

CERAGON NETWORKS LTD  
Form 20-F/A  
February 09, 2017

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

FORM 20-F/A

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

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2015

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF  
1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT  
OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 0-30862

\_\_\_\_\_

CERAGON NETWORKS LTD.  
(Exact Name of Registrant as Specified in Its Charter)

\_\_\_\_\_

Israel  
(Jurisdiction of Incorporation or Organization)

24 Raoul Wallenberg Street, Tel Aviv 69719, Israel  
(Address of Principal Executive Offices)

Michal Lavee Machlav (+972) 3-543-1284 (tel.), (+972) 3-543-1600 (fax), 24 Raoul Wallenberg Street, Tel Aviv  
69719, Israel  
(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact Person)

\_\_\_\_\_

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

Title of Each Class	Name of Exchange of Which Registered
Ordinary Shares, Par Value NIS 0.01	Nasdaq Global Select Market

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

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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: 77,636,864 Ordinary Shares, NIS 0.01 par value.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes  No

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

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one)

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes

No

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EXPLANATORY NOTE

This Amendment No. 2 on Form 20-F/A (“Amendment 2”) is filed in order to amend the Annual Report on Form 20-F for the fiscal year ended December 31, 2015 (the “Form 20-F”) of Ceragon Networks Ltd. (the “Company”), as filed with the Securities and Exchange Commission on March 23, 2016, as well as amend Amendment No. 1 on Form 20-F/A filed with the Securities and Exchange Commission on December 27, 2016 (“Amendment 1”).

Amendment 2 further amends and restates “Item 15. Control and Procedures” of Part I of Form 20-F, incorporates the certifications pursuant to section 302 of the Sarbanes – Oxley Act of 2002 (exhibits 12.1 and 12.2 of the Form 20-F), which were inadvertently omitted from Amendment 1, and adds the signature page, which was erroneously not inserted at the end of the Form 20-F, after “Item 19. Exhibits”.

Pursuant to Rule 12b-15 promulgated under the Securities Exchange Act of 1934, as amended, we have included the entire Form 20-F in this Amendment 2. However, there have been no changes to the text of such item other than the changes stated in the immediately preceding paragraphs. Furthermore, there have been no changes to the XBRL data filed in Exhibit 101 of the Form 20-F.

Except as expressly set forth above, this Amendment 2 does not, and does not purport to, amend, update or restate the information presented in any other item of the Form 20-F or reflect any events that have occurred after the filing of such Form 20-F.

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TABLE OF CONTENTS

Page

PART I

<u>ITEM 1. Identity of Directors, Senior Management and Advisers</u>	1
<u>ITEM 2. Offer Statistics and Expected Timetable</u>	1
<u>ITEM 3. Key Information</u>	2
<u>ITEM 4. Information on the Company</u>	23
<u>ITEM 4A Unresolved Staff Comments</u>	39
<u>ITEM 5. Operating and Financial Review and Prospects</u>	39
<u>ITEM 6. Directors, Senior Management and Employees</u>	55
<u>ITEM 7. Major Shareholders and Related Party Transactions</u>	75
<u>ITEM 8. Financial Information</u>	77
<u>ITEM 9. The Offer and Listing</u>	78
<u>ITEM 10. Additional Information</u>	79
<u>ITEM 11. Quantitative and Qualitative Disclosures about Market Risk</u>	93
<u>ITEM 12. Description of Securities Other than Equity Securities</u>	93

PART II

<u>ITEM 13. Defaults, Dividend Arrearages and Delinquencies</u>	93
<u>ITEM 14. Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	94
<u>ITEM 15. Controls and Procedures</u>	94
<u>ITEM 16. [RESERVED]</u>	95
<u>ITEM 16A Audit Committee Financial Expert</u>	95
<u>ITEM 16B Code of Ethics</u>	95
<u>ITEM 16C Principal Accountant Fees and Services</u>	96
<u>ITEM 16D Exemptions from the Listing Standards for Audit Committees</u>	96
<u>ITEM 16E Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u>	97
<u>ITEM 16F Change in Registrant's Certifying Accountant</u>	97
<u>ITEM 16G Corporate Governance</u>	97
<u>ITEM 16H Mine Safety Disclosure</u>	97

PART III

<u>ITEM 17. Financial Statements</u>	97
<u>ITEM 18. Financial Statements</u>	98
<u>ITEM 19. Exhibits</u>	98

## INTRODUCTION

### Definitions

In this annual report, unless the context otherwise requires:

references to “Ceragon,” the “Company,” “us,” “we” and “our” refer to Ceragon Networks Ltd. (the “Registrant”), an Israeli company, and its consolidated subsidiaries;

references to “ordinary shares,” “our shares” and similar expressions refer to the Registrant’s Ordinary Shares, NIS 0.01 nominal (par) value per share;

references to “dollars,” “U.S. dollars” and “\$” are to United States Dollars;

references to “shekels” and “NIS” are to New Israeli Shekels, the Israeli currency;

references to the “Companies Law” are to Israel’s Companies Law, 5759-1999;

references to the “SEC” are to the United States Securities and Exchange Commission; and

references to the "Nasdaq Rules" are to rules of the Nasdaq Global Select Market.

### Cautionary Statement Regarding Forward-Looking Statements

This annual report includes certain statements that are intended to be, and are hereby identified as, “forward-looking statements” for the purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations and projections about future events.

Forward-looking statements can be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “anticipate,” “estimate,” “continue,” “believe” or other similar expressions, but are not the only way these statements are identified. These statements discuss future expectations, plans and events, contain projections of results of operations or of financial condition or state other “forward-looking” information. When a forward-looking statement includes an underlying assumption, we caution that, while we believe the assumption to be reasonable and make it in good faith, assumed facts almost always vary from actual results, and the difference between a forward-looking statement and actual results can be material. Forward-looking statements may be found in Item 4. “INFORMATION ON THE COMPANY” and Item 5. “OPERATING AND FINANCIAL REVIEW AND PROSPECTS” and in this annual report generally. Our actual results could differ materially from those anticipated in these statements as a result of various factors, including all the risks discussed in “Risk Factors” and other cautionary statements in this annual report. All of our forward-looking statements are qualified by and should be read in conjunction with those disclosures. Except as may be required by applicable law, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties, and assumptions, the forward-looking events discussed in this annual report might not occur.

## PART I

### ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

### ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

1

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## ITEM 3. KEY INFORMATION

## Selected Financial Data

The selected financial data set forth in the table below have been derived from our audited historical financial statements for each of the years from 2011 to 2015. The selected consolidated statement of operations data for the years 2013, 2014 and 2015, and the selected consolidated balance sheet data at December 31, 2014 and 2015, have been derived from our audited consolidated financial statements set forth in Item 18. "FINANCIAL STATEMENTS." The selected consolidated statement of operations data for the years 2011 and 2012 and the selected consolidated balance sheet data at December 31, 2011, 2012 and 2013, have been derived from our previously published audited consolidated financial statements, which are not included in this annual report. This selected financial data should be read in conjunction with our consolidated financial statements and are qualified entirely by reference to such consolidated financial statements. We prepare our consolidated financial statements in U.S. dollars and in accordance with United States Generally Accepted Accounting Principles ("U.S. GAAP"). You should read the consolidated financial data with the section of this annual report entitled Item 5. "OPERATING AND FINANCIAL REVIEW AND PROSPECTS" and our consolidated financial statements and the notes to those financial statements included elsewhere in this annual report.

