ALVARION LTD
Form 20-F
June 29, 2004

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

|_| REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g)
OF THE SECURITIES EXCHANGE ACT OF 1934

OR

|X| ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2003

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 0-30628

Alvarion Ltd.
(Exact name of Registrant as specified in its charter)

Israel
(Jurisdiction of incorporation or organization)

21A HaBarzel Street, Tel Aviv 69710, Israel
(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Name of each exchange on which registered
None	None

Securities registered or to be registered pursuant to Section 12(g) of the Act.

Ordinary Shares, NIS 0.01 par value per share
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

56,545,385 Ordinary Shares, NIS 0.01 par value per share

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.

|X| Yes |_| No

Indicate by check mark which financial statement item the registrant has elected to follow.

|_| Item 17 |X| Item 18

INTRODUCTION

We are a leading provider of wireless broadband connectivity infrastructure. Our solutions are used by telecom carriers and service providers worldwide. Our products are used to provide broadband data and voice services, for subscribers in the "last mile" of connectivity, for feeding cellular networks and for private networks. With our comprehensive product offerings, we provide a broad range of integrated wireless solutions, addressing different markets and frequency bands, designed to address the various business models of carriers and service providers. Our products operate in licensed and license-free bands ranging from 2.4 GHz to 28 GHz and comply with industry standards.

We were incorporated in September 1992 under the laws of the State of Israel. On August 1, 2001, we merged with Floware Wireless Systems Ltd., a company incorporated under the laws of the State of Israel, referred to as Floware. As a result of the merger we continued as the surviving company and Floware's separate existence ceased. Upon the closing of the merger, we changed our name from BreezeCOM Ltd. to Alvarion Ltd. In April 2003, we completed the acquisition of most of the assets and assumption of certain liabilities of InnoWave ECI Wireless Systems Ltd., a wholly-owned subsidiary of ECI Telecom Ltd., or InnoWave.

Except for historical information contained herein, the statements contained in this annual report are forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995 with respect to our business, financial condition and results of operations. Actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including all or any of the risks discussed in "Item 3--Key Information--Risk Factors" and elsewhere in this annual report.

We urge you to consider that statements which use the terms "believe," "expect," "plan," "intend," "estimate," "anticipate," "project" and similar expressions in the affirmative and the negative are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on current assumptions, expectations, estimates and projections and are subject to risks and uncertainties. Except as required by applicable law, including the securities laws of the United States, we do not undertake any obligation nor intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

As used in this annual report, the terms "we," "us," "our," "our company," and "Alvarion" mean Alvarion Ltd., and its subsidiaries, unless otherwise indicated. "Alvarion," "Alvarion & Design," "We're on your wavelength," "BreezeACCESS," "BreezeCOM," "BreezePHONE," "BreezeNET," "BreezEXCHANGE," "BreezeLINK," "WALKair," "WALKnet," "BreezeGATE," "BreezeIP," "BreezeLAN," "BreezeWEB," "BreezeCONFIG," "BreezeWIZARD," "BreezeSECURE," "BreezeVIEW," "BreezeMANAGE," "Alvari," "AlvariX," "AlvariSTAR," "AlvariBASE," "BreezeCARE," "BreezeACCESS II," "BreezeACCESS II CX, " "BreezeACCESS XL," "BreezeACCESS MMDS," "BreezeACCESS OFDM," "BreezeACCESS LB," "BreezeACCESS TM," "BreezeACCESS VL," "BreezeACCESS V," "BreezeACCESS GO," "WALKair 1000," "WALKair 3000," "BreezeNET PRO.11," "BreezeNET DS.11," "BreezeNET DS.11b", "BreezeNET DS.5800", "EasyBridge", "BreezeMAX", "eMGW and "MGW" are trademarks of Alvarion. All other trademarks and tradenames appearing in this annual report are owned by their respective holders.

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PART I

ITEM 1 IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2 OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3 KEY INFORMATION

A. SELECTED FINANCIAL DATA

We have derived the following selected consolidated financial data presented below as of December 31, 2002 and 2003 and for each of the years ended December 31, 2001, 2002 and 2003 from our audited consolidated financial statements and related notes included in this annual report. The consolidated financial data for the year ended December 31, 2001 and thereafter include the results of the former Floware business from August 1, 2001, the effective date of the merger of Floware with and into us. The consolidated financial data for the year ended December 31, 2003 include the results of activities of the assets and assumed liabilities of InnoWave which were acquired on April 1, 2003. We have derived the selected consolidated financial data as of December 31, 1999, 2000 and 2001 and for each of the years ended December 31, 1999 and 2000 from our audited consolidated financial statements and related notes not included in this annual report. We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. You should read the selected consolidated financial data together with the section of this annual report entitled "Item 5--Operating and Financial Review and Prospects" and our consolidated financial statements and related notes included elsewhere in this annual report.

	1999	2000	2001	2002
Statement of Operations Data:				
Sales	$ 44,752	$ 101,460	$ 98,968	$ 88,849
Cost of sales	23,528	55,608	59,484	55,120
Write-off of excess inventory and provision for inventory purchase commitments	--	--	53,881	250
Gross profit (loss)	21,224	45,852	(14,397)	33,479
Operating costs and expenses:				
Research and development, gross	8,958	16,818	27,078	27,597
less grants	2,078	4,345	5,982	3,520
Research and development, net	6,880	12,473	21,096	24,077
Selling and marketing	14,692	26,226	30,258	26,570
General and administrative	2,289	4,132	6,226	6,018
Merger and acquisition related expenses	--	--	2,841	--
Amortization of intangible assets	--	--	1,200	2,400
Amortization of deferred stock compensation	--	18	726	580
In-process research and				

development write-off	--	--	26,300	--
Merger expenses	--	--	2,841	--
Restructuring	--	--	5,437	1,102
One-time expense related to a settlement of an OCS program	--	--	6,535	--
Total operating expenses	23,861	42,849	100,619	60,747
Operating income (loss)	(2,637)	3,003	(115,016)	(27,268)
Financial income (expenses),	(527)	7,031	8,540	6,587
Other expenses	(470)	--	(3,535)	--
Net Income (loss)	$ (3,634)	$ 10,034	$(110,01	$ (20,681)
Basic net earnings (loss) per share	$ (0.32	$ 0.40	$ (2.80)	$ (0.38)
Weighted average number of shares used in computing basic net earnings (loss) per share	11,232	24,938	39,298	53,941
Diluted net earnings (loss) per share	$ (0.32	$ 0.33	$ (2.80)	$ (0.38)
Weighted average number of shares used in computing diluted net earnings (loss) per share	11,232	30,807	39,298	53,941

	1999	2000	2001	2002	2003
Consolidated Balance Sheet Data:					
Working capital.....	$22,418	$159,793	$167,371	$ 74,237	$ 90,359
Total assets.....	36,620	252,837	307,595	272,075	284,957
Shareholders' equity.....	$23,899	$212,495	$254,251	$227,830	$ 220,202

B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

C REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

D RISK FACTORS

Our business, financial condition and results of operations could be seriously harmed due to any of the following risks, among others. If we do not successfully address the risks to which we are subject, we could experience a material adverse affect on our business, results of operations and financial condition and our share price may decline. We cannot assure you that we will successfully address any of these risks.

Risks Related to us, our Business and our Industry

Adverse conditions in the telecommunications industry and in the telecommunications equipment market may decrease demand for our products and may harm our business, financial condition and results of operations.

Our systems are used by telecom carriers and service providers. Many carriers and service providers using wireless broadband, or Wireless Broadband, are emerging companies with unproven business models. The slowdown in the telecommunications industry from 2001 through the beginning of 2003 curtailed the ability of existing and prospective carriers and service providers to finance purchases of products such as ours. During 2003, we perceived an improvement in the general market for telecommunications equipment. However, we cannot predict the duration or extent of any recovery in this market or the impact it may have on our revenues or results of operations.

In addition, the number of carriers and service providers who are our potential customers is small and is expected to remain small because of the limited number of licenses granted in each country and the substantial capital requirements involved in establishing networks.

We have a history of quarterly fluctuations in our results of operations and expect these fluctuations to continue. This may cause volatility in the market price of our ordinary shares.

We have experienced, and may continue to experience, significant fluctuations in our quarterly results of operations. Any fluctuations may cause our results of operations to fall below the expectations of securities analysts and investors. This would likely affect the market price of our ordinary shares.

Factors that may contribute to fluctuations in our quarterly results of operations include:

- the uneven pace of spectrum licensing to wireless carriers;
- adoption of new standards in our industry;
- the size and timing of orders, such as occurred in the fourth quarter of 2003 and in the first quarter of 2004, when we received a large order from one of our customers, and the timing of large scale projects;
- customer deferral of orders in anticipation of new products, product features or price reductions;
- the timing of our product introductions or enhancements or those of our competitors or of providers of complementary products;
- the purchasing patterns of our customers and end-users, as well as the budget cycles of customers for our products;
- seasonality, including the relatively low level of general business activity at the beginning of each fiscal year and during the summer months in Europe and the winter months in South America and in the United States;
- disruption in, or changes in the quality of, our sources of supply;

- the mix of product sales generally, including the mix of sales between base stations and terminal stations and between product families;
- the gap between the time carriers purchase base stations for network infrastructure deployment and the time they purchase terminal stations for connection of subscribers to the network, resulting primarily from the extensive marketing and organizational efforts that carriers are required to make to develop their subscriber base following the deployment of the network infrastructure;
- one-time charges;
- mergers or acquisitions;
- the size and timing of approval of grants from the Government of Israel;
- the geopolitical situation; and
- fluctuations in the exchange rate of the NIS against the dollar.

Our customers ordinarily require the delivery of products promptly after their orders are accepted. Our business usually does not have a significant backlog of accepted orders. Consequently, revenues in any quarter depend on orders received and accepted in that quarter. The deferral of the placing and acceptance of any large order from one quarter to another could materially adversely affect our results of

operations for the previous quarter. If revenues from our business in any quarter remain level or decline in comparison to any previous quarter, our results of operations could be harmed.

In addition, our operating expenses may increase significantly. If revenues in any quarter do not increase correspondingly or if we do not reduce our expenses in a timely manner in response to level or declining revenues, our results of operations for that quarter would be materially adversely affected. Because of the variations that we have experienced in our quarterly results of operations, we do not believe quarter-to-quarter comparisons of our results of operations are necessarily meaningful and you should not rely on results of operations in any particular quarter as an indication of future performance.

We have a history of losses and we may continue to incur losses in the future.

