass, certain assets and liabilities of the interactive voice response ("IVR") business of Digiline SA, an integrator of IVR products based in Belgium, were transferred to Digipass. Digipass' IVR products were used primarily in telebanking applications and incorporate authentication and access control technology. During 1997, VDS NV/SA entered into an agreement to sell the IVR business to Siemens Societe Anonyme for approximately \$200,000.

In January 1997, Digipass changed its name to "VASCO Data Security NV/SA." Concurrent with this event Lintel Security's operations were consolidated with those of VDS NV/SA at a single location near Brussels. VASCO Corp.'s original business was providing consulting, training and software services to companies and government agencies. These services were marketed as VASCO Performance Systems ("VPS"). In 1996, management determined that VASCO Corp. should focus its energies and resources on the data security industry, where it believed significant growth and profit potential existed. Accordingly, on August 20, 1996, VASCO Corp. sold the assets of VPS to Wizdom Systems, Inc. and withdrew from the consulting and technical training business.

b.1 Financial Information about Industry Segments

During each of the last three fiscal years, the Company has operated in only one industry segment.

b.2 Financial Information Relating to Foreign and Domestic Operations and Export Sales

See Note 10 to VASCO CORP. Notes to Consolidated Financial Statements for certain information about foreign and domestic operations and export sales.

c. Narrative Description of Business

(i) General

The Company designs, develops, markets and supports open standards-based hardware and software security systems which manage and secure access to information assets. The Company's hardware products include time-synchronous response only, challenge/response and time-synchronous challenge/response user authentication devices, some of which incorporate an electronic digital signature feature to guarantee the integrity of data transmissions. These devices are commonly referred to as security tokens.

The Company's security tokens are based upon its core encryption technology, which utilizes two widely known and accepted algorithms, DES and RSA. The Company's Cryptech division produces high speed hardware and software encryption products used both internally for its security tokens and for original equipment manufacturers ("OEM") vendors requiring real time encryption services. In addition, the Company has introduced a smartcard security token that uses the challenge/response mode and the X.509 certificate authentication standard.

The Company's security tokens are designed to be used with the VASCO Access Control Manager ("VACMan") server software or to be integrated directly into applications. Together, the Company's software and hardware products provide what it believes is an economical state-of-the-art authentication, authorization and accounting security system.

The Company had sold over 2.0 million security token devices, its primary product line, as of December 31, 1997. The Company's security products are sold primarily to value-added resellers and distributors, and to a lesser extent end-users.

The Company has embarked upon an aggressive campaign to expand its distributor and reseller network. Distributors and resellers that have entered into agreements with the Company's operating subsidiaries include, among others, Concord-Eracom Nederland BV, Protect Data Norge AS, Sirnet AB, All Tech Data Systems, Inc., Clark Data Systems, Inc., HUCOM, Inc. and SEI Information Technology.

Representative end-users of the Company's products include ABN-AMRO Bank, Generale Bank, Banque Paribas Belgique S.A., Rabobank, S-E Banken, AMP Inc., Volvo Data North America, Inc., France Telecom, Manitoba Telephone, Andrew Corp., and Molson Breweries.

(ii) Industry Background

The Data Security Industry. The increasing use and reliance upon proprietary or confidential data by businesses, government and educational institutions that is accessible remotely by users, together with the growth in electronic commerce, has made data security a paramount concern. The Company believes that data security concerns will spur significant growth in the demand for both enterprise and consumer security solutions.

Enterprise Security. With the advent of personal computers and distributed systems in the form of wide area networks ("WANS"), intranets which connect users in disparate facilities, local area networks ("LANS"), which connect users located in a single facility and the public network known as the Internet/World Wide Web (the "Internet"), and other direct electronic links, many organizations have implemented applications to enable their work force and third parties, including vendors, suppliers and customers, to access and exchange data. As a result of the increased number of users having direct and remote access to enterprise networks and data, including a growing number of mobile computer users and telecommuters that perform some or all of their work from home or other remote locations, data has become increasingly vulnerable to unauthorized access.

Unauthorized access can range from users who are authorized to access portions of an enterprise's computing resources accessing unauthorized portions, to hackers who have no legitimate access breaking into a network and stealing or corrupting data. The consequences of such unauthorized access, which can often go undetected, can range from theft of proprietary information or other assets to the alteration or destruction of stored data. As a result of unauthorized access stemming from the increased use of enterprise-wide computing and remote access, network security has become a primary concern to most companies that use and rely on data. This increased attention to data security has stimulated demand for data security products. The Company believes that enterprises are seeking solutions which will continue to allow them to expand access to data while maintaining adequate security. Consumer Security. In addition to the need for enterprise-wide security, the proliferation of PCs in both home and office, combined with widespread access to the Internet, have created significant opportunities for electronic commerce such as electronic bill payment, home banking and home shopping. All of these activities are primarily based on the use of the Internet and, according to published reports, the growth in the number of Internet users worldwide is expected to increase from approximately 28 million in 1996 to approximately 175 million by the end of 2001.

The public generally perceives that there is a risk involved in using credit cards to make purchases via the Internet and this perception has hampered the development of consumer-based electronic commerce. Accordingly, the Company believes that successful expansion of electronic commerce requires the implementation of improved security measures, which accurately identify users and reliably encrypt data transmissions over the Internet. This is particularly true in North America, which has generally lagged behind Europe in this area.

(iii) Products

(A) Current Data Security Solutions

Data security and secured access to on-line commerce generally consist of five components:

Encryption: Maintains data privacy by converting information into an unreadable pattern and allowing only authorized parties to decrypt the data. Encryption can also maintain data integrity by creating digital signatures for transmitted data, enabling the recipient to check whether the data was changed since or during transmission.

Identification and Authentication: Serves as the foundation for other security mechanisms by verifying that a user is who he or she claims to be. Identification and authentication mechanisms are often employed with encryption tools to authenticate users, to determine the proper encryption key for encrypting/decrypting data, or to enable users to digitally "sign" or verify the integrity of transmitted data.

Access Control: Includes firewalls, which limit a user's access to data to only that data which he or she is authorized to access, and authorization and accounting systems, which also limit access to data and keep track of a user's activities after access has been granted.

Anti-Virus: Programs that scan for and, in many cases, remove destructive computer programs known as computer viruses that can become imbedded into programs residing on a computer.

Administration and Management Tools: Set, implement and monitor security policies, the access to which is typically regulated by access control systems. These tools are extremely important to the overall effectiveness of a security system. The most effective security policies employ most, if not all, of these five components. However, most companies only implement a patchwork combination of these components, which can result in their security systems being compromised.

Historically, the Company's primary products have been security tokens. Security tokens are an integral part of identification and authentication systems, which in turn serve as the foundation for each of the five components of data security outlined above. The Company has sought to leverage its identification and authentication expertise by expanding its product offerings to include the other components of data security, in each case incorporating the Company's security tokens. The Company has sought to expand its product offerings to reach its ultimate goal of supplying a full range of security products for integrated, enterprise-wide security solutions, which will meet the needs of the emerging data security market.

Identification and Authentication. Identification and authentication systems provide the foundation for security systems by validating the identity of each user attempting to access information or data contained in a system, regardless of location. The most common use of an identification and authentication device is to authenticate local and remote users who have established a network connection to a company's computer network. Authentication is often done in conjunction with a firewall to authenticate internal users of stand-alone PCs on networks or to authenticate customers and suppliers who have been granted access to a restricted portion of the company's data or other information.

There are three basic methods used to authenticate a user. The first method identifies who the user is, utilizing a hard-to-forge physical attribute such as the user's fingerprints, voice patterns or eye retina patterns. In each case, the physical attribute, or biometric, must be capable of being scanned and converted to a digital document. While biometric devices offer a high level of authentication, they are susceptible to replay attacks. Replay attacks collect samples of a user's biometric "print" (i.e., voice, finger, retina) and then replay the "print" to access a target system. Furthermore, current technology requires additional hardware presents two challenges for biometric solutions: one is the cost and the second is installation and maintenance.

The second authentication method is identifying what the user knows, usually a password known only to the specific user. Passwords, while easy to use, are also the least secure because they tend to be short and static, and are often transmitted without encryption ("clear text"). As a result, passwords are vulnerable to decoding or observation and subsequent use by unauthorized persons. Once a user's password has been compromised, the integrity of the entire computer network can be compromised.

The third authentication method identifies what the user has, generally a physical device or token intended for use by that specific user. Tokens are small devices ranging from simple credit card-like devices to more complex devices capable of generating time-synchronized challenge/response access codes. Early examples of simple tokens include building access passes. Certain token-based systems require both possession of the token itself and a PIN to indicate that the token is being used by an authorized user. Such an approach, referred to as two-factor authentication, provides much greater security than single factor systems such as passwords or simple possession of a token. Early implementations of two-factor authentication include automatic teller machine ("ATM") cards. ATM cards require the user to possess the card and to know the PIN before engaging in the transaction. The Company believes that the use of the two-factor authentication system is the optimal solution for reliable computer and network security and has targeted its products toward this end.

Security Tokens. A security token is a small, portable computing device designed to generate a one-time password. They are normally difficult to counterfeit and are assigned to an individual user. The user transmits a token-generated password, along with an assigned user ID, to a host or authentication server, requesting access, generally to a network. Token-generated passwords are derived from a secret key or seed value. An authentication server on the network receives and decrypts the token password with a corresponding decryption key, validates the user, and (if validated) grants access. Currently available security tokens are event-based, time-synchronous, response only or challenge/response based.

Event-based tokens have the same list of predetermined passwords as the authentication server. Passwords are generated by the token in a predetermined manner, which is expected by the server, and the passwords remain valid for indefinite periods of time. As a result of the passwords being generated from a predetermined list and their ease of calculation by unauthorized users, event-based tokens are the easiest to compromise.

Time-synchronous tokens require the authentication server and the token to be password time-synchronous. When used, the token will calculate and display a password using a stored secret seed value and the current time of day. The server then determines whether the password received is correct for the time frame that it was used in. The principal drawbacks for time-synchronous tokens are extensive maintenance with respect to clock synchronization and the possibility of multiple uses within the specified time frame. Usually, steps are taken to limit the re-use of a password, however, when a time-synchronous token is defined to multiple authentication servers, a common practice, then there is a risk of a password being re-used to access other servers. Nevertheless, these devices provide a higher level of security than event-based tokens.

Response only tokens use either an "event" or time to calculate the response only password. Response only tokens require the user to activate the token and read the password. Challenge/response tokens provide the highest level of security. The authentication server responds to a request for access by issuing a randomly generated challenge in the form of a numeric or alphanumeric sequence. The token, using its embedded seed value, or key, encrypts the challenge. The result is an encrypted response which the user then transmits back to the authentication server via the user's PC keyboard. The server in turn retrieves the key that has been assigned to that user and decrypts the user and grants access.

As with time-synchronous tokens, challenge/response tokens do not transmit an encryption key. However, unlike time-synchronous tokens, passwords of challenge/response tokens are one-time passwords that can never be re-used. In addition, there is no opportunity to initiate a second, illegal session with a challenge/response token. Each attempt at access is accompanied by a new challenge and a correspondingly unique password response.

Although challenge/response tokens generate true one-time passwords, it is possible to compromise the internal seed value of pure challenge/response tokens that only use the seed value and the challenge to calculate the response.

Time synchronous challenge/response tokens can be used to add another variable in the calculation of the one-time password. In addition to the secret seed value and the challenge from the host server, the time of day can be used. Because there is a challenge, the time synchronization does not have to be nearly as exact as with time-synchronous tokens. When time is used as an input variable for challenge response tokens, it is impossible, with today's most advanced computers, to use dictionary attacks to compromise the token.

Smartcards. Smartcards are credit card sized devices that contain an embedded microprocessor, memory and secure operating system. Smartcards have been used in many applications, for example, as stored value cards, either for making general purchases or for specific applications such as prepaid calling cards, and as health care cards, which are used to store patient and provider information and records. Major smartcard chip and card manufacturers include Gemplus SA, Schlumberger Ltd., Philips Electronics N.V., Siemens A.G. and Groupe Francois Charles Oberthur (FCO). These vendors, together with cryptographic vendors, have worked to make smartcard standards compatible with cryptographic standards to offer a security solution with authentication and digital signature capabilities.

(B) The Company's Solution

To date, most approaches to network security have been limited in scope and have failed to address critical aspects of data security. The Company believes that the computer security industry is moving away from incremental or point solutions to enterprise-wide, fully integrated solutions. The Company believes that an effective enterprise-wide solution must address and assimilate issues relating to the following: ease of use and administration, reliability, interoperability with heterogeneous enterprise environments and existing customer applications, and scaleability. The Company also believes that in order to capitalize on this growing market need for enterprise-wide security solutions, network security products must embody both hardware and software components and provide an industry-accepted, open standards-based solution.

Accordingly, the Company has adopted the following approach to data security:

(i) In designing its products, it has sought to incorporate all industry-accepted, open, non-proprietary, remote access protocols, such as RADIUS and TACACS+. This permits interoperability between the Company's security token products and leading remote access servers.

and leading remote access servers. (ii) It has incorporated the two most widely known and accepted algorithms _ the DES and RSA algorithms _ into its products and has sought to refine its offering of single-function, multi-function, challenge/response, response only and digital signature security token products. The Company believes that its combination of software and hardware products provide security with added speed, cryptographic functionality, reliability and flexibility not attainable with software-only programs. Its products provide two-factor authentication requiring the authorized user to possess both the token and the appropriate PIN.

(iii) In addition to providing identification and authentication features in its security products, the Company has included in its security systems accounting and auditing features that allow customers to track and analyze all user access and attempted access to network systems. This permits easier customer implementation and monitoring of corporate security policies.

(iv) The Company has designed its security systems to support various platforms $_$ such as Windows NT $_$ thereby allowing customers to ensure the same security for remote users as is provided to office-based users.

(v) The Company has sought to design products that are easy to use and competitively priced. It also is increasing its customer support capabilities to ensure the smooth installation and maintenance of its systems.

As a result of this approach, the Company believes it has positioned itself to market a new generation of open standards-based hardware and software security systems, including those designed to provide security to Internet users, and it intends to continue to grow to provide a full range of identification and authentication and other security products. See "The Company's Strategy" below. Security Token Products. Generally, the Company's challenge/response tokens work as follows: when a user logs onto a computer or enters a program or network with a user ID, the computer generates a numeric or alphanumeric challenge and displays both the challenge and a flashing bar pattern on the terminal screen. The user holds a token up to the flashing pattern on the screen, and the token reads and interprets the pattern and then displays a unique, or one-time, password on its liquid crystal display. The user then enters this password on the computer keyboard and, if a match exists, access to the computer, program or network is granted. If the terminal screen is not able to display a flashing bar pattern, the user can enter the numeric or alphanumeric challenge into the keypad on the token. PIN protected, break-in attempts to unlock the key are tracked by the token internally. After a pre-programmed number of invalid attempts, the token will be locked out of the system for a specified period of time.

Some of the Company's products also are able to perform "digital signatures" for applications which require proof that a transaction was authorized. A combination of numbers from the transaction are entered into a token which produces an encrypted number that only that specific token, and the information from the transaction, could have created. This number is then entered as part of the transaction, acting as a digital signature authorizing the transaction.

The Company's security tokens include AccessKey II and AuthentiCard, each an optical, hand-held challenge/response security token with a liquid crystal display and numeric keypad that generates a unique password each time it is used, and Digipass, a time-synchronous response only token that generates a one-time password, to authenticate users of PCs and networks and to verify data transmissions by electronic signature. In early 1998, the Company began full production and shipping of its Digipass 300, which is an optical, hand-held multiple-mode security token capable of operating in time-synchronous response only, challenge/response and time synchronous challenge/response modes and of performing digital signature functions.

Smartcards are also emerging as viable security devices. The Company recently announced a new smartcard product, VACMan/CryptaPak, that combines two authentication standards on one smartcard. VACMan/CryptaPak is a standards based smartcard solution that secures Internet applications based on the X.509 authentication standard and also secures remote dial-in access based on the RADIUS authentication standard. It includes a smartcard, smartcard reader and software that enables Netscape Communications Corporation's Communicator to authenticate users via the X.509 certificate standard and software that enables remote dial-in users to be authenticated via the RADIUS authentication standard. See "The Company's Security Products" below. Encryption Products. Hardware encryption product offerings from the Company include DES and RSA microprocessor chips that perform algorithmic functions for use in, among other things, ATMs, fax machines, modems and security servers. The Company's DES and RSA chips are also the central component of its PC DES/RSA Cards, which are printed circuit boards that enable software applications to provide encryption security. The Company also has acquired a software encryption application, Point 'n Crypt, which resides on a PC workstation and enables the user to encrypt or decrypt Windows files or folders. See "The Company's Security Products" below.

Access Control Products. The Company has, through a strategic relationship, developed the VACMan access control system, which centralizes security services in a single location, supports all of the Company's token devices, and is based on industry standard protocols to maximize interoperability. VACMan also incorporates authorization and accounting features. See "The Company's Security Products" below.

(C) The Company's Strategy

The Company's objective is to establish itself as a single source data security solutions vendor and to become a leader in the data security market. The Company's growth is largely dependent on the successful implementation of its business strategy. There can be no assurance that the Company will be able to successfully implement its business strategy or that, if implemented, such strategy will be successful. See Subsection d of Item 1 _ "Factors That May Affect Future Results" below. Key elements of the Company's strategy for achieving this objective are listed below:

Increase Name Recognition. The Company intends to increase the name recognition of its products. It believes that by establishing itself as a brand name, it will obtain a key competitive advantage. The Company believes that the market for data security products is confused by multiple technologies and conflicting claims and that end-users will ultimately be more comfortable buying a well-known product. The Company intends to increase its name recognition by emphasizing sales to well-known visible end-users, expanding its distribution network, increasing its presence at technology trade shows and other increase marketing activities such as print media campaigns.

Expand Product Line. The Company plans to continue to broaden its line of security products to meet its customers' needs and to establish itself as a single source security solutions vendor. The Company intends to accomplish this by continuing to develop identification and authentication expertise, as well as by seeking strategic relationships and acquiring complementary assets or businesses. Expand Global Presence. The implementation of data security products for electronic banking in the European market has become widespread and as a result, the market for the Company's products has grown more quickly in Europe than in North America. Sales by the Company's European subsidiary, VDS NV/SA, and its U.S. subsidiary, VDS, represented 77% and 23%, respectively, of the Company's total revenue for the year ended December 31, 1997. Nevertheless, sales to U.S. customers represented just 8% of the Company's sales for the year ended December 31, 1997. The Company believes that there are significant opportunities for its products in the developing North American market and further believes it is well positioned to take advantage of this growing market. The Company intends to maintain and expand its leadership role in the identification, authentication, authorization and accounting markets in Europe and to leverage its European expertise to introduce and promote the Company's identification, authentication, authorization and accounting products to the North American and other global markets. Enterprises that allow remote access to proprietary databases or information, or need to ensure secure data transmission for purposes of electronic commerce (including via the Internet), are potential customers for the Company's security products. The Company intends to pursue these potential customers through its growing network of distributors and resellers. See "Expand Marketing Channels" below.

Expand Marketing Channels. The Company intends to recruit and support a network of value added resellers worldwide that specialize in both vertical (banking, financial, health, telecommunications and government) markets and horizontal (remote access and Internet application) markets. By undertaking these activities, the Company intends to address and fulfill the requirements of the growing remote access market that is in need of advanced identification, authentication, authorization and accounting products. Some of the distributors and resellers that have entered into agreements to distribute the Company's products in various strategic markets include:

	Europe	North and South America	Asia	
	Concord-Eracom Nederland BV (Netherlands)	All Tech Data Systems, Inc.	Horizon Systems	
		(Midwestern United States)	(Hong Kong)	
	Protect Data Norge AS (Scandinavia)	Clark Data Systems, Inc. (Southwestern United States)	HUCOM, Inc. (Japan)	
	Secureware (France)	Excelsys, SA (Chile)		
	Sirnet AB	LatinWare Ltda. (Scandinavia	a) (Colombia)	
		SEI Information Technology (Midwestern United States)		

Develop Strategic Relationships. To accomplish its strategic goals, the Company has established and is developing strategic relationships with other vendors of complementary security products and may seek to acquire complementary assets or businesses. Also, the Company has identified vendors of security or remote access products that relied solely on static passwords that the Company believes its products can enhance.

The Company also has entered into co-development agreements with certain companies to gain access to technology critical to the acceptance and adoption of the Company's technology and products. The first such agreement, with TriNet Services, Inc., resulted in the Company's Internet AccessKey, enabling the Company to become the first security authentication vendor to enhance security when accessing the Internet. The Internet AccessKey won the 1996 Sun Microsystems Java Cup International award for productivity tools.

The Company also entered into a co-development agreement with SHIVA Corp., a leader in remote access communications equipment, pursuant to which the Company licensed from SHIVA Corp. a generic security server. The resulting product, VACMan, enables the Company's technology and products to be inserted into virtually any organization that allows remote dial-in access to its computer networks.

In addition, the Company entered into an original equipment manufacturer agreement with Netscape Communications Corporation ("Netscape") to bundle Netscape technology and products with the Company's products. The first result is a new product - VACMan/LDAP which allows installations to define user information, including all token information, into Netscape's Directory Server. Netscape is the first vendor to offer a product that supports a newly adopted worldwide standard for directory services. The Company intends to offer a product that supports the same newly adopted worldwide standard for directory services, which will result in a globally distributed security database accessible by a number of applications requiring information about users.

(D) The Company's Security Products

The Company's family of hardware products include time-synchronous response only, challenge/response and time-synchronous challenge/response user authentication token devices or security tokens. Through December 31, 1997, the Company had sold over 2.0 million security tokens (AccessKey II, AuthentiCard and Digipass 500). In addition, the Company recently began marketing a smartcard security token that uses the challenge/response mode and the X.509 certificate authentication standard. The Company also designs, develops and markets encryption chips and encryption boards through a division called Cryptech. The primary customers of the Cryptech products are OEMs of telecommunications equipment that require real time encryption. All the Company's security tokens are used with its software authentication server, VACMan, to provide a complete identification, authentication, authorization and accounting security system. VACMan supports each of the Company's security devices and permits users to centralize their security systems in a single server or network of servers. It is designed for small, medium and large enterprises and Internet service providers, and it provides a centralized and flexible solution for managing network access. VACMan is scaleable for large remote access systems and a single server can support numerous distributed network access servers.

The Company also offers numerous additional products to extend the security services of VACMan/Server to platforms and/or applications that do not yet support the RADIUS protocol. Examples of such products are VACMan/Client NT, VACMan/Client Enterprise (Netscape Web server), VACMan/Client IIS (Microsoft Web Server), and VACMan/Client Solaris. In addition the Company offers workstation software to enhance network connections when using advanced products like Digipass 300, AuthentiCard, AccessKey II or VACMan/CryptaPak. These products have unique workstation requirements to generate a terminal flash pattern for the security tokens and to communicate to a smartcard reader attached to the workstation in the case of VACMan/CryptaPak.

The Company also provides a software development kit ("SDK") that can be used by other vendors or by clients to build RADIUS support into their products or applications. This SDK enables them to perform one integration project and gain support for all RADIUS compliant security servers. The SDKs are written in the C programming language and can be used in numerous operating system environments such as MVS, VMS, UNIX, Windows, NetWare and DOS. The SDKs enable the Company's strategic partners to integrate the Company's products into their own product offerings.

The following chart describes each of the Company's principal products:

Hardware Digipass 300	Features -Multiple mode token capable of operating in time-synchronous response only, challenge/response, and time-synchronous challenge response -Utilizes DES algorithm -Operates optically and/or numerically -PIN protection and token lock/unlock feature -Digital signature function -Storage of multiple secret keys for up to 3 tokens/applications in one
Digipass 500	-Time-synchronous, response only token generates one-time password -Utilizes DES algorithm -PIN protection feature -Digital signature function -Storage of multiple secret keys for up to 8 tokens/applications in one

AuthentiCard	-Time-synchronous, challenge/response token generates one-time password with each use -Utilizes DES algorithm -Operates optically or numerically -PIN protection and token lock/unlock feature -Programmable user messages
AccessKey II	 Time-synchronous, challenge/response token generates one-time password with each use by application of patented technology Optical interface reads flashing pattern on computer screen from which token generates one-time password
DES and RSA Microprocessors	-Incorporate DES or RSA algorithms -Cryptographic functionality -Potential uses include ATMs, wireless telephone networks, modems, fax machines, PCs, servers
PC DES/RSA Card	 Printed circuit boards incorporating VASCO's DES/RSA microprocessor chips Can be integrated into applications requiring encryption security or used as development and evaluation tool for DES/RSA microprocessor chips Development package includes technical manuals, layouts and documented programming source code for DOS, Windows, Windows NT, OS/2 and SCO/UNIX
VACMan/CryptaPak (including smartcard)	-Hardware and software package -Includes smartcard token, smartcard reader and enabling software -Provides challenge/response and X.509 authentication based identification and authentication
Cofficients	Faaturaa

Software

Features

-Centralizes security services (authentication, authorization and accounting) into a single set of security servers to manage network access VACMan Suite -Supports all VASCO tokens -Bundled with Netscape Directory Server -Open standards based, supports RADIUS and TACACS+ industry standard protocols and offers numerous additional RADIUS client products to extend the security services of VACMan/Server to a broad range of platforms -Utilizes either ODBC (Other Data Base Compatibility) compliant relational databases for administration and reporting, or an LDAP (Lightweight Directory Access Protocol) compliant directory server -Scaleable for large remote access systems -Interoperability with a majority of remote access servers including SHIVA, Ascend Communications, Cisco Systems and US Robotics (3COM) VACMan/Point 'n -Encryption software application Crypt -Resides on PC workstation -Encrypts and decrypts Windows files or folders -When used with VASCO's VACMan/CryptaPak, user's encryption key can be stored on the user's smartcard -Full-scale anti-virus product; can detect macro VACMan/AVAST and polymorphic viruses -Faster, more accurate and reliable detection of viruses -Resident scanner enabling protection against viruses, even under Windows NT -Ability to send warning messages by way of Microsoft Network -Ability to run any applications while the system or main application starts -On screen display of scanning results

VASCO, AccessKey, VACMan Server and VACMan/CryptaPak are trademarks of the Company, applications for which are pending in the United States. In addition, AuthentiCard and Digipass are trademarks registered in Belgium.

(iv) Intellectual Property and Proprietary Rights

The Company relies on a combination of patent, copyright, trademark and trade secret laws, as well as employee and third-party non-disclosure agreements to protect its proprietary rights. In particular, the Company holds several patents in the United States and a corresponding patent in certain European countries, which cover certain aspects of its technology. The majority of its patents cover the Company's AccessKey II, Digipass 500, Digipass 300 and AuthentiCard tokens. The U.S. patents expire between 2003 through 2010; the European patent expires in 2008. The Company believes these patents to be valuable property rights and relies on the strength of its patents and trade secret law to protect its intellectual property rights. To the extent that the Company believes its patents are being infringed upon, it intends to assert vigorously its patent protection rights, including but not limited to, pursuing all available legal remedies.

While the Company believes that its patents are material to its future success, there can be no assurance that the Company's present or future patents, if any, will provide a competitive advantage. It also may be possible for others to develop products with similar or improved functionality that will not infringe upon the Company's intellectual property rights. Furthermore, to the extent that the Company believes that its proprietary rights are being violated, and regardless of its desire to do so, it may not have adequate financial resources to engage in litigation against the party or parties who may infringe on its proprietary technology. See Subsection d of Item 1 _ "Factors That May Affect Future Results _ Proprietary Technology and Intellectual Property."

(v) Research and Development

The Company's research and development ("R&D") efforts are concentrated on product enhancement, new technology development and related new product introductions. As of December 31, 1997, the Company employed 13 full-time engineers and, from time to time, independent engineering firms to conduct non-strategic R&D efforts on its behalf. For the fiscal years ended December 31, 1995, 1996 and 1997, the Company expended \$242,000, \$575,000 and \$1,802,000, respectively, on R&D, representing approximately 7%, 6% and 15% of the Company's consolidated revenues for 1995, 1996 and 1997, respectively. See Item 7 _ "Management's Discussion and Analysis of Financial Condition and Results of Operations."

While management is committed to enhancing its current product offerings, and introducing new products, there can be no assurance that the Company's R&D activities will be successful in this regard. Furthermore, there can be no assurance that the Company will have the financial resources required to identify and develop new technologies and to bring new products to market in a timely and cost effective manner, or that any such products will be commercially successful if and when they are introduced.

(vi) Production

The Company's security hardware products are manufactured by third parties pursuant to purchase orders issued by the Company. Its hardware products are comprised primarily of commercially available electronic components which are purchased globally. The Company's software products are controlled in-house by Company personnel and can be produced either in-house or by several outside sources in North America and in Europe.

With the exception of the AccessKey II token, the Company's security tokens utilize commercially available programmable microprocessors, or chips. The Company uses two microprocessors, made by Samsung and Epson, for the various hardware products produced other than the AccessKey II token. The Samsung microprocessors are purchased from Samsung Semiconductor in Belgium, and the Epson microprocessors are purchased from Alcom Electronics NV/SA, also located in Belgium. The microprocessors are the only components of the Company's security tokens that are not commodity items readily available on the open market. While there is an inherent risk associated with each supplier of microprocessors, the Company believes having two sources reduces the overall risk.

AccessKey II uses a custom-designed and fabricated microprocessor which is currently available from a single source, Micronix Integrated Systems, in the United States. The Company does not have a long-term contract with Micronix, but rather submits blanket purchase orders for the AccessKey II microprocessor. The Company expects AccessKey II production to be reduced during 1998 as the production of Digipass 300, which employs a widely available microprocessor, increases. Due to the use of a widely available microprocessor in the Digipass 300, the risks associated with vendor selection and lead times should be reduced.