Year ended December 31,  
2011      2012      2013      2014      2015  
(In thousands, except share and per share data)

## Consolidated Statement of Operations Data:

Revenues	\$445,269	\$446,651	\$361,772	\$371,112	\$349,435
Cost of revenues	323,191	308,354	249,543	286,670	246,487
Gross profit	122,078	138,297	112,229	84,442	102,948
Operating expenses:					
Research and development	50,456	47,487	42,962	35,004	22,930
Selling and marketing	81,716	77,326	67,743	56,059	40,816
General and administrative.	26,524	27,519	26,757	23,657	21,235
Restructuring costs	7,834	4,608	9,345	6,816	1,225
Goodwill impairment	--	--	--	14,765	
Other income	--	--	(7,657 )	(19,827 )	(4,849 )
Acquisition related cost	4,919	--	--	--	--
Total operating expenses	171,449	156,940	139,150	116,474	81,357
Operating income (loss)	(49,371 )	(18,643 )	(26,921 )	(32,032 )	21,591
Financial expenses, net	(2,024 )	(3,547 )	(14,018 )	(37,946 )	(14,738 )
Income (loss) before taxes	(51,395 )	(22,190 )	(40,939 )	(69,978 )	6,853
Tax on income	(2,259 )	(1,201 )	(6,539 )	(6,501 )	(5,842 )
Net income (loss)	(53,654 )	(23,391 )	(47,478 )	(76,479 )	1,011
Basic net earnings (loss) per share	\$(1.49)	\$(0.64)	\$(1.23)	\$(1.22)	\$0.01
Diluted net earnings (loss) per share	\$(1.49)	\$(0.64)	\$(1.23)	\$(1.22)	\$0.01

Weighted average number of shares used in computing basic earnings (loss) per share	35,975,434	36,457,989	38,519,606	62,518,602	77,239,409
Weighted average number of shares used in computing diluted earnings (loss) per share	35,975,434	36,457,989	38,519,606	62,518,602	77,296,681



At December 31  
2011      2012      2013      2014      2015  
(In thousands)

**Consolidated Balance Sheet Data:**

Cash and cash equivalents, short and long term bank deposits, short and long term marketable securities	\$49,531	\$51,589	\$52,337	\$42,371	\$36,318
Working capital	154,987	129,407	106,765	87,748	84,311
Total assets	411,158	393,596	365,971	341,873	265,332
Total long term liabilities	76,664	69,767	52,498	31,822	19,915
Shareholders' equity	161,051	143,709	135,078	104,552	102,821

**Risk Factors**

The following risk factors, among others, could affect our business, results of operations or financial condition and cause our actual results to differ materially from those expressed in forward-looking statements made by us. These forward-looking statements are based on current expectations and we assume no obligation to update this information. You should carefully consider the risks described below, in addition to the other information contained elsewhere in this annual report. The following risk factors are not the only risk factors that the Company faces. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. Our business, financial condition and results of operations could be seriously harmed if any of the events underlying any of these risks or uncertainties actually occur. In that event, the market price for our ordinary shares could decline.

## Risks Relating to Our Business

In 2015 we experienced a decline in sales and revenues. If this decline continues, our results of operations and cash flow may be significantly adversely impacted.

While our measures, taken at the end of 2014, to improve gross profit, reduce operating expenses and improve our working capital management, were the main drivers for the improved financial results in 2015, we have seen a decrease in our sales and revenue as compared with 2014 and 2013. If this trend continues, our results of operations and cash flow may be significantly adversely impacted. In such a case, we may need to take additional measures such as cut in costs, which may impact our ability to compete in the market.

We face intense competition from other wireless equipment providers. If we fail to compete effectively, our business, financial condition and result of operations would be materially adversely affected.

The market for wireless equipment is rapidly evolving, highly competitive and subject to rapid change.

Our primary competitors include industry “generalists” such as Fujitsu Limited, Huawei Technologies Co., Ltd., L.M. Ericsson Telephone Company, NEC Corporation, Nokia and ZTE Corporation, each providing a vast wireless solutions portfolio, with a wireless backhaul solution within their portfolio. In addition to these primary competitors, a number of smaller microwave communications equipment suppliers, including Aviat Networks Inc., DragonWave Inc., and SIAE Microelectronica S.p.A., offer or are developing products that compete with our products.

Most of our principal competitors, the industry “generalists”, are substantially larger than we are and have longer operating histories and greater financial, sales, service, marketing, distribution, technical, manufacturing and other resources than we have. Moreover, the market for wireless equipment is going through significant consolidation. For example, five years ago we had five major wireless network equipment manufacturers, while today we have only three such major manufacturers. As these consolidations have increased the size and thus the competitive resources of these providers, which have greater name recognition and a larger customer base than we have, they may be able to respond more quickly to changes in customer requirements and evolving industry standards, as well as greater resources to the development, promotion and sale of their products. Many of these “generalists”, also have well-established relationships with our current and potential customers, have extensive knowledge of our target markets, which may give them additional competitive advantage. In addition, as these “generalists” have begun to focus more on selling services and bundle the entire network as a full-package offering, some of our customers, which seek best-of-breed solutions like ours, may be driven to purchase “bundled” solutions from the “generalists”. Moreover, as these “generalists” are usually financially stronger than us, some of these large competitors, especially those from China, may be able to offer customers more significant financing packages and more attractive pricing, which are frequently expected by customers in certain regions, and may increase the attractiveness of their products in comparison to ours.

Additionally, even where these “generalists” resell Ceragon products as a part of their own portfolio – selling through resellers may negatively impact our margins and it means that our business success may depend on these competitors to some extent. For example the consolidation between Nokia and Alcatel-Lucent may negatively impact our sales should Nokia decide to decrease volume of sales of the Ceragon products, since today Nokia resells the Ceragon products in various markets.

Moreover, current and potential competitors, may make strategic moves such as mergers, acquisitions or establishing cooperative relationships among themselves or with third parties that may allow them to increase their market share and competitive position.

We expect to face increasing competitive pressures in the future. If we are unable to compete effectively, our business, financial condition and results of operations would be materially adversely affected.



In previous years we incurred substantial losses and negative cash flows. Although we were profitable and generated cash from our operations in 2015, we cannot assure you that we will be able to maintain this improving trend and profitability or continue to have positive operating cash flows.

From 2011 through 2014, we incurred substantial net losses and a negative cash flow from operations. For example, in 2013 we incurred a net loss of \$47.5 million, a net loss of \$76.5 million in 2014, and negative cash flow from operations of \$(29.5) million and \$(32.3) in 2013 and 2014, respectively. Our prior losses were impacted by decreases in revenues, decreased gross margins and the significant expenses, costs and charges associated with prior organizational restructuring activities. In 2015 we incurred a net income of \$1.0 million and generated cash from operating activities of \$16.1 million. However, there is no assurance we will be able to maintain the improved results and may need to take further measures such as cutting additional costs in order to maintain or further improve our results. This may impact our ability to compete in the market for the short and long term and impair our financial condition.