Except for the year ended December 31, 2000 when we had operating income and net income of approximately $3.0 million and $10.0 million, respectively, we have incurred operating and net losses in every fiscal year. For the year ended 2003, our operating loss and net loss were approximately $15.9 million and $11.8 million, respectively. For the year ended 2002, our operating loss and net loss were approximately $27.3 million and $20.7 million, respectively. For the year ended 2001, our operating loss and net loss were approximately $115.0 million and $110.0 million, respectively. Net loss for 2001 included non recurring expenses, such as write-off of excess inventory and provision for inventory purchase commitments of $53.9 million, in-process research and development write-off of $26.3 million, merger expenses of $2.8 million, restructuring costs of $ 5.4 million and one-time expense of $6.5 million related to a settlement of an OCS program. Although we achieved a net profit in the fourth quarter of 2003

of $81,000 and had operating income of $504,000 and a net profit of $1.4 million in the first quarter of 2004, we may incur operating and net losses again in the future. Losses or a decrease in our net income could have a material adverse affect on our business, financial condition and results of operations and the value and market price of our ordinary shares.

Intense competition in the markets for our products may have an adverse affect on our sales and profitability.

Many companies compete with us in the Wireless Broadband equipment market in which we sell our products. We expect that competition will increase in the future, both with respect to products that we currently offer and products that we are developing. In addition, some, or all, of the systems integrators and other strategic partners to which we sell our Wireless Broadband products could develop the capability to manufacture systems similar to our Wireless Broadband products independently. We expect our competitors to continue to improve independently the performance of their current products and to introduce new products or new technologies that may supplant or provide lower cost alternatives to our products or products with better performances. We expect that we will also face competition from alternative wireline and wireless technologies including copper wires, fiber-optic cable, digital subscriber lines, or DSL, cable modems, satellite and other broadband access systems.

Some of our existing and potential competitors have substantially greater resources including financial, technological, manufacturing and marketing and distribution capabilities, and enjoy greater market recognition than we do. We may not be able to differentiate our products from those of our competitors, successfully develop or introduce new products that are less costly or offer better performance than those of our competitors or offer our customers payment or other commercial terms as favorable as those offered by our competitors. In addition, we may not be able to offer our products as part of integrated systems or solutions to the same extent as our competitors. A failure to accomplish one

or more of these objectives could materially adversely affect our sales and profitability, harming our financial condition and results of operation.

Standardization and increased competition may have an adverse effect on our gross margins.

Standardization of product features may also increase the number of competitive product offerings. Furthermore, our competitors may also attempt to influence the adoption of standards that are not compatible with our products. Standardization also results in lower average selling prices. Increased competition, direct and indirect, has resulted in, and is likely to continue to result in, reductions of average selling prices, shorter product life cycles, reduced gross margins, longer sales cycles and loss of market share and, consequently, could adversely affect our sales and profitability.

If we do not increase our share of the Wireless Broadband equipment market, our business will suffer.

To increase our share of the Wireless Broadband market, we must:

- sustain our attained technological position in designing, developing, and manufacturing Wireless Broadband products;
- develop and cultivate additional sales channels, including original equipment manufacturer, or OEM, agreements or other

- strategic arrangements with leading manufacturers of access equipment to market our Wireless Broadband products to prospective customers, such as local exchange carriers, cellular operators, Internet and application service providers and local telephone companies; and

- effectively establish and support relationships with end-users, including local exchange carriers, Internet and application service providers, public fixed or mobile telephone service providers and private network operators.

Our efforts in these markets may not succeed. In addition, we may have to provide extended payment terms to attract customers for our products. The Wireless Broadband equipment market and any future markets that we may attempt to penetrate may not become substantial commercial markets or may not evolve in a manner that will enable our products to achieve market acceptance.

Rapid technological change may have an adverse affect on the market acceptance for our products.

The markets for our products and the technologies utilized in the industry in which we operate evolve rapidly. We rely on key technologies, including wireless LAN, wireless packet data, orthogonal frequency division multiplexing, or OFDM, time division multiplexing, modem and radio technologies and other technologies, including the recently developed WiMAX technology. These technologies may be replaced with alternative technologies or may otherwise not achieve the wide acceptance that we are seeking. In particular, there is substantial risk that the Wireless Broadband technologies underlying our BreezeMAX, BreezeACCESS and WALKair products may not achieve market acceptance for use in access applications. Market changes could render our products and technologies obsolete or subject them to intense competition by alternative products or technologies or by improvements in existing products or technologies. For example, the Wireless Broadband equipment market may stop growing as a result of the deployment of alternative technologies, such as DSL, cable modem, fiber optic, coaxial cable, satellite

systems, third generation cellular systems or otherwise. Also, new or enhanced products developed by other companies may be technologically superior to our products and render our products obsolete.

The success of our Wireless Broadband technology depends on the following factors, among others:

- acceptance of new and innovative technologies;

- acceptance of standards for Wireless Broadband products;

- its capacity to handle growing demands for faster transmission of increasing amounts of data and voice;

- its cost-effectiveness and performance compared to other broadband technologies;

- its reliability and security;

- its suitability for a sufficient number of geographic regions;

- the availability of sufficient frequencies and site locations for carriers to deploy and install products at commercially

reasonable rates; and

- safety and environmental concerns regarding Wireless Broadband transmissions.

Existing and potential industry standards may have a negative impact on our business.

We have developed and continue to develop our products with a view to compliance with existing standards and anticipated future standards. We expended, and intend to continue to expend, substantial resources in developing products and product features that are designed to conform to the IEEE 802.11, 802.11a and 802.11b wireless LAN standards of the Institute of Electrical and Electronics Engineers, Inc., as well as to other industry standards, some of which are still in the process of development. These include the IEEE 802.16a Broadband Wireless Access Standard, the International Telecommunications Union -- Telecommunications Standardization, H.323 Voice over IP and the European Telecommunications Standards Institute Broadband Radio Access Network standard (ETSIBRAN). We also participate in the WiMAX Forum, a non-profit organization whose members are working to promote adoption of the IEEE 802.16a standard and to certify the interoperability of compliant equipment.

Intel Corporation has announced its intention to develop IEEE 802.16a-compliant silicon. If Intel Corporation decides to cease development of IEEE 802.16a-compliant silicon, the acceptance of this standard may be impeded and we may be forced to make significant changes in our development plans. Our future success depends in part on broad acceptance of these standards by the wireless LAN and Wireless Broadband markets. Our focus on anticipated future standards, including the IEEE 802.16a standard, may lead to delays in introducing products designed for current standards. In addition, although we developed our products with a view to compliance with existing standards and anticipated future standards, we may not be able to introduce on a timely basis products that comply with future industry standards.

Our strategy of seeking to anticipate and comply with industry standards is subject to the following additional risks, among others:

- the standards ultimately adopted by the industry may vary from those anticipated by us, causing our products (which were designed to meet anticipated standards) to fail to comply with established standards;

- even if our products do comply with established standards, these standards are not mandatory and consumers may prefer to purchase products that do not comply with them or that comply with new or competing standards; and

- product standardization may have the effect of lowering barriers to entry in the markets in which we seek to sell our products, by diminishing product differentiation and causing competition to be based upon criteria such as the relative size and marketing skills of competitors. We may have greater disadvantages in competing on the basis of these criteria than on the basis of product differentiation.

These risks, among others, may harm our sales and, consequently, our results of operations.

We depend on key personnel.

Our future success depends, in part, on the continued service of key personnel. If one or more of our key technical, sales or management personnel terminates his or her employment, our business and results of operations could be harmed. Our employees are employed "at will." This means that our employees are not obligated to remain employed by us for any specific period.

Under the terms of our merger transaction with Floware and the terms of our agreement with InnoWave, we are liable for Floware's pre-merger liabilities and certain liabilities of InnoWave.

The merger of Floware with and into Alvarion, with Alvarion as the surviving entity, resulted in our assuming all of the liabilities of Floware existing at the time of the merger. In addition, as part of our acquisition on April 1, 2003 of most of the assets of InnoWave, we assumed certain of InnoWave's liabilities. If liability claims against Floware or InnoWave with respect to our assumed obligations are successfully asserted, we would have to assume these liabilities. In addition, in connection with the merger with Floware, we agreed to indemnify the former Floware directors against certain liability claims for a period of seven years following the effective time of the merger (for which purpose we hold an insurance policy). These liabilities and indemnification obligations could have an adverse affect on us.

We may not successfully integrate the business operations of InnoWave. Our failure to do so might harm our results of operations and share price.

In April 2003, we completed the acquisition of most of the assets and assumed liabilities of InnoWave and hired 150 former employees of InnoWave. The challenges of integrating the business operations of the companies include demonstrating to our customers that the acquisition will not result in an adverse change in business focus and persuading our personnel that the companies' respective business cultures are compatible. To successfully integrate both companies' operations, we need to retain management, key employees and business partners of both companies. If we are unable to effectively complete the integration of the two companies' operations, technologies and personnel in a timely and efficient manner, we will not realize the benefits we expect from the acquisition and our business, financial conditions and results of operations may be materially adversely affected.

Our failure to manage growth effectively could impair our business, financial condition and results of operations.

Our rapid growth, including our merger with Floware in August 2001 and the acquisition of most of the assets and assumed liabilities of InnoWave in April 2003, has significantly strained our management, operational and financial resources. Any future growth including mergers and acquisitions may increase the strain on our management, operational and financial resources. If we do not succeed in managing future growth effectively, we may not be able to meet the demand, if any, for our products and we may lose sales or customers, harming our business, financial condition and results of operations.

We may pursue mergers and acquisitions that present risks and may not be successful.

In the future, we may continue to pursue acquisitions or enter into merger transactions to enhance our technology and our leadership in the Wireless Broadband market and diversify our product and service offerings and customer

base or for other strategic purposes. We have a limited history of pursuing and consummating mergers and acquisitions and we cannot be certain that any future mergers and acquisitions will be successful.

Acquiring businesses and companies may require us to expend significant or greater than expected funding. We may be unable to raise the needed funding and we may be required to divert funds from other intended uses. Either of these circumstances could have a material adverse affect on our business, financial condition and results of operations.

Terrorist attacks, or the threat of such attacks, may negatively impact the global economy which may materially adversely affect our business, financial condition and results of operation and may cause our share price to decline.