Orders of microprocessors and some other components generally require a lead time of 12-16 weeks. The Company attempts to maintain a sufficient inventory of all parts to handle short term spikes in orders. Large orders that would significantly deplete the Company's inventory are typically required to be placed with more than 12 weeks of lead time, allowing the Company to attempt to make appropriate arrangements with its suppliers.

The Company purchases the majority of its product components and arranges for shipment to third parties for assembly and testing in accordance with design specifications. The Company's three security token products are assembled exclusively by two independent companies, each of which is based in Hong Kong. Purchases from one of the companies are made on a purchase order by purchase order basis. Purchases from the other company are under a contract that extends to January 21, 1999, with automatic one-year renewals, subject to termination on six month's notice. Each of these companies assembles the Company's security tokens at facilities in mainland China. One of the companies also maintains manufacturing capacity in Hong Kong. Equipment designed to test products at the point of assembly is supplied by the Company and periodic visits are made by Company personnel for purposes of quality assurance, assembly process review and supplier relations. There can be no assurance that the Company will not experience interruptions in the supply of either of the component parts that are used in its products or fully-assembled token devices in general. In the event that the flow of components or finished products was interrupted, there could be a considerable delay in finding suitable replacement sources for those components, as well as in replacement assembly subcontractors with the result that the Company's business and results of operations could be adversely affected. See Subsection d of Item 1 _ "Factors That May Affect Future Results _ Dependence on Single Source Suppliers."

(vii) Competition

The market for computer and network security solutions is very competitive and, like most technology-driven markets, is subject to rapid change and constantly evolving products and services. The industry is comprised of many companies offering hardware, software and services that range from simple locking mechanisms to sophisticated encryption technologies. The Company believes that competition in this market is likely to intensify as a result of increasing demand for security products. The Company's competition comes from a number of sources, including (i) software operating systems suppliers and application software vendors that incorporate a single-factor static password generator vendors promoting response only and/or challenge/response technology, such as ActivCard, Inc., AXENT Technologies, Inc., CRYPTOCard, Inc., Leemah DataCom Security Corporation, Racal-Guardata, Inc., Secure Computing Corp., and Security Dynamics Technologies, Inc.

In some cases, these vendors also support the Company's products and those of its competitors. The Company also may face competition in the future from these and other parties in the future that develop computer and network security products based upon approaches similar to or different from those employed by the Company. There can be no assurance that the market for computer and network security products will not ultimately be dominated by approaches other than the approach marketed by the Company.

The Company believes that the principal competitive factors affecting the market for computer and network security products include name recognition, technical features, ease of use, quality/reliability, level of security, customer service and support, distribution channels and price. Although the Company believes that its products currently compete favorably with respect to such factors, other than name recognition in certain markets, there can be no assurance that the Company can maintain its competitive position against current and potential competitors, especially those with significantly greater financial, marketing, service, support, technical and other competitive resources. Many of the Company's present and potential competitors have significantly greater financial, marketing, service, support, technical and other competitive resources than the Company and, as a result, may be able to respond more quickly to new or emerging technologies and changes in customer requirements, or to devote greater resources to the development, promotion and sale of products, or to deliver competitive products at a lower end-user price. Current and potential competitors have established or may establish cooperative relationships among themselves or with third parties to increase the ability of their products to address the needs of the Company's prospective customers. Accordingly, it is possible that new competitors or alliances may emerge and rapidly acquire significant market share. If this were to occur, the financial condition or results of operations of the Company could be materially adversely effected. See Subsection d of Item 1 _ "Factors That May Affect Future Results _ Competition."

The Company's products are designed to allow authorized users access to a computing environment, in some cases using patented technology as a replacement for the static password. Although certain of the Company's security token technologies are patented, there are other organizations that offer token-type password generators incorporating challenge/response or response only approaches that employ different technological solutions and compete with the Company for market share.

(viii) Sales and Marketing

The Company's computer and network security products are marketed primarily through an indirect sales channel and distribution network and, to a lesser extent, directly to end-users. The Company markets its products primarily in North America and Europe through a combination of value-added resellers, original equipment manufacturers, independent distributors and direct sales efforts. A sales staff of 12 (as of December 31, 1997) coordinates sales through the distribution network and makes direct sales calls either alone or with sales personnel of vendors of computer systems. The sales staff also provides product education seminars to sales personnel of vendors and distributors with whom the Company has working relations and to potential end-users of the Company's products.

In January 1997, the VASCO Advantage Reseller ("VAR") program was introduced. The goal of this program is to expand the Company's marketing channels by engaging companies already proficient in reselling computer network products and security solutions to distribute the Company's products. The Company works with these resellers through its United States and European operating subsidiaries, VDS and VDS NV/SA. VDS, which is primarily responsible for North America, South America and Japan, started in 1997 with one reseller. Since January 1, 1997, arrangements have been made with 39 additional resellers, for a total of 40 as of December 31, 1997. VDS NV/SA, which is generally responsible for developing sales in the remainder of the world, had an existing base of 17 resellers prior to the announcement of the VAR program. Between January 1, 1997 through December 31, 1997, VDS NV/SA engaged an additional 20 resellers, for a total of 37. Combined, VDS and VDS NV/SA established relationships with a total of 77 resellers in 1997, against a target of 64. As of March 31, 1998, VDS NV/SA's resellers numbered 40 and VDS' numbered 46, for a total of 86.

The Company's international sales and operations are subject to risks such as the imposition of government controls, new or changed export license requirements, restrictions on the export of critical technology, trade restrictions and changes in tariffs. While the Company believes its products are designed to meet the regulatory standards of foreign markets, any inability to obtain foreign regulatory approvals on a timely basis could have a material adverse effect on the Company's financial condition or results of operations.

The Company's products are subject to export restrictions and controls as administered by the National Security Agency, the Department of State and the Department of Commerce. Encryption products are eligible for export depending upon the level of encryption technology incorporated into the product. U.S. export laws also prohibit the export of encryption products to specified hostile countries. Until recently, the Company did not need to obtain U.S. export licenses for its products. However, two new encryption products, VACMan/CryptaPak and VACMan/Point `n Crypt, introduced to the product line in August 1997, require a License Exception (i.e., authorization to export, under stated conditions, subject to Export Administration Regulations). The Company believes it will be able to obtain License Exceptions for both its VACMan/CryptaPak and VACMan/Point `n Crypt products for sales to international banking and financial institutions.

There can be no assurance, however, that the list of products and countries for which export approval is required, and the regulatory policies with respect thereto will not be revised from time to time. The inability of the Company to obtain required approvals under these regulations could materially adversely affect the ability of the Company to make international sales of the products under U.S. export control.

The Company's core authentication products, AccessKey II, Digipass 300, Digipass 500, and AuthentiCard, do not, nor are they likely to, fall under U.S. encryption export control regulations. Although all of the Company's authentication products utilize encryption technologies, the products cannot read and encrypt client data. Thus, they are not subject to the U.S. encryption export control regulations. Similarly, VDS NV/SA is subject to export licensing requirements under Belgian law. VDS NV/SA, as owner and exporter of the cryptographic products, must apply to the Belgian Ministry of Economic Affairs for an export license for each company to which it exports such products. An export license is valid for one customer for one year from the date of issue. It can be reused for several consecutive deliveries to that customer until the total export quantity indicated on the license has been exhausted. If the quantity is not completely exported during the one year license period, the license can be renewed once for another year. VDS NV/SA applies for such licenses for customers that wish to purchase cryptographic products. The inability of VDS NV/SA to obtain required approvals or licenses under Belgian law could have a material adverse effect on the Company's financial condition or operations.

The Belgian export of VDS NV/SA's cryptographic products, consisting of DES and RSA microprocessors and PC/DES and RSA cards (including SDKs), is also subject to European Community regulations. VDS NV/SA's cryptographic products are considered to be "goods of dual use" under those regulations, i.e., goods that can be used for both civil and military purposes. As such, a national individual export license is required for their export, except to Luxembourg and the Netherlands. Only the VDS NV/SA products that perform encryption of data for confidentiality reasons require an individual export license, and VDS NV/SA has obtained such licenses for the export of these products.

(ix) Customers and Markets

Customers for the Company's security products include, to some extent, businesses that purchase products directly from the Company for use by their employees, clients or vendors, but the majority are value-added resellers or distributors of related security products or services who in turn sell to other businesses.

To date, virtually all of the Company's security products have been sold in Europe. Sales to one European distributor, Concord-Eracom Nederland BV, accounted for 44% and 16% of the Company's consolidated revenues in 1996 and 1997, respectively. On a pro forma basis (i.e., including Lintel Security and Digipass sales for all of 1996) this customer would have accounted for 33% of the Company's consolidated revenues for 1996. This drop is due to the reduction in shipments to Concord-Eracom Nederland BV during 1997, resulting in revenues from such shipments dropping to \$2 million from \$4 million in 1996. In 1998, however, Concord-Eracom Nederland BV placed an additional \$1.25 million order with VASCO NA. For 1996, on a pro forma basis, Rabobank and S-E Banken each would have accounted for approximately 10% of the Company's total revenues. For 1997, these two customers each accounted for approximately 18% of the Company's total revenues. For additional information, see Item 7_ "Management's Discussion and Analysis of Financial Condition and Results of Operations _ 1997 Compared to 1996 _ Revenues." The Company is aware of the risks associated with this degree of customer concentration and expects to further minimize its reliance on these customers in 1998 and beyond. There can be no assurance, however, that the Company's efforts to minimize this risk will ultimately be successful or that the Company can sustain comparable sales volume with these customers. Furthermore, the loss of these customers' business, or an inability to maintain reasonable profit margins on these sales, may have an adverse effect on the Company. See Subsection d of Item 1 _ "Factors That May Affect Future Results _ Dependence on Major Customers" and "_ Risks of International Operations."

(x) Backlog

At March 31, 1998, the Company had firm purchase orders from customers for an aggregate of \$7,066,000 of AccessKey II, AuthentiCard, Digipass 500 and Digipass 300 security token units, exclusive of the units already shipped under such purchase orders as of March 31, 1998. This compares to a balance of \$3,700,000 as of March 31, 1997.

(xi) Employees

As of December 31, 1997, the Company employed 40 full-time employees and 6 full-time consultants. Of these, 22 were located in North America and 24 were located in Europe. Of the 46 total, 15 were involved in sales, marketing and customer support, 17 in product production, research and development and 14 in administration.

d. Factors That May Affect Future Results

(i) History of Operating Losses; Accumulated Deficit

The Company has incurred losses from continuing operations before interest and taxes for the years ended December 31, 1995, 1996 and 1997 of \$534,000, \$8,658,000 and \$3,935,000, respectively. As of December 31, 1997, the Company had an accumulated deficit of \$15,902,000, which amount includes write-offs of acquired in-process technology related to the acquisitions of Lintel Security and Digipass for the year ended December 31, 1996 in the amount of \$7,351,000. See Item 7 _ "Management's Discussion and Analysis of Financial Condition and Results of Operations." In view of the Company's history of losses, there can be no assurance that the Company will be able to achieve or sustain profitability on an annual or quarterly basis in the future.

(ii) Potential Fluctuations in Quarterly Results

The Company's quarterly operating results have in the past varied and may in the future vary significantly. Factors affecting operating results include: the level of competition; the size, timing, cancellation or rescheduling of significant orders; market acceptance of new products and product enhancements; new product announcements or introductions by the Company's competitors; adoption of new technologies and standards; changes in pricing by the Company or its competitors; the ability of the Company to develop, introduce and market new products and product enhancements on a timely basis, if at all; component costs and availability; the Company's success in expanding its sales and marketing programs; technological changes in the market for data security products; foreign currency exchange rates; and general economic trends and other factors. In addition, because a high percentage of the Company's operating expenses are fixed, a small variation in the timing of recognition of revenue can cause significant variations in operating results from quarter to quarter.

(iii) Additional Capital Needed

The Company requires additional capital to finance its working capital and other needs, including the repayment of outstanding obligations and the financing of future growth. The Company believes its current cash balances and anticipated cash revenues from operations will be sufficient to meet its anticipated cash needs through December 31, 1998.

Continuance of the Company's operations beyond December 31, 1998, however, will depend on the Company's ability to obtain adequate financing. To this end, in April 1998, the Company entered into a loan agreement in the amount of \$3 million with Lernout & Hauspie Speech Products N.V. ("L&H"); the funding of this loan occurred during April 1998. The loan bears interest at the Prime Rate plus 1%, payable quarterly, and matures on January 4, 1999. L&H is an international leader in the development of advanced speech technology for various commercial applications and products. Although the Company has obtained the necessary financing in the past and intends to raise capital in the near future through, among other potential financing sources, a possible public offering of Common Stock, there is no assurance that the Company can reduce its expenditures or sell assets or proprietary rights without having a material effect on its business. See Item 7 $_$ "Management's Discussion and Analysis of Financial Condition and Results of Operations $_$ Liquidity and Capital Resources."

(iv) Rapid Technological Changes and Dependence on New Products

The market for the Company's products is very dynamic and characterized by rapidly changing technology, evolving industry standards and government policies, changing customer requirements, price-competitive bidding and frequent product enhancements and innovations. The introduction by the Company or its competitors of products embodying new technologies and the emergence of new industry standards could render the Company's existing products obsolete and unmarketable. Therefore, the Company's future success will depend in part upon its ability to enhance its current products and develop innovative products to distinguish itself from the competition and to meet customers' changing needs in the data security industry.

The Company is presently expending significant resources to enhance its existing products and develop and introduce the next generation of token and other security products. There can be no assurance that security-related product developments and technology innovations by others will not adversely affect the Company's competitive position or that the Company will be able to successfully anticipate or adapt to changing technology, industry standards or customer requirements on a timely basis. Any failure by the Company to anticipate and respond to such changes could have a material adverse effect on the Company's results of operations and financial condition.

(v) Dependence on Major Customers

Approximately 16% of the Company's revenues during 1997 were derived from the sale of the Company's security products to one European distributor, Concord-Eracom Nederland BV. For 1996, on a pro forma basis, Rabobank and S-E Banken each would have accounted for approximately 10% of the Company's total revenues. For 1997, these two customers each accounted for approximately 18% of the Company's total revenues. There can be no assurance that the Company will be able to modify its existing products or develop new products that will continue to meet the specifications of these customers. Absent significant future revenues from alternative sources, the unforeseen loss of one or more of the Company's major customers' business, or the inability to maintain reasonable profit margins on sales to any of these customers, would have a material adverse effect on the Company's results of operations and financial condition. See Item 7 _ "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 1, Subsection c.(ix) _ "Narrative Description of Business - Customers and Markets."

(vi) Product Concentration

Sales of the Company's AccessKey II and Digipass security tokens together comprised the majority of the Company's net sales during fiscal 1995, 1996 and 1997. Should the demand for or pricing of either of these products decline due to the introduction of superior or lower cost products by competitors, changes in the computer industry or other factors, the Company's results of operations and financial condition would be adversely affected.

(vii) Dependence on Development of Industry Relationships

The Company is party to collaborative arrangements with a number of corporations and evaluates, on an ongoing basis, potential strategic alliances and intends to continue to pursue such relationships. The Company's future success will depend significantly on the success of its current arrangements and its ability to establish additional arrangements. There can be no assurance that these arrangements will result in commercially successful products. See Item 1, Subsection c.(iii)(C) _ "Narrative Description of Business _ Products _ The Company's Strategy _ Develop Strategic Relationships."

(viii) Risks of International Operations

Sales to customers outside the United States accounted for approximately 61%, 95% and 92% of the Company's net revenues in the years ended December 31, 1995, 1996 and 1997, respectively. Because a significant number of the Company's principal customers are located in other countries, management expects that international sales will continue to generate a significant portion of the Company's total revenue.

The Company's international business is subject to a variety of risks, including tariffs and other trade barriers, the establishment and expansion of indirect distribution channels in certain countries or regions, delays in expanding its international distribution channels, difficulties collecting international accounts receivable from distributors or resellers, increased costs associated with maintaining international marketing efforts, the introduction of non-tariff barriers and difficulties in enforcing intellectual property rights.

In addition, the majority of the supply and sales transactions of VDS are denominated in U.S. dollars, whereas many of the supply and sales transactions of VDS NV/SA are denominated in various foreign currencies. A decrease in the value of any of these foreign currencies relative to the U.S. dollar could affect the profitability in U.S. dollars of the Company's products sold in these markets. The Company is therefore subject to the risks associated with fluctuations in currency exchange rates.

In order to reduce the risk of fluctuations in currency exchange rates, VDS NV/SA began in 1997 to buy U.S. dollars based on three- to six-month estimated future needs for U.S. dollars, has developed price lists denominated in both U.S. dollars and foreign currencies, and endeavors to denominate its new supply and sales transactions in U.S. dollars. In this connection, in September 1997 VDS NV/SA purchased \$300,000 in U.S. dollars to cover purchases of supplies. VDS NV/SA is also beginning to attempt to match as to timing of delivery, amount of product and denomination of currency, some purchase orders from vendors with sales orders to customers. There can be no assurance that these matching efforts will be successful in reducing currency exchange risks or that the risks of international operations will not have a material adverse effect on the Company's financial condition or results of operations. The Company does not hold forward exchange contracts or other hedging instruments to exchange various foreign currencies for U.S. dollars to offset currency rate fluctuations which might affect its obligations in relation to its repayment out of income from sales (which are principally in foreign currency) of debt under its loan obligations (which are principally in U.S. dollars). See Item 7 _ "Management's Discussion and Analysis of Financial Condition and Results of Operations."

(ix) Competition

Many of the Company's potential competitors have significantly greater financial, marketing, technical and other competitive resources than the Company. As a result, they may be able to adapt more quickly to new or emerging technologies and changes in customer requirements, or to devote greater resources to the promotion and sale of their products than can the Company. Competition could increase if new companies enter the market or if existing competitors expand their product lines. Any reduction in gross margins resulting from competitive factors could have a material adverse effect on the Company's financial condition or results of operations.

Although the Company believes it has certain technological and other advantages over its competitors, maintaining such advantages will require continued investment by the Company in research and development and sales and marketing. There can be no assurance that the Company will have sufficient resources to make such investments or that the Company will be able to make the technological advances necessary to maintain such competitive advantages. In addition, current and potential competitors have established or may in the future establish collaborative relationships among themselves or with third parties, including third parties with whom the Company has strategic relationships, to increase the ability of their products to address the security needs of the Company's prospective customers. Accordingly, it is possible that new competitors or alliances may emerge and rapidly acquire significant market share. If this were to occur, the financial condition and results of operations of the Company would be materially adversely affected. See Item 1, Subsection c.(vii) _ "Narrative Description of Business _ Competition."

(x) Dependence on Single Source Suppliers

The majority of the Company's products are manufactured by two independent vendors headquartered in Hong Kong. One of the vendors is under a contract that extends to January 21, 1999, with automatic one-year renewals subject to termination on six months notice and purchases from the other vendor are on a purchase order by purchase order basis. Each vendor assembles the Company's security tokens at facilities in mainland China. The importation of these products from China exposes the Company to the possibility of product supply disruption and increased costs in the event of changes in the policies of the Chinese government, political unrest or unstable economic conditions in China or developments in the United States that are adverse to trade, including enactment of protectionist legislation. While the Company believes that it could find substitute contractors for the manufacture and assembly of its products, and has had discussions to that effect with a vendor in Belgium, in the event that the supply of components or finished products is interrupted or relations with either of the two principal vendors is terminated, there could be a considerable delay finding suitable replacement sources to manufacture the Company's products which could have a material adverse effect on the Company's results of operations and financial condition. In addition, the Company's AccessKey II product contains a custom-designed microprocessor which is fabricated by a single supplier located in the United States and is procured by purchase orders. The Company expects AccessKey II production to be reduced during 1998 as the production of Digipass 300, which employs a widely available microprocessor, increases. However, any unforeseen interruption in the supply of microprocessors for the AccessKey II from the sole supplier prior to the full phase-in of the Digipass 300 product would have a material adverse effect on the Company's results of operations and financial condition. See Item 1, Subsection c.(vi) _ "Narrative Description of Business _ Production."

(xi) Proprietary Technology and Intellectual Property

The Company's success depends significantly upon its proprietary technology. The Company currently relies on a combination of patent, copyright and trademark laws, trade secrets, confidentiality agreements and contractual provisions to protect its proprietary rights. The Company seeks to protect its software, documentation and other written materials under trade secret and copyright laws, which afford only limited protection. The Company generally enters into confidentiality and nondisclosure agreements with its employees and with key vendors and suppliers. The Company holds several patents in the United States and a corresponding patent in certain European countries, which cover certain aspects of its technology. The U.S. patents expire between 2003 through 2010; the European patent expires in 2008. There can be no assurance that the Company will develop proprietary products or technologies that are patentable, that any issued patent will provide the Company with any competitive advantages or will not be challenged by third parties, or that patents of others will not have a material adverse effect on the Company's business.

There has also been substantial litigation in the technology industry regarding intellectual property rights, and litigation may be necessary to protect the Company's proprietary technology. The Company expects that companies in the computer and information security market will increasingly be subject to infringement claims as the number of products and competitors in the Company's target market grows. Any such claims or litigation may be time-consuming and costly, cause product shipment delays, require the Company to redesign its products or require the Company to enter into royalty or licensing agreements, any of which could have a material adverse effect on the Company's results of operations and financial condition.

Despite the Company's efforts to protect its proprietary rights, unauthorized parties may attempt to copy aspects of the Company's products or to obtain and use information and software that the Company regards as proprietary. To the extent the Company believes its proprietary rights are being violated, and regardless of its desire to do so, it may not have adequate financial resources to engage in litigation against the party or parties who may infringe on its proprietary technology. In addition, the laws of some foreign countries do not protect proprietary and intellectual property rights to as great an extent as do the laws of the United States. There can be no assurance that the Company's means of protecting its proprietary and intellectual property rights will be adequate or that the Company's competitors will not independently develop similar technology, duplicate the Company's products or design around patents issued to the Company or other intellectual property rights of the Company.

(xii) Product Liability Risks

Customers rely on the Company's token-based security products to prevent unauthorized access to their data. A malfunction of or design defect in the Company's products could result in tort or warranty claims. The Company does not presently maintain product liability insurance for these types of claims. In order to reduce the risk of exposure from such claims, the Company attempts to obtain warranty disclaimers and liability limitation clauses in its agreements with distributors, resellers and end-user clients. However, there can be no assurance that the Company will be successful in obtaining such provisions in its agreements or that such measures will be effective in limiting the Company's liability for any such damages. Any liability for damages resulting from security breaches could be substantial and would have a material adverse effect on the Company's results of operations and financial condition. In addition, a well-publicized actual or perceived security breach involving token-based security systems could adversely affect the market's perception of token-based security products in general, or the Company's products in particular, regardless of whether such breach is attributable to the Company's products. This could result in a decline in demand for the Company's results of operations and financial adverse effect on the Company's results of operations and financial condition.

(xiii) Government Regulation of Technology Exports

The Company's international sales and operations are subject to risks such as the imposition of government controls, new or changed export license requirements, restrictions on the export of critical technology, trade restrictions and changes in tariffs. While the Company believes its products are designed to meet the regulatory standards of foreign markets, any inability to obtain foreign regulatory approvals on a timely basis could have a material adverse effect on the Company's financial condition or results of operations.

Certain products of the Company are subject to export controls under U.S. law, and the Company believes it has obtained or will obtain all necessary export approvals as required. There can be no assurance, however, that the list of products and countries for which export approval is required, and the regulatory policies with respect thereto will not be revised from time to time. The inability of the Company to obtain required approvals under these regulations could materially adversely affect the ability of the Company to make international sales. For example, U.S. governmental controls on the exportation of encryption technology prohibit the Company from exporting some of its products with the more sophisticated data security encryption technology. As a result, foreign competitors facing less stringent controls may be able to compete more effectively than the Company in the global data security market. There can be no assurance that these factors will not have a material adverse effect on the Company's financial condition or results of operations.

Similarly, VDS NV/SA, the Belgian operating subsidiary of the Company, is subject to export licensing requirements under Belgian law. The inability of VDS NV/SA to obtain required approvals or licenses under Belgian law also could have a material adverse effect on the Company's financial condition or results of operations. For additional information on such export restrictions and licensing requirements under U.S. and Belgian law, see Item 1, Subsection c.(viii) _ "Narrative Description of Business _ Sales and Marketing."

(xiv) Dependence on Key Personnel

The Company depends, to a significant degree on the efforts of its President, Chief Executive Officer and the Chairman of its Board of Directors, T. Kendall Hunt, and those of other key personnel employed by or serving as consultants to its subsidiaries, including John Haggard, Mario Houthooft, Frank Hoornaert, Hyon Im, Jan Valcke and Richard Vaden. Mr. Houthooft has entered into a consulting agreement with VDS NV/SA. Neither Mr. Hunt nor the Company's other key personnel have entered into employment agreements with the Company. As a result, there are no restrictions on competition by these individuals (other than Mr. Houthooft) after termination of employment or consulting services. Key man insurance in the amount of \$1.5 million is currently maintained by the Company on the life of Mr. Hunt but not on any of the other key personnel. The loss of the services of Mr. Hunt or one or more of its other key personnel could have an adverse effect on the Company's business and operating results.

The Company's continued success is also dependent upon its ability to attract and retain qualified employees to support its future growth. Competition for such personnel is intense, and there can be no assurance that the Company can retain its key employees or that it can attract, assimilate or retain other highly qualified personnel in the future.

(xv) Management and Control

Control of the Company presently is largely in the hands of its Board of Directors, management and T. Kendall Hunt. As of May 4, 1998, the Board of Directors of the Company and their spouses owned beneficially and of record approximately 56% (and Mr. Hunt and his family owned beneficially and of record 51%) of the outstanding shares of the Company's Common Stock. Mr. Hunt is Chairman of the Board of Directors, Chief Executive Officer and President of the Company. As a result, Mr. Hunt will have control over the direction and operation of the Company and with his family will be able to elect the directors of the Company and to approve any corporate action requiring majority stockholder approval. Such concentration of control may have an adverse effect on the market price of the Company's Common Stock.

Item 2 - Properties

The Company's corporate offices and North American administrative, sales and marketing, research and development and support facilities are located in the United States in an office complex in Oakbrook Terrace, Illinois, a western suburb of Chicago. These facilities are leased through November 15, 1999, and consist of approximately 10,000 square feet. The Company believes that the Oakbrook Terrace facilities will be adequate for its present growth plans.

The Company's European administrative, sales and marketing, research and development and support facilities are located in Belgium in an industrial park in a southwestern suburb of Brussels. These facilities consist of approximately 10,000 square feet of office space which are occupied under a lease expiring in July of 1999. The Company believes that these facilities are adequate through the term of the current lease and that on expiration of the lease it will be able to either extend the lease or find suitable facilities at comparable rates.

Item 3 - Legal Proceedings

The Company is not currently involved in any material litigation. However, the Company had a product acceptance dispute with its principal customer involving the sale in 1995 of approximately \$315,000 of certain smartcard readers produced by the Company in response to written specifications submitted by the customer. This disagreement was settled during 1998 with a portion of the amount being credited to the customer (\$85,000) and the remainder applied to future orders (this amount will be determined based upon the amount of product returned by the customer, but in no case will be greater than \$230,000). Additionally, the Company has a disagreement with certain stockholders regarding their rights as holders of warrants following the Exchange Offer. As of the date of this Annual Report on Form 10-K, no litigation with respect to this matter has been commenced, and the Company is unable to determine the extent of the matter's adverse impact, if any, upon its results of operations or financial condition.

Item 4 - Submission of Matters to a Vote of Security Holders

No matter was submitted during the fourth quarter of 1997 to a vote of security holders, through solicitation of proxies or otherwise.

Pursuant to General Instruction G(3) of Form 10-K and Instruction 3 to Item 401(b) of Regulation S-K, the following information is included as an unnumbered item in Part I of this Report in lieu of being included in the Proxy Statement for the Company's annual meeting of stockholders to be held on June 15, 1998.

Executive Officers of the Registrant

The executive officers of the Company, each of whom has served since the Company's organization in July 1997, and key personnel of its subsidiaries, and their respective ages as of December 31, 1997, are as follows:

Executive Officers of the Company

	-	
T. Kendall Hunt	54	Chief Executive Officer, President,
		Chairman of the Board and Director
Forrest D. Laidley	53	Secretary and Director (1)
Gregory T. Apple	31	Vice President and Treasurer

Age Position

Kev Personnel of VDS

Name

Name Age Position

John C. Haggard 39 President and Chief Operating Officer (2)

Key Personnel of VDS NV/SA

Name Age Position

Mario A. Houthooft 44 Managing Director and Director (3)

- Mr. Laidley is also a member of the Audit Committee and a member of the Compensation Committee of the Board of Directors of the Company.
- (2) Mr. Haggard, effective January 15, 1998, now serves as the Chief Technology Officer of the Company.
- (3) Mr. Houthooft is not an employee of VDS NV/SA, but serves as an officer of VDS NV/SA and performs services pursuant to a consulting agreement with VDS NV/SA. See "_ Consulting Arrangement _ Mario Houthooft Consulting Agreement" below. Mr. Houthooft was named to the Board of Directors on April 10, 1998.

T. Kendall "Ken" Hunt _ Mr. Hunt is Chairman of the Board, Chief Executive Officer and President of the Company. He has been a director of the Company since July 1997. He also serves, since 1990, as a Director, the Chairman of the Board and President of VASCO Corp. and prior thereto served in similar capacities during certain periods from 1984 with VASCO Corp.'s predecessors. Mr. Hunt also serves as VASCO Corp.'s President and Chief Executive Officer.