Fluctuating working capital needs may require additional or alternate cash resources. If we are unable to obtain such resources our ability to fund operations could be impaired.

We have experienced significant fluctuations in liquidity and in our working capital needs. Our working capital needs are primarily impacted by the volume of our business and its profitability, our payment terms with our vendors and customers and the level of inventory we need to maintain in order to meet our contractual obligations.

We believe that our cash resources can support our business plan for at least the next 12 months; nevertheless changes and fluctuations in the above elements may require additional cash. Should our cash needs increase, we may need to raise additional funds through public or private debt or equity offerings. If we are not able to raise other capital or borrow additional funds, we may not be able to fund our working capital and operational needs which would have a material adverse effect on our business, financial condition, results of operations and cash flow.

In addition, as our credit facility period ends at March 31, 2017, we will have to extend the credit facility agreement or replace it with another financing arrangements in order to support the operations beyond March 31, 2017. The inability of the syndicate of banks to extend our credit facility, including by reason of a non-approval by the Controller of Restricting Trade, whose approval is required, and our inability to extend this credit facility under terms applicable to our business plans or to find alternate sources for it, may have material adverse effect on our business, financial condition, results of operations and cash flow.

We could be adversely affected by our failure to comply with the covenants in our credit agreement or by the failure of any bank to provide us with credit under committed credit facilities.

We have a committed credit facility available for our use from a syndicate of four banks. Our credit agreement contains financial and other covenants requiring that we maintain, among other things, minimum shareholders' equity value, a certain ratio between our shareholders' equity and the total value of our assets on our balance sheet, a certain ratio between our net financial debt to each of our working capital and accounts receivable, and a minimum cash covenant. Any failure to comply with the covenants, including due to poor financial performance, may constitute a default under the credit agreement and may require us to seek an amendment or waiver from the banks to avoid termination of their commitments and/or an immediate repayment of all outstanding amounts under the credit facilities which would have a material adverse effect on our financial condition and ability to operate. In addition, the payment may be accelerated and the credit facility may be cancelled upon an event in which a current or future shareholder acquires control (as defined under Israel Securities Law) of us. For more information, See Item 5. "OPERATING AND FINANCIAL REVIEW AND PROSPECTS; B. "Liquidity and Capital Resources," for a more detailed discussion.

In addition, the credit facility is provided by the syndication with each bank agreeing severally (and not jointly) to make its agreed portion of the credit loans to us in accordance with the terms of the credit loan agreement, which

includes a framework for joint decision making powers by the banks. If one or more of the banks providing the committed credit facility were to default on its obligation to fund its commitment, the portion of the committed facility provided by such defaulting bank would not be available to us.

5

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Due to the volume of our sales in emerging markets, we are susceptible to a number of political, economic and regulatory risks that could have a material adverse effect on our business, reputation, financial condition and results of operations.

A majority of our sales are made in countries in Latin America, India, Asia Pacific and Africa. For each of the years ended December 31, 2014 and 2015, sales in these regions accounted for approximately 73% of our revenues. As a result, the occurrence of any international, political, regulatory or economic events in these regions could adversely affect our business and result in significant revenue shortfalls and collection risk. Any such revenue shortfalls and/or collection risk could have a material adverse effect on our business, financial condition and results of operations. For example, there have been substantial import controls into Argentina, under which we need to obtain tax and customs authorities' approvals for import activities. To date we have been able to obtain all required approvals, and in Argentina, controls are just now being slowly lifted after the recent change in government, but we cannot assure you that more stringent requirements will not be imposed in the future. Due to the continued Venezuelan government policy that limits our customers' ability to pay for imported goods in foreign currency, our revenue from Venezuela has decreased significantly in 2014. In addition we have recorded in 2014 and 2015 a charge of \$20.5 million and \$1.6 million respectively, to reflect a re-measurement of assets in Venezuela, primarily accounts receivables, which were denominated or linked to the U.S. dollars. During 2015 our equity was adversely impacted at an amount of \$4.3 million as a result of the erosion of the Brazilian currency against the U.S. dollar in this year. We have no assurance that current conditions will not further deteriorate or that similar conditions will not occur in other developing countries, which might adversely affect our sales in these countries and/or our ability to collect the proceeds from such sales in the future.

Following are some of the risks and challenges that we face doing business internationally, several of which are more likely in the emerging markets than in other countries:

- unexpected changes in or enforcement of regulatory requirements, including security regulations relating to international terrorism and hacking concerns and regulations related to licensing and allocation processes;
- unexpected changes in or imposition of tax or customs levies;
- fluctuations in foreign currency exchange rates;
- restrictions on currency and cash repatriation;
- imposition of tariffs and other barriers and restrictions;
- burden of complying with a variety of foreign laws including foreign import restrictions which may be applicable to our products;
- difficulties in protecting intellectual property;
- laws and business practices favoring local competitors;
- demand for high-volume purchases with discounted prices;
- collection delays and uncertainties;
- civil unrest, war and acts of terrorism;
- requirements to do business in local currency; and



- requirements to do manufacture or purchase locally;

6

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In addition, local business practices in jurisdictions in which we operate, and particularly in emerging markets, may be inconsistent with international regulatory requirements, such as anti-corruption and anti-bribery regulations to which we are subject. It is possible that, notwithstanding our policies and in violation of our instructions, some of our employees, subcontractors, agents or partners may violate such legal and regulatory requirements, which may expose us to criminal or civil enforcement actions. If we fail to comply with such legal and regulatory requirements, our business and reputation may be harmed.

Our operating results may vary significantly from quarter to quarter and from our expectations for any specific period.

Our quarterly results are difficult to predict and may vary significantly from quarter to quarter, or from our expectations and guidance for any specific period. Most importantly, delays in product delivery or completion related services, can cause our revenues, net income and operating cash flow to fluctuate significantly from anticipated levels, especially as a large portion of our revenues are traditionally generated towards the end of each quarter. Factors such as geographical mix, delivery terms and timeline, product mix, related services mix and other deal terms may differ significantly from our prediction and impact our revenue recognition timing, gross margins, costs and expenses as well as cash flow from operations. In addition, the decisions of our customers regarding spending throughout the year may also create unpredictable fluctuations in the timing in which we received orders and can recognize revenues, which may impact our quarterly results.

The quarterly variation of our operating results, may, in turn, create volatility in the market price for our shares.

A decrease in industry growth or reduction in our customers' revenue from increased regulation or new mobile services may cause operators' investments in networks to slow, be delayed or stop, harming our business.

We are exposed to changing network models that affect operator spending on infrastructure as well as trends in telecom operators and other service provider's investment cycles. The emergence of over-the-top services, which make use of the operators' network to deliver rich content to users but are not sharing their revenue with the operators, are causing operators to lose a substantial portion of their voice/SMS revenues. In addition, changes in regulatory requirements in certain jurisdictions around the world are allowing smaller operators to enter into, and compete in, the market, which may also reduce our customers' pricing to their end-users further causing them to lose revenues. This is leading operators to spend more carefully on infrastructure upgrades and build-outs. Operators today are revising their old models because adding capacity to meet demand could force them to increase their current capital expense investments over the coming years. As a result, operators are looking for more cost-efficient solutions and network architecture that allow them to break the linearity of cost and capacity through more efficient use of existing infrastructure and assets. If operators fail to monetize new services, fail to introduce new business models or experience a decline in operator revenues or profitability, their willingness to invest further in their network systems may decrease, which will reduce their demand for our products and services and may have an adverse effect on our business, operating results and financial condition.