The financial, political, economic and other uncertainties following terrorist attacks throughout the world have led to a worsening of the global economy. As a result, many of our customers and potential customers have become much more cautious in setting their capital expenditure budgets, thereby restricting their telecommunications procurement to well-defined current needs. Uncertainties related to the threat of terrorism have had a negative effect on global economy, causing businesses to continue slowing spending on telecommunications products and services and further lengthen already long sales cycles. Any escalation of these threats or similar future events may disrupt our operations or those of our customers, distributors and suppliers, which could adversely affect our business, financial condition and results of operations.

Our Wireless Broadband business depends in part on original equipment manufacturers and systems integrators.

The success of the sales of our Wireless Broadband products currently depends in part on existing relationships with OEMs or other system integrators. A significant portion of our WALKair system is sold to and through telecommunications systems integrators for integration into their systems, rather than directly to carriers. The sale of our Wireless Broadband products depends in part on the OEMs' and systems integrators' active marketing and sales efforts as well as the quality of their integration efforts and post-sales support. Sales through the OEM system integrator channels expose this business to a number of risks, each of which could result in a significant reduction in the sales of our Wireless Broadband

products. We face the risk of termination of these relationships and the promotion of competing products or emphasis on alternative technologies by these OEMS and systems integrators. In addition, our efforts to increase sales may suffer from the lack of visibility of the BreezeACCESS and WALKair names resulting from OEMs' and systems integrators' integration of these products into more comprehensive systems. If any of these risks materializes, we will need to develop alternative methods of marketing these products. Until we do so, sales of our Wireless Broadband products may decline.

Our business is dependent upon the success of distributors who are under no obligation to purchase our products.

A significant portion of our revenues is derived from sales to independent distributors. These distributors then resell the products to others, who further resell those products to end-users. The three largest distributors of our products accounted for a total of approximately 13.7% of our sales in 2001, 20.9% of our sales in 2002 and 13.1% of our sales in 2003. If we terminate or lose any of these distributors, we may not be successful in replacing them on a timely basis, or at all. Any changes in the distribution and sales channels of

our products, particularly the loss of a major distributor or our inability to establish effective distribution and sales channels for new products will impact our ability to sell our products and result in a loss of revenues. We are highly dependent upon the acceptance of our products by our distributors and their active marketing and sales efforts. In some cases, arrangements with our distributors do not prevent them from selling competitive products and those arrangements do not contain minimum sales or marketing performance requirements. These distributors may not give a high priority to marketing and supporting our products. Changes in the financial condition, business or marketing strategies of these distributors could have a material adverse effect on our results of operations. Any of these changes could occur suddenly and rapidly.

We are also dependent upon the success of our direct sales efforts.

Direct sales accounted for a total of approximately 28.0% of our sales in 2001, 14.5% of our sales in 2002 and 28.4% of our sales in 2003. Direct sales customers are not under any obligation to purchase our products. Some of these customers do not have long business histories and have encountered, and may continue to encounter, financial difficulty, including difficulty in obtaining credit to purchase our products. These customers typically purchase our products on a project-by-project basis, so that continuity of purchases by these customers is not assured. If we are unable to effectively continue our direct sales efforts of our products, our results of operations could be materially adversely affected. Any such change could occur suddenly and rapidly.

If we lose large customers we may not succeed in replacing them.

In 2003, 13.9% of our sales were to a South American operator. This customer has made additional orders in 2004. In 2002, one of our customers was responsible for 11.4% of our 2002 sales and another was responsible for 10.3% of our sales. If we lose these large customers, we may not be successful in replacing them on a timely basis, or at all, and our revenues may be affected.

We could be subject to warranty claims and product recalls, which could be very expensive and harm our financial condition.

Products like ours sometimes contain undetected errors. These errors can cause delays in product introductions or require design modifications. In addition, we are dependent on unaffiliated suppliers for key components incorporated into our products. Defects in systems in which our products are deployed, whether resulting from faults in our products or products supplied by others, from faulty installation or from any other cause, may result in customer dissatisfaction. We are continually marketing several new products. The risk of errors in these new products, as in any new product, may be greater than the risk of errors in established products. The warranties for our products permit customers to return for repair, within a period ranging from 12 to 36 months of purchase, any defective products. Any failure of a system in which our products are deployed (whether or not these products are the cause), any product recall and any associated negative publicity could result in the loss of, or delay in, market acceptance of our products and harm our business, financial condition and results of operations.

We depend on a limited number of manufacturing subcontractors with limited manufacturing capacity, and are exposed to the risk that these manufacturers may be unable to fill our orders on a timely basis and at the quality specifications that we require. As a result, we may not meet our customers' demands, harming

our business and results of operations.

We currently depend on a limited number of contract manufacturers with limited manufacturing capacity to manufacture our products. The assembly of certain of our finished products, the manufacture of custom printed circuit boards utilized in electronic subassemblies and related services are also performed by these independent subcontractors. In addition, we rely on third-party "turn-key" manufacturers to manufacture certain sub-systems for our products.

Reliance on third party manufacturers exposes us to significant risks, including risks resulting from:

- potential lack of manufacturing capacity;
- limited control over delivery schedules;
- quality assurance and control;
- manufacturing yields and production costs;
- voluntary or involuntary termination of their relationship with us;
- difficulty in, and timeliness of, substituting any of our contract manufacturers, which could take as long as six months or more;
- the economic and political conditions in their environment; and
- their financial strength.

If the operations of our contract manufacturers are halted, even temporarily, or if they are unable to operate at full capacity for an extended period of time, we may experience business interruption, increased costs, loss of goodwill and loss of customers.

In addition, because we outsource the manufacture of several of our products, we are required to place manufacturing orders well in advance of the time when we expect to sell these products. In the event that we order the manufacture of a greater or lesser amount of these products than we will ultimately require, we are generally obligated to purchase the surplus products or to forego or delay the sale or delivery of the products that we did not order in advance. In either case, our business and results of operations may be adversely affected. Any of these risks could result in manufacturing delays or increases in manufacturing costs and expenses. For example, in 2003 and 2001 we recorded an allowance for irrevocable inventory purchase commitments in our financial statements in an aggregate amount of approximately $1.3 million and $8.6 million , respectively as a result of over-estimation of our sales. If we experience manufacturing delays, we could lose orders for our products and, as a result, lose customers. There may be an adverse affect on our profitability and consequently on our results of operations, if we incur increased costs.

We must be able to manage expenses and inventory risks associated with meeting the demand of our customers.

To ensure that we are able to meet customer demand for our products, we place orders with our subcontractors and suppliers based on our estimates of

future sales. If actual sales differ materially from these estimates, our inventory levels and expenses may be adversely affected and our business and results of operations could suffer. For example, in 2001, the fulfillment of our product and supply orders resulted in our receiving more products and components than we were able to sell and caused an increase in our inventories. This oversupply was caused by customer demand not meeting the sales forecasts that were made when the orders were originally placed. In June and September 2001, we wrote off this inventory and made provisions for purchase commitments in an amount of approximately $53.9 million. In 2002, we wrote off additional inventory in an amount of approximately $250,000 and in 2003 we wrote off additional inventory and made provisions for purchase commitments in an amount of approximately $6.6 million.

Our dependence on limited sources for key components of our products may lead to disruptions in the delivery and cost of our products, harming our business and results of operations.

We currently obtain key components for our products from a limited number of suppliers, and in some instances from a single supplier. In addition, some of the components that we purchase from single suppliers are custom-made. Although we believe that we can replace any single supplier and obtain key components of comparable quality and price from alternative suppliers, we cannot assure you that we will not experience disruptions in the delivery and cost of our products. We do not have long-term supply contracts with most of these suppliers. In addition, there is global demand for some electrical components that are used in our systems and that are supplied by relatively few suppliers. This presents the following risks:

- delays in delivery or shortages of components, especially for custom-made components or components with long delivery lead times, could interrupt and delay manufacturing and result in cancellations of orders for our products;
- suppliers could increase component prices significantly and with immediate effect on the manufacturing costs for our products;
- we may not be able to develop alternative sources for product components;

- suppliers could discontinue the manufacture or supply of components used in our products. This may require us to modify our products, which may cause delays in product shipments, increased manufacturing costs and increased product prices;
- we may be required to hold more inventory for longer periods of time than we otherwise might in order to avoid problems from shortages or discontinuance; and o due to the political situation in the Middle East, we may not be able to import necessary components.

In the past, we experienced delays and shortages in the supply of components on more than one occasion. We may experience such delays in the future, harming our business and results of operations.

Our products, particularly our licensed band products, have long and unpredictable sales cycles. This could adversely impact our revenues and net income.

The sales cycle for our licensed band products encompasses significant technical evaluation and testing by each potential purchaser and a commitment of cash and other resources. The sales cycle can extend for as long as one year from initial contact with a carrier to receipt of a purchase order. This time frame may be extended due to, among other reasons, a carrier's need to obtain financing to purchase systems incorporating our products, the regulatory authorization of competition in local services, delays in the licensing of spectrum for these services and other regulatory hurdles.

As a result of the length of this sales cycle, revenues from our products may fluctuate from quarter to quarter and fail to correspond with associated expenses, which are largely based on anticipated revenues. In addition, the delays inherent in the sales cycle of our products raise additional risks of customers canceling or changing their product plans. Our revenues will be adversely affected if a significant customer reduces, delays or cancels orders during the sales cycle of the products or chooses not to deploy networks incorporating our products. Any such fluctuation in revenue or cancellation of orders could affect the market price of our ordinary shares.

Government regulation may increase our costs of doing business, limit our potential markets or require changes to our products that may be difficult and costly.

Our business is premised on the availability of certain radio frequencies for two-way broadband communications. Radio frequencies are subject to extensive regulation under the laws of each country and international treaties. Each country has different regulation and regulatory processes for wireless communications equipment and uses of radio frequencies. In the United States, our products are subject to the Federal Communications Commission, or FCC, rules and regulations. In other countries, our products are subject to national or regional radio authority rules and regulations. Current FCC regulations permit license-free operation in FCC-certified bands in the radio spectrum in the United States. In other countries the situation varies as to the spectrum, if any, that may be used without a license and as to the permitted purposes of such use. Some of our products operate in license-free bands, while others operate in licensed bands. The regulatory environment in which we operate is subject to significant change, the results and timing of which are uncertain.