Forrest D. Laidley _ Mr. Laidley is Secretary of the Company. He has been a director of the Company since July 1997. He also serves, since 1990, as a Director, Secretary and General Counsel of VASCO Corp. He has been involved with VASCO Corp. and its predecessors for certain periods in these capacities since 1984. He is currently and has been a partner in the law firm of Laidley & Porter (and predecessor firm) in Libertyville, Illinois since 1985. He serves on the Advisory Council on Main Street Libertyville and is a director of Harris Bank Libertyville, an Illinois chartered banking institution, and Carmel High School, Mundelein, Illinois. Gregory T. Apple _ Mr. Apple is Vice President and Treasurer of the Company. He also serves, since 1996, as Vice President of Finance and Administration of VASCO Corp. His responsibilities encompass all accounting and administrative aspects of the Company and its subsidiaries. Before joining VASCO Corp. in 1996, he was employed as Controller and Vice President of Finance of a privately held software company, Napersoft, Inc., from 1993 until 1996, with essentially similar responsibilities. From 1988 until joining Napersoft, he was an auditor for KPMG Peat Marwick LLP.

John C. Haggard _ Mr. Haggard serves, since 1994, as President and Chief Operating Officer of VDS. Prior to joining VDS, Mr. Haggard was Assistant Vice President of Research and Development and Technical Owner for Computer Associates International, Inc.'s Security Control and Audit division from 1988. Since January 15, 1998, Mr. Haggard has served as the Chief Technology Officer of the Company.

Mario Houthooft _ Mr. Houthooft serves, since January 1, 1997, as Managing Director of VDS NV/SA pursuant to a consulting agreement. Mr. Houthooft was elected to the Board of Directors of the Company as of April 10, 1998. From 1992 until joining VDS NV/SA, he served in various management positions with Lintel Security. Prior thereto, he was with Cryptech Company from 1986 where he served in various positions.

Consulting Arrangement

Mario Houthooft Consulting Agreement. Mr. Houthooft was one of the two principals of Lintel NV, the company that sold certain assets relating to data security products to Lintel Security, which was then acquired by VASCO Corp. Mr. Houthooft's services as Managing Director of VDS NV/SA are rendered pursuant to a management agreement by and between VDS NV/SA and LINK BVBA, the company that employs Mr. Houthooft. The management agreement has an indefinite term, although it is terminable by either party upon six months notice, or without prior notice upon payment of a specified amount. Mr. Houthooft is to devote at least forty-five hours per week to his confidentiality obligations and precludes Mr. Houthooft from soliciting VDS NV/SA employees or engaging in competing businesses during the term of the agreement. The agreement further provides that Mr. Houthooft will not render services to a competitor or start a competing business in Belgium, the Netherlands and Luxembourg for a one month period following termination of the agreement. In addition to these restrictions, Mr. Houthooft is subject to a covenant not to compete contained in the Lintel Security acquisition agreements pursuant to which Mr. Houthooft agreed not to compete, directly or indirectly, with VASCO Corp. (or any of its affiliates) in the manufacture and sale of computer security products through December 31, 2001.

PART II

Item 5 - Market for Registrant's Common Equity and Related Stockholder Matters

There was no established public market for the Company's Common Stock in 1997. On March 20, 1998, the Company's Common Stock was approved for trading on the NASD Electronic Bulletin Board system under the symbol "VDSI."

On May 4, 1998, the closing sale price for the Company's Common Stock, par value \$.001, on the Over-the-Counter Bulletin Board was \$6.00 per share. Such Over-the-Counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent an actual transaction. On May 4, 1998, there were 85 registered holders of record of the Common Stock.

The Company has not paid any dividends on its Common Stock since incorporation. Dividends were paid relating to the Company's Series B Preferred Stock, which was converted to common stock in September 1997. Restrictions or limitations on the payment of dividends may be imposed under the terms of credit agreements or other contractual obligations. In the absence of such restrictions or limitations, the declaration and payment of dividends will be at the sole discretion of the Board of Directors of the Company and subject to certain limitations under the General Corporation Law of the State of Delaware. The timing, amount and form of dividends, if any, will depend, among other things, on the Company's results of operations, financial condition, cash requirements, plans for expansion and other factors deemed relevant by the Board of Directors. The Company intends to retain any future earnings for use in its business and therefore does not anticipate paying any cash dividends in the foreseeable future.

In connection with the Company's organization, the Company issued 100 shares of its Common Stock to VASCO Corp. on July 16, 1997 for an aggregate consideration of \$100. The 100 shares were not registered under the Securities Act of 1933, as amended (the "1933 Act") and were issued in reliance on Section 4(2) of the 1933 Act. No other securities were issued by the Company in 1997. Item 6 - Selected Financial Data
(in thousands, except per share data)(1)

	Year Ended December 31,									
	1993	1994	1995	1996(2)	1997					
Statement of Operations Data:										
Total revenues \$ Operating income (loss) Net income (loss) available to	2,199\$ 138			10,192 \$ (8,658)(3)						
common stockholders	50	30	(465)	(9,349)(3)	(5,998)(4)					
Basic income (loss) per common share Shares used in computing per	-	-	(0.03)	(0.53)(3)	(0.31)(4)					
share amounts	13,877	14,260	14,817	17,533	19,106					
		Dec	ember 31,							

Balance Sheet Data: Cash \$ Working capital Total assets	1993 209\$ 514 1,522	1994 38 \$ 764 2,111	1995 745\$ 1,074 2,414	1996 1,814 4,902 12,368	1997 \$ 1,898 1,945 8,376
Long term obligations, less current portion Common stock subject to redemption Stockholders' equity	746 -	60 -	7 371	9,114 742	10,943 495
(deficit)	340	1,364	966	(1,205)	(6,865)

For a discussion of factors that affect the comparability of the financial information set forth above, such as significant acquisitions undertaken by the Company, the disposition of the Company's VASCO Performance Systems line of business in 1996, and the significant costs incurred during 1997 related to the Exchange Offer, see Item 7 _ "Management's Discussion and Analysis of Financial Condition and Results of Operations."

- (1) Represents the financial information of VASCO Corp., as the Company had not begun operations as of December 31, 1997.
- (2) Includes the results of operations of Lintel Security from March 1996 and Digipass from July 1996; see "Financial Statements."
- (3) Includes a pretax charge for acquired in-process research and development of \$7,351.
- (4) Includes legal, accounting and printing costs of approximately \$1,218 related to preparing for the Exchange Offer that took place in February/March 1998.

Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations

Certain statements contained in the following Management's Discussion and Analysis of Financial Condition and Results of Operations are forward-looking statements. All forward-looking statements included herein are based on information available to the Company on the date hereof and assumptions which the Company believes are reasonable. The Company does not assume any obligation to update any such forward-looking statements. These forward-looking statements involve risks and uncertainties. the Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth in Subparagraph d. of Item 1 - "Factors That May Affect Future Results" and elsewhere in this Form 10-K.

On March 11, 1998, VASCO Data Security International, Inc. (the "Company") successfully completed its offer (the "Exchange Offer") to exchange the Company's shares, options, and warrants for VASCO Corp. shares, options and warrants. Because the Company was a non-operating subsidiary of VASCO Corp. prior to the completion of the Exchange Offer (which occurred on March 11, 1998), the discussion of results contained herein relates to the results of VASCO Corp. and its subsidiaries. Accordingly, references to "VASCO" shall refer to VASCO Corp. for periods prior to March 11, 1998.

OVERVIEW

VASCO designs, develops, markets and supports open standardsbased hardware and software security systems which manage and secure access to data. VASCO's original corporate predecessor was founded in 1984, and VASCO entered the data security market in 1991 when it acquired a controlling interest in what is today one of VASCO's two operating subsidiaries, VASCO Data Security, Inc. ("VDS") (formerly known as "ThumbScan, Inc."), a company that designs, develops and sells security tokens, primarily to European customers. In 1996, VASCO began developing and marketing open standards-based security systems by introducing a hardware and software package, VACMan, that is based on industry-accepted remote access protocols.

Recent Acquisitions. In 1996, VASCO significantly expanded its presence in the European data security market through the acquisition of two Belgian companies, Lintel Security (effective March 1, 1996) and Digipass SA ("Digipass") (effective July 1, 1996), which today comprise VASCO's other operating subsidiary, VASCO Data Security NV/SA ("VDS NV/SA"). Both Lintel Security and Digipass at the time of acquisition were involved in designing, developing and marketing data security products, and Digipass was to a lesser extent involved in developing interactive voice response ("IVR") products used primarily for telebanking applications. Lintel Security and Digipass were combined in January 1997 and renamed VASCO Data Security NV/SA. During 1997, VDS NV/SA entered into an agreement to sell the IVR business to Siemens Societe Anonyme ("Siemens") for approximately \$200,000. The acquisition of Lintel Security was accomplished in two steps. VASCO, through VDSE, acquired 15% of the capital stock of Lintel Security in March of 1996, and then acquired the remaining 85% in June of 1996. As a result, VASCO's consolidated results for 1996 include 100% of Lintel Security's results for the period from March through June of 1996, with a minority interest elimination for the 85% not owned for this period, and 100% of Lintel Security's results for the remainder of 1996, and all references to inclusion of Lintel Security's results since the date of acquisition reflect these percentage ownership figures for the appropriate time periods.

The Lintel Security purchase involved a cash payment in the amount of \$289,482 and the issuance of (i) \$747,500 in convertible notes due May 30, 1998, (ii) 428,574 shares of VASCO's common stock, and (iii) 100,000 warrants entilling the holders to purchase an equal number of shares of VASCO's common stock at \$7.00 per share. The note bears interest at the rate of 8% per annum, which is payable quarterly, in cash or shares of VASCO's common stock at the option of the holders. The notes can be converted at any time, at the option of the holders, into shares of VASCO's common stock at \$7.00 per share. The warrants were valued at their fair value at the date of grant. These convertible notes and warrants were exchanged pursuant to the Exchange Offer and now represent convertible notes and warrants for the Company's Common Stock.

The purchase of Digipass was a cash transaction involving an initial payment of \$4,800,000 and an obligation to pay an additional \$3,400,000 on or before December 31, 1997. Underlying this obligation was a guarantee to the seller of Digipass, furnished by a European commercial bank, which was secured by various personal and company guarantees. VASCO renegotiated the guarantee into a convertible loan due September 30, 2002 that bears interest at a rate of 3.25%, payable annually, and the obligation to the seller of Digipass was paid in full in August 1997. See "Liquidity and Capital Resources" below.

Prior Lines of Business. Before entering the data security industry in 1991, VASCO's primary endeavor was providing consulting, training and software services to various institutions in the public and private sectors through VPS. In 1996, VASCO sold the assets comprising this line of business, which consisted primarily of contract rights, accounts receivable and training methodologies, for consideration consisting of a royalty, payable to VASCO, equal to 5% of the gross training revenues of the purchaser in excess of \$350,000 per annum for a period of five years from the date of the sale. VASCO anticipates that the royalties, if any, payable by the purchaser of the VPS assets will be immaterial.

Revenue and Earnings. The majority of sales made by VDS and VDS NV/SA are in the European markets, although the Company intends to actively pursue additional markets outside of Europe, particularly Asia and North and South America.

Revenues from sales of security tokens, specifically the AccessKey II and Digipass tokens, continue to represent the majority of the Company's total revenues. In excess of 80% of VDS's sales for 1995, 1996 and 1997 were comprised of security token devices, with Concord-Eracom Nederland BV accounting for 92%, 97% and 67% of VDS's sales in 1995, 1996 and 1997, respectively. On a consolidated basis, the percentages for 1995, 1996 and 1997 were 61%, 44% and 16%, respectively, including revenues relating to the Lintel Security and Digipass operations from their respective acquisition dates in 1996. It is expected that consolidated sales to other customers and markets will increase and, assuming this occurs, the degree of concentration attributable to this major customer will decrease. However, the Company expects that this major customer will continue to be a meaningful contributor to the Company's revenues and earnings for the foreseeable future. In 1998, for example, Concord-Eracom Nederland BV placed an additional \$1.25 million order with VDS. Consequently, the unforeseen loss of this customer's business, or the inability to maintain reasonable profit margins on sales to this customer, may have an adverse effect on the Company's results of operations and financial condition.

Although the Company believes it is likely that sales of security tokens, including the newly introduced Digipass 300, will continue to account for a majority of the Company's total revenues for the foreseeable future, the Company also believes that revenues from sales of its other hardware and software data security products, including the additional product offerings made possible by the Lintel Security and Digipass acquisitions, will continue to increase in the future. No assurance, however, can be given that revenues will increase in the future.

Research and Development. The Company is devoting its capital and other resources to enhancing its existing security products and developing new products to provide enterprise-wide hardware and software security solutions. Costs of research and development, principally the design and development of hardware and software prior to the determination of technological feasibility, are expensed as incurred on a project-by-project basis. The Company's capitalization policy currently defines technological feasibility as a functioning beta test prototype with confirmed manufacturability (a working model), within a reasonably predictable range of costs. Additional criteria include receptive customers, or potential customers, as evidenced by interest expressed in a beta test prototype, at some suggested selling price.

Once technical feasibility has been established, ongoing development costs incurred prior to actual sales of the subject product are capitalized in accordance with Statement of Financial Accounting Standards No. 86, "Accounting for the Costs of Computer Software to Be Sold, Leased or Otherwise Marketed." Product development costs are capitalized on a product-by-product basis and are amortized by the greater of (i) the ratio that current gross revenues for a product bear to the total of current and anticipated future gross revenues for that product or (ii) the straight-line method over the remaining estimated economic life of the product. The remaining estimated economic life of these products are reviewed at least quarterly. Management has concluded that, in today's rapidly evolving technology markets and with the expanding state of the computer and network security industry in general, it may be impractical to anticipate product life cycles in excess of two years. Historically, however, the Company's products have experienced significantly longer product lives than two years.

Variations in Operating Results. The Company's quarterly operating results have in the past varied and may in the future vary significantly. Factors affecting operating results include: the level of competition; the size, timing, cancellation or rescheduling of significant orders; market acceptance of new products and product enhancements; new product announcements or introductions by the Company's competitors; adoption of new technologies and standards; changes in pricing by the Company or its competitors; the ability of the Company to develop, introduce and market new products and product enhancements on a timely basis, if at all; component costs and availability; the Company's success in expanding its sales and marketing programs; technological changes in the market for data security products; foreign currency exchange rates; and general economic trends and other factors. See Subparagraph d. of Item 1 -"Factors That May Affect Future Operating Results."

In addition, the Company has experienced, and may experience in the future, seasonality in its business. The seasonal trends have included higher revenue in the last quarter of the calendar year and lower revenue in the next succeeding quarter. The Company believes that revenue has tended to be higher in the last quarter due to the tendency of certain customers to implement or complete changes in computer or network security prior to the end of the calendar year. In addition, revenue has tended to be lower in the summer months, particularly in Europe, when many businesses defer purchase decisions. Because the Company's operating expenses are based on anticipated revenue levels and a high percentage of the Company's expenses are fixed, a small variation in the timing of recognition of revenue could cause significant variations in operating results from quarter to quarter.

Currency Fluctuations. The majority of the supply and sales transactions of VASCO Data Security, Inc. are denominated in U.S. dollars, whereas many of the supply and sales transactions of VDS NV/SA are denominated in various foreign currencies. In order to reduce the risks associated with fluctuations in currency exchange rates, VDS NV/SA began in September 1997 to buy U.S. dollars based on three to six months estimated future needs for U.S. dollars, has developed price lists denominated in both U.S. dollars and foreign currencies, and endeavors to denominate its new supply and sales transactions in U.S. dollars. In September 1997, VDS NV/SA purchased \$300,000 in U.S. dollars to cover purchases of supplies. VDS NV/SA is also beginning to attempt to match the timing of delivery, amount of product and the currency denomination of purchase orders received from vendors with sales orders to customers. See Subparagraph d. of Item 1 - "Factors That May Affect Future Operating Results - Risks of International Operations."

RESULTS OF OPERATIONS

The following table sets forth, for the periods indicated, certain consolidated financial data as a percentage of revenue for the years ended December 31, 1995, 1996 and 1997.

	Percentage of Revenue Year Ended December 31,						
	1995	1997					
Total revenue	 100.0%	100.0%	 100.0%				
Cost of goods sold		57.6					
Gross profit Operating costs:	21.9	42.4	48.9				
	6.6						
Research and development							
General and administrative		35.8	38.8				
Acquired in-process research and development		72.1	-				
Total operating costs	36.2	127.3	80.9				
Operating loss Interest expense Other expense, net		(84.9) (3.4) (0.4)	(9.3)				
Loss before income taxes Provisions (benefit) for	(16.4)	(88.8)	(43.1)				
income taxes	(6.8)	1.4	4.9				
Net loss	(9.6)	(90.7) =====	(48.0)				

The following discussion is based upon VASCO's consolidated results of operation for the years ended December 31, 1997, 1996 and 1995. References to "VASCO" represent the consolidated entity. References to "VASCO NA" represent VASCO Corp. and VDS, excluding the acquisition of Lintel Security and Digipass. References to "VASCO Europe" mean the operation of Lintel Security and Digipass following their acquisition by VASCO. (Percentages in the discussion are rounded to the closest full percentage point.)

1997 COMPARED TO 1996

The following discussion and analysis should be read in conjunction with VASCO's Consolidated Financial Statements for the years ended December 31, 1997 and 1996.

VASCO's consolidated revenues for the year ended December 31, 1997 were \$12,302,000, an increase of \$2,110,000, or 21%, as compared to the year ended December 31, 1996. VASCO Europe contributed \$9,518,000, or 77%, of total consolidated revenues, with VASCO NA contributing the remaining \$2,784,000, or 23%. Revenues (and other operating results) attributable to VASCO Europe for 1996 are included only from the time of acquisition of Lintel Security and of Digipass.

VASCO NA's revenues were \$2,784,000 for 1997, a decrease of \$2,034,000, or 42%, as compared to 1996 and accounted for 23% of consolidated revenues in 1997. The decrease can be attributed, in part, to a temporary reduction in shipments to Concord-Eracom Nederland BV during 1997. Concord-Eracom Nederland BV represented approximately \$4,200,000 in revenue for 1996, as compared to \$2,000,000 in 1997. However, during 1998 Concord-Eracom Nederland BV has placed an additional order with VASCO NA of approximately \$1,250,000. VPS, the former technical and training unit which was sold in August of 1996, had revenues of \$204,000 in 1996 and accounted for 4% of VASCO's revenues in 1996.

Cost of Goods Sold

VASCO's consolidated cost of goods sold for the year ended December 31, 1997 was \$6,287,000, an increase of \$416,000, or 7%, as compared to the year ended December 31, 1996. This increase is primarily attributable to the inclusion of VASCO Europe for the entire year 1997. VASCO Europe's cost of goods sold was \$4,929,000, accounting for 78% of the consolidated cost of goods sold.

VASCO NA's cost of goods sold was \$1,358,000 in 1997, representing a decrease of \$1,135,000, or 46%, from 1996. This decrease is consistent with the 42% decrease in revenues for the same period and, as discussed above under "Revenues," is due to a temporary reduction in shipments to Concord-Eracom Nederland BV during 1997. However, the cost of goods sold for security products decreased as a percentage at a slightly quicker pace than revenues for security products. This is due to certain improvements in the manufacture of the products, as well as economies of scale being realized as the 1996 acquisitions of Lintel Security and Digipass were fully integrated.

Gross Profit

VASCO's consolidated gross profit for the year ended December 31, 1997 was \$6,015,000, an increase of \$1,694,000, or 39%, over 1996. This represents a consolidated gross margin of 49%, as compared to 1996's consolidated gross margin of 42%. VASCO Europe contributed \$4,589,000 to the consolidated gross profit representing a gross margin of 48% as compared to 37% for the prior year. VASCO NA contributed \$1,426,000 to the 1997 gross profit as compared to \$2,325,000 for 1996, a decrease of \$899,000 or 39%. This represented a gross margin of 51% as compared to 48% for the prior year. The increase in gross margin is due to certain improvements in the manufacture of the products, as well as economies of scale being realized as the 1996 acquisitions of Lintel Security and Digipass were fully integrated.

Sales and Marketing Expenses

Consolidated sales and marketing expenses for the year ended December 31, 1997 were \$3,381,000, an increase of \$1,976,000, or 141%, over 1996. The increase can be attributed to the addition of VASCO Europe for the full year 1997; increased sales efforts including, in part, increased travel costs; an increase in marketing activities, including print media campaigns and other efforts, and an increased presence at trade shows.

Research and Development

Consolidated R&D costs for the year ended December 31, 1997 were \$1,802,000, an increase of \$1,228,000, or 214%, as compared to the year ended December 31, 1996. R&D costs represented 15% of consolidated revenues for 1997 as compared to 6% for 1996. The increase is due to the addition of R&D headcount, both in the U.S. and Europe, and to the acquisition of the VACMan product from Shiva Corporation and the related integration efforts surrounding it. R&D efforts are undertaken by both VASCO NA and VASCO Europe on behalf of the consolidated group of companies. Whereas VASCO NA is primarily responsible for the development of software products, VASCO Europe is responsible for hardware development. Consequently, management of the Company believes it is not meaningful to address R&D costs separately at the operating company level.

VASCO expensed, as cost of goods sold, \$0 and \$180,000 in 1997 and 1996, respectively, reflecting the amortization of capitalized development costs. As of December 31, 1997 and 1996, VASCO did not carry any product development costs on its books as an asset. There were no product development costs capitalized in 1997 or 1996.

General and Administrative Expenses

Consolidated general and administrative expenses for the year ended December 31, 1997 were \$4,768,000, an increase of \$1,120,000, or 31%, over 1996. The majority of this increase can be attributed to the legal, accounting and printing costs associated with the preparation of the Exchange Offer held by the Company during the first quarter of 1998. In addition, the full-year impact of the Lintel Security and Digipass acquisitions and the amortization of intangibles associated with those acquisitions increased general and administrative expenses in 1997.

Acquired In-process Research and Development

During 1996, VASCO expensed \$7,351,000 pertaining to the inprocess research and development acquired in the Lintel Security and Digipass acquisitions. Based upon independent appraisals, approximately 67% of the acquisition premium has been expensed in accordance with U.S. Generally Accepted Accounting Principles. As of December 31, 1997, there remains a net balance of \$2,314,000 representing the intangible assets related to the acquisitions, which are carried on VASCO's books and amortized over an additional 18-66 months. Amortization expenses amounted to \$1,083,000 and \$440,000 for the years ended December 31, 1997 and 1996, respectively. VASCO's consolidated operating loss for the year ended December 31, 1997 was \$3,935,000, compared to the consolidated operating loss of \$8,658,000 for 1996. Of the 1997 loss, VASCO NA contributed a loss in the amount of \$4,130,000 and VASCO Europe contributed income in the amount of \$195,000. The 1996 consolidated operating loss included a write-off of acquired in-process research and development in the amount of \$7,351,000 and \$440,000 of amortization expense relating to intangible assets in 1996. The 1996 operating loss, before the writeoff and the amortization, was \$867,000.

VASCO'S 1997 operating loss, excluding the amortization of intangibles, was attributable to continued investment in R&D (primarily for Digipass 300), sales and marketing investments in North America, the expenses for development of corporate infrastructure, such as sales personnel and administrative staff and office equipment, and the legal, accounting and printing costs incurred during 1997 associated with the preparation of the Exchange Offer held by the Company during the first quarter of 1998.

Interest Expense

Consolidated interest expense in 1997 was \$1,148,000 compared to \$346,000 in 1996. The increase can be attributed to average borrowings in 1997 being substantially above those levels of the previous year. See "Liquidity and Capital Resources" below.

Income Taxes

VASCO recorded tax expense for the year ended December 31, 1997 of \$200,000 for VASCO NA and \$407,000 for VASCO Europe. The tax expense recorded for VASCO NA represents the revaluation (write-down) of deferred tax assets. As of December 31, 1997, VASCO reflected a net deferred tax asset of \$83,000, which represented the amount that management deemed would more likely than not be realized. The net deferred tax asset was net of a valuation allowance of \$831,000, which was established during 1996 and adjusted during 1997, considering the effects of reversing deferred tax liabilities, projected future earnings, which were revised substantially as a result of the acquisitions of Lintel Security and Digipass, and tax planning strategies.

At December 31, 1997, VASCO had net operating loss carryforwards of \$4,722,000 and foreign net operating loss carryforwards approximating \$1,025,000, which may be used to offset future taxable income of VASCO generated in the United States. The net operating loss carryforwards expire in various amounts beginning in 2002 and continuing through 2012.

Dividends and Accumulated Deficit

VASCO paid dividends of \$82,000 and \$108,000 during the years ended December 31, 1997 and 1996, respectively. These dividend payments were attributable to 9,000 shares of VASCO Series B Preferred Stock issued in 1994. During 1997, all 9,000 shares of VASCO Series B Preferred Stock were converted into VASCO Corp. common stock. VASCO began 1997 with an accumulated deficit of \$9,903,000. As a result of the 1997 net loss, this deficit has increased to \$15,902,000. VASCO's 1997 increase in accumulated deficit can be attributed primarily to increased legal, accounting and printing costs incurred during 1997 associated with the Exchange Offer held by VASCO during the first quarter of 1998, the amortization of intangibles related to the 1996 acquisitions of Lintel Security and Digipass, strategic marketing programs implemented during 1997 and a product acquisition.

1996 COMPARED TO 1995

The following discussion and analysis should be read in conjunction with VASCO's Consolidated Financial Statements for the years ended December 31, 1996 and 1995.

Revenues

VASCO's consolidated revenues for the year ended December 31, 1996 were \$10,192,000, an increase of \$6,497,000, or 176%, as compared to the year ended December 31, 1995. VASCO Europe contributed \$5,374,000, or 53%, of total consolidated revenues. Of the \$5,374,000 total revenues contributed by VASCO Europe, \$5,180,000, or 96%, represent data security product revenues, with the remaining \$194,000, or 4%, representing revenues from the IVR products. Revenues (and other operating results) attributable to VASCO Europe are included only from the time of acquisition of Lintel Security and of Digipass.

VASCO NA's revenues were \$4,818,000 for 1996, an increase of \$1,118,000, or 30%, as compared to 1995 and accounted for 47% of consolidated revenues in 1996. Security product sales increased \$2,157,000 to \$4,614,000 in 1996, representing a 88% increase over 1995. Conversely, VPS, the former technical and training unit which was sold in August of 1996, had revenues of \$204,000 in 1996, representing a decrease of \$1,034,000, or 84%, for the comparable period in 1995. VPS accounted for just 4% of VASCO NA's revenues in 1996, down from 33% in 1995.

Cost of Goods Sold

Consolidated cost of goods sold for the year ended December 31, 1996 was \$5,871,000, an increase of \$2,984,000, or 103%, as compared to the year ended December 31, 1995. This increase is primarily attributable to the acquisition of VASCO Europe in 1996 and offset to some extent by a decrease in VASCO NA's combined cost of goods sold. VASCO Europe's cost of goods sold was \$3,378,000, accounting for 58% of the consolidated cost of goods sold.

VASCO NA's cost of goods sold was \$2,493,000 in 1996, representing a decrease of \$394,000, or 14%, from 1995. This decrease was primarily a result of a decrease of \$814,000, attributable to VPS's operations prior to its disposal. This was partially offset by an increase in cost of goods sold related to security products of \$420,000. VASCO NA's cost of goods sold for security products was \$2,453,000 in 1996, as compared to \$2,033,000 in 1995, representing an increase of 21%. The cost of goods sold for security products. This is due to certain non-recurring costs related to capitalized development costs (approximately \$350,000) and inventory write-downs (approximately \$100,000) included in the cost of goods sold for 1995.

The non-recurring charge for capitalized development costs in the fourth quarter of 1995 related to several PC security products that were not expected to generate future revenues. In addition, two authentication products were deemed to have a shorter useful life than originally estimated resulting in the acceleration of amortization expense as a result of the change in estimate. The useful lives were reduced due to technological advances in the market, as well as VASCO's development activities with regard to its AKII successor product (Digipass 300).

The non-recurring inventory write-downs resulted in the fourth quarter of 1995 from management's review of discontinued products and various electronic components. As a result of this review, reserves were established to write-down the inventory to its estimated net realizable value.

Gross Profit

VASCO's consolidated gross profit for the year ended December 31, 1996 was \$4,321,000, an increase of \$3,513,000, or 435%, over 1995. This represents a consolidated gross margin of 42%, as compared to 1995's consolidated gross margin of 22%. VASCO Europe contributed \$1,996,000 to the consolidated gross profit representing a gross margin of 37%. VASCO NA contributed \$2,325,000 to the 1996 gross profit as compared to \$808,000 for 1995, an increase of \$1,517,000 or 188%. Data security products accounted for 93% of VASCO NA's 1996 gross profit due to the reduction in VPS activity and the eventual disposition of VPS during the year. Data security products only accounted for 57% of gross profit during 1995, with VPS accounting for the remaining 43% of gross profit.

VASCO NA's gross margin increased in 1996 to 46% from 22% in 1995. This is attributable to 1995 non-recurring costs related to capitalized development costs and write-down of certain inventory, and increased sales of higher margin security products as opposed to lower margin VPS services.

Sales and Marketing Expenses

Consolidated sales and marketing expenses for the year ended December 31, 1996 were \$1,405,000, an increase of \$1,160,000, or 473%, over 1995. Of the total increase, \$548,000, or 47%, can be attributed to the addition of VASCO Europe. Sales and marketing expenses increased by \$612,000, or 250%, for VASCO NA. The increase for VASCO NA can be attributed to increased sales efforts, including, in part, the addition of four sales people, and increased travel costs; an increase in marketing activities, including print media campaigns and other efforts, and an increased presence at trade shows.