Global competition and current market conditions, including those specifically impacting the telecommunications industry, have resulted in downward pressure on the prices for our products, which could result in reduced revenues, gross margins, profitability and demand for our products and services.

Currently, we and other manufacturers of telecommunications equipment are experiencing, and are likely to continue to experience, increased downward price pressure, particularly as we increase our customer base to include more Tier 1 customers and continue to meet market demand in certain emerging markets and other less profitable countries. As a result, we may experience declining average sales prices for our products. Our future profitability will depend upon our ability to improve manufacturing efficiencies, to reduce costs of materials used in our products, and to continue to design to cost and introduce new lower-cost products and product enhancements. Because customers frequently negotiate supply arrangements far in advance of delivery dates, we may be required to commit to price reductions for

our products before we are aware of how, or if, cost reductions can be obtained. Current or future price reduction commitments and any inability on our part to respond to increased price competition, in particular from tier 1 customers with higher volumes and stronger negotiating power, could harm our profitability, business, financial condition and results of operations. Alternatively, if we decide not to pursue some of the deals, our revenues might significantly decrease and harm our business and financial results.

7

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In recent years we have increased our sales in India, a region typically characterized as being price-sensitive, resulting in pressure on our profitability. For the years ended December 31, 2014 and 2015, 24.8% and 30.3% of our revenues were earned in India, respectively. We expect that our revenues from sales of our products in India will continue to constitute a significant portion of our business in the future. In addition, we anticipate continued demand for our sales in Latin America, a geography which is characterized by strong downward pricing pressures. Challenging global economic conditions could also have adverse, wide-ranging effects on demand for our products and services, as well as for the products of our customers. The telecommunications industry has experienced downturns in the past in which operators substantially reduced their capital spending on new equipment. Continued adverse economic conditions, which still exist in certain jurisdictions, including certain countries in Europe, Latin America and Africa, could cause network operators to postpone investments or initiate other cost-cutting initiatives to improve their financial position. Over the past several years, network operators have started to share parts of their network infrastructure through cooperation agreements rather than through legal consolidation, which may adversely affect demand for lower cost network equipment. Moreover, the level of demand by operators and other customers who buy our products and services can change quickly and can vary over short periods, including from month to month.

If the current economic situation deteriorates, or if the uncertainty and variations in the telecommunications industry continues, our business could be negatively impacted, including in such areas as reduced demand for our products and services, slowed customer buying decisions, pricing pressures, possible withdrawal of global operators from some geographies in which they currently operate in and in which we sell, supplier or customer disruptions, or insolvency of certain of our key distributors, resellers, original equipment manufacturers (OEMs) and systems integrators, which could impair our distribution channels, which could reduce our revenues or our ability to collect our accounts receivable and have a material adverse effect on our financial condition and results of operations.

Some of our competitors can benefit from currency fluctuations as their costs and expenses are primarily denominated in currencies other than the U.S. dollar. In case the U.S. dollar strengthens against these currencies these competitors might offer their products and services for a lower price and take market share from us, which might adversely affect our business, result of operation and financial condition.

If we fail to effectively manage deliveries of our products, we may be unable to timely fulfill our customer commitments, which would adversely affect our business and results of operations. Technical problems in our relatively new product line, may adversely affect our business.

We outsource substantially all our manufacturing operations, and purchase ancillary equipment for our products from contract and other independent manufacturers and other third parties. If we fail to effectively manage and synchronize our deliveries from all these sources to the customer in a timely manner, fail to forecast the mix or quantities of our products or underestimate our production requirements, which could interrupt manufacturing, we could incur additional costs, be subject to penalties and suffer from reduction in our business. If one or more of the contract and other independent manufacturers or other third parties do not fully comply with their contractual obligations or experience delays, disruptions or component procurement problems, our ability to deliver complete product orders to our customers, or otherwise fulfill our contractual obligations to our customers, could be delayed or impaired. This could result in higher manufacturing costs, could cause damage to customer relationships or could result in our payment of penalties to our customers, which would adversely affect our business, financial results and customer relationships.

Since we launched our IP-20 platform, we face some technical problems that are typical to an introduction phase of a new product. Such technical problems may cause delays in product delivery, which could result in additional costs and adversely affect customer satisfaction and our result of operation. In addition, in our competitive market, we are expected to launch new versions and as well as new products from time to time, which again, are more prone to technical problems that may delay our deliveries. Any such technical problem may adversely affect our ramping up ability and may cause us to incur additional manufacturing costs or decrease our revenues, and may have a material adverse effect on our business.



We derive a substantial portion of our revenues from fixed-price projects, including our rollout projects, under which we assume greater financial risk if we fail to accurately estimate the costs of the projects.

We are engaged in supplying rollout projects, involving fixed-price contracts. We assume greater financial risks on fixed-price projects, which routinely involve the provision of installation and other services, versus equipment –only sales, which do not similarly require us to provide services or require customer acceptance certificates in order for us to recognize revenue. If we miscalculate the resources or time we need for these fixed-price projects, the costs of completing these projects may exceed our original estimates, which would negatively impact our financial condition and results of operations.

We have in the past undertaken restructuring activities, most recently in the fourth quarter of 2014, which may adversely impact our operations.

Since 2012, we implemented several restructuring activities in order to reduce operating costs and improve efficiency. The restructuring activities mainly included post termination costs, property and equipment write-offs in relation to activities that were terminated, as well as facilities-related expenses for warehouse and office closings and relocations.

We incurred restructuring charges of \$9.3 million and \$6.8 million, respectively, in 2013 and 2014. In the first quarter of 2015 we incurred charges of \$1.2 million which were related to our 2014 restructuring activity.

We based our restructuring efforts on assumptions and plans regarding the appropriate cost structure of our businesses, taking into consideration, among other factors, our product mix and projected sales. These assumptions may not be correct as we continue to evaluate and transform our business in order to achieve desired cost savings in an increasingly competitive market. If we are required to carry out an additional restructuring plan, we may incur additional restructuring charge, which may have adverse impact on our results of operation as well as our ability to compete in the market for the short and long term. Further, we may have difficulty attracting and retaining personnel as a result of a perceived risk of future workforce reductions.

We face intense competition from other communications solutions that compete with our high-capacity point-to-point wireless products, which could reduce demand for our products and have a material adverse effect on our business and results of operations. In addition, we are dependent upon sales of our single family of products into the high-capacity point-to-point wireless backhaul market. Any reduction in demand for our products in this market would cause our revenues to decrease.

Our products compete with other high-speed communications solutions, including fiber optic lines and other wireless technologies. Some of these technologies utilize existing installed infrastructure and have achieved significantly greater market acceptance and penetration than high-capacity point-to-point wireless technologies. Moreover, as more and more data demands are imposed on existing network frameworks and because of consolidation of fixed and mobile operators, operators may be more motivated to invest in more expensive high-speed fiber optic networks to meet current needs and remain competitive.