In many countries the unavailability of radio frequencies for two-way broadband communications has inhibited the growth of these networks. The process of establishing new regulations for Wireless Broadband frequencies and allocating these frequencies to operators is complex and lengthy. The

regulation of frequency licensing began during 1999 in many countries in Europe and South America and continues in many countries in these and other regions. However, this frequency licensing regulation process may suffer from delays that may postpone the commercial deployment of products that operate in licensed bands in any country that experiences this delay. Our current customers that commercially deploy our licensed band products have already been granted appropriate frequency licenses for their network operation. In some cases, the continued validity of these licenses may be conditional on the licensee complying with various conditions. In addition to regulation of available frequencies, our products must conform to a variety of national and international regulations that require compliance with administrative and technical requirements as a condition to the operation of marketing or devices that emit radio frequency energy. These requirements were established, among other things, to avoid interference among users of radio frequencies and permit interconnection of equipment.

The regulatory environment in which we sell our products subjects us to several risks, including the following:

- Our customers may not be able to obtain sufficient frequencies for their planned uses of our Wireless Broadband products. For example, the licensing process in China is taking longer than expected and has caused a delay in our ability to market our products in the Chinese market.

- Failure by the regulatory authorities to allocate suitable and sufficient radio frequencies in a timely manner could deter potential customers from ordering our Wireless Broadband products. Also, licenses to use certain frequencies and other regulations may include terms which affect the desirability of using our products and the ability of our customers to grow.

- If our products operate in the license-free bands, FCC rules and similar rules in other countries require operators of radio frequency devices, such as our products, to cease operation of a device if its operation causes interference with authorized users of the spectrum and to accept interference caused by other users.

- If the use of our products interferes with authorized users, or if users of our products experience interference from other users, market acceptance of our products could be adversely affected.

- Regulatory changes, including changes in the allocation of available frequency spectrum, may significantly impact our operations by rendering our current products obsolete or non-compliant, or by restricting the applications and markets served by our products.

- Regulatory changes and restrictions imposed due to environmental concerns. For example, restrictions imposed on the location of outdoor antennas.

- We may not be able to comply with all applicable regulations in each of the countries where our products are sold and we may need to modify our products to meet local regulations.

In addition, we are subject to export control laws and regulations with respect to all of our products and technology. We are subject to the risk that more stringent export control requirements could be imposed in the future on product classes that include products exported by us.

Our proprietary technology is difficult to protect and unauthorized use of it by third parties may impair our ability to compete effectively.

Our success and ability to compete will depend, to a large extent, on maintaining our proprietary rights and the rights that we currently license or will license in the future from third parties. We rely primarily on a combination of trademark, trade secret and copyright law and confidentiality, non-disclosure and assignment-of-inventions agreements to protect our proprietary technology. We have obtained one patent and have several patent applications pending that are associated with our products. We also have several trademark registrations associated with our name and some of our products.

These measures may not be adequate to protect our technology from third-party infringement. Our competitors may independently develop technologies that are substantially equivalent or superior to our technology. Third party patent applications filed earlier may block our patent applications or receive broader claim coverage. In addition, any patents issued to us, if issued at all, may not provide us with significant commercial protection. Third parties may also invalidate, circumvent, challenge or design around our patents or trade secrets, and our proprietary technology may otherwise become known or similar technology may be independently developed by competitors. Additionally, our products may be sold in foreign countries that provide less protection to intellectual property than that provided under U.S. or Israeli laws. Failure to successfully protect our intellectual property from infringement may damage our ability to compete effectively and harm our results of operations.

We could become subject to litigation regarding intellectual property rights, which could seriously harm our business.

Third parties have in the past asserted against us, and may in the future assert against us, infringement claims or claims that we have violated a patent or infringed a copyright, trademark or other proprietary right belonging to them. In addition, based on the size and sophistication of our competitors and the history of rapid technological change in our industry, we anticipate that several competitors may have intellectual property rights that could relate to our products. Therefore, we may need to litigate to defend against claims of infringement or to determine the validity or scope of the proprietary rights of others. Similarly, we may need to litigate to enforce or uphold the validity of our patent, trademarks and other intellectual property rights. Other actions may involve ownership disputes over our intellectual property or the misappropriation of our trade secrets or proprietary technology. As a result of these actions, we may have to seek licenses to a third party's intellectual property rights. These licenses may not be available to us on reasonable terms or at all. In addition, if we decide to litigate these claims, the litigation could be expensive and time consuming and could result in court orders preventing us from selling our then-current products or from operating our business. Any infringement claim, even if not meritorious, could result in the expenditure of significant financial and managerial resources and harm our business, financial condition and results of operations.

If we are unable to maintain licenses to use certain technologies, we may not be able to develop and sell our products.

We license certain technologies from others for use in connection with some of our technologies. The loss of these licenses could impair our ability to develop and market our products. If we are unable

to obtain or maintain the licenses that we need, we may be unable to develop and market our products or processes, or we may need to obtain substitute technologies of lower quality or performance characteristics or at greater cost. We cannot assure you that we can maintain these licenses or obtain additional licenses, if we need them in the future, on commercially reasonable terms or at all.

Operating in international markets exposes us to risks which could cause our sales to decline and our operations to suffer.

While we are headquartered in Israel, at least 99% of our sales in 2001, 2002 and 2003 were generated elsewhere around the world. Our products are marketed internationally and we are therefore subject to certain risks

associated with international sales, including:

- trade restrictions, tariffs and export license requirements, which may restrict our ability to export our products or make them less price-competitive;
- currency fluctuations;
- greater difficulty in safeguarding intellectual property; and
- difficulties in managing overseas subsidiaries and international operations.

We may encounter significant difficulties with the sale of our products in international markets as a result of one or more of these factors.

There may be health and safety risks relating to wireless products.

In recent years, there has been publicity regarding the potentially negative direct and indirect health and safety effects of electromagnetic emissions from cellular telephones and other wireless equipment sources, including allegations that these emissions may cause cancer. Our wireless communications products emit electromagnetic radiation. Health and safety issues related to our products may arise that could lead to litigation or other actions against us or to additional regulation of our products. We may be required to modify our technology and may not be able to do so. We may also be required to pay damages that may reduce our profitability and adversely affect our financial condition. Even if these concerns prove to be baseless, the resulting negative publicity could affect our ability to market these products and, in turn, could harm our business and results of operations.

The trading price of our ordinary shares is subject to volatility.

The trading price of our ordinary shares has experienced significant volatility in the past and may continue to do so in the future. Since our initial public offering in March 2000, the sales prices of our ordinary shares on the Nasdaq National Market have ranged from a high of $53.125 to a low of $1.55. On June 15, 2004, the last sales price of our ordinary shares on the Nasdaq National Market was $10.56. We may continue to experience significant volatility in the future, based on the following factors, among others:

- our prospects;
- actual or anticipated fluctuations in our sales and results of operations;

- variations between our actual or anticipated results of operations and the published expectations of analysts;
- general conditions in the Wireless Broadband products industry and general conditions in the telecommunications equipment industry;
- announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures and capital commitments;

- introduction of technologies or product enhancements that reduce the need for our products;
- general economic and political conditions, particularly in the United States and in South America, and the effect of any hostilities with Iraq on our operations and results; and
- departures of key personnel.

We may be classified as a passive foreign investment company.

As a result of the combination of our substantial holdings of cash, cash equivalents and securities and the decline in the market price of our ordinary shares from its historical highs, there is a risk that we could be classified as a passive foreign investment company, or PFIC, for United States federal income tax purposes. Based upon our market capitalization during each year prior to 2001, we do not believe that we were a PFIC for any such year and, based upon our valuation of our assets as of the end of each quarter of 2002 and 2003 and an independent valuation of our assets as of the end of each quarter of 2001, we do not believe that we were a PFIC for 2003, 2002 or 2001 despite the relatively low market price of our ordinary shares during much of those years. We cannot assure you, however, that the Internal Revenue Service or the courts would agree with our conclusion if they were to consider our situation. There is no assurance that we will not become a PFIC in 2004 or in subsequent years. If we were classified as a PFIC, U.S. taxpayers that own our ordinary shares at any time during a taxable year for which we were a PFIC would be subject to additional taxes upon certain distributions by us or upon gains recognized after a sale or disposition of our ordinary shares unless they appropriately elect to treat us as a "qualified electing fund" under the U.S. Internal Revenue Code. This could also adversely affect the market price of our ordinary shares.

Risks Relating to Our Location in Israel

Conducting business in Israel entails special risks.

We are incorporated under Israeli law and our principal offices and manufacturing and research and development facilities are located in the State of Israel. Political, economic and military conditions in Israel directly affect our operations. We could be harmed by any major hostilities involving Israel, the interruption or curtailment of trade between Israel and its trading partners or a significant downturn in the economic or financial condition of Israel. Due to the volatile security situation in Israel, our insurance carrier no longer insures our facilities and assets for damage or loss resulting from terrorist incidents. Additionally, several countries still restrict business with Israel and with Israeli companies. We could be

adversely affected by the continuation or deterioration of Israel's conflict with the Palestinians or from restrictive laws or policies directed towards Israel or Israeli businesses.

We could be adversely affected if the rate of inflation in Israel exceeds the rate of devaluation of the New Israeli Shekel against the dollar.

Substantially all our revenues are generated in U.S. dollars. A portion of our expenses, primarily labor expenses, is incurred in New Israeli Shekels, or NIS. As a result, we are exposed to the risk that the rate of inflation in Israel will exceed the rate of devaluation of the NIS in relation to the dollar,

that the timing of this devaluation lags behind inflation in Israel, or the NIS may increase in value relative to the dollar. If the dollar costs of our operations in Israel increase, our dollar-measured results of operations will be adversely affected. In 2003, the value of the dollar decreased in relation to the NIS by 7.6%, and the deflation rate in Israel was -1.9%.

We currently benefit from government programs and tax benefits that may be discontinued or reduced.

We currently receive grants and tax benefits under Government of Israel programs. Pursuant to our current arrangement with the Office of the Chief Scientist, or OCS, the OCS will finance up to 20% of our research and development expenses by reimbursing us for 50% of the approved expenses related to our generic research and development projects. In addition, we obtain other grants from the OCS to fund certain other research and development projects. These programs restrict our ability to manufacture particular products or transfer particular technology outside of Israel. If we fail to comply with these conditions in the future, the benefits received could be canceled and we could be required to refund any payments previously received under these programs, pay increased taxes or pay additional amounts with respect to the grants received under these programs. The Government of Israel has reduced the benefits available under these programs in recent years and these programs and tax benefits may be discontinued or curtailed in the future. If the Government of Israel discontinues or modifies these programs and tax benefits, our business, financial condition and results of operations could be materially adversely affected.