Research and Development

Consolidated R&D costs for the year ended December 31, 1996 were \$575,000, an increase of \$333,000, or 138%, as compared to the year ended December 31, 1995. R&D costs represented 6% of consolidated revenues for 1996, approximately the same percentage as 1995. R&D efforts are undertaken by both VASCO NA and VASCO Europe on behalf of the consolidated group of companies. Whereas VASCO NA is primarily responsible for the development of software products, VASCO Europe is responsible for hardware development. Consequently, management of the Company believes it is not meaningful to address R&D costs separately at the operating company level.

VASCO expensed, as cost of goods sold, \$180,000 and \$445,000 in 1996 and 1995, respectively, reflecting the amortization of capitalized development costs. In the fourth quarter of 1995 VASCO accelerated the amortization of capitalized development costs to reflect an adjustment to the estimated economic life of certain products. The accelerated portion of 1995 amortization amounted to approximately \$350,000.

Net product development costs carried on VASCO's books as an asset were \$0 and \$157,000 at December 31, 1996 and December 31, 1995, respectively. There were no product development costs capitalized in 1996 or 1995. General and Administrative Expenses

Consolidated general and administrative expenses for the year ended December 31, 1996 were \$3,648,000, an increase of \$2,793,000, or 326%, over 1995. Of the total increase, \$1,426,000, or 51%, can be attributed to the addition of VASCO Europe. General and administrative expenses increased by \$1,367,000, or 160%, for VASCO NA. The increase for VASCO NA can be attributed to an increase in administrative infrastructure to support the efforts of other areas of the VASCO, as well as amortization of intangibles associated with the acquisitions of Lintel Security and Digipass.

Acquired In-process Research and Development

VASCO expensed, as an operating expense, \$7,351,000 pertaining to the in-process research and development acquired in the Lintel Security and Digipass acquisitions. Based upon independent appraisals, approximately 67% of the acquisition premium was expensed in accordance with U.S. Generally Accepted Accounting Principles. As of December 31, 1996, there remained \$3,372,000 of intangible assets related to the acquisitions which will be carried on VASCO's books and be amortized over an additional 30 - 78 months. As noted above, \$440,000 of the intangible assets were amortized to expense in 1996.

Operating Loss

VASCO's consolidated operating loss for the year ended December 31, 1996 was \$8,658,000, compared to the consolidated operating loss of \$534,000 for 1995. The 1996 consolidated operating loss included a write-off of acquired in-process research and development in the amount of \$7,351,000 and the \$440,000 of intangible assets amortized to expense in 1996. The operating loss, before the write-off and the amortization of intangibles expensed, was \$867,000. Of this amount, VASCO NA contributed a loss of \$911,000 and VASCO Europe contributed net operating income of \$44,000.

VASCO's 1996 operating loss, before the write-off of acquired in-process research and development and the amortization of intangibles expensed, was attributable to continued investment in R&D (primarily for Digipass 300), sales and marketing investments in North America, one-time professional fees associated with the acquisitions of Lintel Security and Digipass, the expenses for development of corporate infrastructure, such as sales personnel and administrative staff and office equipment, and, in general, the costs associated with consolidating and assimilating the Lintel Security and

Digipass acquisitions.

Interest Expense

Consolidated interest expense in 1996 was \$346,000 compared to \$74,000 in 1995. The increase can be attributed to average borrowings in 1996 being substantially above those levels of the previous year. See "Liquidity and Capital Resources" below.

Income Taxes

VASCO recorded tax expense for the year ended December 31, 1996 of \$162,000 for VASCO NA and \$32,000 for VASCO Europe. The tax expense recorded for VASCO NA represents the revaluation (write-down) of deferred tax assets. As of December 31, 1996, VASCO reflected a net deferred tax asset of \$283,000, which represented the amount that management deemed would more likely than not be realized. The net deferred tax asset was net of a valuation allowance of \$631,000, which was established during 1996, considering the effects of reversing deferred tax liabilities, projected future earnings, which were revised substantially as a result of the acquisitions of Lintel Security and Digipass, and tax planning strategies. VASCO has net operating loss carryforwards of \$1,626,000 as of December 31, 1996, which may be used to offset future taxable income of VASCO generated in the United States. The net operating loss carryforwards expire in various amounts beginning in 2010 and continuing through 2011.

Dividends and Accumulated Deficit

VASCO paid dividends of \$108,000 in each of 1996 and 1995. These dividend payments were attributable to 9,000 shares of VASCO Series B Preferred Stock issued in 1994. VASCO began 1996 with an accumulated deficit of \$554,000. As a result of the 1996 net loss, this deficit increased to \$9,903,000.

VASCO'S 1996 loss before taxes, the resulting net loss after taxes, and the resulting increase in accumulated deficit, can be attributed primarily to the acquisitions of Lintel Security and Digipass and the write-off of acquired in-process research and development. The write-off of acquired in-process research and development accounted for 81% of VASCO'S 1996 loss before taxes.

RECENT DEVELOPMENTS

Loan Agreement/License Agreement. On March 31, 1998, the Company entered into two agreements with Lernout & Hauspie Speech Products N.V. ("L&H"): a loan agreement and a license agreement. The loan agreement, in the amount of \$3 million, bears interest at the Prime Rate plus 1%, payable quarterly, and matures on January 4, 1999. This loan is convertible at the option of the holder into shares of the Company's Common Stock based upon the average closing price of VASCO Corp.'s common stock for the 10 trading days prior to March 11, 1998, the date the Exchange Offer closed. This loan was funded in April 1998.

The license agreement with L&H is for the use of L&H's speech recognition and speech verification technology for data security, telecom and physical access applications. This license agreement includes a prepayment of royalties by the Company in the amount of \$600,000, payable no later than June 30, 1998 and an additional prepayment in the amount of \$200,000, payable no later than March 31, 1999. L&H is an international leader in the development of advanced speech technology for various commercial applications and products.

LIQUIDITY AND CAPITAL RESOURCES

Since inception, VASCO has financed its operations through a combination of the issuance of equity securities, private borrowings, short-term commercial borrowings, cash flow from operations, and loans from Mr. T. Kendall Hunt, VASCO's Chief Executive Officer and one of the stockholders of its original corporate predecessor.

In 1995, VASCO borrowed \$130,000 from Mr. Hunt, resulting in a total loan payable balance of \$190,000 at the end of 1995. This loan was repaid in 1996 from the proceeds of private placements during 1996.

Also during 1995, VASCO privately placed units consisting of 217,352 shares of VASCO's common stock and 108,676 VASCO Warrants to purchase one share of VASCO common stock at \$6.00. The VASCO Warrants are exercisable at the option of the holder; however, VASCO maintains the right to require exercise of the warrants 30 days prior to a public offering of VASCO's common stock. Total issue fees and costs of \$22,261 have been netted against \$369,498 of proceeds from the placement.

Of the total 108,676 units issued in the private placement described in the immediately preceding paragraph, 53,000 units were sold to a group of investors subject to a Registration Rights Agreement ("Rights Agreement") entered into on October 19, 1995. The agreement required that the common stock portion of the units (106,000 shares) be covered by an effective registration statement under the Securities Act by July 1, 1996. The described remedy in the event of default was a put option (the "put"), allowing the investors to exchange their units for consideration of \$7.00 per unit, or \$3.50 per common share. Due to a delay in making the required filing with the Securities and Exchange Commission, VASCO agreed to an extension and renegotiation of the Rights Agreement. This resulted in a requirement for an effective registration statement on or before March 31, 1997 and an increase in the put price to \$14.00 per unit, or \$7.00 per share. This filing deadline also was not satisfied and VASCO and the investor group entered into an amended agreement under which (i) the investor group, (ii) additional VASCO warrants to purchase an aggregate of 141,344 shares of VASCO common stock at a price of \$5.19 per share were granted to the investor group, (iii) the March 31, 1997 deadline for an effective registration statement was changed to March 31, 1998, and (iv) the investor group, (iii) the march 31, 1997, VASCO raises financing of \$5,000,000 or more. These warrants were exchanged pursuant to the Exchange Offer and now represent warrants for the Company's Common Stock. [The Company and the investor group disagree as to the applicability of certain provisions of the Rights Agreement for the formany and the investor group disagree

During the second quarter of 1996, VASCO placed additional units consisting of 666,666 shares of VASCO common stock and 137,777 warrants, each of which entitles the holder to purchase one share of VASCO common stock at \$4.50. The private placement of shares and warrants generated gross proceeds of \$3,000,000. In addition, in the same transaction, VASCO borrowed \$5,000,000 and issued a \$5,000,000 convertible note due on May 28, 2001. The note bears interest at 9%, with interest payable to the holder on a quarterly basis. The holder may, at its option, elect to receive interest payments in cash or Common Stock. In calculating the shares of VASCO common stock to be issued in lieu of cash interest, the average closing price for shares of VASCO common stock for the previous 20 trading days is used. In the event VASCO receives funds equal to or greater than \$30,000,000 from a public offering of its Common Stock, the holder of this note has the right to require VASCO to pay all amounts due and owing under the note within 30 days of receipt by VASCO of notice from the holder of exercise of this right. Total issue fees and costs of \$170,000 related to the equity portion of this transaction have been netted against the \$3,000,000 of proceeds from the equity private placement. In addition, 55,555 shares of VASCO common stock and 8,889 VASCO Warrants, each of which entitles the holder to purchase one share of VASCO common stock at \$4.50, were issued as commissions related to the placement. These warrants were exchanged pursuant to the Exchange Offer and now represent warrants for the Company's Common Stock.

The proceeds from the \$8,000,000 private placement (\$3,000,000 equity and \$5,000,000 debt) were used to make the first installment of \$4,800,000 toward the Digipass purchase, to satisfy one-time expenses related to the Lintel Security and Digipass acquisitions, to retire VASCO's debt to its commercial lender and to Mr. Hunt, and to fund working capital requirements in general.

In 1996, VASCO raised additional funds in a private placement of units consisting of 237,060 shares of VASCO common stock and 35,329 VASCO Warrants, each of which entitles the holder to purchase one share of VASCO common stock at \$4.50. Total issue fees and costs of \$47,885 were netted against the \$1,066,770 in total proceeds from the placement in VASCO's financial statements. In addition, 16,489 shares of VASCO common stock were issued as commissions related to the placement. These warrants were exchanged pursuant to the Exchange Offer and now represent warrants for the Company's Common Stock.

The net effect of 1996 activity resulted in an increase in cash of \$1,069,000, resulting in a cash balance of \$1,814,000 at December 31, 1996, compared to \$745,000 at the end of 1995. VASCO's working capital at December 31, 1996 was \$4,902,000, an increase of \$3,828,000, or 356%, from \$1,074,000 at the end of 1995. The majority of the improvement is attributable to an increase in all current asset categories, aided by the addition of VASCO Europe's assets and the private placements made during the year, offset with the final payment related to the Digipass acquisition in the amount of \$3,400,000. VASCO's current ratio was 2.32 at December 31, 1996, compared to 2.01 at the end of 1995.

Effective in June 1997, VASCO established a bridge loan with Generale Bank in the amount of \$2,500,000, evidenced by five convertible notes in the amount of \$500,000 each. Upon completion of the Exchange Offer, the Company became obligated for all obligations under the loan and the notes. These notes bear interest at a rate of 3.25%, payable quarterly, and are due September 30, 1998, at which time 116% of the principal amount becomes due and payable. In the event the Company completes a public offering prior to September 30, 1998, the holder of a note has the option within seven days after the completion of a public offering to require the note to be repaid at 100% of the principal amount thereof in cash or in Common Stock (valued at the public offering price), at the holder's election, together with all accrued and unpaid interest to the date of repayment plus additional special interest payable in cash as follows: \$88,235 if repayment is between January 1, 1998 and March 31, 1998, both dates inclusive; and \$125,000 if repayment is between April 1, 1998 and September 30, 1998, both dates inclusive. In the event that the holder of the note does not elect within seven days after completion of the public offering to require the note to be repaid, the holder may at any time thereafter (until the close of business on the September 30, 1998 maturity date) require the principal amount of the note to be repaid in shares of Common Stock (valued at the public offering price) plus accrued and unpaid interest to the date of repayment (but no additional special interest shall be payable). If the notes have not been repaid prior to the September 30, 1998 maturity date, repay the note prior to November 1, 1998, then on and from November 1, 1998 (but before payment of the note), in the event a public offering has not been completed the bank may convert the principal amount into shares of the Company's Common Stock (i) at a conversion price equal to a historical 20 day trading price in the United States if the stock is listed or quoted on the Nasdaq, Easdaq or another national U.S. stock exchange, plus the payment of \$250,000 in special interest, payable in cash or shares at the option of the bank, or (ii) if the shares are not so listed, at a conversion price of \$1.00. VASCO also issued warrants entitling the bank to acquire an aggregate of 40,000 shares of VASCO's common stock at exercise prices ranging from \$4 to \$10 per share, which warrants became warrants for the Company's Common Stock upon completion of the Exchange Offer. These notes are expected to be renegotiated upon maturity.

The net effect of 1997 activity resulted in an increase in cash of \$4,000, resulting in a cash balance of \$1,898,000 at December 31, 1997, compared to \$1,814,000 at the end of 1996. VASCO's working capital at December 31, 1997 was \$1,945,000, a decrease of \$2,957,000, or 60%, from \$4,902,000 at the end of 1996. The majority of the change is attributable to a decrease in all current asset categories with the exception of cash, with current liabilities remaining consistent from year to year. VASCO's current ratio was 1.51 at December 31, 1997, compared to 2.32 at the end of 1996.

VDSE entered into a convertible loan agreement with Banque Paribas Belgique S.A. effective August, 1997, in order to refinance the \$3.4 million payment due December 31, 1997 in connection with VASCO's acquisition of Digipass. The terms of the agreement provide that the \$3.4 million principal amount is convertible, at the option of the lender, into shares of the Company's Common Stock. This loan bears interest at the rate of 3.25%, payable annually, and matures on September 30, 2002. The loan is convertible, commencing on the earlier of January 1, 1999 or the date of a public offering of the Company's shares on the EASDAQ and/or NASDAQ and terminating on August 31, 2002, at a conversion price equal to the per share public offering price, provided, however, that if no such offering has occurred prior to January 1, 1999, and the loan is converted after such date but prior to a public offering, the conversion price is the average closing market price for shares of the Company's Common Stock on the NASD Electronic Bulletin Board system for the 20 trading days prior to the date of the notice of conversion, less 10%. In the event a public offering is completed, the lender may at its option (by written notice within seven days after receipt by the Company of proceeds of the public offering) require the principal amount of the loan to be repaid in cash, in which case additional special interest is payable as follows: \$340,000 if repayment is on or before June 30, 1998, \$510,000 if repayment is between July 1, 1998 and December 31, 1998 (both dates inclusive), and \$680,000 if repayment is on January 1, 1999 or later.

The Company intends to seek acquisitions of businesses, products and technologies that are complementary or additive to those of the Company. While from time to time the Company engages in discussions with respect to potential acquisitions, the Company has no plans, commitments or agreements with respect to any such acquisitions as of the date of this Form 10-K and currently does not have excess cash for use in making acquisitions. There can be no assurance that any such acquisition will be made.

The Company believes that its current cash balances and anticipated cash revenues from operations will be sufficient to meet its anticipated cash needs through December 31, 1998. Continuance of the Company's operations beyond December 31, 1998, however, will depend on the Company's ability to obtain adequate financing. To this end, in March 1998, the Company entered into a loan agreement in the amount of \$3 million with Lernout & Hauspie Speech Products N.V. ("L&H"); the funding of this loan is occurred early in the second quarter of 1998. The loan bears interest at the highest "prime rate" published in The Wall Street Journal under the heading "Money Rates" on such day plus 1%, payable quarterly, and matures on January 4, 1999. L&H is an international leader in the development of advanced speech technology for various commercial applications and products. The loan is convertible at the option of L&H into shares of the company's Common Stock at the rate of \$5.6813 per share (based on the average closing price of VASCO Corp.'s common stock for the ten trading days prior to March 12, 1998).

L&H and VASCO have agreed to work together to apply L&H's patented voice technology in various applications of voice authentication. VASCO's first application is for data and network security, authenticating the user through a voiceprint, matching only to a specific individual's pre-recorded voice . Voice authentication will compliment VASCO's other methods of authentication, providing strong, yet flexible choices for the end customer. It will also allow VASCO to reach markets that it currently cannot serve, presenting new opportunities for growth.

The Company has also entered into engagement letters with Banque Paribas S.A. and Generale Bank for a possible future public offering. Further, the Company has had preliminary discussions regarding other possible debt or equity financing. There can be no assurance, however, that the Company will be successful in effecting a public offering or obtaining other additional financing.

YEAR 2000 CONSIDERATIONS

Many existing computer systems and software products are coded to accept only two digit entries in the date code field with respect to year. With the 21st century less than two years away, the date code field must be adjusted to allow for a four digit year. The Company believes that its internal systems are Year 2000 compliant, but the Company will need to take the required steps to make its existing products compliant. The total estimated cost of this exercise is \$100,000, with an anticipated completion date of December 31, 1998. There can be no assurance, however, that the Company will meet its anticipated completion date or that the total cost will not exceed \$100,000. The Company believes that the purchasing patterns of customers and potential customers may be affected by Year 2000 issues as companies expend significant resources to upgrade their current software systems for Year 2000 compliance. This, in turn, could result in reduced funds available to be spent on other technology applications, such as those offered by the Company, which could have a material adverse effect on the Company's business and results of operations.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In June 1997, the Financial Accounting Standard Board issued SFAS No. 130, "Reporting Comprehensive Income." The Company is required to adopt SFAS No. 130 for periods beginning after December 15, 1997. This statement establishes standards for reporting comprehensive income and its components in a full set of generalpurpose financial statements. The standard requires all items that are required to be recognized under accounting standards as components of comprehensive income be reported in a financial statement that is displayed in equal prominence with the other financial statements. The standard is not expected to have a material impact on the Company's current presentation of income.

In June 1997, the Financial Accounting Standards Board also issued SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information." The Company is required to adopt the disclosures of SFAS No. 131 beginning with its December 31, 1998 annual financial statements. This statement establishes standards for the way companies are to report information about operating segments. It also establishes standards for related disclosures about products and services, geographic areas and major customers. The Company is currently evaluating the impact of this standard on its financial statements.

In November 1997, the American Institute of Certified Public Accountants issued Statement of Position ("SOP") No. 97-2, "Software Revenue Recognition." The Company is required to adopt SOP 97-2 on January 1, 1998. SOP 97-2 is intended to reduce diversity in current revenue recognition practices within the software industry. The Company is currently evaluating the effects of SOP 97-2 on its operations.

Item 7A - Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

Item 8 - Financial Statements and Supplementary Data

The information in response to this item is included in the Company's consolidated financial statements, together with the report thereon of KPMG Peat Marwick LLP, appearing on pages F-1 through F-18 of this Form 10-K, and in Item 7 under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Item 9 - Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

PART III

Item 10 - Directors and Executive Officers of the Registrant

The sections entitled "Election of Directors" and "Section 16(a) Beneficial Ownership Report Compliance" contained in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on June 15, 1998, are incorporated herein by reference. The section entitled "Executive Officers of the Registrant" appearing immediately after Part I of this Report is incorporated herein by reference.

Item 11 - Executive Compensation

The section entitled "Executive Compensation" contained in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on June 15, 1998, is incorporated herein by reference.

Item 12 - Security Ownership of Certain Beneficial Owners and $\ensuremath{\mathsf{Management}}$

The section entitled "Security Ownership of Certain Beneficial Owners and Management" contained in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on June 15, 1998, is incorporated herein by reference.

Item 13 - Certain Relationships and Related Transactions

None.

PART IV

Item 14 - Exhibits, Financial Statement Schedules and Reports on Form $\operatorname{\mathsf{8-K}}$

a. (1) The following consolidated financial statements and notes thereto, and the related independent auditors' report, are included on pages F-1 through F-18 of this Form 10-K:

Consolidated Balance Sheets as of December 31, 1996 and 1997

Consolidated Statements of Operations for the Years Ended December 31, 1995, 1996 and 1997

Consolidated Statements of Stockholders' Equity (Deficit) of the Years Ended December 31, 1995, 1996 and 1997

Consolidated Statements of Cash Flows for the Years Ended December 31, 1995, 1996 and 1997

Notes to Consolidated Financial Statements

Independent Auditors' Report

(2) The following financial statement schedule of the Company is included on page S-2 of this Form 10-K:

Schedule II

All other financial statement schedules are omitted because such schedules are not required or the information required has been presented in the aforementioned financial statements.

(3) The following exhibits are filed with this Form 10-K or incorporated by reference as set forth below:

EXHIBIT INDEX

Exhibit Number Description

- +3.1 Certificate of Incorporation of Registrant, as amended.
- 3.2 Bylaws of Registrant, as amended and restated.
- 4.1 Intentionally Omitted.

+4.2 Specimen of Registrant's Common Stock Certificate.

- 4.3 Intentionally Omitted.
- +4.4 Form of Letter of Transmittal and Release.

- +4.5 Form of Registrant's Warrant Agreement.
- +4.6 Form of Registrant's Option Agreement.
- +4.7 Form of Registrant's Convertible Note Agreement.
- +10.1 Netscape Communications Corporation OEM Software Order Form dated March 18, 1997 between VASCO Data Security, Inc. and Netscape Communications Corporation.**
- +10.2 License Agreement between VASCO Data Security, Inc. and SHIVA Corporation effective June 5, 1997.**
- +10.3 Heads of Agreement between VASCO Corp., VASCO Data Security Europe S.A., Digiline International Luxembourg, Digiline S.A., Digipass S.A., Dominique Colard and Tops S.A. dated May 13, 1996.
- +10.4 Agreement relating to additional terms and conditions to the Heads of Agreement dated July 9, 1996, among the parties listed in Exhibit 10.3.
- +10.5 Agreement between VASCO Corp., VASCO Data Security Europe SA/NV, Mario Houthooft and Guy Denudt dated March 1, 1996.
- +10.6 Asset Purchase Agreement dated as of March 1996 by and between Lintel Security SA/NV and Lintel SA/NV, Mario Houthooft and Guy Denudt.
- +10.7 Management Agreement dated January 31, 1997 between LINK BVBA and VASCO Data Security NV/SA (concerning services of Mario Houthooft).
- +10.8 Sublease Agreement by and between VASCO Corp. and APL Land Transport Services, Inc. dated as of August 29, 1997.
- +10.9 Office Lease by and between VASCO Corp. and LaSalle National Bank, not personally, but as Trustee under Trust Agreement dated September 1, 1997, and known as Trust Number 53107, dated July 22, 1985.
- +10.10 Lease Agreement by and between TOPS sa and Digipass sa effective July 1, 1996.
- +10.11 Lease Agreement by and between Perkins Commercial Management Company, Inc. and VASCO Data Security, Inc. dated November 21, 1995.
- +10.12 Asset Purchase Agreement by and between VASCO Corp. and Wizdom Systems, Inc. dated August 20, 1996.
- +10.13 1997 VASCO Data Security International, Inc. Stock Option Plan, as amended.

- +10.14 Distributor Agreement between VASCO Data Security, Inc. and Hucom, Inc. dated June 3, 1997.**
- +10.15 Non-Exclusive Distributor Agreement by and between VASCO Data Security, Inc. and Concord-Eracom Nederland BV dated May 1, 1994.**
- +10.16 Banque Paribas Belgique S. A. Convertible Loan Agreement for \$3.4 million.
- +10.17 Pledge Agreement dated July 15, 1997 by and between T. Kendall Hunt and Banque Paribas Belgique S.A.
- +10.18 Engagement Letter between Banque Paribas S.A. and VASCO Corp. dated June 20, 1997, as amended.
- +10.19 Financing Agreement between Generale Bank and VASCO Corp. dated as of June 27, 1997.
- +10.20 Letter Agreement between Generale Bank and VASCO Corp. dated June 26, 1997.
- +10.21 Form of Warrant dated June 16, 1997 (with Schedule).
- +10.22 Form of Warrant dated October 31, 1995 (with Schedule).
- +10.23 Form of Warrant dated March 7, 1997 (with Schedule).
- +10.24 Form of Warrant dated August 13, 1996 (with Schedule).
- +10.25 Form of Warrant dated June 27, 1996 (with Schedule).
- +10.26 Form of Warrant dated June 27, 1996 (with Schedule).
- +10.27 Convertible Note in the principal amount of \$500,000.00, payable to Generale de Banque dated July 1, 1997 (with Schedule).
- +10.28 Agreement by and between VASCO Data Security NV/SA and S.I. Electronics Limited effective January 21, 1997.**
- +10.29 Agreement effective May 1, 1993 by and between Digipass s.a. and Digiline s.a.r.l.
- +10.30 VASCO Data Security, Inc. purchase order issued to National Electronic & Watch Co. LTD. **
- +10.31 VASCO Data Security, Inc. purchase order issued to Micronix Integrated Systems.**
- +10.32 Agreement between Registrant and VASCO Corp. dated as of August 25, 1997.
- +10.33 Convertible Note dated June 1, 1996 made payable to Mario Houthooft in the principal amount of \$373,750.00.

- +10.34 Convertible Note dated June 1, 1996 made payable to Guy Denudt in the principal amount of \$373,750.00.
- +10.35 Osprey Partners Warrant (and Statement of Rights to Warrant and Form of Exercise) issued June 1, 1992.
- +10.36 Registration Rights Agreement dated as of October 19, 1995 between certain purchasing shareholders and VASCO Corp.
- +10.37 First Amendment to Registration Rights Agreement dated July 1, 1996.
- +10.38 Second Amendment to Registration Rights Agreement dated March 7, 1997.
- +10.39 Purchase Agreement by and between VASCO Corp. and Kyoto Securities Ltd.
- +10.40 Convertible Note dated May 28, 1996 payable to Kyoto Securities, Ltd. in principal amount of \$5 million.
- +10.41 Amendment to Purchase Agreement and Convertible Note by and between VASCO Corp. and Kyoto Securities, Ltd.
- +10.42 Executive Incentive Compensation Plan.
- +10.43 Letter for Credit granted by Generale de Banque to Digipass SA dated January 27, 1997.
- 10.44 License Agreement dated as of March 25, 1998 by and between VASCO Data Security International, Inc., for itself and its subsidiaries, and Lernout & Hauspie Speech Products N.V.
- 10.45 Loan Agreement dated as of March 31, 1998 by and between Lernout & Hauspie Speech Products N.V. and VASCO Data Security International, Inc.
- 10.46 Convertible Note dated April 1, 1998 payable to Lernout & Hauspie Speech Products N.V. in the principal amount of \$3 million.
 - 21 Subsidiaries of Registrant.
 - 27 Financial Data Schedule.
- + Incorporated by reference to the Registrant's Registration Statement on Form S-4, as amended (Registration No. 333-35563), originally filed with the Securities and Exchange Commission September 12, 1997.
- * Confidential treatment has been granted for the omitted portions of this document.

VASCO Data Security International, Inc. will furnish any of the above exhibits to its stockholders upon written request addressed to the Secretary at the address given on the cover page of this Form 10-K. The charge for furnishing copies of the exhibits is \$.25 per page, plus postage.

(b) Reports on Form 8-K

No reports on Form 8-K have been filed by the Registrant during the quarter ended December 31, 1997.

SUPPLEMENTAL INFORMATION TO BE FURNISHED WITH REPORTS FILED PURSUANT TO SECTION 15(D) OF THE ACT BY REGISTRANTS WHICH HAVE NOT REGISTERED SECURITIES PURSUANT TO SECTION 12 OF THE ACT

No annual report to security holders covering the Registrant's last fiscal year has been sent to security holders and no proxy statement, form of proxy or other proxy soliciting material has been sent to the Registrant's security holders with respect to any annual or other meeting of security holders. This Form 10-K and the Registrant's proxy statement for its Annual Meeting of Stockholders to be held June 15, 1998 will be sent to Registrant's security holders subsequent to the filing of this Form 10-K. The Registrant will file with the Securities and Exchange Commission the proxy statement for Registrant's Annual Meeting to be held June 15, 1998.

VASCO CORP. CONSOLIDATED BALANCE SHEETS

	Decem	ber 31,
ASSETS Current assets:	1996	1997
Cash Accounts receivable, net of allowance for doubtful accounts of \$452,000 and	\$1,813,593	\$ 1,897,666
\$429,000 in 1996 and 1997 Inventories, net Prepaid expenses	3,242,618 2,182,743 471,902	
Notes receivable Deferred income taxes Other current assets	225,141 283,000 399,963	83,000
Total current assets Property and equipment:	8,618,960	5,748,409
Furniture and fixtures Office equipment	143,560 592,965	488,338 322,434
Accumulated depreciation	,	810,772 (497,381)
Goodwill, net of accumulated and \$198,267		
amortization of \$58,571 in 1996 and 199 Other assets	7 819,041 2,553,108	
Total assets	\$12,367,555 =======	\$ 8,375,825 ======

LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT) Current liabilities: Current maturities of long-debt Accounts payable Customer deposits Other accrued expenses	\$ 91,160 1,945,644 1,022,195 658,084	1,083,965 426,914
Total current liabilities	3,717,083	
Long-term debt, including stockholder notes of \$5,713,750 and \$5,000,000 in 1996 and 1997 Common stock subject to redemption	9,113,750 741,894	8,442,946 494,668
<pre>Stockholders' equity (deficit): Preferred stock, 8% cumulative series A convertible, \$.01 par value - 317,181 shares authorized; 117,171 shares issued and outstanding in 1996; -0- shares issued and outstanding in 1997 Preferred stock, 12% cumulative series B convertible, \$.01 par value - 9,500 shares authorized; 9,000 shares issued and outstanding in 1996; -0- shares issued and outstanding in</pre>	1,172	-
1997	90	-
Common stock, \$.001 par value - 50,000,000 shares authorized; 18,453,332 shares issued and outstanding in 1996; 20,132,968 shares issued and	•	
outstanding in 1997 Additional paid-in capital	18,454	
Accumulated deficit		9,186,726 (15,901,575)
Cumulative translation adjustment		(170,162)
Total stockholders' equity (deficit)	(1,205,172)	(6,864,878)
Total liabilities and stockholders' equity (deficit)	\$12,367,555 =======	

See accompanying notes to consolidated financial statements.