Some of the principal disadvantages of high capacity, point-to-point wireless technologies that may make other technologies more appealing include suboptimal operations in extreme weather conditions and limitations in connection with the need to establish line of sight between antennas.

In addition, customers may decide to use transmission frequencies for which we do not offer products.

Moreover, we develop and sell one family of products into the high-capacity point-to-point wireless backhaul market. As a result, we are more likely to be adversely affected by a reduction in demand for point-to-point wireless backhaul products in comparison to companies that also sell multiple and diversified product lines and solutions to

customers.

9

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To the extent that these competing communications solutions reduce demand for our high-capacity point-to-point wireless transmission products, there may be a material adverse effect on our business and results of operations.

Consolidation of our potential customer base could harm our business.

The increasing trend toward mergers in the telecommunications industry has resulted in the consolidation of our potential customer base. In situations where an existing customer consolidates with another industry participant, which uses a competitor's products, our sales to that existing customer could be reduced or eliminated completely to the extent that the consolidated entity decides to adopt the competing products. Further, consolidation of our potential customer base could result in purchasing decision delays as consolidating customers integrate their operations and could generally reduce our opportunities to win new customers, to the extent that the number of potential customers decreases. Moreover, some of our potential customers have agreed to share networks, which results in less network equipment and associated services required and a decrease in the overall size of the market. Network operators have started to share parts of their network infrastructure through cooperation agreements rather than legal consolidations, which may adversely affect demand for network equipment and could harm our business and results of operations.

We rely on a limited number of contract manufacturers to manufacture our products and if they experience delays, disruptions, quality control problems or a loss in capacity, it could materially adversely affect our operating results.

We outsource substantially all of our manufacturing processes, management of our logistic hubs and supply of our antennas to a limited number of contract manufacturers and suppliers that are located in Israel, Ukraine, Malaysia, Singapore, the Philippines and Hungary. We do not have long-term contracts with any of these contract manufacturers. From time to time, we have experienced and may in the future experience delays in shipments from these contract manufacturers. As part of our continued effort to reduce costs and the restructuring announcement on December 15, 2014, on March 18, 2015 we signed a contract with a certain contract manufacturer to outsource our production facility in Slovakia. As part of this outsourcing, we transferred the production activity to the new manufacturer during 2015. As a result of this move, we may experience delays in shipment as well as quality issues, until ramp up and knowledge transfer is completed.

Although we believe that our contract manufacturers have sufficient economic incentive to perform our manufacturing, the resources devoted to these activities are not within our control, and we cannot assure you that manufacturing problems will not occur in the future. In addition, the operations of our contract manufacturers are not under our control, and may themselves in the future experience manufacturing problems, including inferior quality and insufficient quantities of components. These delays, disruptions, quality control problems and loss in capacity could result in delays in deliveries of our product to our customers, which could subject us to penalties payable to our customers, increased warranty costs and possible cancellation of orders. If our contract manufacturers experience financial, operational, manufacturing capacity or other difficulties, or shortages in components required for manufacturing, our supply may be disrupted and we may be required to seek alternate manufacturers. We may be unable to secure alternate manufacturers that meet our needs in a timely and cost-effective manner. In addition, some of our contract manufacturers have granted us licenses with respect to certain technology that is used in a number of our products. If we change contract manufacturers, we may be required to renegotiate these licenses or redesign some of our products, either of which could increase our cost of revenues and cause product delivery delays. If we change manufacturers, during the transition period, we may be more likely to face delays, disruptions, quality control problems and loss in capacity, and our sales, profits and customer relationships may suffer.

Our international operations expose us to the risk of fluctuation in currency exchange rates and restrictions related to foreign currency exchange controls.

Although we derive a significant portion of our revenues in U.S. dollars, a portion of our U.S. dollar revenues are derived from customers operating in local currencies, which are different from the U.S. dollar. Therefore, devaluation in the local currencies of our customers relative to the U.S. dollar could cause our customers to cancel or decrease



orders or delay payment. In addition, part of our revenues from customers are in non-U.S. dollar currencies, therefore we are exposed to the risk of devaluation of such currencies relative to the dollar, which could have a negative impact on our revenues and results of operations. We are also subject to other foreign currency risks including repatriation restrictions in certain countries, particularly in Latin America. See also the risk of “Due to the volume of our sales in emerging markets, we are susceptible to a number of political, economic and regulatory risks that could have a material adverse effect on our business, reputation, financial condition and results of operations”

A substantial portion of our operating expenses are denominated in New Israeli Shekels, and to a lesser extent, other non-U.S. dollar currencies. Our NIS-denominated expenses consist principally of salaries and related costs and related personnel expenses. We anticipate that a portion of our expenses will continue to be denominated in NIS. In 2015, the NIS continued to fluctuate in comparison to the U.S. dollar, with the NIS depreciating by 0.3% against the U.S. dollar for that year. If the U.S. dollar weakens against the NIS in the future, there will be a negative impact on our results of operations.

In some cases, we are paid in non-U.S. dollar currencies or maintain monetary assets in non-U.S. dollar currencies, which could affect our reported results of operations. Also our cash balances in certain countries, may be devaluated significantly, especially in cases where conversion to U.S. dollars and repatriation of these cash reserves is restricted or impossible, which could have a material adverse effect on our financial condition. In addition, we have assets and liabilities that are denominated in non-U.S. dollar currencies. Therefore, significant fluctuation in these other currencies could have a significant effect on our results.

We use derivative financial instruments, such as foreign exchange forward contracts, to mitigate the risk of changes in foreign exchange rates on balance sheet accounts and forecast cash flows. We do not use derivative financial instruments or other “hedging” techniques to cover all of our potential exposure and may not purchase derivative instruments adequate to insulate ourselves from foreign currency exchange risks. In some countries, we are unable to use “hedging” techniques to mitigate our risks because hedging options are not available for certain government restricted currencies. During 2015, we incurred losses in the amount of \$7.8 million as a result of exchange rate fluctuations that have not been offset in full by our hedging strategy. In addition, during 2015 we also recorded charges of \$4.3 million to the other comprehensive loss in our shareholders’ equity as a result of the erosion of the Brazilian currency against the U.S. dollar. The volatility in the foreign currency markets may make it challenging to hedge our foreign currency exposures effectively.

We are engaged in supplying installation or rollout projects for our customers. Such long-term projects have inherent additional risks. Problems in executing these rollout projects, including delays or failure in acceptance testing procedures and other items beyond our control, would have a material adverse effect on our results of operations.

We are engaged in supplying our products as total rollout projects, which include installation and other services for our customers. In this context, we may act as prime contractor and equipment supplier for network build-out projects, providing installation, supervision and commissioning services required for these projects, or we may provide such services and equipment for projects handled by system integrators. As we engage in more rollout projects, we expect to continue to routinely enter into contracts involving significant amounts to be paid by our customers over time and which often require us to deliver products and services representing an important portion of the contract price before receiving any significant payment from the customer. Once a purchase agreement has been executed, the timing and amount of revenue, if applicable, may remain difficult to predict. The completion of the installation and testing of the customer’s networks and the completion of all other suppliers’ network elements are subject to the customer’s timing and efforts, and other factors outside our control, such as site readiness for installation, availability of power and access to sites, which may prevent us from making predictions of revenue with any certainty. This could cause us to experience substantial period-to-period fluctuations in our results of operations and financial condition.