We currently contemplate that a portion of our products will be manufactured outside of Israel. This could materially reduce the tax benefits to which we would otherwise be entitled. In addition, because the Israeli tax authorities customarily review and reassess existing tax benefits granted to merging companies and because we have yet to finalize the status of our tax benefits with the Israeli tax authorities following our merger with Floware and our acquisition of most of the assets and assumption of related liabilities of InnoWave, we cannot assure you that the Israeli tax authorities will not modify adversely to us the tax benefits that we could have enjoyed prior to these events.

Provisions of Israeli law may delay, prevent or make difficult a merger or an acquisition of us, which could prevent a change of control and therefore depress the market price of our ordinary shares.

Provisions of Israeli corporate and tax law may have the effect of delaying, preventing or making more difficult a merger or other acquisition of us. The Israeli Companies Law, 5759-1999, referred to as the Companies Law, generally requires that a merger be approved by the board of directors and by a shareholder vote at a shareholders' meeting that has been called on at least 21 days' advance notice. Any creditor of a merger party may seek a court order to delay or enjoin the merger, if there is a reasonable concern that the surviving corporation will not be able to satisfy all of the obligations of any party to the merger. Moreover, a merger may not be completed until at least 70 days have passed from the time that

the merger proposal has been filed with the Israeli Registrar of Companies. Other potential means of acquiring a public Israeli company such as us might involve significant obstacles, including a requirement for court approval for the acquisition. In addition, a body of case law has not yet developed with respect to the new Companies Law. Until this happens, uncertainties will exist regarding its interpretation. These uncertainties could have the effect of

inhibiting attempts to acquire us and other transactions and decisions by or involving us.

It may be difficult to effect service of process and enforce judgments against directors, officers and experts in Israel.

We are incorporated in Israel. Our executive officers and directors and some of the experts named in this annual report are expected to be nonresidents of the United States, and a substantial portion of our assets and the assets of these persons may be located outside the United States. Therefore, it may be difficult to enforce a judgment obtained in the United States against us or any of those persons. It may also be difficult to enforce civil liabilities under U.S. federal securities laws in original actions instituted in Israel.

ITEM 4. INFORMATION ON THE COMPANY

A. HISTORY AND DEVELOPMENT OF THE COMPANY

We were incorporated in September 1992 under the laws of the State of Israel. Since our inception, we have devoted substantially all of our resources to the design, development, manufacturing and marketing of wireless products.

On August 1, 2001, Floware merged with and into us. As a result of the merger we continued as the surviving company and Floware's separate existence ceased. Upon the closing of the merger, we changed our name from BreezeCOM Ltd. to Alvarion Ltd. On April 1, 2003, we completed an acquisition of most of the assets and the assumption of related liabilities of InnoWave Wireless Communication Ltd.

Our principal executive offices are located at 21A HaBarzel Street, Tel Aviv 69710, Israel and our telephone number is 972-3-645-6262. In 1995, we established a wholly-owned subsidiary in the United States, Alvarion, Inc., a Delaware corporation. Alvarion, Inc. is located at 5858 Edison Place, Carlsbad, CA, 92008 and its telephone number is (760) 517-3100.

B. BUSINESS OVERVIEW

General

We are a leading provider of wireless broadband connectivity infrastructure. Our solutions are used by telecom carriers and service providers worldwide. Our products are used to provide broadband data and voice services, for subscribers in the "last mile" of connectivity, for feeding cellular networks and for private networks. With our comprehensive product offerings, we provide a broad range of integrated wireless broadband solutions, addressing different markets and frequency bands, designed to address the various business models of carriers and service providers.

Our products are usually used in a point-to-multipoint architecture and address a wide scope of end-user profiles, from the residential and small office, home office, or SOHO, markets, through small and medium enterprises, or SMEs, and multi-tenant units/multi-dwelling units, or MTU/MDUs.

Our products operate in licensed and license-free bands, ranging from 2.4 GHz to 28 GHz and comply with industry standards. Our core technologies include spread spectrum radio, linear radio, digital signal processing, modems, networking protocols and very large systems integration, or VLSI.

Broadband Wireless Access Overview

Growth of the Broadband Wireless Access, or BWA, market is currently driven by demand for broadband connectivity. We expect that this growth will be affected by:

- Demand in un-served areas where wire infrastructure cannot fill the demand for broadband.
- International regulatory changes enabling increased competition and resulting in increased allocation of spectrum.
- Adoption of industry standards.
- Introduction of low cost wireless technology based on international standards.

Demand for Broadband in Unserved Areas

Demand for user bandwidth and availability of competitively priced solutions has increased. DSL and cable modem rollout continues in many areas throughout the world and telecom operators are upgrading central offices and deploying broadband solutions. However, in areas were DSL and cable modems cannot fulfill the demand for broadband, the broadband wireless solution is an effective alternative to meet this demand. Our products also support demand for voice in areas were infrastructure is poor or does not exist.

Deregulation

Global telecom deregulation is opening up the telecommunications/Internet access industries to competition by new players. As more and more countries enable carriers and service providers to operate in a variety of frequencies, new broadband access markets are opening. Unlike the built-in delivery systems of wireline infrastructure, wireless technology requires the use of frequencies contained within a given spectrum to transfer voice and data. Usually, governments allocate a specific range of that spectrum, either licensed or unlicensed bands, to incumbent and competitive carriers, as well as to cellular operators, internet service providers, or ISPs, and other service providers, enabling them to launch a variety of broadband initiatives based exclusively on wireless networking solutions.

Standardization

The wireless broadband market is in a continuing process of standardization. The WiFi Alliance, a non-profit international association, has succeeded in promoting the IEEE 802.11 - the Wireless LAN standard. Similarly, we helped produce the 802.16a specification, led its harmonization with ETSI, and became a principal founder of the WiMAX Forum, a non-profit industry organization chartered to ensure interoperable 802.16 systems from multiple vendors. The scope of the 802.16-based standard is the

Wireless MAN (Metropolitan Area Network), supporting larger range outdoor access networks with more performance and dedicated high-end services. Once standards are accepted, product costs generally decrease and product interoperability is possible, factors aiding in market growth.

Second Generation Technology

Second-generation broadband wireless solutions is based on an OFDM technology with Non-Line-of-Sight, or NLOS, capabilities, creating more possibilities to cover a Wireless Access network. In addition, the availability of lower-cost, volume-produced standard chips to replace internally-produced

proprietary chips will enable vendors to lower the cost of the solution to the operators. Low cost solutions can create a larger demand for broadband wireless applications. In July 2003, Intel Corporation announced its intention to develop IEEE 802.16a-compliant silicon chip. At the same time, we signed a strategic agreement with Intel to work together to incorporate Intel's 802.16a chips into our line of standard-based technology. The cost of our system is expected to decrease significantly as a result of our cooperation with Intel and the availability of standard chip sets.

Our Target Customers

We market and sell our products to two primary types of customers: telecom carriers; and service providers and regional carriers.

Telecom Carriers

Deregulation in the global telecommunications industry has increased the number of carriers providing data and voice access to the global telecommunications network. These include incumbent local exchange carriers, competitive local exchange carriers seeking to compete effectively in various markets and cellular operators who are able to leverage their infrastructure, radio base-station sites and customer base, together with their marketing, billing systems and customer support investments, to offer competitive broadband Internet access services to their customer base or to attract new customers for broadband whom can eventually become cellular customers. BWA has emerged as an attractive last-mile alternative to wired access solutions under certain circumstances. Certain telecom carriers are deploying our products to provide voice and broadband services in rural areas.

Unlike the limited reach of landline infrastructure, Wireless Broadband systems offer carriers the ability to reach otherwise inaccessible customers, while providing increased bandwidth flexibility and service differentiation.

Wireless Broadband technology offers opportunity and growth potential to carriers targeting emerging market sectors, such as SOHO, SME, MTU/MDU and many parts of the residential market because of its bandwidth, low capital and operating costs and the ability to use the technology to deliver sophisticated data and voice services.

The modular architecture of our Wireless Broadband products enables carriers to deploy our products gradually as customer demand grows, limiting the initial capital expenditure in equipment and enabling rapid roll out. With high network capacity and coverage, classes of service options, carrier-class equipment and network management software, our Wireless Broadband products provide attractive solutions for carriers seeking to compete in a deregulated market environment.

Service Providers and Regional Carriers

In today's competitive telecommunications markets, Internet service providers and regional carriers seek to offer their customers comprehensive solution packages as the demand increases for service providers and regional carriers to deliver enhanced data and voice services with fast and reliable connectivity.

Leveraging the potential of these customers requires the delivery of dependable last mile broadband connectivity, which, in turn, requires deployment of the necessary infrastructure. Many SME, SOHO and residential customers are located on the periphery of urban centers, beyond the reach of fiber-optic

systems, cable modems or other landline connections. Even when these connections are available, bottlenecks between the operator's final point-of-presence and the customer often lead to inconsistent service and unpredictable network performance.

The reduced installation costs, rapid roll out potential and modular architecture of our Wireless Broadband solutions, coupled with their high network capacity and coverage and enhanced service options, present an attractive alternative to service providers and regional carriers seeking to supply their customers with reliable comprehensive data and voice solutions.

Geographic Markets

Alvarion Wireless Broadband installations include two types of applications for different geographic markets:

Developing regions developed countries	- Low density population areas in countries with in high levels of economic development that have limited telecommunications infrastructures and do not yet have high penetration for access technologies for broadband services, such as cable and ADSL, or complementary to ADSL and cables where they do not have full coverage.
Developing countries	- Countries lacking coverage of telecommunications infrastructures seeking mass deployment of technologies for voice and broadband services.

Our strategy is to provide a generic, integrated system solution, enabling our products to be used by a diverse group of end users in a wide variety of applications in each of these geographic areas. Our products are used primarily by telecom carriers, by service providers and by regional carriers. Telecom carriers and service providers using our products include, among others:

- Telmex;
- TPSA;
- Millicom International Cellular S.A.;
- MultiTel S.A.;
- AMA Wireless;
- Iberbanda SA;
- EDN Sovintel;
- Megafon;

- Mobifon Titan Broadband;
- Telecel Paraguay SA;
- Entel PCS Telecommunications SA;
- Meridian Telecoms Inc.;
- Vivendi Telecom Hungary;
- China Mobile;
- China Telecom;
- China Netcom;
- China Unicom;
- Irish Broadband;
- Neo Sky 2003 S.A;
- Equant Russia Limited; and
- Reliance

Our OEM partners are Siemens, Alcatel, Nera and Datang Telephone Corp.

Our Solutions

Our product offerings include two different types of wireless broadband applications: access; and bridging and backhauling.