VASCO CORP. CONSOLIDATED STATEMENTS OF OPERATIONS

		Year Ended Dece	
		1996	1997
Revenue: Data security products and services Training and consulting	\$ 2,457,587 1,237,546	\$ 9,988,885 203,600	\$ 12,302,185 -
Total revenues	3,695,133	10,192,485	12,302,185
Cost of goods sold: Data security products and services Training and consulting	2,033,186 854,217	5,678,223 193,245	6,286,688 -
Total cost of goods sold	2,887,403	5,871,468	6,286,688
Gross profit	807,730	4,321,017	6,015,497
Operating costs: Sales and marketing Research and development General and administrative Acquired in-process research and development	245,212 242,002 854,979 -	1,405,453 574,766 3,647,760 7,350,992	3,380,777 1,801,575 4,768,378 -
Total operating costs	1,342,193	12,978,971	9,950,730
Operating loss	(534,463)	(8,657,954)	(3,935,233)
Interest expense Other expense, net	(73,576)	(346,248) (42,407)	(1,148,183) (226,423)
Loss before income taxes Provision (benefit) for income taxes	(608,039) (251,000)	(9,046,609) 194,000	(5,309,839) 606,579
Net loss	(357,039)	(9,240,609)	(5,916,418)
Preferred stock dividends	(108,254)	(108,160)	(81,900)
Net loss available to common stockholders	\$ (465,293)	\$ (9,348,769)	\$ (5,998,318) =========
Basic loss per common share	\$(0.03) ======	\$ (0.53) =======	\$ (0.31) =======
Weighted average common shares outstanding	14,817,264 ======	17,533,369 =======	19,105,684 =======

See accompanying notes to consolidated financial statements.

			VASCO CORP.		
CONSOLIDATED	STATEMENTS	0F	STOCKHOLDERS'	EQUITY	(DEFICIT)

Description	Series Prefen Stoc Shares	red	Series Prefe Stoo Shares	rred Ck	Common S Shares	tock Amt	APIC		Cumulative Transla- tion Adj.	Treasury Shares	Stock Amt	Total Equity
Balance at 12/31/94 Net loss Cash dividends paid	317,181 -	\$3,172	9,000	\$90 -	15,693,575 -	\$15,694 -	\$1,394,588 -	\$(89,195) (357,039)	\$ - -	1,201,250 -	\$(40,650) -	\$1,283,699 (357,039)
on preferred B Dividends payable on	-	-	-	-	-	-	-	(108,000)	-	-	-	(108,000)
pref. A upon conv Issuance of treasury		-	-	-	-	-	-	(254)	-	-	-	(254)
stock	-	-	-	-	-	-	159,688	-	-	(217,352)	7,349	167,037
Stock compensation Exercise of stock	-	-	-	-	50,000	50	66,708	-	-	(250,975)	8,486	75,244
options Common stock subject	-	-	-	-	50,000	50	78,244	-	-	(445,000)	17,706	96,000
to redemption	-	-	-	-	-	-	(190,694)	-	-	-	-	(190,694)
Balance at 12/31/95	317,181	3,172	9,000	90	15,793,575	15,794	1,508,534	(554,488)	-	287,923	(7,109)	965,993
Net loss	-	-	-	-	-	-	-	(9,240,609)	-	-	-	(9,240,609)
Cash dividends paid on preferred B	-	-	-	-	-	-	-	(108,000)	-	-	-	(108,000)
Dividends payable on pref. A upon conv Exercise of stock		-	-	-	-	-	-	(160)	-	-	-	(160)
options Issuance of common	-	-	-	-	24,000	24	5,215	-	-	-	-	5,239
stock Issuance of common	-	-	-	-	1,161,773	1,162	4,252,240	-	-	-	-	4,253,402
stock in connecti with Lintel acq. Conv. of Series A	-	-	-	-	140,651	141	3,387,769	-	-	(287,923)	7,109	3,395,019
preferred stock		(2,000)) -	-	1,333,333	1,333	667	-	-	-	-	-
Cum. translation adj Common stock subject		-	-	-	-	-	-	- ((105,056)	-	-	(105,056)
to redemption	-	-	-	-	-	-	(371,000)	-	-	-	-	(371,000)
Balance at 12/31/96	117,181	1,172	9,000	90	18,453,332	18,454	8,783,425	(9,903,257)((105,056)	-	-	(1,205,172)

Net loss Cash dividends paid	-		-	-	-	-	-	-	(5,916,418)	-	-	-	(5,916,418)
on preferred B Exercise of stock	-		-	-	-	-	-	-	(81,900)	-	-	-	(81,900)
options Cancellation of	-		-	-	-	189,375	189	42,281	-	-	-	-	42,470
common stock	-		-	-	-	(16,489)	(17)) -	-	-	-	-	(17)
Issuance of common stock	-		-	-	-	83,714	83	418,079	-	-	(32,504)	227,528	645,690
	(117,18	1)(1,	172)	-	-	778,383	779	391	-	-	(2,842)	19,768	19,766
Conv. of Series B preferred stock	-		- (9	9,000)(9	90)	644,653	645	(555) -	-	-	-	-
Repurchase of commor stock	-		-		-	-	-	-	-	-	35,328	(247,296)	(247,296)
Legal fees associate with sale of stoo			-		-	-	-	(56,895)) -	-	-	-	(56,895)
Cum. translation adj			-		-	-	-	-	-	(65,106)	-	-	(65,106)
Balance at 12/31/97	-	\$ =====	- =====	- \$ ·	- ====	20,132,968	\$ 20,133 ======	\$9,186,726	\$(15,901,575 ======	5)\$(170,162)	-	\$ - =========	\$(6,864,878) =======

See accompanying notes to consolidated financial statements.

VASCO CORP. CONSOLIDATED STATEMENTS OF CASH FLOWS

		Year Ended De	
	1995	1996	1997
Cash flows from operating activities: Net loss Adjustments to reconcile net loss to net cash provided by (used in) operating activities: Acquired in-process research and	\$ (357,039) \$		\$ (5,916,418)
development Depreciation and amortization Interest paid in shares of	- 483,545	.,	1,248,807
common stock Deferred income taxes Compensation expense Changes in current assets and current liabilities, net of acquisitions:	(251,000) 75,244	118,750 162,000 -	418,196 200,000 -
Accounts receivable, net Inventories, net Other current assets Accounts payable Customer deposits Other accrued expenses	168,858 53,302 (48,640) (23,911) - (41,660)	(279,940) 459,068 1,022,195	1,181,449 563,867 (861,679) (595,281) 948,726
Net cash provided by (used in) operations	58,699	(1,896,438)	(2,028,166)
Cash flows from investing activities: Acquisition of Lintel/Digipass Additions to property and equipment	(93,749)		(127,646)
Net cash used in investing activities		(4,744,286)	(127,646)
Cash flows from financing activities: Series B preferred stock dividends Net proceeds from issuance of common	(108,000)	(108,000)	(81,900)
stock Proceeds from exercise of stock	443,237	4,133,605	(56,895)
options Repurchase of common stock Proceeds from issuance of debt Repayment of debt	- 10,986 (404,697)	5,238 - 4,986,096 (1,202,178)	42,470 (247,261) 2,716,141 (67,564)
Net cash provided by financing activities Effect of exchange rate changes on cash		7,814,761 (105,056)	
Net increase in cash Cash, beginning of period	706,476 38,136	1,068,981 744,612	1,813,593
Cash, end of period	\$ 744,612	\$ 1,813,593	

Supplemental disclosure of cash flow information:						
Interest paid	\$	67,087	\$	51,929	\$	53,865
Income taxes paid		· -	\$	120,319		415,480
Supplemental disclosure of noncash inves financing activities: Fair value of assets acquired from	tin	g and				
Lintel/Digipass Cash paid				2,003,644 4,461,144)		
Notes payable, common stock and warrants issued			\$ ==	7,542,500		
Common stock issued upon conversion of Series A preferred stock	\$	-	\$ ===	2,000	\$	1,172
Common stock issued upon conversion of Series B preferred stock	\$ =	-	\$ ===	-	\$ ==	90

See accompanying notes to consolidated financial statements.

VASCO CORP. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 - Summary of Significant Accounting Policies

Nature of Operations

VASCO Corp. and its wholly owned subsidiaries, VASCO Data Security, Inc., and VASCO Data Security NV/SA (the Company), offer a variety of computer security products and services. The Company's patented and proprietary hardware and software products provide computer security, Advanced Authentication Technology and RSA/DES encryption for financial institutions, industry and government. The primary market for these products is Europe.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Principles of Consolidation

The consolidated financial statements include the accounts of VASCO Corp. and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

Revenue Recognition

Revenues from the sale of computer security hardware and imbedded software are recorded upon shipment. No significant Company obligations exist with regard to delivery or customer acceptance following shipment.

Property and Equipment

Property and equipment are stated at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets ranging from three to seven years. Additions and improvements are capitalized, while expenditures for maintenance and repairs are charged to operations as incurred. The cost and accumulated depreciation of property sold or retired are removed from the respective accounts and the resultant gains or losses, if any, are included in current operations.

Software Costs

The Company capitalizes software development costs in accordance with Statement of Financial Accounting Standards (SFAS) No. 86. Research and development costs, prior to the establishment of technological feasibility, determined based upon the creation of a working model, are expensed as incurred. The Company's policy is to amortize capitalized costs by the greater of (a) the ratio that

current gross revenues for a product bear to the total of current and anticipated future gross revenues for that product or (b) the straight-line method over the remaining estimated economic life of the product, generally two to five years, including the period being reported on. Unamortized capitalized costs determined to be in excess of the net realizable value of a product are expensed at the date of such determination.

The Company expensed 444,795, 180,275 and 0 in 1995, 1996 and 1997, respectively, for the amortization of capitalized software costs.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Fair Value of Financial Instruments and Long-Lived Assets

The following disclosures of the estimated fair value of financial instrument are made in accordance with the requirements of SFAS No. 107, "Disclosures and Fair Value of Financial Instruments." The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies. The fair values of the Company's financial instruments were not materially different from their carrying amounts at December 31, 1996 and 1997, except for notes payable and long-term debt, for which the fair value is not determinable.

On January 1, 1996, the Company adopted SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of," under which the Company has reviewed long-lived assets and certain intangible assets and determined that their carrying values as of December 31, 1997 are recoverable in future periods.

Stock-Based Compensation

On January 1, 1996, the Company adopted SFAS No. 123, "Accounting for Stock-Based Compensation," which permits entities to recognize the compensation expense associated with the fair value of all stock-based awards on the date of grant. Alternatively, SFAS No. 123 allows entities to continue to apply the provisions of Accounting Principles Board (APB) Opinion 25, "Accounting for Stock Issued to Employees," and provide pro forma net income and earnings per share disclosures as if the fair value method defined in SFAS No. 123 had been applied. The Company has elected to apply the provisions of APB Opinion 25 and provide the pro forma disclosures of SFAS No. 123.

Foreign Currency Translation and Transactions

The financial position and results of operations of the Company's foreign subsidiaries are measured using the local currency as the functional currency. Accordingly, assets and liabilities are translated into U.S. dollars using current exchange rates as of the balance sheet date. Revenues and expenses are translated at average exchange rates prevailing during the year. Translation adjustments arising from differences in exchange rates are included as a separate component of stockholders' equity. Gains and losses resulting from foreign currency transactions are included in the consolidated statements of operations.

Goodwill

Goodwill is amortized on a straight-line basis over the expected period to be benefited, which is seven years. Adjustments to the carrying value of goodwill are made if the sum of expected future undiscounted net cash flows from the business acquired is less than the book value of goodwill.

Loss Per Common Share

In the fourth quarter of 1997, the Company adopted SFAS No. 128, "Earnings Per Share," which established new methods for computing and presenting earnings per share ("EPS") and replaced the presentation of primary and fully-diluted EPS with basic ("Basic") and diluted EPS. Basic earnings per share is based on the weighted average number of shares outstanding and excludes the dilutive effect of unexercised common stock equivalents. Diluted earnings per share is based on the weighted average number of shares outstanding and includes the dilutive effect of unexercised common stock equivalents. Because the Company reported a net loss for the years ended December 31, 1995, 1996 and 1997, per share amounts have been presented under the basic method only.

Had the Company reported net earnings for the years ended December 31, 1995, 1996 and 1997, the weighted average number of shares outstanding would have potentially been diluted by the following common equivalent securities (not assuming the effects of applying the treasury stock method to outstanding stock options or the if-converted method to convertible securities):

	1995	1996	1997
Stock options Warrants Convertible notes (June 1996) Convertible notes (July 1997)*	1,425,382 200,000 - -	1,661,632 928,578 518,595 -	1,945,257 1,056,922 518,595 657,895
Convertible notes (August 1997)*	-	-	893,632
	1,625,382 ======	3,108,805 ======	5,072,301 ======

 \ast Due to the contingent nature of the conversion feature of these notes, a 20-day average market price was used to calculate the diluted number of shares.

Additionally, net earnings applicable to common stockholders for the years ended December 31, 1996 and 1997 would have been increased by interest expense related to the convertible notes of \$265,450 and \$980,250, respectively.

Note 2 - Acquisitions

Effective March 1, 1996, the Company acquired a 15% interest in Lintel NV (Lintel). On June 1, 1996, the Company acquired the remaining 85% of Lintel. Lintel, located in Brussels, Belgium, was a developer of security technologies for personal computers, computer networks and telecommunications systems, using cryptographic algorithms such as DES and RSA. The results of Lintel's operations are included in the Company's consolidated statement of operations from March 1, 1996 with minority interest being reflected in other expense in the consolidated statement of operation for the period from March 1, 1996 to June 1, 1996. The purchase price was \$4,432,000, consisting of \$289,482 in cash, \$747,500 in 8% convertible notes payable due May 30, 1998 and convertible to common stock at a rate of \$7.00 per share, 428,574 shares of the Company's common stock valued at \$7.00 per share, and 100,000 purchase warrants for the Company's common stock at an exercise price of \$7.00. The warrants were recorded at their fair value on the date of grant. The acquisition of Lintel was accounted for as a purchase and, accordingly, the acquired assets have been recorded at their estimated fair values at the date of the acquisition. Acquired inprocess research and development in the amount of \$2,900,000 was expensed during 1996 in conjunction with the acquisition, based upon an independent third-party valuation. Goodwill related to this transaction was \$387,000, which is being amortized over a period of seven years.

Effective July 1, 1996, the Company acquired Digipass s.a. (Digipass). Digipass, located in Belgium, was a developer of security technologies for personal computers, computer networks and telecommunications systems using the DES cryptographic algorithm. Prior to the Company's acquisition of Digipass, the assets of the interactive voice response (IVR) business of Digiline SA were transferred to Digipass. Digipass' IVR products are used primarily in telebanking applications and in corporate authentication and access control technology. The purchase price was \$8,200,000, with \$4,800,000 being paid at the effective date of acquisition, and the balance of \$3,400,000 in the form of a note, which was paid in August 1997.

The acquisition of Digipass was accounted for as a purchase and, accordingly, the acquired assets and liabilities have been recorded at their estimated fair values at the date of the acquisition. Acquired in-process research and development in the amount of \$4,451,000 was expensed during 1996, based upon an independent thirdparty valuation. Goodwill related to this transaction was \$491,000, which is being amortized over a period of seven years. The results of operations for Digipass have been included in the consolidated statement of operations subsequent to July 1, 1996.

Other assets, resulting from the acquisitions of Lintel and Digipass, are comprised of the following at December 31, 1997 and 1996 (net of accumulated amortization):

	December 31,		
	1996	1997	
Software and hardware technology . \$ Workforce Customer lists	1,540,417 514,167 498,524	\$ 988,417 200,388 421,096	
\$	2,553,108	\$ 1,609,901 =======	

Software and hardware technology is being amortized over a period of three to four years while workforce and customer lists are being amortized over a period of seven years. Amortization of these assets was \$374,892 and \$943,207 for the years ended December 31, 1996 and 1997, respectively. Included in the 1997 amortization is a write-down in the amount of \$234,493 related to the workforce of Digipass, due to attrition realized during the year.

The following unaudited pro forma summary presents the Company's results of operations as if the acquisitions has occurred at the beginning of 1996. This summary is provided for informational purposes only. If does not necessarily reflect the actual results that would have occurred had the acquisitions been made as of those dates or of results that may occur in the future.

	For the Year Ended December 31,		
	1995	1996	
Total revenues\$	11,622,809	\$13,654,420	
Net loss	(1,738,359)	(9,507,076)	
Net loss per common share	(0.12)	(0.53)	

Note 3 - Inventories

Inventories, consisting principally of hardware and component parts, are stated at the lower of cost or market. Cost is determined using the first-in-first-out (FIFO) method.

Inventories are comprised of the following:

	December 31,			
	1996		1997	
Component parts\$ Work-in-process and finished	338,325	\$	569,922	
goods Obsolescence reserves	1,998,286 (153,868)		595,133 (163,761)	
\$	2,182,743	\$	1,001,294 ======	

The Company uses multiple suppliers for the microprocessors used in the production of hardware products, as well as for the assembly of the products. The microprocessors are the only components of the Company's hardware devices that would be considered non-commodity items and may not be readily available on the open market. There is, however, an inherent risk associated with each supplier of microprocessors. In order to increase orders of microprocessors, a lead time of 12 weeks is typically needed. The Company maintains a sufficient inventory of all component parts to handle short-term spikes in order quantities. Other accrued expenses are comprised of the following:

	Dece	31,	
	1996		1997
Accrued expenses Accrued interest Accrued payroll Accrued dividends Other	\$330,919 126,966 - 196,977 3,222 \$658,084 =======	\$ \$1, ===	553,683 657,799 171,231 168,509 55,588 ,606,810

Note 5 - Income Taxes

At December 31, 1997, the Company has net operating loss carryforwards approximating \$4,722,000 and foreign net operating loss carryforwards approximating \$1,025,000. Such losses are available to offset future taxable income at VASCO Corp. and its U.S. subsidiary and expire in varying amounts beginning in 2002 and continuing through 2012. In addition, if certain substantial changes in the Company's ownership should occur, there would be an annual limitation on the amount of the carryforwards which could be utilized. In fiscal 1995, the Company had no current tax provision due to the utilization of approximately \$66,000 of loss carryforward benefits.

 $\ensuremath{\mathsf{Pretax}}$ loss from continuing operations was taxed in the following jurisdictions:

	For the Year Ended December 31,						
	1995	1996	1997				
Domestic Foreign	\$ (608,039) \$	(1,205,853) \$ (7,840,756)	· · · · ·				
Foreign		(7,840,750)	(034,019)				
Total	\$ (608,039) \$ 	(9,046,609) \$	(5,309,839)				

The provision for income taxes consists of the following:

	For the Year Ended December 31,						
		1995	1996	1997			
Current: Federal State Foreign	\$	 - \$ -	 - 31,670	\$ \$ 406,579			
Deferred: Federal State Foreign	\$	(219,846)\$ (31,154) -	,	\$ 175,176 24,824 -			
Total	\$	(251,000)\$ ======	194,000 ======	\$ 606,579 ======			

The differences between income taxes computed using the statutory federal income tax rate of 34% and the provisions (benefits) for income taxes reported in the consolidated statements of operations are as follows:

	For the Year Ended December 31,				
	1995	1996	1997		
Expected tax benefit at the Increase (decrease) in income taxes resulting from:	\$(121,393)	\$(3,075,847)	\$(1,805,345)		
State tax expense, net of federal	(29,319)	())	(, ,		
Foreign taxes at rates other than	-	163,107			
Change in valuation allowance Nondeductible acquired in-process	-	631,000	1,779,000		
technology	-	2,499,337	-		
Nondeductible expenses	(85,340)	2,831	622,257		
Other, net	(14,948)	29,986	6,055		
	\$(251,000)	\$ 194,000	\$ 606,579		
	========	=========	=========		

The deferred income tax balances are comprised of the following:

	December 31,			
	1996	1997		
Deferred tax assets:				
U.S. net operating loss carryforward Foreign net operating loss	\$ 631,000	\$ 1,833,000		
carryforward	-	412,000		
Inventory	60,000	44,000		
Accounts receivable	175,000	149,000		
Fixed assets	44,000	30,000		
Other	4,000	25,000		
Total gross deferred income tax assets	914,000	2,493,000		
Less valuation allowance	(631,000)	(2,410,000)		
Net deferred income taxes	\$ 283,000	\$ 83,000		
	========	========		

The net change in the total valuation allowance for the years ended December 31, 1996 and 1997 was an increase of \$631,000 and \$1,779,000, respectively. In assessing the realizability of deferred tax assets, the Company considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which these temporary differences become deductible. This assessment was performed considering the scheduled reversal of deferred tax aliabilities, projected future taxable income, and tax planning strategies. The Company has determined that it is more likely than not that \$83,000 of deferred tax assets will be realized. The remaining valuation allowance of \$2,410,000 is maintained on deferred tax assets which the Company has not determined to be more likely than not realizable as of December 31, 1997. This valuation allowance will be reviewed on a regular basis and adjustments made as appropriate.

Debt consists of the following:	December 31,		
	1996	1997	
Convertible stockholder note, interest			
<pre>payable at 9% \$ Convertible stockholders' notes,</pre>	5,000,000	\$ 5,000,000	
interest payable at 8%	713,750	636,921	
interest payable at 5.33%	3,400,000	-	
Convertible note, interest payable at 3.25%	-	3,400,000	
Convertible note, interest payable at 3.25%	-	2,500,000	
Installment notes payable Installment notes payable, secured by	88,578	91,425	
certain equipment	2,582	-	
	9,204,910	11,628,346	
Less current maturities		(3,185,400)	
Long-term debt\$	9,113,750 ======	\$ 8,442,946 =======	

In June 1997, the Company entered into a new financing agreement with a European bank. The new agreement provides for \$2.5 million in financing, matures on September 30, 1998, bears interest at a rate of 3.25% annually and is convertible into common stock of the Company at the option of the bank, at conversion prices as specified in the agreement. In the event the Company completes a public offering prior to September 30, 1998, the holder of a note has the option within seven days after the completion of a public offering to require the note to be repaid at 100% of the principal amount thereof in cash or in common stock (valued at the public offering price), at the holder's election, together with all accrued and unpaid interest to the date of repayment plus additional special interest payable in cash as follows: \$88,235 if repayment is between January 1, 1998 and March 31, 1998 and \$125,000 if repayment is between April 1, 1998 and September 30, 1998.

In August 1997, the Company renegotiated the guarantee related to the final payment for the 1996 acquisition of Digipass into a term loan in the amount of \$3.4 million. The note matures on September 30, 2002 and bears interest at a rate of 3.25% annually. In the event a public offering is completed, the lender may at its option require the principal amount of the loan to be repaid in cash, in which case additional special interest is payable as follows: \$340,000 if repayment is on or before June 30, 1998, \$510,000 if repayment is on January 1, 1998 and December 31, 1998 and \$680,000 if repayment is on January 1, 1999 or later. In addition, the note is convertible into common stock of the Company at the option of the bank, at a conversion prices as specified in the agreement. During 1996, the Company acquired two companies located in Europe (see Note 2). To facilitate the first acquisition, Lintel, one component of the purchase price was represented by two convertible notes, each payable in the amount of \$373,750 (\$747,500 total) due May 30, 1998. The notes are convertible at the holders' option at a rate of \$7.00 per share of common stock. During 1996 and 1997, these notes were paid down by \$33,750 and \$76,829, respectively. Each of these notes bears an interest rate of 8%, with interest payments made on a quarterly basis. At the holders' option, the interest may be paid either in cash or in common stock of the Company. In calculating the shares of common stock to be issued in lieu of cash interest, the average closing price for the Company's common stock for the previous 20 trading days is used.

During 1996, the Company continued to raise capital privately, including a private placement consisting of the issuance of 666,666 shares of common stock and a \$5,000,000 convertible note due May 29, 2001. The note bears interest at 9%, with interest payable to the holder on a quarterly basis. The holder may, at its option, elect to receive interest payments in cash or common stock. In calculating the shares of common stock to be issued in lieu of cash interest, the average closing price for the Company's common stock for the previous 20 trading days is used.

Aggregate maturities of debt at December 31, 1997 are as follow:

1998	
1999	,
2000	, -
2001	-,,
2002 and thereafter	, ,
Total	\$11,628,346
	=========

Interest expense to stockholders was \$12,900, \$265,565 and \$507,100 for the years ended December 31, 1995, 1996 and 1997, respectively.

Note 7 - Stockholders' Equity

Preferred Stock

The Company has the authority to issue 500,000 shares of preferred stock of which 317,181 have been designated Series A, 8% convertible preferred stock and 9,500 have been designated Series B, 12% convertible preferred stock. The remaining 173,319 shares are undesignated.

The Series A, 8% convertible preferred stock (Series A Shares) consists of 317,181 shares that carry a cumulative dividend, payable upon conversion, of 8% per annum. During 1996, 200,000 Series A Shares were converted into 1,333,333 shares of common stock; the remaining 117,181 Series A Shares were converted into 781,207 shares of common stock during 1997.

The Series B, 12% convertible preferred stock (Series B Shares) consists of 9,000 shares that carry a cumulative dividend, payable monthly, of 12% per annum based on a liquidation value of \$100 per share. On September 17, 1997, all 9,000 Series B Shares were converted into 644,653 shares of common stock.

Common Stock

During 1995, the Company privately placed 108,676 equity units, each consisting of two shares of common stock reissued from treasury with one warrant to purchase one share of common stock at \$6.00. Included in the 108,676 equity units are 53,000 equity units subject to redemption, at the option of the holder, at a price of \$7.00 per share, or \$14.00 per equity unit. In March 1997, 17,664 of these equity units (representing 35,328 shares of common stock and 17,664 warrants) were redeemed at \$14.00 per equity unit, with 70,667 warrants to purchase one share of common stock at \$5.19 being issued to the holders of the redeemed units.

In July 1997, the Company reissued 2,824 shares of common stock from treasury and 778,383 original issue shares in conjunction with the conversion of the 117,181 Series A Shares (see Preferred Stock above). Additionally, in September 1997, the Company issued 644,653 shares of common stock in conjunction with the conversion of the 9,000 Series B Shares (see Preferred Stock above).

Additional common stock transactions during 1997 were as follows: 189,375 shares of common stock were issued as a result of the exercise of options under the Company's incentive stock option plan (see Note 8) for total proceeds of \$42,470; 16,489 shares of common stock that had been issued in December 1996 were subsequently canceled; and 116,218 shares of common stock were issued in lieu of interest related to the \$5,000,000 convertible note placed during 1996 (see Note 6).

During 1996, the Company reissued 287,923 shares of treasury stock, issued 140,651 shares of common stock and 100,000 warrants to purchase one share of common stock at \$7.00 as a part of the acquisition of Lintel (see Note 2). The warrants were recorded at their fair value on the date of grant. In addition, the Company continued to raise money through private placements of its common stock. In the first quarter of 1996, the Company privately placed 167,482 shares of common stock and 83,741 warrants to purchase one share of common stock at \$6.00, generating \$284,720 in net proceeds. The warrants are exercisable at the option of the holder, however, the Company maintains the right to require exercise of the warrants 30 days prior to a public offering of the Company's stock.

During the second quarter of 1996, the Company placed 666,666 shares of common stock with 137,777 warrants to purchase one share of common stock at \$4.50. Total issue fees and costs of \$170,000 have been netted against \$3,000,000 of proceeds from the placement in the Company's financial statements. In addition, 55,555 shares of common stock and 8,889 warrants to purchase one share of common stock at \$4.50 were issued as commissions related to the placement. The Company raised additional funds in 1996 in a private placement of 237,060 shares of common stock with 35,329 warrants to purchase one share of common stock at \$4.50. Total issue fees and costs of \$47,885 have been netted against the \$1,066,770 in total proceeds from the placement in the Company's financial statements. In addition, 16,489 shares of common stock were issued as commissions related to the placement, but were canceled in 1997.

Additional common stock transactions during 1996 were as follows: 1,333,333 shares of common stock were issued pursuant to the conversion of 200,000 shares of Series A preferred stock; 24,000 shares of common stock were issued as a result of the exercise of options under the Company's incentive stock option plan (see Note 8) for total proceeds of \$5,238; and 20,021 shares of common stock were issued in lieu of an interest payment in the amount of \$118,750 related to the private debt placement that occurred during 1996 (see Note 6).

Note 8 - Stock Option Plan

The Company's 1987 Stock Option Plan, as amended, (Option Plan) is designed and intended as a performance incentive. The Option Plan is administered by the Compensation Committee as appointed by the Board of Directors of the Company (Compensation Committee).

The Option Plan permits the grant of options to employees of the Company to purchase shares of common stock intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended (Code). All options granted to employees are for a period of ten years, are granted at a price equal to the fair market value of the common stock on the date of the grant and are vested 25% on the date of grant and an additional 25% on each subsequent anniversary of the grant.

The Option Plan further permits the grant of options to directors, consultants and other key persons (non-employees) to purchase shares of common stock not intended to qualify as incentive stock options under the Code. All options granted to non-employees are for a period of ten years, are granted at a price equal to the fair market value of the common stock on the date of the grant, and may contain vesting requirements and/or restrictions as determined by the Compensation Committee at the time of grant. These options are vested 50% six months from the date of grant and the remaining 50% on the first anniversary of the date of grant.

During 1996, the Compensation Committee increased the shares authorized under the Option Plan by 500,000 to 3,000,000.