In addition, typically in rollout projects, we are dependent on the customer to issue acceptance certificates to generate and recognize revenue. In such projects, we typically bear the risks of loss and damage to our products until the customer has issued an acceptance certificate upon successful completion of acceptance tests. Moreover, we are not always the prime integrator in these projects and in such cases, the acceptance may be delayed even further since it depends on the acceptance of other network elements, which are not in our control. The early deployment of our products during a long-term project reduces our cash flow, as we generally collect a significant portion of the contract price after successful completion of an acceptance test. If our products are damaged or stolen, or if the network we install does not pass the acceptance tests or if the customer does not or will not issue an acceptance certificate, the end user or the system integrator, as the case may be, could refuse to pay us any balance owed and we would incur

substantial costs, including fees owed to our installation subcontractors, increased insurance premiums, transportation costs, and expenses related to repairing or manufacturing the products. Moreover, in such a case, we may not be able to repossess the equipment, thus suffering additional losses.

If any of the above occurs, we may not be able to generate or recognize revenue and we may incur additional costs, any of which could materially adversely impact our results of operation and financial condition.

A single customer and customer group represent a significant portion of our revenues, and if we were to lose this single customer or customer group or experience any material reduction in orders from this single customer or customer group, our revenues and operating results may be adversely affected.

In 2015 we had revenue from a single customer group of affiliated companies equaling 17.7% of our total revenues. In 2014 we had revenue from a single customer that accounted for approximately 16.1% of our total revenues. In 2013 we had revenues from a single customer group of affiliated companies that accounted for approximately 15.4% of our total revenues. Our sales are generally made from standard purchase orders rather than long-term contracts. Accordingly, these large customers are not obligated to purchase a fixed amount of products or services over any period of time from us and may terminate or reduce their purchases from us at any time without notice or penalty. We therefore have difficulty projecting future revenues from these customers. This could have, and has had, an adverse effect on our reported revenues, profitability and cash flow. In addition, the loss of these customers or any material reduction in orders could adversely affect different aspects of our results of operations, including cash flow, and financial condition.

Our failure to establish and maintain effective internal control over financial reporting could result in material misstatements in our financial statements, failure to meet our reporting obligations. This may cause investors to lose confidence in our reported financial information, which could result in the trading price of our common stock to decline.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of our management, including the chief executive officer (“CEO”) and the chief financial officer (“CFO”), we carried out an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2015, using the criteria established in “Internal Control - Integrated Framework” (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected in a timely manner.

At the end of 2014, based on the Company’s evaluation, our management, including the CEO and CFO, has identified a material weakness related to our legal entity in Brazil, which accounted for approximately 10% of our total revenue for the year ended 2014, approximately 9% of our total assets as of 2014, finding that we did not maintain effective controls over our financial reporting and closing procedures as of December 31, 2014. This material weakness resulted from the fact that our accounting and supervisory personnel in Brazil did not have adequate accounting experience to enforce compliance with all the procedures that had been defined to ensure appropriate financial reporting. This deficiency could result in a material misstatement of the annual or interim consolidated financial statements that may not be prevented or detected on a timely basis.

With the oversight of CEO and CFO, we took steps and plan to take additional measures to remediate the underlying causes of the material weakness and as a result as of December 31, 2015 we had no material weakness in our internal controls over our financial reporting. See also ITEM 15. “CONTROLS AND PROCEDURES.”

If we conclude in future periods that our internal controls over financial reporting are not effective, we may fail to meet our future reporting obligations on a timely basis, our financial statements may contain material misstatements, our operating results may be negatively impacted, and we may be subject to litigation and regulatory actions, causing investor perceptions to be adversely affected and potentially resulting in a decline in the market price of our common stock. Even if we conclude that our internal controls over financial reporting are adequate, any internal control or procedure, no matter how well designed and operated, can only provide reasonable assurance of achieving desired control objectives and cannot prevent all mistakes or intentional misconduct or fraud.

Additional tax liabilities could materially adversely affect our results of operations and financial condition.

As a global corporation, we are subject to income and other taxes both in Israel and various foreign jurisdictions. Our domestic and international tax liabilities are subject to the allocation of revenues and expenses in different jurisdictions and the timing of recognizing revenues and expenses. Our tax expense includes estimates or additional tax, which may be incurred for tax exposures and reflects various estimates and assumptions, including assessments of our future earnings that could impact the valuation of our deferred tax assets. From time to time, we are subject to income and other tax audits, the timings of which are unpredictable. Our future results of operations could be adversely affected by changes in our effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in our overall profitability, changes in tax legislation and rates, changes in generally accepted accounting principles, changes in the valuation of deferred tax assessments and liabilities, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures. While we believe we comply with applicable tax laws, there can be no assurance that a governing tax authority will not have a different interpretation of the law and assess us with additional taxes. Should we be assessed additional taxes, there could be a material adverse effect on our results of operations and financial condition.

Our business activities in multiple countries may also expose us to indirect as well as withholding taxes in those countries. Our inability to meet certain tax regulations related to indirect or withholding tax as well as different interpretations applied by the governing tax authorities to those regulations may expose us to additional tax payments and penalties which would have a material adverse impact on our results of operations and financial condition.

Due to inaccurate forecasts, we may be exposed to inventory-related losses on inventories purchased by our contract manufacturers and other suppliers or to increased expenses should unexpected production ramp up be required. In addition, part of our inventory may be written off, which would increase our cost of revenues.

Our contract manufacturers and other suppliers are required to purchase inventory based on manufacturing projections we provide to them. If the actual orders from our customers are lower than projected, or the mix of products ordered changes, or if we decide to change our product line and/or our product support strategy, our contract manufacturers or other suppliers will have excess inventory of raw materials or finished products, which we would be required to purchase, thus incurring additional costs and our gross profit and results of operations could be adversely affected. In addition, our inventory levels may be too high, and inventory may become obsolete or over-stated on our balance sheet. This would require us to write off inventory, which could adversely affect our results of operations.

Alternatively, if we underestimate our requirements and actual orders are significantly larger than our planned forecast, we may be required to accelerate production and purchase of supplies, which may result in additional costs of buying components at less attractive prices, paying expediting fees and express shipment costs, overtime and other manufacturing expenses and our gross margins and results of operations could be adversely affected.

We require our contract manufacturers and other suppliers from time to time to purchase more inventory than is immediately required, and, with respect to our contract manufacturers, to partially assemble components, in order to shorten our delivery time in case of an increase in demand for our products. In the absence of such increase in demand, we may need to make advance payments or compensate our contract manufacturers or other suppliers, as needed. We also may purchase components or raw materials from time to time for use by our contract manufacturers

in the manufacturing of our products.

13

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Inventory of raw materials, work in-process or finished products located either at our warehouse or our customers' sites as part of the network build-up may accumulate in the future, and we may encounter losses due to a variety of factors including:

new generations of products replacing older ones, including changes in products because of technological advances and cost reduction measures; and

the need of our contract manufacturers to order raw materials that have long lead times and our inability to estimate exact amounts and types of items thus needed, especially with regard to the frequencies in which the final products ordered will operate.