Access

We offer applications in which access to the end-user is provided by Wireless Broadband systems. These access applications can be utilized by telecom operators, service providers and regional carriers in accordance with the geographic needs of their regions of operation. The applications are either broadband data, voice or telecommunication multiservices.

BWA solutions are implemented in a modular infrastructure, enabling swift, cost-effective rollout as needed. Sectorized base stations are deployed to provide radio coverage to the targeted area, and frequency channels are reused in non-adjacent base station sectors, making the most efficient use of the available spectrum. Base stations are connected to the operator's central office, or Point of Presence, using wired or wireless point-to-point solutions. End users are provided with customer premises equipment, or CPE, typically consisting of an outdoor unit with a radio and an antenna connected to an indoor unit, which presents voice and data interfaces to the customer network. The entire BWA network is connected to the carrier data backbone.

Our BreezeMAX, BreezeACCESS, MGW/eMGW and WALKair BWA products provide carriers with comprehensive BWA solutions ranging from toll-quality telephony, to high-speed access to voice and data in the licensed and license-free bands. Our solutions provide these operators with services that are comparable to leased line and fiber connectivity, while delivery heightened bandwidth flexibility and service differentiation. Our BWA products offer carriers comprehensive, scalable and rapidly deployable solutions to their last mile connectivity needs independent of landline infrastructure.

Bridging and Backhauling

We offer applications in which wireless equipment is used as Wireless Broadband network bridging or backhauling.

Our BreezeAccess LB, BreezeNET DS.11 and BreezeNET DS.5800 allow cost-effective IP-based bridging and backhauling in the unlicensed bands, offering carriers, wireless Internet service providers, and enterprises the ability to increase the bandwidth of their point-to-point networks and extend wireless links throughout their operating environments. Operators, service providers, and enterprise customers can increase their network capacity while reducing capital and operational expenditures for their backhaul, access, and LAN extension applications that previously required them to acquire frequency, deploy high cost radio links, and/or lease expensive wire-line services due to poor line of sight conditions.

Our Products

We manufacture and sell the following products:

Internet Protocol-based Access Products:

- BreezeMAX

- BreezeACCESS access products (BreezeACCESS II, V, MMDS, XL, VL, OFDM).

Multiservice Access Products:

- WALKair products (WALKair 1000 and 3000);
- MGW and eMGW

Bridging and Backhauling Products:

- BreezeNET products (BreezeNET DS.11, PRO.11 and DS.5800);
- BreezeACCESS connectivity products (BreezeNET B and BreezeACCESS LB)

Network Management Products:

- BreezeMANAGE, WALKnet, BreezeVIEW and AlvariSTAR network management products.

Internet Protocol-based Access Products

The BreezeMAX is our third generation OFDM platform based on the IEEE 802.16/ETSI HIPERMAN standards, following the WiMAX standard. The BreezeMAX is a carrier-class platform that addresses multiple applications from residential to business, MDU/MTU, hotspot backhauling and home networking.

Our BreezeMAX 3500 product, our first product to be introduced under this platform, operates in the 3.5 GHz licensed frequency band. It is a modular, scalable system that offers macro and micro base stations, and various types of CPEs, for business and residential users, which combine to enable carriers to deploy the optimal cost/performance for each of their operating environments. Enabling the offering of IP-based voice, data, and even triple play services in dense urban to rural areas, BreezeMAX is the BWA solution for providers wanting to boost their revenue potential.

BreezeACCESS enables high-speed, data and voice, point-to-multipoint BWA applications. BreezeACCESS access products operate in several frequency bands to meet the needs of service providers and telecom operators worldwide. The BreezeACCESS IP-based product family consists of base stations, including access units and controllers, and subscriber units, which operate optimally when connected to computers or computer networks utilizing the Internet Protocol. The subscriber units include subscriber units for data applications and subscriber units for data and telephony applications. BreezeACCESS is modular in design, allowing for a low initial investment, and is scalable for future growth.

BreezeACCESS IP-based products allow service providers to offer their subscribers a wireless connection to the Internet and to public telephone networks simultaneously utilizing Internet Protocol technology. BreezeACCESS uses wireless packet data switching technology in which the transmitted data is divided into small sets of data packets. Wireless packet data switching enables efficient use of system resources since users utilize the network only when data is transmitted or received. BreezeACCESS provides an always-on, leased-line equivalent connection to the network. In addition to fast Internet access and IP telephony services, BreezeACCESS systems support a complement of value-added classes of services including VPN, Virtual LAN, or VLAN, and QoS, based on per user allocation of committed data rate and maximum data rate.

BreezeACCESS OFDM, or orthogonal frequency division multiplexing-based, products, support higher speed wireless broadband access products currently in the licensed 3.5 GHz band, and provide data rates of up to 12 Mbps.

OFDM technology, on which BreezeMAX, BreezeACCESS OFDM and BreezeACCESS VL are based, enable higher data rates, up to 12 Mbps in the case of BreezeACCESS OFDM and up to 54 Mbps in the case of BreezeACCESS VL, by utilizing the available radio spectrum in a more efficient manner than current technologies. In addition, OFDM technology enables NLOS operation with robust resistance to interference. OFDM based products enable carriers to use the technology in applications where a high data rate is required, including serving medium to large enterprises and high-speed backbone applications. The BreezeACCESS VL OFDM-based system, which utilizes our proprietary air protocol and broad set of features along with a high power radio, uses our "open platform" architecture and may be used with other BreezeACCESS band versions (BreezeACCESS II, XL, V or OFDM), giving operators the flexibility to use one band for service provisioning to residential, SOHO and SME customers, while reserving high bandwidth for large enterprises and MTUs. It is intended to become our service provider solution in all the 5 GHz bands (5.15-5.35, 5.47-5.7, 5.7-5.8).

BreezeACCESS VL, OFDM-based products operate in the unlicensed, 5.725-5.850 GHz ISM band, and provide data rates of up to 54 Mbps.

BreezeACCESS IP-based products include BreezeACCESS II, BreezeACCESS V, BreezeACCESS XL, BreezeACCESS VL, BreezeACCESS OFDM and BreezeACCESS MMDS.

BreezeACCESS II products operate in the unlicensed, 2.4 GHz ISM band, and provide data rates of up to 3 Mbps.

BreezeACCESS V products operate in the unlicensed, 5 GHz ISM band, and provide data rates of up to 3 Mbps.

BreezeACCESS MMDS products operate in the 2.5-2.7 GHz MMDS licensed bands, which are licensed in North and South America and other countries worldwide, and provide data rates of up to 3 Mbps.

Multiservice Access Products

WALKair Products

The WALKair system is a Wireless Broadband system that enables carriers to provide high-speed Internet access, other data services and voice services primarily to SMEs. WALKair's high spectral efficiency, dynamic bandwidth allocation, effective frequency reuse plan and high coverage capacity enable carriers to connect last-mile business subscribers to their network in an efficient and cost-effective manner.

Our WALKair products consist of WALKair 1000 that operates in the 3.5, 10.5 and 26 GHz licensed bands, and WALKair 3000 that operates in the 26 GHz band.

The WALKair product family is comprised of the indoor and outdoor unit of a terminal station, installed at a subscriber's premises, and the indoor and outdoor unit of a base station, installed at the center of a cell. In addition, WALKair products include system management software. WALKair is modular in design, allowing for a low initial investment, and is scalable for future growth. The WALKair system supports a variety of customer interfaces and services such as EI, Ethernet, V35/ X21, Frame Relay and leased line BR,

providing integrated high-speed data and voice services.

WALKair products are based on time division multiplexing, or TDM, technology. WALKair systems support a complement of value-added classes of services including VPN, Virtual LAN, or VLAN, and QoS, based on per-user allocation of committed data rate and maximum data rate.

WALKair 3000 accommodates carriers' requirements for broader bandwidth, primarily driven by the growing use of data-intensive Internet applications. It also enables carriers to efficiently connect multiple subscribers in multi-tenant buildings by a single terminal station. WALKair 3000 supports significantly broader bandwidth for each customer and increased capacity for each cell, increasing the peak speed of transmission of each terminal station to up to 36 Mbps. WALKair 3000 integrates smoothly with WALKair 1000. This enables carriers to deploy both systems on the same base station, serving a variety of subscribers with different needs for communication services, within the same cell.

Integrating our WALKair 1000 and WALKair 3000 technologies in the same base station, Alvarix allows operators to benefit from low deployment costs without limiting the ability to upgrade each customer when appropriate. For a low-cost entry solution, operators can deploy WALKair 1000 along with differentiated data service. When higher speed and capacity is required, WALKair 3000 can be deployed on the same base station to deliver high-end data services with premium QoS capabilities. This pay-as-you-grow approach allows operators to improve their infrastructure price-performance.

Our integrated WALKair/BreezeACCESS base station, AlvariBASE, which operates in the 3.5 GHz licensed band, enables operators to create a BWA solution that provides both BreezeACCESS and WALKair services in a coverage area, using a unified infrastructure. AlvariBASE allows BreezeACCESS and WALKair customer premises equipment to connect wirelessly to the same base station, using the same antennas and outdoor radio units in the base.

MGW and eMGW Products

The MultiGain Wireless, MGW, and enhanced MultiGain, eMGW, solutions are cost effective, rapidly deployable, point-to-multipoint fixed wireless access systems that provide data and voice services for both residential and small business users mainly in, suburban and rural environments. Utilizing radio links instead of copper lines to bridge the last mile, the MGW and eMGW products enable rapid deployment of quality services to residential or SOHO customers. The products ensure the optimal utilization of the available spectrum and minimum interference, regardless of topography.

eMGW is a point-to-multipoint Fixed Wireless Access system that provides fast Internet access, corporate access and carrier-class telephony in a single system. It also enables LAN-to-LAN connectivity over IP-VPN tunnels for businesses, fax (G3) and dial-up modem (v.92/56Kbps) services for residential subscribers and leased line services. It operates in a broad range of licensed and unlicensed (ISM) bands, from 1.5 to 5.7 GHz. eMGW provides coverage of up to 25 kilometers in very challenging environments and operates in NLOS installation scenarios. The eMGW is the optimal price / performance fixed wireless access system for operators who need to: provide coverage to subscribers in green fields; upgrade existing networks with advanced data services; and provide wireless DSL services in low and medium subscriber density areas.

eMGW, which has a scalable and modular architecture, is comprised of an indoor base station controller, an outdoor base station radio, an indoor

subscriber interface and an outdoor subscriber terminal. It also includes a network planning tool and a network management system featuring fault, configuration, performance and security management.

eMGW is based on our frequency hopping CDMA technology and utilizes our innovative "hybrid switching" transmission technology, combining circuit switching for toll quality voice and packet switching for fast data services, optimizing the utilization of spectrum resources. This "hybrid switching" concept provides a solution for the economic and technological challenges facing network operators today.