The Company applies APB Opinion No. 25 and related interpretations in accounting for the Option Plan. Had compensation cost for the Option Plan been determined consistent with SFAS No. 123, the Company's net loss available to common stockholders and net loss per common share would have been the pro forma amounts indicated below:

	For the Y	ber 31,		
	1995	 1996		1997
Net loss available to common stockholders				
As reported Pro forma Net loss per common share		(9,348,769) (9,542,493)		
As reported Pro forma	(0.03) (0.03)	\$ (0.53) (0.54)		(0.31) (0.33)

For purposes of calculating the compensation cost consistent with SFAS No. 123, the fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants in fiscal 1995, 1996 and 1997: dividend yield of 0%; expected volatility of 50%; risk free interest rates ranging from 6.29% to 6.80%; and expected lives of five years.

The following is a summary of activity under the Option Plan:

	Options Outstanding	Weighted Average Price	Options Exercisable	Weighted Average Price
Outstanding at December 31, 1994 Granted Exercised Forfeited	411,000 (495,000)	\$ 0.20 0.20 0.18 0.18	1,761,382	\$ 0.19
Outstanding at December 31, 1995 Granted Exercised Forfeited	335,000 (24,000)	0.20 4.65 0.23 2.14	1,232,257	0.20
Outstanding at December 31, 1996 Granted Exercised Forfeited	512,500 (189,375)	1.01 4.18 0.22 3.91	1,299,757	0.57
Outstanding at December 31, 1997	1,945,257	\$ 1.85	1,460,629	\$ 1.29

The following table summarizes information about stock options outstanding at December 31, 1997:

	Opt:	ions Outstand	Options Ex	ercisabl	e	
Range of Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price		Weighte Averag Exercis Price	je se
\$3.00 - 6.00 \$0.125 - 0.375		,		, -		55 20

Note 9 - Employee Benefit Plan

The Company maintains a contributory profit sharing plan established pursuant to the provisions of Section 401(k) of the Internal Revenue Code which provides benefits for eligible employees of the Company. The Company made no contributions to the plan during the years ended December 31, 1995, 1996 and 1997.

Note 10 - Geographic and Customer Information

During 1995, 1996 and 1997, sales to one customer (a reseller of the Company's product) aggregated approximately \$2,259,000, \$4,297,000 and \$1,994,000 respectively, representing 61%, 44% and 16% of the total revenues, respectively. Accounts receivable from this customer represented 31% and 40% of the Company's gross accounts receivable balance at December 31, 1996 and 1997, respectively. United States sales to unaffiliated customers includes export sales from the Company's United States operations to unaffiliated customers in the Netherlands of approximately \$2,318,000, \$4,297,000 and \$1,994,000 for the years ended December 31, 1995, 1996 and 1997, respectively.

Information regarding geographic areas for the year ended December 31, 1995 is as follows:

	United States	Belgium	Elimi	nations	Total
Sales to unaffiliated customers Operating income (loss) Identifiable assets	(534,000)	\$ 	\$	- - -	3,695,000 (534,000) 2,414,000

Information regarding geographic areas for the year ended December 31, 1996 is as follows:

	United States	Belgium	Eliminations	Total
Sales to unaffiliated customers Operating income (loss) Identifiable assets Information regarding December 31, 1997 is as follo	(2,919,000) 12,738,000 geographic	8,756,000	- (9,126,000)	\$10, 192, 000 (8, 658, 000) 12, 368, 000 ed
	United States	Belgium	Eliminations	Total

Sales to unaffiliated				
customers	\$2,974,000	\$9,566,000	\$ (238,000)	\$12,302,000
Operating income (loss)	(3,988,000)	53,000	-	(3,935,000)
Identifiable assets	10,653,000	5,689,000	(7,966,000)	8,376,000

Note 11 - Commitments and Contingencies

The Company leases office space and equipment under operating lease agreements expiring at various times through 2000.

Future minimum rental payments required under noncancelable leases are as follows:

Year		Amount
1998	 \$	226,421
1999		139,304
2000		539

Rent expense under operating leases aggregated approximately \$60,000, \$158,000 and \$213,000 for the years ended December 31, 1995, 1996 and 1997, respectively.

During a period of time extending from the mid-1980s to the mid-1990s the Company engaged in certain matters that were not in compliance with requisite corporate law. There have been no lawsuits asserted or filed against the Company related to these matters. Management cannot assess the likelihood that a lawsuit would be filed nor can management estimate a potential range of loss.

The Company is subject to legal proceedings and claims which have arisen in the ordinary course of its business and have not been finally adjudicated. These actions, when ultimately concluded and determined, will not, in the opinion of management, have a material adverse impact on the financial position, results of operations and liquidity of the Company.

Note 12 - Subsequent Events (unaudited)

Exchange Offer. VASCO Data Security International, Inc. ("VDSI Inc.") was organized in 1997 as a subsidiary of VASCO Corp., a Delaware corporation ("VASCO Corp."). Pursuant to an exchange offer ("Exchange Offer") by VDSI Inc. for securities of VASCO Corp. that was completed March 11, 1998, VDSI Inc. acquired 97.7% of the common stock of VASCO Corp. Consequently, VASCO Corp. became a subsidiary of VDSI Inc., with the remaining 2.3% of VASCO Corp. shareholders representing a minority interest.

Loan Agreement/License Agreement. On March 31, 1998, the Company entered into two agreements with Lernout & Hauspie Speech Products N.V. ("L&H"), consisting of a loan agreement and a license agreement. The loan agreement, in the amount of \$3 million, bears interest at the prime rate plus 1%, payable quarterly, and matures on January 4, 1999. This loan is convertible at the option of the holder into shares of the Company's common stock based upon the average closing price of VASCO Corp.'s common stock for the 10 trading days prior to March 11, 1998, the date the Exchange Offer closed. This loan was funded in April 1998.

The license agreement with L&H is for the use of L&H's speech recognition and speech verification technology for data security, telecom and physical access applications. This license agreement includes a prepayment of royalties by the Company in the amount of \$600,000, payable no later than June 30, 1998 and an additional prepayment in the amount of \$200,000, payable no later than March 31, 1999. L&H is an international leader in the development of advanced speech technology for various commercial applications and products.

The Stockholders and Board of Directors VASCO Corp.:

We have audited the accompanying consolidated balance sheets of VASCO Corp. and subsidiaries (the "Company") as of December 31, 1996 and 1997 and the related statements of operations, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 1997. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of VASCO Corp. and subsidiaries as of December 31, 1996 and 1997, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 1997, in conformity with generally accepted accounting principles.

/s/ KPMG Peat Marwick LLP

Chicago, Illinois March 13, 1998 The Stockholders and Board of Directors of VASCO Corp.:

Under date of March 13, 1998, we reported on the consolidated balance sheets of VASCO Corp. and subsidiaries (the "Company") as of December 31, 1996 and 1997, and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for each of the years in the three-year period ended December 31, 1997. These consolidated financial statements and our report thereon are included in the annual report on Form 10-K for the year ended December 31, 1997. In connection with our audits of the aforementioned consolidated financial statements, we also audited the related consolidated financial statement schedule. The financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statement schedule based on our audits.

In our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ KPMG Peat Marwick LLP

Chicago, Illinois March 13, 1998

SCHEDULE II

VASCO CORP.

VALUATION AND QUALIFYING ACCOUNTS

Allowance for Doubtful Accounts	Beginning	Bad Debt	Accounts	Ending
For Trade Accounts Receivable	Balance	Expense	Written Off	Balance
Year ended December 31, 1995 \$	96,000 \$	165,000 \$	(79,000) \$	182,000
Year ended December 31, 1996	182,000	346,000	(76,000)	452,000
Year ended December 31, 1997	452,000	97,000	(120,000)	429,000
Reserve for Obsolete Inventories	Beginning	Obsolescence	Inventory	Ending
	Balance	Expense	Written Off	Balance
Year ended December 31, 1995 \$	15,000 \$	99,000 \$		114,000
Year ended December 31, 1996	114,000	40,000		154,000
Year ended December 31, 1997	154,000	101,000		164,000

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, on May 4, 1998.

VASCO Data Security International, Inc.

/s/ T. Kendall Hunt T. Kendall Hunt Chairman of the Board, Chief Executive Officer and President

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed by the following persons on behalf of the Registrant in the capacities indicated on May 4, 1998.

POWER OF ATTORNEY

Each of the undersigned, in his capacity as an officer or director, or both, as the case may be, of VASCO Data Security International, Inc. does hereby appoint T. Kendall Hunt and Gregory T. Apple, and each of them severally, his true and lawful attorneys or attorney to execute in his name, place and stead, in his capacity as director or officer, or both, as the case may be, this Annual Report on Form 10-K for the fiscal year ended December 31, 1997 and any and all amendments thereto and to file the same with all exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission. Each of said attorneys shall have power to act hereunder with or without the other attorney and shall have full power and authority to do and perform in the name and on behalf of each of said directors or officers, or both, as the case may be, every act whatsoever requisite or necessary to be done in the premises, as fully and to all intents and purposes as to which each of said officers or directors, or both, as the case may be, might or could do in person, hereby ratifying and confirming all that said attorneys or attorney may lawfully do or cause to be done by virtue hereof.

TITLE

SIGNATURE

/s/ T. Kendall Hunt	Chairman of the Board, Chief Executive Officer
T. Kendall Hunt	and President and Director (Principal Executive Officer)
/s/ Gregory T. Apple Gregory T. Apple	Vice President and Treasurer (Principal Financial Officer and Principal Accounting Officer)
/s/ Robert E. Anderson Robert E. Anderson	Director
/s/ Michael P. Cullinane Michael P. Cullinane	Director
/s/ Mario A. Houthooft Mario A. Houthooft	Director
/s/ Forrest D. Laidley Forrest D. Laidley	Director
/s/ Michael A. Mulshine Michael A. Mulshine	Director

AMENDED BY-LAWS

ARTICLE I - STOCKHOLDERS

Section 1. Annual Meeting

To the extent required by applicable law, an annual meeting of the stockholders, for the election of directors to succeed those whose terms expire and for the transaction of such other business as may properly come before the meeting, shall be held at such place, on such date, and at such time as the Board of Directors shall each year fix, which date shall be within thirteen months subsequent to the later of the date of incorporation or the last annual meeting of stockholders.

Section 2. Special Meetings

Special meetings of the stockholders, for any purpose or purposes prescribed in the notice of the meeting, may be called by the Board of Directors or the Chief Executive Officer and shall be held at such place, on such date, and at such time as they or he shall fix.

Section 3. Notice of Meetings

Written notice of the place, date, and time of all meetings of the stockholders shall be given, not less than ten nor more than sixty days before the date on which the meeting is to be held, to each stockholder entitled to vote at such meeting, except as otherwise provided herein or required by law (meaning, here and hereinafter, as required from time to time by the General Corporation Law of the State of Delaware or the Certificate of Incorporation).

When a meeting is adjourned to another place, date, or time, written notice need not be given of the adjourned meeting if the place, date, and time thereof are announced at the meeting at which the adjournment is taken; provided, however, that, if the date of any adjourned meeting is more than thirty days after the date for which the meeting was originally noticed, or if a new record date is fixed for the adjourned meeting, written notice of the place, date, and time of the adjourned meeting shall be given in conformity herewith. At any adjourned meeting, any business may be transacted which might have been transacted at the original meeting.

Section 4. Quorum

Except as otherwise provided by law or these by-laws, at each meeting of stockholders the presence in person or by proxy of the holders of a majority in voting power of the outstanding shares of stock entitled to vote at the meeting shall be necessary and sufficient to constitute a quorum. In the absence of a quorum the chairman of the meeting or the stockholders so present (by a majority in voting power thereof) may adjourn the meeting from time to time in

the manner provided in Section 3 of Article I of these by-laws until a quorum shall attend. Shares of its own stock belonging to the corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation is held, directly or indirectly, by the corporation, shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of the corporation or any subsidiary of the corporation to vote stock, including but not limited to its own stock, held by it in a fiduciary capacity.

Section 5. Organization

Such person as the Board of Directors may have designated or, in the absence of such a person, the highest ranking officer of the corporation who is present shall call to order any meeting of the stockholders and act as chairman of the meeting. In the absence of the Secretary of the corporation, the secretary of the meeting shall be such person as the chairman appoints.

Section 6. Conduct of Business

The chairman of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of discussion as seem, to him, in order.

Section 7. Proxies and Voting

At any meeting of the stockholders, every stockholder $% \left({{{\rm{ch}}} \right)$ entitled to vote may vote, in person or by proxy.

Each stockholder shall have one vote for every share of stock entitled to vote which is registered in his name on the record date for the meeting, except as otherwise provided herein or required by law.

All voting, except on the election of directors and where otherwise required by law, may be by a voice vote; provided, however, that upon demand therefor by a stockholder entitled to vote or his proxy, a stock vote shall be taken. Every stock vote shall be taken by ballots, each of which shall state the name of the stockholder or proxy voting and such other information as may be required under the procedure established for the meeting. Every vote taken by ballots shall be counted by an inspector or inspectors appointed by the chairman of the meeting.

All elections shall be determined by a plurality of the votes cast, and, except as otherwise required by law, all other matters shall be determined by a majority of the votes cast.

Section 8. Stock List

A complete list of stockholders entitled to vote at any meeting of stockholders, arranged in alphabetical order for each class of stock and showing the address of each such stockholder and the number of shares registered in his name, shall be open to the examination of any such stockholder, for any purpose germane to the meeting, during ordinary business hours for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held.

The stock list shall also be kept at the place of the meeting during the whole time thereof and shall be open to the examination of any such stockholder who is present. This list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

Section 9. Nomination of Directors.

Any stockholder nominating a person for election as a director must comply with the procedures set forth herein. Nominations of persons for election to the Board of Directors of the corporation may be made at a meeting of stockholders (a) by or at the direction of the Board of Directors or (b) by any stockholder of the corporation who is a stockholder of record at the time of giving of notice provided for in this Section 9, who shall be entitled to vote for the election of directors at the meeting and who complies with the notice procedures set forth in this Section 9. Such nominations, other than those made by or at the direction of the Board of Directors, shall be made pursuant to timely notice in writing to the Secretary of the corporation. To be timely, a stockholder's notice shall be delivered to or mailed and received at the principal executive offices of the corporation not less than 60 days nor more than 90 days prior to the meeting; provided, however, that in the event that less than 70 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 10th day following the day on which such notice of the date of the meeting or such public disclosure was made. Such stockholder's notice shall set forth (a) as to each person whom the stockholder proposes to nominate for election or reelection as a director all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); and (b) as to the stockholder giving the notice (i) the name and address, as they appear on the corporation's books, of such stockholder and (ii) the class and number of shares of the corporation which are beneficially owned by such stockholder. At the request of the Board of Directors, any person nominated by the Board of Directors for election as a director shall furnish to the Secretary of the corporation that information required to be set forth in a stockholder's notice of nomination which pertains to the nominee. No person nominated by a stockholder shall be eligible to serve as a director of the corporation unless nominated in accordance

with the procedures set forth in this By-Law. The Chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the procedures prescribed by the By-Laws, and if the Chairman should so determine and declare to the meeting, the defective nomination shall be disregarded. Notwithstanding the foregoing provisions of this Section 9, a stockholder shall also comply with all applicable requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder with respect to the matters set forth in this Section 9. Nothing herein shall limit or restrict the right of the Board of Directors to nominate persons for election as directors or to elect directors in accordance with these By-Laws.

Section 10. Notice of Business.

At any meeting of the stockholders, only such business shall be conducted as shall have been brought before the meeting (a) by or at the direction of the Board of Directors or (b) by any stockholder of the corporation who is a stockholder of record at the time of giving of the notice provided for in this Section 10, who shall be entitled to vote at such meeting and who complies with the notice procedures set forth in this Section 10. For business to be properly brought before a stockholder meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation not less than 60 days nor more than 90 days prior to the meeting; provided, however, that in the event that less than 70 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be received no later than the close of business on the 10th day following the day on which such notice of the date of the meeting was mailed or, if earlier, the date on which such public disclosure was made. A stockholder's notice to the Secretary shall set forth as to each matter the stockholder proposes to bring before the meeting (a) a brief description of the business desires to be brought before the meeting and the reasons for conducting such business at the meeting, (b) the name and address, as they appear on the corporation's books, of the stockholder proposing such business, (c) the class and number of shares of the corporation which are beneficially owned by the stockholder and (d) any material interest of the stockholder in such business. Notwithstanding anything in the By-Laws to the contrary, no business shall be conducted at a stockholder meeting except in accordance with the procedures set forth in this Section 10. The Chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting and in accordance with the provisions of the By-Laws, and if the Chairman should so determine and declare to the meeting, any such business not properly brought before the meeting shall not be transacted. Notwithstanding the foregoing provision of this Section 10, a stockholder shall also comply with all applicable requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder with respect to the matters set forth in this Section and in the event of any conflict with any such applicable requirements and the foregoing provisions of this Section 10, such applicable requirements shall prevail.

Section 1. Number and Term of Office

The number of directors who shall constitute the whole board shall be such number not less than four nor more than twenty as the Board of Directors shall at the time have designated. Each director shall be elected for a term of one year and until his successor is elected and qualified, except as otherwise provided herein or required by law.

Whenever the authorized number of directors is increased between annual meetings of the stockholders, a majority of the directors then in office shall have the power to elect such new directors for the balance of a term and until their successors are elected and qualified. Any decrease in the authorized number of directors shall not become effective until the expiration of the term of the directors then in office unless, at the time of such decrease, there shall be vacancies on the board which are being eliminated by the decrease.

Section 2. Vacancies

If the office of any director becomes vacant by reason of death, resignation, disqualification, removal, or other cause, a majority of the directors remaining in office, although less than a quorum, may elect a successor for the unexpired term and until his successor is elected and qualified.

Section 3. Regular Meetings

Regular meetings of the Board of Directors shall be held at such place or places, on such date or dates, and at such time or times as shall have been established by the Board of Directors and publicized among all directors. A notice of each regular meeting shall not be required.

Section 4. Special Meetings

Special meetings of the Board of Directors may be called by onethird of the directors then in office or by the Chief Executive Officer and shall be held at such place, on such date, and at such time as they or he shall fix. Notice of the place, date, and time of each such special meeting shall be given each director by whom it is not waived by mailing written notice not less than three days before the meeting or by telegraphing the same not less than eighteen hours before the meeting. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

Section 5. Quorum

At any meeting of the Board of Directors, one-third of the total number of the whole board, but not less than two, shall constitute a quorum for all purposes. If a quorum shall fail to attend any meeting, a majority of those present may adjourn the meeting to another place, date, or time without further notice or waiver thereof.

Section 6. Participation in Meetings by Conference Telephone

Members of the Board of Directors, or of any committee thereof, may participate in a meeting of such board or committee by means of conference telephone or similar communications equipment that enables all persons participating in the meeting to hear each other. Such participation shall constitute presence in person at such meeting.

Section 7. Conduct of Business

At any meeting of the Board of Directors, business shall be transacted in such order and manner as the board may from time to time determine, and all matters shall be determined by the vote of a majority of the directors present, except as otherwise provided herein or required by law. Action may be taken by the Board of Directors without a meeting if all members thereof consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board of Directors.

Section 8. Powers

The Board of Directors may, except as otherwise required by law, exercise all such powers and do all such acts and things as may be exercised or done by the corporation, including, without limiting the generality of the foregoing, the unqualified power:

(1) To declare dividends from time to time in accordance with law;

(2) To purchase or otherwise acquire any property, rights or privileges on such terms as it shall determine;

(3) To authorize the creation, making and issuance, in such form as it may determine, of written obligations of every kind, negotiable or non-negotiable, secured or unsecured, and to do all things necessary in connection therewith;

(4) To remove any officer of the corporation with or without cause and, from time to time, to devolve the powers and duties of any officer upon any other person for the time being;

(5) To confer upon any officer of the corporation the power to appoint, remove and suspend subordinate officers and agents;

(6) To adopt from time to time such stock option, stock purchase, bonus, or other compensation plans for directors, officers and agents of the corporation and its subsidiaries as it may determine;

(7) To adopt from time to time such insurance, retirement, and other benefit plans for directors, officers and agents of the corporation and its subsidiaries as it may determine; and

(8) To adopt from time to time regulations, not inconsistent with these by-laws, for the management of the corporation's business and affairs.

Directors, as such, may receive, pursuant to resolution of the Board of Directors, fixed fees and other compensation for their services as directors, including, without limitation, their services as members of committees of the directors.

ARTICLE II - COMMITTEES

Section 1. Committees of the Board of Directors

The Board of Directors, by a vote of a majority of the whole board, may from time to time designate committees of the board, with such lawfully-delegable powers and duties as it thereby confers, to serve at the pleasure of the board and shall, for those committees and any others provided for herein, elect a director or directors to serve as the member or members, designating, if it desires, other directors as alternative members who may replace any absent or disqualified member at any meeting of the committee. Any committee so designated may exercise the power and authority of the Board of Directors to declare a dividend or to authorize the issuance of stock if the resolution which designates the committee or a supplemental resolution of the Board of Directors shall so provide. In the absence or disqualification of any member of any committee and any alternate member in his place, the member or members of the committee present at the meeting and not disqualified from voting, whether or not he or they constitute a quorum, may by unanimous vote appoint another member of the Board of Directors to act at the meeting in the place of the absent or disqualified member.

Section 2. Conduct of Business

Each committee may determine the procedural rules for meeting and conducting its business and shall act in accordance therewith, except as otherwise provided herein or required by law. Adequate provision shall be made for notice to members of all meetings; onethird of the members shall constitute a quorum unless the committee shall consist of one or two members, in which event one member shall constitute a quorum; and all matters shall be determined by a majority vote of the members present. Action may be taken by any committee without a meeting if all members thereof consent thereto in writing, and the writing or writings are filed with the minutes of the proceedings of such committee.

ARTICLE III - OFFICERS

Section 1. Generally

The officers of the corporation: (i) shall consist of a President, a Secretary and a Treasurer, and (ii) may also consist of a Chairman of the Board, a Chief Executive Officer, a Chief Operating Officer, one or more Executive Vice Presidents and one or more Vice Presidents, as may from time to time be appointed by the Board of Directors. Officers shall be elected by the Board of Directors, which shall consider that subject at its first meeting after every annual meeting of stockholders. Each officer shall hold his office until his successor is elected and qualified or until his earlier resignation or removal. Any number of offices may be held by the same person.

Section 2. Chairman of the Board

The Chairman of the Board must be a member of the Board of Directors. The Chairman of the Board shall preside over meetings of the Board of Directors and of the stockholders and perform such other duties as the Board of Directors may designate.

Section 3. Chief Executive Officer

Subject to the provisions of these by-laws and to the direction of the Board of Directors, the Chief Executive Officer shall have the responsibility for the general management and control of the affairs and business of the corporation and shall perform all duties and have all powers which are commonly incident to the office of chief executive or which are delegated to him by the Board of Directors. He shall have power to sign all stock certificates, contracts and other instruments of the corporation which are authorized. He shall have general supervision and direction of all of the other officers and agents of the corporation.

Section 4. President

The President shall perform such duties as the Board of Directors or the Chief Executive Officer shall prescribe. In the absence or disability, or a vacancy in the office, of the Chief Executive Officer or the Chief Operating Officer, the President shall perform the duties and exercise the powers of the Chief Executive Officer or the Chief Operating Officer, as the case may be.

Section 5. Chief Operating Officer

The Chief Operating Officer shall be the chief administrative officer of the corporation, in charge of the operations of the corporation. The Chief Operating Officer shall perform such duties as the Board of Directors or the Chief Executive Officer shall prescribe.

Section 6. Executive Vice Presidents

Each Executive Vice President shall be senior to each Vice President. Each Executive Vice President shall perform such duties as the Board of Directors or the Chief Executive Officer shall prescribe. In the absence or disability, or a vacancy in the office, of the President, the Executive Vice President who has served in such capacity for the longest time shall perform the duties and exercise the powers of the President.

Section 7. Vice Presidents

Each Vice President shall perform such duties as the Board of Directors or the Chief Executive Officer shall prescribe. In the absence or disability, or a vacancy in the office, of the President, if there are then no Executive Vice Presidents, the Vice President who has served in such capacity for the longest time shall perform the duties and exercise the powers of the President.

Section 8. Treasurer

The Treasurer shall have the custody of all monies and securities of the corporation and shall keep regular books of account. He shall make such disbursements of the funds of the corporation as are proper and shall render from time to time an account of all such transactions and of the financial condition of the corporation.

Section 9. Secretary

The Secretary shall issue all authorized notices for, and shall keep minutes of, all meetings of the stockholders and the Board of Directors. He shall have charge of the corporate books.

Section 10. Delegation of Authority

The Board of Directors may from time to time delegate the powers or duties of any officer to any other officers or agents, notwithstanding any provision hereof.

Section 11. Removal

Any officer of the corporation may be removed at any time, with or without cause, by the Board of Directors.

Section 12. Action with Respect to Securities of Other Corporations

Unless otherwise directed by the Board of Directors, the President shall have power to vote and otherwise act on behalf of the corporation, in person or by proxy, at any meeting of stockholders of or with respect to any action of stockholders of any other corporation in which this corporation may hold securities, and otherwise to exercise any and all rights and powers which this corporation may possess by reason of its ownership of securities in such other corporation. ARTICLE IV - RIGHT OF INDEMNIFICATION OF DIRECTORS, OFFICERS AND OTHERS

Section 1. Right to Indemnification

The corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "Indemnitee") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "proceeding"), by reason of the fact that he, or a person for whom he is the legal representative, is or was a director or officer of the corporation or, while a director or officer of the corporation or, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnitee. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article V, the corporation shall be required to indemnify an Indemnitee in connection with a proceeding (or part thereof) commenced by such Indemnitee only if the commencement of such proceeding (or part thereof) by the Indemnitee was authorized by the Board of Directors.

Section 2. Prepayment of Expenses

The corporation shall pay the expenses (including attorneys' fees) incurred by an Indemnitee in defending any proceeding in advance of its final disposition, provided, however, that such payment of expenses in advance of the final disposition of the proceeding shall be made only upon receipt of an undertaking by the Indemnitee to repay all amounts advanced if it should be ultimately determined that the Indemnitee is not entitled to be indemnified under this Article V or otherwise.

Section 3. Claims

If a claim for indemnification or advancement of expenses under this Article V is not paid in full within sixty (60) days after a written claim therefor by the Indemnitee has been received by the corporation, the Indemnitee may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the corporation shall have the burden of proving that the Indemnitee is not entitled to the requested indemnification or advancement of expenses under applicable law.

Section 4. Nonexclusivity of Rights

The rights conferred on any Indemnitee by this Article V shall not be exclusive of any other rights which such Indemnitee may have or hereafter acquire under any statute, provision of the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

Section 5. Other Sources

The corporation's obligation, if any, to indemnify or to advance expenses to any Indemnitee who was or is serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, enterprise or nonprofit entity shall be reduced by any amount such Indemnitee may collect as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, enterprise or nonprofit enterprise.

Section 6. Amendment or Repeal

Any repeal or modification of the foregoing provisions of this Article V shall not adversely affect any right or protection hereunder of any Indemnitee in respect of any act or omission occurring prior to the time of such repeal or modification.

Section 7. Other Indemnification and Prepayment of Expenses

This Article V shall not limit the right of the corporation, to the extent and in the manner permitted by law, to indemnify and to advance expenses to persons other than Indemnitees when and as authorized by appropriate corporate action.

ARTICLE V - STOCK

Section 1. Certificates of Stock

Each stockholder shall be entitled to a certificate signed by, or in the name of the corporation by, the President or any Executive Vice President or Vice President and by the Secretary or an assistant secretary or the Treasurer or an assistant treasurer, certifying the number of shares owned by him. Any of or all the signatures on the certificate may be facsimile.

Section 2. Transfers of Stock

Transfers of stock shall be made only upon the transfer books of the corporation kept at an office of the corporation or by transfer agents designated to transfer shares of the stock of the corporation. Except where a certificate is issued in accordance with Section 4 of Article VI of these by-laws, an outstanding certificate for the number of shares involved shall be surrendered for cancellation before a new certificate is issued therefor.

Section 3. Record Date

Subject to applicable law, the Board of Directors may fix a record date, which shall not be more than 60 nor less than 10 days before the date of any meeting of stockholders, nor more than 60 days prior to the time for the other action hereinafter described, as of which there shall be determined the stockholders who are entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof; to express consent to corporate action in writing without a meeting; to receive payment of any dividend or other distribution or allotment of any rights; or to exercise any rights with respect to any change, conversion or exchange of stock or with respect to any other lawful action.

Section 4. Lost, Stolen or Destroyed Certificates

In the event of the loss, theft or destruction of any certificate of stock, another may be issued in its place pursuant to such regulations as the Board of Directors may establish concerning proof of such loss, theft or destruction and concerning the giving of a satisfactory bond or bonds of indemnity.

Section 5. Regulations

The issue, transfer, conversion, and registration of certificates of stock shall be governed by such other regulations as the Board of Directors may establish.

ARTICLE VI - NOTICES

Section 1. Notices

Whenever notice is required to be given to any stockholder, director, officer, or agent, such requirement shall not be construed to mean personal notice. Such notice may in every instance be effectively given by depositing a writing in a post office or letter box in a postpaid, sealed wrapper, or by dispatching a prepaid telegram, addressed to such stockholder, director, officer, or agent at his or her address as the same appears on the books of the corporation. The time when such notice is dispatched shall be the time of the giving of the notice.

Section 2. Waivers

A written waiver of any notice, signed by a stockholder, director, officer or agent, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such stockholder, director, officer or agent. Neither the business nor the purpose of any meeting need be specified in such a waiver.