Further, our inventory of finished products located either at our warehouse or our customers' sites as part of a network build-up may accumulate if a customer were to cancel an order or refuse to physically accept delivery of our products, or in rollout projects which include acceptance tests, refuse to accept the network. The rate of accumulation may increase in a period of economic downturn.

Our sales cycles in connection with competitive bids or to prospective customers are lengthy.

It typically takes from three to twelve months after we first begin discussions with a prospective customer before we receive an order from that customer, if an order is received at all. In some instances, we participate in competitive bids in tenders issued by our customers or prospective customers. These tender processes can continue for many months before a decision is made by the customer. In addition even after the initial decision is made we may be required for a lengthy and extensive testing and integration phase, as well as a lengthy contract negotiation phase, before a final decision to purchase is made. In some cases, even if we have signed a contract and our products were tested and approved for usage, it could take a significant amount of time until customer places purchase orders, if at all. As a result, we are required to devote a substantial amount of time and resources to secure sales. In addition, the lengthy sales cycle results in greater uncertainty with respect to any particular sale, as events may occur during the sales cycle that impact customers' decisions which, in turn, increases the difficulty of forecasting our results of operations.

Our contract manufacturers obtain some of the components included in our products from a limited group of suppliers and, in some cases, single or sole source suppliers. The loss of or problems in any of these suppliers could cause us to experience production and shipment delays as well as additional costs, which may result in a substantial cost increase or loss of revenue.

Our contract manufacturers currently obtain key components from a limited number of suppliers. Some of these components are obtained from a single or sole source supplier. Our contract manufacturers' dependence on a single or sole source supplier, or on a limited number of suppliers, subjects us to the following risks:

The component suppliers may experience shortages in components and interrupt or delay their shipments to our contract manufacturers. Consequently, these shortages could delay the manufacture of our products and shipments to our customers, which could result in penalties or cancellation of orders for our products.

The component suppliers could discontinue the manufacture or supply of components used in our systems. In such an event, our contract manufacturers or we may be unable to develop alternative sources for the components necessary to manufacture our products, which could force us to redesign our products, or we may need to buy a large stock of the component into inventory before it is discontinued. Any such redesign of our products would likely interrupt the manufacturing process and could cause delays in our product shipments. Moreover, a significant modification in our product design may increase our manufacturing costs and bring about lower gross margins.

The component suppliers may increase component prices significantly at any time and with immediate effect, particularly if demand for certain components increases dramatically in the global market. These price increases

would increase component procurement costs and could significantly reduce our gross margins and profitability.

14

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If we do not succeed in developing and marketing new products that keep pace with technological developments, changing industry standards and our customers' needs, we may not be able to grow or sustain our business.

The market for our products is characterized by rapid technological advances, changing customer needs and evolving industry standards, as well as increasing pressures to make existing products more cost efficient. Accordingly, our success will depend, among other things, on our ability to develop and market new products or enhance our existing products in a timely manner to keep pace with developments in technology, and customer requirements.

In addition, the wireless equipment industry is subject to rapid change in technological and industry standards. This rapid change, through official standards committees or widespread use by operators, could either render our products obsolete or require us to modify our products resulting in significant investment, both in time and cost, in new technologies, products and solutions. We cannot assure you that we will continue to successfully develop these components and bring them into full production with acceptable reliability, or that any development or production ramp-up will be completed in a timely or cost-effective manner.

We are continuously seeking to develop new products and enhance our existing products. In late 2013 we announced a significant new line of products (IP-20 Platform) which we continue to enhance with newer products and capabilities. Developing new products and product enhancements requires research and development resources. We may not be successful in enhancing our existing products or developing new products in response to technological advances or to satisfy increasingly sophisticated customer needs in a timely and cost-effective manner, which would have a material adverse effect on our ability to grow or maintain our business. Moreover, we cannot assure that new products being developed on the basis of the IP-20 Platform will be accepted in the market or will result in profitable sales or that such products will not require additional quality assurance and defect fixing processes.

Our past acquisition activities expose us to risks and liabilities.

The Nera Acquisition was our first acquisition involving significant international operations. In acquiring Nera we undertook a number of identified contingent liabilities of Nera, such as various known litigations with third parties, and other contingent exposures with customers, suppliers and employees, all of which could accumulate to a substantial amount. In addition, we may be exposed to potential tax liabilities worldwide with governmental authorities, which could result in a substantial cost. We also undertook certain exposures for penalties and other financial risks posed by a few of Nera's customers in the event of a default by us due to commercial or political circumstances, which may not be under our control. We assessed these contingent liabilities in the purchase price allocation.

However, our assessment of such contingent liabilities may not have been accurate and we may be exposed to actual payments, which may be significantly higher than we assessed. If we are required to make any actual payment on such potential tax liabilities, this could result in the Nera Acquisition being substantially more expensive than originally estimated and could materially adversely affect our results of operations and financial condition.

Our acquisition activities expose us to risks and liabilities, which could also result in integration problems and adversely affect our business.

Following the Nera Acquisition and other smaller acquisitions, we have increased the size of our operations and worldwide presence. We intend to continue to explore potential merger or acquisition opportunities. We are unable to predict whether or when any prospective acquisitions will be completed. The process of integrating an acquired business may be prolonged due to unforeseen difficulties and may require a disproportionate amount of our resources and management's attention. The anticipated benefits and cost savings of such mergers and acquisitions or other restructuring may not be realized fully, or at all, or may take longer to realize than expected. Acquisitions involve numerous risks any of which could harm our business, results of operations or the price of our ordinary shares.



We sell other manufacturers' products as an original equipment manufacturer, or OEM, which subjects us to various risks that may cause our revenues to decline.

We sell a limited number of products on an OEM basis through relationships with a number of manufacturers. Some of these OEM products enable us to offer a complete solution to some of our customers. These manufacturers have chosen to sell a portion of their products through us in order to take advantage of our reputation and sales channels. The sale of these OEM products by us depends in part on the quality of these products, the ability of these manufacturers to deliver their products to us on time and their ability to provide both presale and post-sale support. Sales of OEM products by us expose our business to a number of risks, each of which could result in a reduction in the sales of our products. We face the risks of termination of these relationships, technical and financial problems these companies might encounter or the promotion of their products through other channels and turning them into competitors rather than partners. In addition, failure by our OEM manufacturers to deliver their products or discontinue production of their products may cause difficulty to, and may have an adverse effect on, our business. If any of these risks materialize, we may not be able to develop alternative sources for these OEM products, which may cause us to lose certain customers or a part of their business which would cause our revenues to decline.

If we fail to obtain regulatory approval for our products, or if sufficient radio frequency spectrum is not allocated for use by our products, our ability to market our products may be restricted.

Radio communications are subject to regulation in most jurisdictions and to various international treaties relating to wireless communications equipment and the use of radio frequencies. Generally, our products must conform to a variety of regulatory requirements established to avoid interference among users of transmission frequencies and to permit interconnection of telecommunications equipment. Any delays in compliance with respect to our future products could delay the introduction of those products. Also, these regulatory requirements may change from time to time, which could affect the design and marketing of our products as well as the competition we face from other suppliers' products. Delays in allocation of new spectrum, such as the E and V bands in various countries, at prices which are competitive for our customers, for use with wireless backhaul communications, may also adversely affect the marketing and sales of our products.