MGW is a point-to-multipoint fixed wireless access system that supports a variety of services, including toll quality voice, high-speed voice band data and ISDN-BRI, primarily for urban, suburban and rural environments. MGW's scalable architecture enables low initial investment, with incremental growth based on subscriber demand. It is well suited for both new operators entering the market and incumbent operators in areas where copper infrastructure is already saturated or is difficult to install, such as new housing areas, historical sites or temporary installations. Based on our frequency hopping CDMA technology, MGW supports a broad range of frequency bands, from 800MHz to 3.8 GHz, and provides coverage of over 25 kilometers in line of sight, or LOS, conditions. Hundreds of thousands of MGW lines have already been successfully installed in over 60 countries.

MGW is comprised of a radio port control unit, a radio port coupler, a fixed access unit, a power supply and charger unit and a coverage extender used to extend the geographical coverage of the network. It also includes a network planning tool and a network management system featuring fault, configuration, traffic and performance management.

Bridging and Backhauling Products

BreezeNET Products

Our BreezeNET products are designed to provide high reliability building-to-building bridging solutions, to support mobile connectivity, and to provide individuals or small groups of users with wireless access to a LAN. BreezeNET products consist of three product families: BreezeNET DS.11, BreezeNET PRO.11 and BreezeNET DS.5800.

BreezeNET DS.11 products utilize direct sequence spread spectrum, or DSSS, radio technology and are compliant with the IEEE 802.11b Wireless LAN standard. DSSS products provide data rates of up to 11 Mbps and are most suitable for low user density applications where high data rates are of prime importance. BreezeNET DS.11 outdoor bridging products, operating in the unlicensed 2.4 GHz band, feature an indoor/outdoor architecture with an indoor interface unit and an outdoor radio unit. The indoor/outdoor architecture enables lower cost installations while supporting reliable building-to-building high data rate bridging over long distances.

BreezeNET PRO.11 products utilize frequency hopping spread spectrum, or FHSS, radio technology and are compliant with the IEEE 802.11 Wireless LAN standard. FHSS products provide data rates of up to 3 Mbps and allow point-to-multipoint installations with a large number of wireless users. BreezeNET PRO.11 products, operating in the unlicensed 2.4 GHz band, include indoor solutions and outdoor wireless connectivity solutions most suitable for building-to-building bridging and applications characterized by high user density, and high-speed mobility in harsh radio environments.

BreezeNET DS.5800 products utilize DSSS radio technology leverage on the IEEE 802.11 standard. BreezeNET DS.5800, consisting of an indoor interface unit and an outdoor radio unit, provides point-to-point wireless bridging and backhauling at data rates of up to 11 Mbps and is designed specifically for challenging environments and adverse weather conditions. BreezeNET DS.5800, providing an indoor/outdoor architecture and operating in the unlicensed 5.8 GHz band, is suited for high-speed building-to-building connectivity, enabling wireless Internet backhauls, campus interconnectivity and community-wide networking without exposure to interference from more common 2.4 GHz systems.

BreezeACCESS Connectivity Products

We have extended our BreezeACCESS product family to provide wireless connectivity solutions. We have added additional products for backhauling and feeding with our BreezeACCESS LB products.

BreezeNet B products function as a wireless bridge system that provide high-capacity, high-speed point-to-point connectivity. The BreezeNET B system operates in the unlicensed 5GHz band and enables operation in near and non-line-of-sight environments such as buildings, foliage or ridgelines. The system also features adaptive modulation for automatic selection of modulation schemes to maximize data rate and improve spectral efficiency. BreezeNET B supports security sensitive applications through optional use of authentication and/or data encryption. The system supports VLANs, enabling secure operation, and VPN services, allowing tele-workers or remote offices to conveniently access their enterprise network.

BreezeACCESS LB products function as point-to-point wireless bridges, using a standard Ethernet interface. BreezeACCESS LB, operating in the unlicensed 5.8 GHz band, provides data rates of up to 72 Mbps and enables connectivity in near and non-line-of-sight conditions. Its advanced capacity and link availability reduces costs and avoids the need for more expensive backhaul systems such as leased lines

or pure line-of-sight wireless systems. BreezeACCESS LB products are comprised of an indoor interface unit and an outdoor radio unit. BreezeACCESS LB's OFDM-based technology also reduces interference and multi-path conflicts.

Network Management Products

We provide advanced management applications for our BWA solutions. Our network management applications are equipped with graphics-based user interfaces and provide a set of tools for configuring, monitoring and effectively managing our BWA networks. Our network management products are:

- BreezeMANAGE, which configures, monitors and manages our BreezeACCESS products;
- WALKnet, which configures, monitors and manages our WALKair products;
- BreezeVIEW, which configures, monitors and manages our BreezeNET products;
- AlvariSTAR, which configures, monitors and manages our BreezeACCESS and WALKair products.

BreezeMANAGE, WALKnet, BreezeVIEW and AlvariSTAR are multi-platform simple network management protocol, or SNMP, applications. Using standard and private SNMP agents incorporated in the products, these applications, operating under the HP Open View network management platform, enable configuring, managing faults and monitoring performance of all system components from a central management station.

Accessories Offered by Us

In order to support our products and provide comprehensive solutions to our customers, we provide a family of accessories designed to extend the range of our BreezeACCESS, WALKair and BreezeNET solutions. These accessories include antennas, cables, surge arrestors, amplifiers and other components. We also offer various configuration and monitoring tools in addition to the BreezeMANAGE, WALKnet and BreezeVIEW network management applications for our BreezeACCESS, WALKair and BreezeACCESS products.

Technologies Underlying Our Products

We use internally developed core technologies and continue to invest heavily in augmenting our expertise in networking, radio and digital signal processing, or DSP, modem technologies. We also participate as active members in international standards committees.

Networking Technology

A key to the commercial success of our products lies in their compatibility with existing and emerging network protocols and applications. We have developed a protocol that permits an increased data rate while maintaining full compatibility with the IEEE 802.11 standard. The load balancing capability developed and implemented in BreezeNET PRO.11 products allows for a maximum aggregate

throughput of approximately 25 Mbps, subject to conditions. Seamless and reliable operation at roaming speeds of up to 60 miles per hour has enabled us to support vehicular applications with high mobility requirements.

To support our BreezeACCESS products, we have developed or otherwise acquired, and continue to invest in, networking expertise in the areas of VoIP, based on industry standards such as H.323 and media gateway control protocol, or MGCP, and other Internet standards and protocols. We have also developed, and are continuing to develop, know-how to satisfy market requirements with respect to quality of service, classes of services, committed information rate, maximum information rate, virtual LAN management and interfacing with billing systems for data and voice. We are developing medium access technology based on the 802.16a standard for further improved support of these needs.

To support our WALKair products, we have developed time division multiple access, or TDMA, based air protocol whereby all terminal stations are synchronized with the base station. Each terminal station transmits a burst according to the base station upon demand.

Radio Technology

We have in-house radio development capabilities to address the diversified frequency bands and modulation methods of our products. The frequency bands include, among others, 900 MHz, 2.4 GHz, 2.5-2.7 GHz, or MMDS, 3.4-3.6 GHz, 5.7 GHz, 10.5 GHz and 26 GHz. The modulation methods include Frequency Hopping Spread Spectrum, or FHSS, Gaussian Frequency Shift Keying, or GFSK, Direct

Sequence Spread Spectrum, or DSSS, Single Carrier QAM and OFDM. Our products include both Time Division Duplex, or TDD, radios and Frequency Division Duplex, or FDD, radios.

Our radio teams specialize in low cost, mass-production oriented radio design. The system level capability is software assisted radio auto-calibration, which allows for reduced manufacturing costs and compensates for instability, temperature changes and aging of components.

Our internal radio expertise enables us to attract clients by addressing promptly new needs, such as new frequency bands or the combined base station architecture present in AlvariBASE.

Digital Signal Processing (DSP) Modem Technology

We maintain strong expertise in DSP and in modem design. Our capabilities include hardware oriented design, as well as programmable DSP oriented design. The extensive configurability of our modems, through FPGA and DSP reprogramming, allow us to introduce advanced features to our products and to follow amendments to emerging standards.

We have developed mixed signal ASICs containing DSP cores. Inclusion on-chip of analog-digital converters is instrumental to both cost reduction and power consumption reduction. First generation ASIC supports our 802.11-based FH-GFSK products, with the above-standard capability of delivering 3 Mbps, with automatic fall back to 2 Mbps and 1 Mbps as necessary. Our second generation ASIC is optimized for OFDM modulation, as used by the 802.11a/g standards and the recently approved 802.16a standard. This ASIC is based on a proprietary programmable "very long instruction word" DSP architecture. The programmable architecture allows us to implement numerous beyond-standard capabilities, such as OFDMA extensions to the baseline OFDM mode. This system-on-a-chip ASIC will serve as a key component of our BreezeACCESS-OFDM products. Additional ASIC developed in-

house supports our WALKair products, with a full duplex point-to-multipoint single carrier trellis-coded 64QAM modem.

We have developed the BreezeMAX base station platform, which is designed to support the WiMAX (802.16d and HIPERMAN) air interface specification. The platform supports the multiple antenna elements per sector in order to exploit the smart-antenna signal processing techniques for improved coverage and network capacity. The programmable DSP-based architecture of the BreezeMAX platform will enable us to support the emerging 802.16e standard for combined mobile and fixed operation, while enjoying the benefits of OFDMA and smart-antenna processing. The base station architecture and capabilities is closely aligned with the CPE ASICs and reference design developed by Intel in the course of our collaboration, in order to assure optimum performance in future WiMAX deployments.

The PSTN FWA MGW system was extended to provide additional data services to wireless subscribers. The eMGW system was especially designed to support the modern wholesale network model for carriers. PPPoE, remote and local DHCP network tools give to the network access provider ability for fast and inexpensive IP network configuration and interfacing to the billing systems.