ARTICLE VII - MISCELLANEOUS

Section 1. Facsimile Signature

In addition to the provisions for the use of facsimile signatures elsewhere specifically authorized in these by-laws, facsimile signatures of any officer or officers of the corporation may be used whenever and as authorized by the Board of Directors or a committee thereof.

Section 2. Corporate Seal

The Board of Directors may provide a suitable seal containing the name of the corporation, which seal shall be in charge of the Secretary. Duplicates of the seal may be kept and used by the Treasurer or by the assistant secretary or assistant treasurer.

Section 3. Reliance Upon Books, Reports, and Records

Each director, each member of any committee designated by the Board of Directors, and each officer of the corporation shall, in the performance of his duties, be fully protected in relying in good faith upon the books of account or other records of the corporation, including reports made to the corporation by any of its officers, by an independent certified public accountant, or by an appraiser selected with reasonable care.

Section 4. Fiscal Year

The fiscal year of the corporation shall be as fixed by the Board of Directors.

Section 5. Time Periods

In applying any provision of these by-laws which requires that an act be done or not done a specified number of days prior to an event or that an act be done during a period of a specified number of days prior to an event, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

ARTICLE VIII - AMENDMENTS

Section 1. Amendments

These by-laws may be amended or repealed by the Board of Directors or by the stockholders.

by and between

VASCO DATA SECURITY INTERNATIONAL, INC., for itself and its subsidiaries ("LICENSEE")

and

LERNOUT & HAUSPIE SPEECH PRODUCTS, N.V. ("LICENSOR")

Effective Date years	: March 25, 19	98 Initial	. Term: Five		
	rate Name: VASCO Data Sec nder the Laws of Delaware 1901 S. Meyers Road, Sui Oakbrook Terrace, IL USA 630-932-8844 Fax: 630-	, USÁ te 210 60181	l, Inc.		
LICENSEE Notic	es Address: Same				
Attention:	T. Kendall Hun	t or Greg Apple			
Phone:	Same	Fax:			
LICENSOR Name: Lernout & Hauspie Speech Products N.V. Incorporated under the Laws of Belgium Address: St. Krispijnstraat 7 8900 Ieper, Belgium Phone: 057/22 88 88 Fax: 057/20 84 89					
LICENSOR Notic	es Address: 52 3	rd Avenue			
	Burlington, MA	01803			
Attention: Phone: 0986	Mr. Tom Dohert 781-238-0960	y Fax:	781-238-		

THIS AGREEMENT IS GOVERNED BY THE ATTACHED TERMS AND CONDITIONS. LICENSEE AND LICENSOR ACKNOWLEDGE THAT THEY HAVE READ AND AGREE TO BE BOUND BY THE ATTACHED TERMS AND CONDITIONS. IN WITNESS WHEREOF, THIS AGREEMENT HAS BEEN DULY EXECUTED BY THE PARTIES HERETO, AS OF THE EFFECTIVE DATE.

LICENSEE:	LICENSOR:
By:	By:
Name:	Name:
Title:	Title:

ARTICLE I: DEFINITIONS

The following terms shall have the meanings ascribed to them herein whenever they are used in this Agreement, unless otherwise clearly indicated by the context.

- 1.1. "Corrections" shall mean changes made in the Development Software and/or Documentation by LICENSOR to correct errors or defects in the Development Software and/or Documentation.
- 1.2. "Designated Application" shall mean the application(s) made by LICENSEE as identified in Addendum B.
- 1.3. "Development Software" shall mean the Software Development Kit (SDK), to be adapted to work with the Designated Application; Documentation for the SDK, which is customarily provided by LICENSOR as a part of the SDK; and all Corrections of the SDK. This shall not include any enhancements or upgrades of the SDK.
- 1.4. "Documentation" shall mean those visually-readable materials, in English, developed by or for LICENSOR for use in connection with the Development Software. Documentation includes operating instructions, input information and format specifications.
- 1.5. "End User" shall mean the customers of LICENSEE or of Third Parties, who will only be granted the right to use the Run-Time Software in connection with the Designated Application.
- 1.6. "Run-Time Software" shall mean an object code/executable copy of software derived from the Development Software (or any portion thereof) which is integrated by LICENSEE within the Designated Application and executable only in association with the Designated Application.
- 1.7. "Third Party" shall include original equipment manufacturers, system houses, value added resellers and other such entities engaged in doing business with LICENSEE, and who acquire the

Designated Application, incorporating the Run-Time Software, for distribution purposes only.

1.8"Subsidiary" shall mean a corporation or other legal entity at least a majority of whose voting stock or voting power entitled to vote for the election of directors (or other managing authority) is owned, directly or indirectly, by the parent, now or hereafter.

ARTICLE II: GRANT OF SOFTWARE LICENSE

- 2.1. Subject to all applicable terms and conditions hereof, LICENSOR hereby grants to LICENSEE and its subsidiaries and LICENSEE and its subsidiaries accept from LICENSOR, except as noted in Addendum B, a world-wide non-exclusive, non-transferable license to:
 - a) use the Development Software solely in connection with LICENSEE's development, distribution and provision of technical support for Designated Application incorporating Run-Time Software;

- b) make Run-Time Software copies based on the Development Software with the sole purpose to incorporate into the Designated Application;
- c) distribute to End Users directly or through Third Parties, copies of the Run-Time Software incorporated into the Designated Application;
- d) incorporate all or part of the Documentation into LICENSEE's Designated Application documentation, provided LICENSEE properly incorporates and references LICENSOR's trademarks and copyrights in the documentation.
- 2.2. All distributions by Third Parties in accordance with Article 2.1.c shall be pursuant to written agreements that incorporate applicable terms and conditions hereof, including appropriate methods of calculation, reporting and payment of applicable royalties (see Article III hereof).
- 2.3. It is furthermore expressly agreed that the only right granted to Third Parties is the right to distribute the Designated Application incorporating the Run-Time Software.

ARTICLE III: ROYALTIES/PAYMENTS

3.1. Royalties

In consideration for the rights granted under Article II, LICENSEE shall make royalty payments to LICENSOR, pursuant to Addendum C, for the Run-Time Software shipped hereunder by LICENSEE or distributed by any Third Party.

3.2. Other Fees

Any training provided by LICENSOR under this Agreement will be invoiced at the end of each month in which said services are provided. Unless otherwise provided in writing, all invoices are payable within thirty (30) days after invoice date.

3.3. Late Payments

Failing payment on time as mentioned here above, LICENSEE shall be deemed to be in default, such without any notice or injunction being required. In such case, LICENSEE shall be liable for interest at the rate of twelve percent (12%) per annum of the total amount due.

ARTICLE IV: WARRANTY

4.1. LICENSOR warrants that it has the right to grant the licenses contained in this Agreement.

- 4.2. LICENSOR warrants that the Development Software will perform substantially in accordance with the specifications as mentioned in the Documentation. LICENSEE acknowledges that the Development Software is of such complexity that it may have inherent defects and agrees that if any deviations from the Documentation exist, as LICENSEE's exclusive remedy and LICENSOR's sole responsibility, LICENSOR shall use its best efforts to eliminate any significant deviations reported to it by LICENSEE in writing. This warranty shall expire six (6) months after the Effective Date of this Agreement (the "Warranty Period").
 4.3. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, LICENSOR MAKES, AND LICENSOR MAKES, A
- 4.3. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, LICENSOR MAKES, AND LICENSEE RECEIVES, NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. LICENSOR DOES NOT WARRANT THAT ANY OR ALL FAILURES, DEFECTS OR ERRORS WILL BE CORRECTED, OR WARRANT THAT THE FUNCTIONS CONTAINED IN THE DEVELOPMENT SOFTWARE WILL MEET CUSTOMER'S REQUIREMENTS. LICENSEE ACKNOWLEDGES THAT LICENSOR HAS MADE NO REPRESENTATIONS REGARDING WARRANTY OR LIABILITY OTHER THAN AS STATED IN THIS AGREEMENT.

ARTICLE V: SUPPORT

- 5.1. During the term of the Warranty Period as defined above in Article IV, LICENSOR shall, upon request of LICENSEE, provide the following support to LICENSEE, free of charge :
 - a) Telephone Support

LICENSOR shall provide telephone consulting services to LICENSOR shall provide telephone consulting services to LICENSEE's designated personnel to assist such personnel in resolving problems, obtaining clarification relative to the Development Software and Documentation and providing assistance regarding suspected defects or errors in the Development Software or Documentation. Said services shall be provided during normal business hours (Belgian Time), Mondays through Fridays (excluding Belgian legal holidays). The names, telephone, fax numbers of LICENSOR's support personnel, as well as a list of the current holidays, are specified in Addendum D.

b) Written Support

LICENSOR agrees to diligently work for the resolution of defects and errors in the Development Software and/or Documentation.

- C) Corrections LICENSOR shall keep LICENSEE advised of the status of all Corrections done by LICENSOR for the Development Software and Documentation during the term of the support. At the request of LICENSEE, LICENSOR shall provide one (1) copy of the current release of the Development Software incorporating such Corrections.
- Exceptions to Technical Support Agreements The below items are expressly excluded from the support programs and shall, as such, be invoiced at the then current engineering fees:

i)Maintenance of software not delivered by LICENSOR;

- ii) Repairs caused by other causes than normal use or repairs caused by force majeure (such as, but not limited to, fire, flood, failure of electric power or air conditioning);
- iii) Repairs required by the fact that maintenance has been done by a third party, not authorized by LICENSOR.
- e) Training Training can be given to LICENSEE by LICENSOR as an additional service which will be invoiced at the applicable training fees.
- 5.2. After the term of the Warranty Period, LICENSEE may purchase additional support and training from LICENSOR by entering into a maintenance and support agreement.

ARTICLE VI: TERM

- 6.1. The Initial Term of this Agreement shall commence on the Effective Date herein and shall be automatically renewed for one (1) year periods, unless terminated or canceled as provided in Article 6.2.
- 6.2. This Agreement may be terminated for cause, as follows:
 - a) by LICENSOR, if LICENSEE fails to make timely payments or provide royalty reports as required hereunder, and any such failure is not remedied within thirty (30) days after receipt of written notice;
 - b) by LICENSOR, if LICENSEE expressly or impliedly repudiates this license by refusing to observe the restricted use or confidentiality requirements as mentioned in this Agreement, LICENSOR may terminate this Agreement immediately, by providing written notice to LICENSEE stating such breach;
 - c) by either party, if a party ceases its business activities as a result of bankruptcy, dissolution, liquidation, or other causes, the other party may immediately terminate this Agreement by providing written notice to that party.
- 6.3. After the Initial Term as defined hereabove, this Agreement may be terminated by either party without cause by giving the other party a ninety (90) days written notice.
- 6.4.Any termination or cancellation of this Agreement shall promptly terminate LICENSEE's rights as defined in Article II. Provided however that such termination shall not terminate or affect sublicenses previously and properly granted to End Users and Third Parties, being it that such termination is not due to breach of contract by LICENSEE.

- 6.5. No termination or cancellation of this Agreement shall affect the obligation of LICENSEE to collect and distribute to LICENSOR all payments, which have become or will be due from Third Parties and End Users and any other payments which have become due hereunder.
- 6.6. At the moment of termination or cancellation LICENSEE shall promptly return all Development Software to LICENSOR.

6.7. For the purposes of this Agreement "immediately" shall mean three (3) days after postal date of a written notice or the date of delivery of the courier mail company, whichever comes first.

ARTICLE VII: INDEMNITY

- 7.1. LICENSOR shall indemnify and defend LICENSEE and Third Parties against any claim that the Development Software infringes any third party patent, copyright, trade secret or other intellectual property right when used in accordance with the terms of this Agreement, provided however that LICENSEE shall give LICENSOR prompt notice of any such claim and shall give information, reasonable assistance and authority to defend or settle the claim. LICENSOR shall have the right, at its option, either to obtain for LICENSEE the right to continue using the Development Software and Run-Time Software, substitute other software with equivalent functional capabilities, modify the Development Software and Run-Time Software so that it is no longer infringing while retaining equivalent functions, or terminate this Agreement and refund all royalties paid by LICENSEE under Addendum C of this Agreement.
- 7.2. Except as provided above, LICENSOR shall have no liability to LICENSEE, Third Parties and End Users in the event infringement of any intellectual property right arises from components of a Designated Application which are not derived directly from the Development Software or Run-Time Software operating on the Designated Application, but which are introduced into the Designated Application by LICENSEE, or which result from compliance with LICENSEE's designs, specifications or instructions, or from modification of the Development Software by LICENSEE.

ARTICLE VIII: LIABILITY

8.1. Limitation on Damages

In no event shall LICENSOR be liable for any loss of or damage to revenues, profits or goodwill or other special, incidental, indirect or consequential damages of any kind, resulting from its performance or failure to perform pursuant to the terms of this Agreement or any of the attachments hereto, or resulting from the furnishing, performance, or use or loss of use of any Development Software, Run-Time Software or other materials delivered to LICENSEE hereunder, including, without limitation, any interruption of business, whether resulting from breach of contract, breach of warranty, or any other cause (including negligence), even if LICENSOR has been advised of the possibility of such damages.

8.2. Maximum Liability

LICENSOR's total liability to LICENSEE from any and all causes shall be limited to the total amount of royalties actually paid by LICENSEE to LICENSOR under this Agreeement.

LICENSOR's limitation of liability is cumulative with all LICENSEE's payments being aggregated to determine satisfaction of the limit. The existence of more than one claim shall not enlarge or extend the limit.

ARTICLE IX: CONFIDENTIAL INFORMATION

9.1. "Confidential Information" shall mean (a) any information conveyed in written, graphic, machine-readable or other tangible form, provided that such information is conspicuously marked and/or considered by a party as confidential or proprietary; or (b) any information conveyed orally where such information is designated as confidential or proprietary at the time of such oral disclosure. Notwithstanding the above, information shall not be deemed Confidential Information to the extent that it (i) was generally known and available in the public domain at the time it was disclosed or subsequently becomes generally known and available in the public domain through no fault of the recipient; (ii) was known to the recipient at the time of disclosure; (iii) is disclosed with the prior written approval of the disclosing party; (iv) was independently developed by the recipient without any use of the Confidential Information of the disclosing party; or (v) becomes known to the recipient from a source other than the disclosing party without breach of this Agreement. The obligation not to use or disclose said Confidential Information will remain in effect until one of these exceptions occurs.

- 9.2. Both parties agree not to disclose any trade secrets or Confidential Information transferred to it by the other party which are identified in writing and/or are considered by a party as confidential. Each party shall protect the other's Confidential Information form unauthorized dissemination and use with the same degree of care that such party uses to protect its own like information. Neither party will use the other's Confidential Information for purposes other than necessary to directly further the purposes of this Agreement. Neither party will disclose to third parties the other's Confidential Information without the prior written consent of the other party. Except as expressly provided in this Agreement, no ownership or license rights are granted in any Confidential information.
- 9.3. Since unauthorized transfer of one party's Confidential Information will substantially diminish their value and injure that party in ways that cannot be remedied fully by money, the other party's breach of these Article IX obligations will entitle first party to equitable relief (including orders for specific performance and injunctions), as well as monetary damages.
- 9.4. Both parties agree that the terms and conditions, and this Agreement itself shall be considered as Confidential Information, except as expressly otherwise stated in this Agreement.

ARTICLE X: RESTRICTED USE

- 10.1. LICENSEE shall not use, distribute or have distributed the Development Software as such, nor shall LICENSEE use, distribute or have distributed any Run-Time Software in connection with or on any application other than the Designated Application.
- 10.2. LICENSEE shall not recreate, generate or reverse-engineer any portion or version of the Development Software or attempt any of the foregoing, or aid, abet or permit others to do so. LICENSEE is not allowed to make any derivative works based on or make any modifications to the Development Software, other than expressly agreed to in this Agreement.
- 10.3. LICENSEE expressly agrees not to commercialize the Development Software and/or Run-Time Software, in a manner which enables a third party to make, use, or distribute additional applications other than the Designated Application.
- 10.4. LICENSEE acknowledges that unauthorized reproduction or use of the Development Software and/or Run-Time Software as provided in this Article X is a breach of a material obligation of this Agreement and is subject to any available remedies for such breach.

ARTICLE XI: TITLE AND RIGHTS TO SOFTWARE AND MODIFICATIONS

- 11.1. The grant of license and distribution rights by LICENSOR to LICENSEE under Article II hereof is LICENSEE's only right to the Development Software and the Run-Time Software. Title, interests and rights to the Development Software and Run-Time Software, in all language versions delivered or to be delivered hereunder shall always remain in LICENSOR.
- 11.2. Title, interests and rights to the Development Software, the Run-Time Software and Documentation shall always remain in LICENSOR. Furthermore, the grant of such license shall not restrict licensing by LICENSOR in any manner.

ARTICLE XII: TAXES

12.1.The Run-Time Software licensed hereunder is intended principally for use by End Users and therefore should be exempt from sales, use, excise and other similar taxes. However, if such tax, or any import duty, or export duty, should be imposed on LICENSOR, LICENSEE shall either bear such tax or duty by a direct payment to the taxing authority or shall reimburse LICENSOR for such tax or duty paid by LICENSOR.

ARTICLE XIII: USE OF LOGO

- 13.1. LICENSEE agrees to add the L&H Corporate Logo to its products using the Run-Time Software or any other logo at the request of LICENSOR. This logo must appear on the packaging and collateral of LICENSEE's Designated Application, as well as in the accompanying user documentation. LICENSEE agrees to issue with LICENSOR a joint press release upon shipment of its first product using the Run-Time Software, or sooner, as mutually agreed upon by both parties. Any press releases concerning this Agreement must be approved in writing by LICENSOR prior to release.
- 13.2. LICENSEE shall provide LICENSOR, free of charge, with ten (10) copies of the Designated Application for demonstration and marketing purposes.

ARTICLE XIV: MISCELLANEOUS

- 14.1. This Agreement shall be deemed to have been entered into and shall be construed, governed and interpreted in accordance with the laws of Belgium, without giving effect to principles of conflict of law.
- 14.2. The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions, and this Agreement shall be construed in all respects as if such invalid or unenforceable provisions were omitted.
- 14.3. The failure of either party to insist, in any one or more instances, upon the performance of any of the terms of this Agreement or to exercise any right hereunder, shall not be construed as a waiver of the future performance of any such term or the future exercise of such right.

- 14.4. Whenever any occurrence (e.g. an event of force majeure) is delaying or threatens to delay LICENSOR's timely performance under this Agreement, LICENSOR will promptly give notice thereof, including all relevant information with respect thereto, to LICENSEE.
- 14.5. It is hereby agreed that the rights and obligations of the parties hereto contained in Articles III, VI, VIII, IX, X, XI, XII and the Addenda referenced therein, shall survive and continue after any termination or cancellation of this Agreement and shall bind the parties, their successors, their assigns and their legal representatives.
- 14.6. This Agreement sets forth and shall constitute the entire agreement between LICENSEE and LICENSOR with respect to the subject matter thereof, and shall supersede any and all prior agreements, understandings, promises and representations made by one party to the other concerning the subject matter herein and the terms and conditions applicable thereto. This Agreement may not be released, discharged, supplemented, interpreted, amended or modified in any manner except by an instrument in writing signed by a duly authorized officer or representative of each of the parties hereto as is specially provided elsewhere in this Agreement.
- 14.7. In making and performing this Agreement, the parties act and shall act at all times as independent contractors and nothing contained in this Agreement shall be construed or implied to create the relationship of partner or of employer and employees between the parties. At no time shall either party make commitments for or in the name of the other party.
- 14.8. LICENSEE is not allowed to assign the license rights granted hereunder without LICENSOR's prior written consent, which shall not be unreasonably withheld.
- 14.9. All notices under this Agreement shall be sent to the address here above mentioned. All such notices shall be deemed to be received by the other party three (3) days after the postal date or on the date of signature of the receipt of delivery by a courier mail company.
- 14.10.The Addenda referenced in this Agreement, and the specifications referenced therein, as well as other documentation referenced in this Agreement which define the obligations of the parties, are a part of this Agreement with the same force and effect as if fully set forth herein.

ADDENDUM A

SOFTWARE FUNCTIONAL SPECIFICATION

1. Functional Specification of the Development Software

Speaker Verification

Lernout & Hauspie has developed speaker verification software for use in access control applications. The VOICE PRINT software is built around the L&H speaker verification engine. As such it allows for seamless integration in already existing telephone applications.

The actual scenario and combination of different elements in the verification procedure is under control of the application developer. He can combine several attempts or several passwords to improve the overall security.

PRODUCT DESCRIPTION

Enrollment of a new speaker

Each new person is asked to select his personal password or passwords (each at least 1 second in length) and enter 3 times into the system. The verification software checks if the password(s) is (are) sufficiently long, contains a sufficiently rich subset of phonemes and if the said utterances were consistent over the 3 enrollment utterances. Out of each utterance a feature vector, or voice token, is extracted. The 3 voice tokens are then combined by the verification engine into a single Voice Print, which is the final representation of the identity of the user. The whole enrollment procedure should not take longer than half a minute.

Verification Procedure

This is a 2-step procedure. Identity Claim: First the person needs to identify himself to the system. This can be achieved by using `a token' for entering a name or access number but could also be achieved by keyboard input, magnetic badge, or any other suitable method.

name or access number but could also be donated a single and input, magnetic badge, or any other suitable method. VOICE PRINT verification: As primary verification check the person is asked to enter his voice password. A new voice token is extracted from the uttered sample and is matched against the centrally stored voice print.

Features

- . passwords of 1 second or longer

- . consistency check during enrollment
 . utterance length control
 . tradeoff between false acceptance and false rejection by simple threshold control
- . possibility of integration of multiple identity claims and multiple verification prompts
- . environment: this product is designed to work over
- telephone input.
- . response time: less than 0.5 seconds

PERFORMANCE

.

Using a double voice print of each 1 to 2 seconds long (3-4 syllable word) following average equal error rates have been obtained:

. better than 4% EER in case the intruder KNOWS the password

Using a triple voice print of each 1 to 2 seconds long (3-4 syllable word) following average equal error rates have been obtained:

better than 3% EER in case the intruder KNOWS the password

SYSTEM REQUIREMENTS

Minimum 486 PC, equipped with the necessary telephony hardware and software, Windows '95, Minimum 8 MB RAM $\,$

Background storage (on disk) of a voice print requires as little as 1.4kByte pre second of speech. An active keyword (in RAM) requires 25kByte/second.

Client-Server architecture is supported

2. Deliverables

Licensee agrees having received he SDK for Speaker verification and the software supporting logic to combine scores from individual trials and multiple passwords. And furthermore he hereby accepts the development software.

ADDENDUM B

DESIGNATED APPLICATION/ LIMITED EXCLUSIVITY

1. Designated Application

The Run-Time Software will be incorporated into the following LICENSEE's proprietary application(s):

Products into which the Run-Time Software represents an inherent part of its security function, or add-on modules to certain products into which the Run-Time Software represents an inherent part of its security function, which are being deployed in the field of:

Telecom Applications.

Data Security Applications

Physical Access Applications.

Future applications to be defined in mutual agreement.

2. LIMITED EXCLUSIVITY

The license granted under article 2.1. shall be exclusive with respect to Data Security Applications under which LICENSOR's Run-Time Software is used as an alternate method to authenticate users under LICENSEE' s patents 4,599,489 Claim 1 (attached hereto as Exhibit 1) and 0172239 Claim 1 (attached hereto as Exhibit 2), under the assumption of LICENSEE's representations and warranties that it fully and solely owns the above patents and that these patents have not been invalidated by any third party.

Both patents describe the use of a device that is analogous to a key to generate passwords for authenticating users. The exclusivity pertains to Data Security Applications under which the users are required to generate a voice sample that can then be transmitted to the computer for verification using the Run-Time Software, all in accordance with and limited to the above claims under the above mentioned patents.

LICENSEE acknowledges that LICENSOR retains the right to enter into agreements, without any restriction or consideration, under which its customers, either existing or new, shall have the right to commercially use and exploit the Run-Time Software in connection with Data Security Applications in so far said applications do not infringe the above patents of LICENSEE.

Furthermore, nothing in this Agreement shall prevent LICENSOR to license the Run-Time Software to its existing customer base, under which LICENSOR has sold or licensed an L&H product, as well as to customers who received a license from LICENSEE under which such customer is or will be allowed to practice the claims under the above patents.

This exclusivity shall commence on the Effective Date of this Agreement and shall remain for a period of five(5) years,

(i) so long as LICENSEE:

- a) does not enter into agreements with other speech software companies;
- b) makes timely payments to LICENSOR under this Agreement and other agreements;

c) remains the sole owner of the above patents;

(ii) unless the patents are abandoned by LICENSEE or such patents becomes the subject of a patent invalidation;

(iii) provided both parties evaluate from time to time, but not less than once a year, the revenue forecasts to be generated under the exclusivity.

The failure to achieve any of the above cumulative conditions shall immediately revert the exclusivity into a non- exclusivity.

In addition, both parties agree to consider the other as a Strategic Partner. As such, both parties agree to negotiate in good faith to issue a license(s) to companies in Data Security industry which wish to incorporate either the LICENSOR's Run-Time Software or Licensee's derivative products developed using LICENSOR's Run-Time Software.

ADDENDUM C

ROYALTY PRICING

1. Royalties

- a) The royalty to be paid by LICENSEE for the use of LICENSOR's Run-Time Software consists of ten percent (10 %) of the revenue of LICENSEE related to the Designated Applications.
- b) LICENSEE hereby commits to a non-refundable pre-payment on royalties in the amount of US \$ 800.000 (eight hundred thousand US \$).
- c) LICENSEE will provide LICENSOR with calendar quarterly reports showing the quantity of royalty-bearing copies of the Designated Application shipped and/or distributed hereunder, commencing three (3) months after the Effective Date. These quarterly reports shall be provided to LICENSOR within ten (10) days after each quarter. LICENSEE shall at the same time transfer the amount of royalties due to LICENSOR's bank account for all such royalties due.
- d) LICENSEE shall keep a separate register in which it shall record the exact number of royalty- bearing copies, as well as the type of the Designated Application incorporating the Run-Time Software and any other information relevant for determining the amounts of royalties payable.

LICENSOR shall have the right to conduct an audit of LICENSEE, and (through LICENSEE), Third Parties records relative to the performance of this Agreement no more than once yearly. Such audit shall be conducted by a mutually acceptable auditing firm, independent from the parties.

LICENSEE's approval of the time and place for the audit requested by LICENSOR shall not be unreasonably withheld.

Any audit shall be performed during normal business hours. In the event such audit reveals an underpayment to LICENSOR, LICENSEE shall pay LICENSOR such underpayment within thirty (30) days, as well as the audit costs. Those audit costs shall only be paid by LICENSEE if the underpayment is greater than five percent (5%).

2. Engineering Fees

No engineering specification is currently anticipated. In the event engineering needs to be performed, a separate engineering agreement will be executed.

- 3. Payment Terms
- a) LICENSEE will pay a first non-refundable pre-payment on royalties to the amount of six hundred thousand US Dollars (\$ 600,000 USD) within three (3) months after the Effective Date of this Agreement. This non-refundable prepayment will be credited against royalty payments as described in this Agreement. LICENSEE shall pay the non-refundable prepayment according to the payment schedule as mentioned hereunder:

LICENSEE will pay a second non-refundable pre-payment on royalties to the amount of two hundred thousand US Dollars (\$ 200,000 USD) within twelve (12) months after the Effective Date of this Agreement. This non-refundable prepayment will be credited against royalty payments as described in this Agreement. LICENSEE shall pay the non-refundable prepayment according to the payment schedule as mentioned hereunder:

After the minimum committed royalties, the amounts of royalties shall be paid by LICENSEE to LICENSOR in quarterly basis and shall be calculated according to section 1 of this Addendum, being it understood that during the commitment period, or any extension thereof, royalties shall be at least equal to or be higher than the minimum amounts as specified in section 3.a).

This means that if during the commitment period/or any extension thereof, the royalty fee in a specific quarter would be less than the corresponding minimum amount to be paid in such quarters, LICENSEE shall pay the minimum amount, but shall be entitled to offset the difference in and against any future quarterly royalty payments, which would exceed the corresponding minimum amounts, provided however that such offset shall be limited each quarter to the amount paid in excess of the corresponding minimum amount.

Any royalties due for a specific quarter under this agreement, upon consummation of the committed quantity, shall be paid by LICENSEE no later than ten (10) days after the end of such specific quarter.

b) Payment of Non-Refundable Engineering Fee will be defined when applicable. ADDENDUM D SUPPORT DURING WARRANTY PERIOD

 LICENSOR's contact information for technical support during the warranty period will be:

Name: Technical Support Engineer tel: +32-57-229-585 fax:+32-57-208-489

e-mail address: tech.support@lhs.be

2. LICENSOR's normal business hours are as follows:

Monday:8.30- 12.30and 13.30- 17.30Tuesday:8.30- 12.30and 13.30- 17.30Wednesday:8.30- 12.30and 13.30- 17.30Thursday:8.30- 12.30and 13.30- 17.30Friday:8.30- 12.30and 13.30- 16.30

3. The current legal holidays are as follows:

Belgium: January 1, 1998 January 2, 1998 April 13, 1998 May 1, 1998 May 21, 1998 June 1, 1998 July 21, 1998 November 11, 1998 December 25, 1998 December 28-31, 1998

- 4. LICENSEE shall contact the above mentioned persons of LICENSOR's personnel via the telephone and fax numbers mentioned here above to request for the technical support services as described in Article VI of this Agreement. LICENSOR's technical support personnel will provide LICENSEE with a resolution within a reasonable period of time according to the request and the difficulty of the problem.
- 5.If LICENSEE is willing to receive more and/or other technical support during the warranty period, or wishes to expand the technical support after the warranty period, LICENSEE has to enter into a separate maintenance and support agreement with LICENSOR.