Participation in International Standards Committees

As part of our strategy to become a technological leader and influence the industry in specific areas, we have, since our inception, been an active member

in standardization committees. We have participated in the IEEE 802.11 wireless LAN work group, being the driving force behind increasing the data rate of the frequency hopping modem. Naftali Chayat, our chief technology officer, chaired a task group of the IEEE 802.11a, a wireless LAN work group involved with high-data rate standardization. We are a principal founder of the WiMAX Forum, a non-profit organization whose members are working to promote adoption of the IEEE 802.16 OFDM standard and to certify to interoperability of compliant equipment. The scope of the 802.16-based standard is the Wireless MAN (Metropolitan Area Network), supporting larger range outdoor access networks with more performance and dedicated high-end services. Alvarion's director of business development, Mohammad Shakouri, is the Vice-Chair of WiMAX and chairs the Marketing Working Group. Alvarion's engineers actively participate in the technical group for defining inter-operability profiles and tests. We also actively participate in - IEEE 802.16. Broadband Wireless Access work group, to define and improve the OFDM mode, selected by WiMAX, for both fixed and mobile applications. Our employee, Marianna Goldhammer, is the HiperMAN Chair and ETSI - BRAN (Broadband Radio Access Networks) Vice-Chair. HiperMAN has adopted the 802.16 OFDM mode. Ms. Goldhammer is acting to align the IEEE and ETSI standards.

Sales, Marketing and Support of Our Products

We market our products through an extensive network of more than 220 active partners. These include original equipment manufacturers, national and local distributors, systems integrators and resellers. Our distributor partners in turn sell to resellers, including value-added resellers and systems integrators, and to end-users. We also market our products directly to large-end customers.

We currently sell and distribute our products in more than 130 countries worldwide. The use of different types of marketing channels through our partnership network enables us to market our products to many different markets and to meet the differing needs of our customers.

Our products are aimed at the Wireless Broadband and wideband market. We sell in these markets through OEM agreements or other strategic arrangements with leading telecommunications suppliers, direct sales to large customers, such as public access providers, as well as indirectly through our distribution channels, which market primarily to smaller Internet service providers and operators. Additionally, in order to achieve broad and rapid market penetration, we maintain direct relationships with carriers. By doing so, we believe that we are better able to understand the needs of carriers and are better able to identify and anticipate trends in the Wireless Broadband market.

We have strategic relationships with major telecommunications equipment manufacturers, such as Siemens, Alcatel, Nera and Datang. Pursuant to arrangements entered into with these partners, they are permitted to distribute our products on either a regional or worldwide basis under private labels. We are expanding our efforts to seek additional strategic relationships with international partners and other key companies to increase our exposure and establish ourselves as a supplier to markets and end-user segments that are not reached by our present distribution channels.

We have strong relationships with leading incumbents to whom we sell our solutions directly.

A distributor of our products is typically a data communications or a telecommunications marketing organization, or both, with the capability to add value with training and first-tier support to resellers and systems integrators.

During 2003, one of our customers, a South American operator, accounted for 13.9% of our sales. In addition, companies affiliated with Siemens accounted for 8.5% and 11.4% of our sales in 2003 and 2002 respectively and companies affiliated with Alcatel accounted for 3.7% and 10.3% of our sales in 2003 and 2002 respectively.

We operate in various regions. Our subsidiaries and representative offices, located throughout North America, South America, Europe and Asia, support our international marketing network.

We derive our revenues from different geographical regions. For a more detailed discussion regarding the allocation of our revenues by geographical regions based on the location of our customers, see "Item 5A-Operating and Financial Review and Prospects-Operating Results."

We conduct a wide range of marketing activities aimed at generating name recognition and awareness of our brands throughout the telecommunications community, as well as identifying leads for distributors and other resellers. These activities include public relations, participation in trade shows and exhibitions, advertising programs, public speaking at industry forums and maintaining a website.

We maintain a highly trained technical support team that participates in providing customer support to customers who have purchased our products. This includes local support by distributors' and systems integrators' personnel trained by our support team, support through help desks and the provision of detailed technical information on our website, expert technical support for resolution of more difficult problems, as well as participation in pre- and post-sales activities conducted by our distribution channels with large accounts and key end-users. We also offer our clients extended warranty and service agreements.

We organize technical seminars covering general technologies, as well as specific products and applications. We also have qualification programs to advance the technical knowledge of our distributors

and their ability to sell and support our products. The seminars are held in various countries and in different languages according to need.

Manufacturing Operations and Suppliers

We currently subcontract most of the manufacturing of our products. We have an exacting pre-qualification process for our contract manufacturers, which includes the examination of the technological skills, production capacity and quality assurance ability of each contract manufacturer. Our manufacturing capacity planning is based on marketing forecasts done on a monthly basis.

Our products are currently manufactured primarily by several subcontractors located in Israel. These subcontractors purchase, on our behalf, many of the components for our products.

Part of our production is conducted in our facility in Tel Aviv. For this part of our production, we have arrangements with several subcontractors, who manufacture components for our products, or conduct either electronic assembly or mechanical assembly. The electronic assembly, and some mechanical assembly of electronic components is carried out by one assembly subcontractor who is based in Israel.

The quality assurance, final assembly and testing operations of our

products are performed by us at our facilities in Tel Aviv and Omer and at our subcontractors', R.H. Electronics Ltd., U.S.R. Electronics Ltd. and Sanmina SCI, facilities in Israel. Equipment owned by us and used for final assembly and testing is located at our facilities in Omer and in our leased premises at the facilities of R.H. Electronics and U.S.R. Electronics as part of our Approved Enterprise program.

We monitor quality with respect to each stage of the production process, including the selection of components and subassembly suppliers, warehouse procedures, assembly of goods, final testing and packaging and shipping. Our packaging and shipping activities are conducted at our Tel Aviv and Omer facilities.

We are ISO 9001 certified, which verifies that our manufacturing processes adhere to established standards. We require that our contract manufacturers be ISO 9002 certified.

Several components and sub-assemblies included in our products are presently obtainable only from a limited group of suppliers and subcontractors, and some of these components are custom-made for us.

Proprietary Rights

In order to protect our proprietary rights in our products and technologies, we rely primarily upon a combination of trademark, trade secret, and copyright law and confidentiality, non-disclosure and assignment of inventions agreements. We have over 20 patents issued by patent offices in several countries, with additional patents pending. We have trademark registrations in Israel, United States, the European Union and many other countries. In addition, we have typically entered into nondisclosure, confidentiality and assignment of inventions agreements with our employees, consultants and with some of our suppliers and customers who have access to sensitive information. We cannot assure you that the steps taken by us to protect our proprietary rights will be adequate to prevent misappropriation of our technology or independent development and/or the sale by others of software products with features based upon, or otherwise similar to, those of our products.

Given the rapid pace of technological development in the communications industry, we also cannot assure you that our products do not or will not infringe on existing or future proprietary rights of others. Although we believe that our technology has been independently developed and that none of our intellectual property infringes on the rights of others, we cannot assure you that third parties will not assert infringement claims against us or seek an injunction on the sale of any of our products in the future. If an infringement were found to exist, we may attempt to acquire the requisite licenses or rights to use such technology or intellectual property. However, we cannot assure you that such licenses or rights could be obtained on terms that would not have a material adverse affect on us, if at all.

We license certain technologies from others for use in connection with some of our technologies. The loss of these licenses could impair our ability to develop and market our products. If we are unable to obtain or maintain the licenses that we need, we may be unable to develop and market our products or processes, or we may need to obtain substitute technologies of lower quality or performance characteristics or at greater cost.

The Competitive Environment in which We Operate

The markets for our products are very competitive and we expect that competition will increase in the future, both with respect to products that we are currently offering, and with respect to products that we are developing. The principal competitive factors in these markets include:

- price and price/performance ratio;
- global presence;
- effective "broadcast" coverage area;
- data transmission rates;
- efficiency of the transmission on the wireless network;
- network scalability;
- services supported;
- power consumption;
- product miniaturization;
- ease of installation;
- product time to market;
- comprehensiveness of product portfolio;
- ability to bundle products;
- ability to implement network solutions;

- product certifications;
- relationships with OEMs;
- effective distribution channels; and
- ability to support new industry standards.

Companies that are engaged in the manufacture and sale, or the development, of products that compete with our Wireless Broadband products include Alcatel, Ericsson, Marconi plc, SR Telecom, Wi-Lan Inc., Airspan Inc., Proxim, Inc., Motorola, Aperto Networks Navini, IP wireless and Remec, Inc. Our products also compete with alternative telecommunications transmission media, including leased lines, copper wire, fiber-optic cable, cable modems, television modems and satellite.

Government Regulation

Our business is premised on the availability of certain radio frequencies for two-way broadband communications. Radio frequencies are subject to extensive regulation under the laws of each country and international treaties. Each country has different regulation and regulatory processes for wireless communications equipment and uses of radio frequencies. In the United States, our products are subject to FCC rules and regulations. In other countries, our

products are subject to national or regional radio authority rules and regulations. Current FCC regulations permit license-free operation in FCC-certified bands in the radio spectrum in the United States. In other countries the situation varies as to the spectrum, if any, that may be used without a license and as to the permitted purposes of such use. Some of our products operate in license-free bands, while others operate in licensed bands. The regulatory environment in which we operate is subject to significant change, the results and timing of which are uncertain.

In many countries, the unavailability of radio frequencies for two-way broadband communications has inhibited the growth of these networks. The process of establishing new regulations for Wireless Broadband frequencies and allocating these frequencies to operators is complex and lengthy. The regulation of frequency licensing began during 1999 in many countries in Europe and South America and continues in many countries in these and other regions. Licensed blocks in 3.5GHz were released in some countries. However, this frequency licensing regulation process may suffer from delays that may postpone commercial deployment of products that operate in licensed bands in any country that experiences this delay. Our current customers that commercially deploy our licensed band products have already been granted appropriate frequency licenses for their network operation. In some cases, the continued validity of these licenses may be conditional on the licensee complying with various conditions.

There is a trend to release more license-exempt bands, namely in 5GHz. In the United States, FCC rules were modified to include additional 255MHz of spectrum. In Europe, the process is slower. We see potential for new markets in rural areas and developing countries, created by the availability of licensed-exempt spectrum in 5MHz.

In addition to regulation of available frequencies, our products must conform to a variety of national and international regulations that require compliance with administrative and technical requirements as a condition to marketing devices that emit radio frequency energy. These requirements

were established, among other things, to avoid interference among users of radio frequencies and to permit the interconnection of equipment.

We are subject to export control laws and regulations with respect to all of our products and technology. In addition, Israeli law requires us to obtain a government license to engage in research and development, and export, of the encryption technology incorporated in some of our products. We currently have the required licenses to utilize the encryption technology in our products.

C. ORGANIZATIONAL STRUCTURE