LOAN AGREEMENT

LOAN AGREEMENT dated as of March 31, 1998 entered into by and between Lernout & Hauspie Speech Products N.V., a Belgian corporation ("Lender") and VASCO Data Security International, Inc., a Delaware corporation ("Borrower").

WITNESSETH:

WHEREAS, Borrower has requested that Lender make available to Borrower a line of credit in the amount of up to \$3,000,000 to finance Borrower's working capital needs;

WHEREAS, Lender is willing to do so, but only on the terms and subject to the conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual conditions and agreements set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrower and Lender agree as follows.

1. CERTAIN DEFINITIONS. As used herein the terms set forth on Schedule I hereto shall have the meanings set forth thereon.

2. THE LOAN.

(a) At any time after the date hereof through April 30, 1998 (the "Commitment Period"), Lender shall, at Borrower's request, make a loan to Borrower (the "Loan"), subject to the terms and conditions contained in this Agreement and in an aggregate amount not to exceed \$3,000,000. Once repaid, the Loan may not be reborrowed. The Loan shall be due and payable as set forth in the Note.

(b) The Loan shall be evidenced by a Note in the form of Exhibit A hereto and shall be secured by a security interest in all of the assets of Borrower pursuant to a Security Agrement in the form of Exhibit B hereto. The Loan shall bear interest and be payable as set forth in the Note.

(c) Proceeds of the Loan shall be used by Borrower to finance Borrower's working capital needs.

(d) Borrower may request that Lender advance the Loan on not less than fourteen (14) days' prior written notice to Lender, made after the satisfaction of the conditions precedent set forth below. The Lender shall make only one advance hereunder. Lender shall make the Loan available to Borrower by wire transfer or otherwise as Borrower requests in its notice to advance the Loan (provided that Borrower shall reimburse Lender for any administrative expense (wire transfer fees and the like) incurred by Lender in connection with such advance methods, except for an advance by bank or certified check).

3. REPRESENTATIONS AND WARRANTIES.

The Borrower hereby represents and warrants to the Lender that:

(a) Organization and Qualification. The Borrower is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has all required corporate power and authority to own its property, to carry on its business as presently conducted and to carry out the transactions contemplated hereby.

(b) Charter. The Borrower has delivered to counsel to the Lender true and complete copies of its Certificate of Incorporation or equivalent document as amended from time to time (the "Charter") and by-laws ("By-laws") as currently in effect.

(c) Capitalization. The authorized capital stock of the Borrower consists of 75,000,000 shares of common stock, \$.001 par value ("Common Stock") of which 20,316,585 shares are validly issued and outstanding, fully paid and non-assessable. Except as disclosed in the Prospectus attached hereto as Exhibit C, (a) there are no outstanding warrants, options, preemptive rights or other rights to purchase or acquire, or any agreements providing for the issuance or sale of (contingent or otherwise), or any commitments or claims of any character relating to, any of the Borrower's capital stock or any shares of stock or securities convertible into or exchangeable for any such capital stock, and (b) there are no securities of the Borrower convertible into or exchangeable for shares of capital stock of the Borrower. Except as disclosed in the Prospectus attached hereto as Exhibit C, there are no restrictions on the transfer of the Borrower's capital stock, other than those imposed by applicable federal and state securities laws.

(d) Authorization of Transaction. The execution, delivery and performance of this Agreement have been duly authorized by all necessary corporate or other action of the Borrower and it is the valid and binding obligation of the Borrower, enforceable in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors. The issuance of the Note pursuant to the terms of this Agreement is duly and validly authorized, and no further approval or authority of the shareholders or the directors of the Borrower or of any governmental authority or agency will be required for the issuance and sale of the Note pursuant by this Agreement.

(e) Approvals; Compliance With Laws. The execution, delivery and performance of this Agreement and the transactions contemplated hereby (i) do not require any approval or consent of, or filing with, any governmental agency or authority in the United States of America or otherwise which has not been obtained and which is not in full force and effect as of the date hereof, (ii) will not conflict with or constitute a breach or violation of the Charter or By-laws of the Borrower, and (iii) will not result in a violation of or any law or regulation to which it is subject. (f) Disclosure. Neither this Agreement, together with any financial statement, schedule, exhibit, or other statement (written or oral) pertaining to the Borrower, made, delivered or communicated to the Lender by the Borrower or any representative thereof in connection with this Agreement and the transactions related thereto, contains any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements contained therein not misleading in light of the circumstances under which they were made.

4. BORROWER'S AGREEMENTS. The Borrower agrees as follows:

(a) Borrower will notify Lender, at least thirty (30) days prior to any such event, of any change in Borrower's exact legal name, any change in its place of business or location as set forth in the preamble to this Agreement, or its establishment of any new place of business or location, or any change in Borrower's organizational structure.

(b) The Borrower will deliver to the Lender until such time as the Borrower becomes a reporting Borrower under the Exchange Act of 1934, as amended (the "Exchange Act"), such financial statements and other information as the Borrower may provide to any other security holder or lender to the Borrower; and (b) with reasonable promptness, such other financial data related to the business, affairs and financial condition of the Borrower and any subsidiaries as is available to the Borrower and as from time to time the Lender may reasonably request.

(c) Except as consented to by the Lender, the Borrower shall not pay or set apart for payment to holders of capital stock, any dividends, and the Borrower shall not redeem or purchase any shares of capital stock.

(d) The Borrower may not amend the Charter or By-laws of the Borrower in such a manner as may adversely affect the rights of the Lender hereunder, the Note or any Common Stock to be issued in connection herewith or therewith.

(e) The Borrower will permit representatives designated by the Lender, at its expense, to visit and inspect any of the properties of the Borrower (or any subsidiary), and to inspect and make extracts of the books and records of the Borrower, and to discuss the affairs, finances, and accounts of the Borrower with its officers, all to such reasonable extent and at such reasonable times and intervals as the representatives may reasonably request. If the Borrower determines that such inspection might result in the disclosure of trade secrets or other confidential information, the Borrower may require such persons to sign nondisclosure agreements with respect thereto.

(f) The Borrower will maintain and cause each of its subsidiaries now in existence or hereinafter acquired or created to maintain its corporate existence in good standing and comply with all applicable laws and regulations of the United States or of any state or states thereof or of any political subdivisions thereof or of any government authority, where failure to so comply would have a material adverse effect on the Borrower and its subsidiaries, taken as a whole; provided, however, that nothing herein shall prohibit the Borrower from liquidating or dissolving any of its subsidiaries into the Borrower or merging any of its subsidiaries with or into the Borrower or any other Subsidiary.

(g) The Lenders shall have such registration rights with respect to the shares of Common Stock as may be issuable upon conversion of the Note, as are no less favorable than any registration rights granted to any other securityholder of the Borrower, whether now or hereafter existing.

5. CONVERSION.

(a) Conversion Right. Subject to and in compliance with the provisions of this Section 5, all or any part of the principal amount and unpaid interest outstanding under the Note may, at the option of the holder thereof, be converted at any time or from time to time into fully-paid and non-assessable shares of Common Stock of the Borrower.

(b) Applicable Conversion Value. Subject to adjustment as hereinafter provided, the number of shares of Common Stock into which the Note may be converted shall be equal to (i) the aggregate amount of principal and unpaid interest outstanding under the Note on the Conversion Date (as defined below) divided by (ii) the average of the high and low bid and ask prices for the Common Stock for the ten (10) consecutive trading days immediately preceding March 12, 1998, or \$5.6813 per share.

(c) Adjustment for Dividends; Reclassification, etc. In case at any time or from time to time after the date hereof, the holders of Common Stock (or other capital stock of the Borrower) shall have received, or (on or after the record date fixed for the determination of shareholders eligible to receive) shall have become entitled to receive, without payment therefor (i) other or additional stock or other securities or property (including cash) by way of dividend or (ii) other or additional stock or other securities or property (including cash) by way of spin-off, split-up, reclassification, recapitalization, combination of shares or similar corporate rearrangement, then and in each such case the holder of the Note, on the conversion thereof as provided in this Section 5, shall be entitled to receive the amount of stock and other securities and property (including cash) which such holder would hold on the date of such conversion if on the date hereof he had been the holder of record of the number of shares of Common Stock issuable upon conversion of the Note and had thereafter, during the period from the date hereof to and including the date of such conversion, retained such shares and all such other or additional stock and other securities and property (including cash) receivable thereby as aforesaid during such period, giving effect to all adjustments called for during such period under this Section 5. (d) Adjustment for Reorganization, Consolidation, Merger, etc. In case at any time or from time to time, the Borrower shall (i) effect a reorganization, (ii) consolidate with or merger into any other person or entity, or (iii) transfer all or substantially all of its properties or assets to any other person or entity under any plan or arrangement contemplating the dissolution of the Borrower, then, in each such case, the holder of the Note, on the conversion thereof as provided in this Section 5 at any time after the consummation of such reorganization, consolidation or merger or the effective date of such dissolution, as the case may be, shall receive, in lieu of the Common Stock issuable on such exercise prior to such consummation or such effective date, the stock or other securities and property (including cash) to which such holder would have been entitled upon such consummation or in connection with such transaction, as the case may be, if such holder had so converted its Note, immediately prior thereto, all subject to further adjustment thereafter as provided under this Section 5.

(e) Continuation of Terms. Upon any reorganization, consolidation, merger or transfer (and any dissolution following any transfer) referred to in paragraph (d) above, each Note shall continue in full force and effect and the terms hereof shall be applicable to the shares of stock and other securities and property receivable on the conversion of the Note after the consummation of such reorganization, consolidation or merger or the effective date of dissolution following any such transfer, as the case may be, and shall be binding upon the issuer of any such stock or other securities, including, in the case of any such transfer, the person or entity acquiring all or substantially all of the properties or assets of the Borrower.

(f) Exercise of Conversion Privilege. To exercise its conversion privilege, the holder of the Note shall surrender such Note being converted to the Borrower at its principal office, and shall give written notice to the Borrower at that office that such holder elects to convert such Note, or a portion thereof. The date when such written notice is received by the Borrower, together with the Note being converted, shall be the "Conversion Date." As promptly as practicable after the Conversion Date, the Borrower shall issue and shall deliver to the holder of the Note being converted, or on its written order, such certificate or certificates as it may request for the number of shares of Common Stock, as applicable, issuable upon the conversion of such Note in accordance with the provisions of this Agreement.

(g) Reservation of Common Stock. The Borrower shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the Note, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Note and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding, the Borrower shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose. (h) No Dilution or Impairment. The Borrower will not, by amendment of its Charter or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Note, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holders of shares of Common Stock issuable upon conversion of the Note against dilution or other impairment. Without limiting the generality of the foregoing, the Borrower (a) will not increase the par value of any shares of stock receivable on the conversion of the Note above the amount payable therefor on such conversion, (b) will take all such action as may be necessary or appropriate in order that the Borrower may validly and legally issue fully paid and nonassessable shares of stock on the conversion of all Note from time to time outstanding, (c) will not transfer all or substantially all of its properties and assets to any other person or entity, or consolidate with or merge into any other person or entity or permit any such person or entity to consolidate with or merge into the Borrower (if the Borrower is not the surviving person), unless such other person or entity shall expressly assume in writing and will be bound by all the terms of the Note.

6. EVENTS OF DEFAULT; REMEDIES. Upon the occurrence and during the continuance of an Event of Default (as defined on Schedule I hereto), (a) the Borrower shall have no further right to request the Loan hereunder, (b) the Loan shall bear interest at the Default Rate of Interest, as defined in the Note, (c) the Lender may by notice to Borrower accelerate the payment of the Loan and all other obligations of Borrower hereunder and demand payment thereof; and (d) Lender may proceed to enforce payment of any of the foregoing and shall have and may exercise any and all rights under the Uniform Commercial Code or which are afforded to Lender herein, in the Security Agreement and other collateral documents executed in connection herewith, or otherwise.

7. EXPENSES. Borrower agrees to pay Lender on demand any and all reasonable out-of-pocket costs and expenses of any nature (including without limitation reasonable attorneys' fees and disbursements) which may be incurred by Lender in connection with exercise of Lender's rights against the Borrower after an Event of Default; any exercise of Lender's right of acceleration; any enforcement, collection or other proceedings with respect to the Loan; or any bankruptcy, insolvency or other similar proceedings of the Borrower.

8. CONDITIONS PRECEDENT.

Borrower acknowledges and agrees that Lender will not make the Loan hereunder, nor will Lender entertain any request from Borrower for the Loan hereunder, unless and until all of the following conditions have been satisfied and remain satisfied as of the date of funding the Loan: (a) Representations and Warranties. Borrower's representations and warranties contained herein shall be correct and complete in all material respects; (b) Covenants. Borrower shall be in compliance in all material respects with all covenants and agreements contained herein;

(c) No Events of Default. There shall exist no Event of Default or any event which, with the passage of time or the giving of notice or both, would constitute an Event of Default; and

(d) Delivery of Documents. Borrower shall have delivered, or caused to be delivered, to Lender such documents, including without limitation the Note, the Security Agreement and UCC-1 financing statements naming Lender as secured party, duly executed by the Borrower, and in form and substance reasonably satisfactory to Lender, as Lender shall reasonable request in its sole discretion.

9. MISCELLANEOUS PROVISIONS.

(a) Notices. Unless otherwise specified herein, all other notices hereunder shall be in writing directed to the addresses shown on the first page of this Agreement. Written notices and communications shall be effective and shall be deemed received on the day when delivered by hand or by facsimile transmission; on the next business day, if by commercial overnight courier; and on the third business day, if by registered or certified mail, postage prepaid.

(b) No Waiver. No failure to exercise and no delay in exercising, on the part of Lender, any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right or remedy. Waiver by Lender of any right or remedy on any one occasion shall not be construed as a bar to or waiver thereof or of any other right or remedy on any future occasion. Lender's rights and remedies hereunder, under any agreement or instrument supplemental hereto or under any other agreement or instrument shall be cumulative, may be exercised singly or concurrently and are not exclusive of any rights or remedies provided by law.

(c) Assignment. This Agreement shall be binding upon and shall inure to the benefit of Borrower and Lender and their respective successors and assigns; PROVIDED THAT Borrower may not assign or transfer any rights or obligations hereunder without Lender's prior written consent.

(d) Governing Law; Jurisdiction. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts (other than its laws relating to conflicts of laws).

Executed as an instrument under seal on the date set forth above.

VASCO DATA SECURITY INTERNATIONAL, INC.

By: ______ Name: T. Kendall Hunt Title: CEO

LERNOUT & HAUSPIE SPEECH PRODUCTS N.V.

By: _____ Thomas Doherty Vice President Finance and Strategic Planning

EXHIBIT A

CONVERTIBLE NOTE

\$3,000,000.00

Boston, Massachusetts April 1, 1998

FOR VALUE RECEIVED, the undersigned VASCO DATA SECURITY INTERNATIONAL, INC., a Delaware corporation ("Maker"), hereby promises to pay to the order of LERNOUT & HAUSPIE SPEECH PRODUCTS N.V., a Belgian corporation, at its place of business at Sint-Krispijnstraat 7, 8900 Ieper, Belgium ("Lender"), the sum of THREE MILLION DOLLARS (\$3,000,000.00), or so much as may have been advanced to Maker as provided in that certain Loan Agreement (the "Loan Agreement") dated as of March 31, 1998 between Maker and Lender, together with interest on the unpaid principal amount from time to time outstanding prior to demand at a fixed rate per annum equal to one percent (1%) over the Prime Rate in effect as of the date hereof.

Prior to the occurrence of an Event of Default, as defined in the Loan Agreement, interest shall be payable quarterly on the first business day of each of July and October. All outstanding principal and interest shall be due and payable in full on January 4, 1999.

After the occurrence and during the continuance of an Event of Default, (a) principal outstanding hereunder shall bear interest at a fixed rate equal to the sum of the Prime Rate in effect as of the date hereof plus four percent (4%) per annum (the "Default Rate of Interest"), and (b) the Lender shall be entitled to accelerate all outstanding principal and interest due hereunder and demand immediate payment in full of the same.

Interest payable under this Note is subject to Belgian withholding tax, at a rate of 15% as of the date hereof. Each payment of interest hereunder shall be increased by an amount equal to one-half of the withholding tax obligation of the Lender with respect to such payment.

This Note is convertible at the option of the holder hereof into shares of Common Stock of the Maker in the manner set forth in the Loan Agreement.

Interest and fees shall be calculated on the basis of a 360-day year times the actual number of days elapsed. "Prime Rate," as used herein, shall mean for any day the highest "prime rate" published in The Wall Street Journal under the heading "Money Rates" on such day (or on the next day on which The Wall Street Journal is published). In no event shall interest payable hereunder exceed the highest rate permitted by applicable law. To the extent any interest received by Lender exceeds the maximum amount permitted, such payment shall be credited to principal, and any excess remaining after full payment of principal shall be refunded to Maker. This Note evidences borrowings under the Loan Agreement and is secured by and entitled to the benefits of the provisions of the Loan Agreement and any other instruments or documents executed in connection therewith. The principal of this Note is subject to prepayment in full or in part at any time without premium or penalty; provided, however, that Maker shall give Lender at least five (5) business days prior written notice of any prepayment to permit Lender to exercise its conversion rights as provided in the Loan Agreement prior to such repayment.

Maker and all guarantors and endorsers hereby waive presentment, demand, notice, protest, and all other demands and notices in connection with the delivery, acceptance, performance and enforcement of this Note, and assent to extensions of the time of payment or forbearance or other indulgence without notice. No delay or omission of Lender in exercising any right or remedy hereunder shall constitute a waiver of any such right or remedy. Acceptance by Lender of any payment after demand shall not be deemed a waiver of such demand. A waiver on one occasion shall not operate as a bar to or waiver of any such right or remedy on any future occasion.

Executed as an instrument under seal as of the date first above written.

WITNESS:

VASCO DATA SECURITY INTERNATIONAL, INC.

By: Name: T. Kendall Hunt Title: CEO

EXHIBIT B

SECURITY AGREEMENT

SECURITY AGREEMENT made by VASCO DATA SECURITY INTERNATIONAL, INC. (the "Debtor") in favor of LERNOUT & HAUSPIE SPEECH PRODUCTS N. V. (the "Secured Party"). In consideration of the agreement of Secured Party to extend credit or other financial accommodations to the Debtor, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Debtor hereby agrees for the benefit of Secured Party as follows:

1. Grant of Security Interest. As collateral security for the payment and performance when due of the Obligations (defined below), the Debtor hereby collaterally assigns, mortgages, and pledges to Secured Party, and hereby grants to Secured Party a security interest in, all of the Debtor's right, title and interest in, to and under the Collateral (defined below).

"Collateral" means all the Debtor's present and future right, title and interest in and to any of the following property, wherever located and whether now owned or hereafter acquired: All of the Debtor's tangible and intangible personal property, including without limitation, all inventory, equipment and other goods, all accounts receivable, notes, drafts, acceptances, instruments and documents, contract rights, chattel paper, general intangibles, deposit accounts, books and records, and all cash and non-cash proceeds of the foregoing in whatever form received, including without limitation insurance proceeds; provided, however, that Collateral shall not include patents or other intellectual property. Any of the foregoing terms which are specifically defined in the Uniform Commercial Code as in effect in the Commonwealth of Massachusetts shall have the meanings given therein.

"Obligations" means any and all payment and performance obligations of the Debtor to Secured Party, now existing or hereafter arising, direct or indirect, absolute or contingent, due or to become due, liquidated or unliquidated, including without limitation, Debtor's obligations to Secured Party under that certain Loan Agreement dated as of the date hereof (the "Loan Agreement"), and that certain \$3,000,000 Convertible Note executed in connection therewith.

2. Secured Party's Rights and Obligations. Debtor shall remain liable under all accounts receivable, instruments and documents and general intangibles. Secured Party shall not have any obligation or liability under any accounts receivable, instruments and documents or general intangibles by reason of this Security Agreement nor shall Secured Party be required to perform the Debtor's obligations pursuant thereto. At any time, Secured Party shall have the right to verify accounts receivable constituting a portion of the Collateral and Debtor agrees to cooperate with Secured Party in arranging for such verification. After an Event of Default, Secured Party may notify account debtors that the accounts receivable have been assigned to Secured Party and that payments shall be made directly to Secured Party. At the request of Secured Party at any time after an Event of Default, the Debtor will so notify such account debtors. Notwithstanding any such action, Secured Party shall have no obligation to inquire as to the sufficiency of any payment received by it or to take any action to collect or enforce the payment of any account receivable.

3. Further Assurances. Debtor will join with Secured Party in executing such UCC financing statements as Secured Party may request and will pay the cost of filing the same in all public office where filing is deemed necessary or desirable by Secured Party. At Secured Party's request from time to time, the Debtor will execute and deliver any and all such further instruments and documents and take such further actions as Secured Party may reasonably deem desirable in obtaining the full benefits of this Security Agreement. The Debtor also hereby authorizes Secured Party to execute on behalf of the Debtor and file UCC financing or continuation statements with appropriate jurisdictions in order to perfect the security interests granted herein.

4. Events of Default. The occurrence of any Event of Default as defined in the Loan Agreement shall constitute an Event of Default hereunder.

5. Remedies Upon Default. If a Event of Default occurs, Secured Party may declare all Obligations secured hereby immediately due and payable and shall have all of the rights and remedies of a secured party under the Uniform Commercial Code as now in effect in the Commonwealth of Massachusetts or under other applicable law. Without limitation, Secured Party may notify Debtor's account or contract debtors (or other obligors whose obligations to Debtor secure this agreement) of Secured Party's security interest and that such account or contract debtors are to make payments directly to Secured Party. Secured Party may send this notice in Debtor's name or in Secured Party's name, and at Secured Party's request Debtor will join in Secured Party's notice, provide written confirmation of Secured Party's security interest and request that payment be sent to Secured Party's security interest and request that payment be sent to Secured Party. Secured Party may enforce this obligation by specific performance. Secured Party may collect all amounts due on the accounts and accounts receivable. Upon and after notification by Secured Party to Debtor, Debtor shall hold any proceeds and collections of any of the collateral in trust for Secured Party and shall not commingle such proceeds or collections with any other of Debtor's funds, and Debtor shall deliver all such proceeds to Secured Party immediately upon Debtor's receipt thereof in the identical form Party immediately upon Debtor's receipt thereof in the identical form received and duly endorsed or assigned to Secured Party. At the request of Secured Party, the Debtor shall cause the Collateral, or such portion of the Collateral as Secured Party may direct, to be assembled for Secured Party at such location (including, without limitation, Debtor's business address) as Secured Party may request. Secured Party will give to the Debtor reasonable notice of the time and place of any public sale of Collateral or of the time after which any private sale or other intended disposition

thereof is to be made. Such requirement of reasonable notice shall be met if such notice is mailed postage prepaid to the address of the Debtor set forth in this Agreement at least ten (10) days before the time of the proposed sale or disposition. Any such sale may take place from Debtor's location or such other location as Secured Party may designate. Debtor shall remain liable for any deficiency in payment of the Obligations after any such sale.

Debtor hereby irrevocably appoints Secured Party as its true and lawful attorney-in-fact with full power of substitution to take such actions in the name of the Debtor or Secured Party to carry out the terms of this Agreement and to protect, enforce, preserve or perfect Secured Party's rights hereunder. Such power of attorney is irrevocable and shall be deemed to be coupled with an interest.

6. Miscellaneous. Expenses of enforcing Secured Party's rights hereunder including, but not limited to, preparation for sale, selling or the like and Secured Party's reasonable attorneys' fees and other expenses shall be payable by Debtor and shall be secured hereby. None of the terms or provisions of this Agreement may be waived, altered, modified or amended except by an instrument in writing, duly executed by Secured Party and Debtor. Secured Party's rights and remedies hereunder or under any other agreement or instrument shall be cumulative, may be exercised singly or concurrently and are not exclusive of any other rights or remedies provided by law. This Agreement shall be binding on and inure to the benefit of the respective successors and assigns of the Debtor and Secured Party. This Agreement shall be governed by the laws governing the Loan Agreement.

EXECUTED an instrument under seal as of March 31, 1998.

VASCO DATA SECURITY INTERNATIONAL, INC.

Bv:

Name: T. Kendall Hunt Title: CEO

UCC financing statements to be filed in:

EXHIBIT C

[PROSPECTUS]

SCHEDULE I - DEFINITIONS

"Event of Default" means any one or more of the following events:

(a) failure by Borrower to pay any principal, interest or other amount due hereunder or on account of the Loan, within five (5) days of the date when due;
 (b) failure by Dependent of the second second

(b) failure by Borrower to perform or discharge, observe or comply with any of its covenants or agreements set forth herein or in the Note or Security Agreement, (or any of the other security documents delivered in connection herewith);

(c) any representation, warranty of Borrower to Lender set forth herein is found to have been false or misleading in any material respect as of the time when made;

 (d) Borrower's liquidation, termination, dissolution or ceasing to carry on any substantial part of its current business;

(e) a change in control with respect to Borrower or consummation by Borrower of a reorganization, merger or consolidation with any other person or entity, transfer of all or substantially all of its assets or properties or consummation of any other plan or arrangement involving a similar extraordinary corporate transaction.

(f) commencement by Borrower of a voluntary proceeding seeking relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law, or seeking appointment of a trustee, receiver, liquidator or other similar official for it or any substantial part of its assets; or its consent to any of the foregoing in an involuntary proceeding against it; or Borrower shall generally not be paying its debts as they become due or admit in writing its inability to do so; or an assignment for the benefit of, or the offering to or entering into by Borrower of any composition, extension, reorganization or other agreement or arrangement with, its creditors; or

(g) commencement of an involuntary proceeding against Borrower seeking relief with respect to it or its debts under any bankruptcy, insolvency or other similar law, or seeking appointment of a trustee, receiver, liquidator or other similar official for it or any substantial part of its assets, which proceeding is not dismissed or stayed within sixty (60) days.

"Note" means the note executed and delivered by Borrower to Lender in the form of Exhibit A hereto, made to evidence the Loan.

"Security Agreement' means the security agreement executed and delivered by Borrower to Lender in the form of Exhibit B hereto, entered into in connection with the Loan.

"Loan" has the meaning given in Section 2(a) hereof.

\$3,000,000.00

Boston, Massachusetts April 1, 1998

FOR VALUE RECEIVED, the undersigned VASCO DATA SECURITY INTERNATIONAL, INC., a Delaware corporation ("Maker"), hereby promises to pay to the order of LERNOUT & HAUSPIE SPEECH PRODUCTS N.V., a Belgian corporation, at its place of business at Sint-Krispijnstraat 7, 8900 Ieper, Belgium ("Lender"), the sum of THREE MILLION DOLLARS (\$3,000,000.00), or so much as may have been advanced to Maker as provided in that certain Loan Agreement (the "Loan Agreement") dated as of March 31, 1998 between Maker and Lender, together with interest on the unpaid principal amount from time to time outstanding prior to demand at a fixed rate per annum equal to one percent (1%) over the Prime Rate in effect as of the date hereof.

Prior to the occurrence of an Event of Default, as defined in the Loan Agreement, interest shall be payable quarterly on the first business day of each of July and October. All outstanding principal and interest shall be due and payable in full on January 4, 1999.

After the occurrence and during the continuance of an Event of Default, (a) principal outstanding hereunder shall bear interest at a fixed rate equal to the sum of the Prime Rate in effect as of the date hereof plus four percent (4%) per annum (the "Default Rate of Interest"), and (b) the Lender shall be entitled to accelerate all outstanding principal and interest due hereunder and demand immediate payment in full of the same.

Interest payable under this Note is subject to Belgian withholding tax, at a rate of 15% as of the date hereof. Each payment of interest hereunder shall be increased by an amount equal to one-half of the withholding tax obligation of the Lender with respect to such payment.

This Note is convertible at the option of the holder hereof into shares of Common Stock of the Maker in the manner set forth in the Loan Agreement.

Interest and fees shall be calculated on the basis of a 360-day year times the actual number of days elapsed. "Prime Rate," as used herein, shall mean for any day the highest "prime rate" published in The Wall Street Journal under the heading "Money Rates" on such day (or on the next day on which The Wall Street Journal is published).

In no event shall interest payable hereunder exceed the highest rate permitted by applicable law. To the extent any interest received by Lender exceeds the maximum amount permitted, such payment shall be credited to principal, and any excess remaining after full payment of principal shall be refunded to Maker. This Note evidences borrowings under the Loan Agreement and is secured by and entitled to the benefits of the provisions of the Loan Agreement and any other instruments or documents executed in connection therewith. The principal of this Note is subject to prepayment in full or in part at any time without premium or penalty; provided, however, that Maker shall give Lender at least five (5) business days prior written notice of any prepayment to permit Lender to exercise its conversion rights as provided in the Loan Agreement prior to such repayment.

Maker and all guarantors and endorsers hereby waive presentment, demand, notice, protest, and all other demands and notices in connection with the delivery, acceptance, performance and enforcement of this Note, and assent to extensions of the time of payment or forbearance or other indulgence without notice. No delay or omission of Lender in exercising any right or remedy hereunder shall constitute a waiver of any such right or remedy. Acceptance by Lender of any payment after demand shall not be deemed a waiver of such demand. A waiver on one occasion shall not operate as a bar to or waiver of any such right or remedy on any future occasion.

Executed as an instrument under seal as of the date first above written.

WITNESS:

VASCO DATA SECURITY INTERNATIONAL, INC.

Name: T. Kendall Hunt Title: CEO

Subsidiaries of the Registrant

Entity	Jurisdiction	Percentage Ownership
VASCO Corp.	Delaware	97.7%
VASCO Data Security Europe SA	Belgium	100%*
VASCO Data Security NV/SA	Belgium	100%*
VASCO Data Security, Inc.	Delaware	100%

 * All shares are held by the parent corporation, except that shares representing less than 1% are held by T. Kendall Hunt.