In addition, in most jurisdictions in which we operate, users of our products are generally required to either have a license to operate and provide communications services in the applicable radio frequency or must acquire the right to do so from another license holder. Consequently, our ability to market our products is affected by the allocation of the radio frequency spectrum by governmental authorities, which may be by auction or other regulatory selection. These governmental authorities may not allocate sufficient radio frequency spectrum for use by our products. We may not be successful in obtaining regulatory approval for our products from these authorities and as we develop new products either our products or some of the regulations will need to change to take full advantage of the new product capabilities in some geographies. Historically, in many developed countries, the lack of available radio frequency spectrum has inhibited the growth of wireless telecommunications networks. If sufficient radio spectrum is not allocated for use by our products, our ability to market our products may be restricted which would have a materially adverse effect on our business, financial condition and results of operations. Additionally, regulatory decisions allocating spectrum for use in wireless backhaul at frequencies used by our competitors' products could increase the competition we face.

Other areas of regulation and governmental restrictions, including tariffs on imports and technology controls on exports or regulations related to licensing and allocation processes, could adversely affect our operations and financial results.

Our products are used in critical communications networks, which may subject us to significant liability claims.

Because our products are used in critical communications networks, we may be subject to significant liability claims if our products do not work properly. The provisions in our agreements with customers that are intended to limit our

exposure to liability claims may not preclude all potential claims. In addition, any insurance policies we have may not adequately limit our exposure with respect to such claims. We warrant to our current customers that our products will operate in accordance with our product specifications. If our products fail to conform to these specifications, our customers could require us to remedy the failure or could assert claims for damages. Liability claims could require us to spend significant time and money in litigation or to pay significant damages. Any such claims, whether or not successful, would be costly and time-consuming to defend, and could divert management's attention and seriously damage our reputation and our business.

Our international wireless backhaul operations subject us to environmental, health and other laws and potential liabilities that could materially impact our business, results of operations and financial condition.

Due to the nature of our global operations, we must comply with certain international and domestic laws, regulations and restrictions, which may expose our business to risks including the following:

- o Pursuant to Section 1502 of the Dodd-Frank Act, as a United States publicly-traded company we are required to disclose use or potential use of certain minerals and their derivatives, including tantalum, tin, gold and tungsten, that are mined from the Democratic Republic of Congo and adjoining countries and deemed conflict minerals. These requirements necessitate due diligence efforts to assess whether such minerals are used in our products in order to make the relevant required annual disclosures. We timely file our conflict minerals reports. Yet, there are, and will be, ongoing costs associated with complying with these disclosure requirements, we may face reputational challenges that could impact future sales if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to verify with sufficient accuracy the origins of all conflict minerals used in our products.
- o Our business is subject to numerous laws and regulations designed to protect the environment, including with respect to discharges management of hazardous substances. Although we believe that we have complied with these requirements and that such compliance has not had a material adverse effect on our results of operations, financial condition or cash flows, the failure to comply with current or future environmental requirements could expose the company to criminal, civil and administrative charges, due to the nature of our business and environmental risks, we cannot provide assurance that any such material liability will not arise in the future.
- o Our wireless communications products emit electromagnetic radiation. While we are currently unaware of any negative effects associated with our products, there has been publicity in recent years, regarding the potentially negative direct and indirect health and safety effects of electromagnetic emissions from wireless telephones and other wireless equipment sources, including allegations that these emissions may cause cancer. 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. 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. Claims against other wireless equipment suppliers or wireless service providers could adversely affect the demand for our backhaul solutions.

If we are unable to protect our intellectual property rights, our competitive position may be harmed.

Our ability to compete will depend, in part, on our ability to obtain and enforce intellectual property protection for our technology internationally. We currently rely upon a combination of trade secret, trademark and copyright laws, as well as contractual rights, to protect our intellectual property. In connection with the Nera Acquisition, we acquired certain patents and patent applications. However, our patent portfolio may still not be as extensive as those of our competitors. As a result, we may have limited ability to assert any patent rights in negotiations with, or in counterclaiming against, competitors who assert intellectual property rights against us.

We also enter into confidentiality, non-competition and invention assignment agreements with our employees and contractors engaged in our research and development activities, and enter into non-disclosure agreements with our suppliers and certain customers so as to limit access to and disclosure of our proprietary information. We cannot assure you that any steps taken by us will be adequate to deter misappropriation or impede independent third-party development of similar technologies. Moreover, under current law, we may not be able to enforce the non-competition agreements with our employees to their fullest extent.

We cannot assure you that the protection provided to our intellectual property by the laws and courts of foreign nations will be substantially similar to the remedies available under U.S. law. Furthermore, we cannot assure you that third parties will not assert infringement claims against us based on foreign intellectual property rights and laws that are different from those established in the United States. Any such failure or inability to obtain or maintain adequate protection of our intellectual property rights for any reason could have a material adverse effect on our business, results of operations and financial condition.

Defending against intellectual property infringement claims could be expensive and could disrupt our business.

The wireless equipment industry is characterized by vigorous protection and pursuit of intellectual property rights, which has resulted in often protracted and expensive litigation. We have been exposed to infringement allegations in the past. We may in the future be notified that we or our vendors, allegedly infringe certain patent or other intellectual property rights of others. Any such litigation or claim could result in substantial costs and diversion of resources. In the event of an adverse result of any such litigation, we could be required to pay substantial damages (including potentially treble damages and attorney's fees should a court find such infringement willful), cease the use and licensing of allegedly infringing technology and the sale of allegedly infringing products (including those we purchase from third parties). We may be forced to expend significant resources to develop non-infringing technology, obtain licenses for the infringing technology or replace infringing third party equipment. We cannot assure you that we would be successful in developing such non-infringing technology, that any license for the infringing technology would be available to us on commercially reasonable terms, if at all, or that we will find suitable substitute for infringing third party equipment.

If we fail to attract and retain qualified personnel, our business, operations and product development efforts may be materially adversely affected.

Our products require sophisticated research and development, marketing and sales, and technical customer support. Our success depends on our ability to attract, train and retain qualified personnel in all these professional areas while also taking into consideration varying geographical needs and cultures. We compete with other companies for personnel in all of these areas, both in terms of profession and geography, and we may not be able to hire sufficient personnel to achieve our goals or support the anticipated growth in our business. The market for the highly-trained personnel we require globally is competitive, due to the limited number of people available with the necessary technical skills and understanding of our products and technology. If we fail to attract and retain qualified personnel due to compensation or other factors, our business, operations and product development efforts would suffer.

#### Risks Related to Our Common Shares

If we are characterized as a passive foreign investment company, our U.S. shareholders may suffer adverse tax consequences, including higher tax rates and potentially punitive interest charges on certain distributions and on the proceeds of share sales.

We do not believe that for 2015 we were a passive foreign investment company, or PFIC, for U.S. federal income tax purposes. Non-U.S. corporations may generally be characterized as a PFIC for any taxable year, if after applying certain look through rules, either (1) 75% or more of such corporation's gross income is passive income, or (2) at least 50% of the average value of all such corporation's assets are held for the production of, or produce, passive income. If we are characterized as a PFIC, our U.S. shareholders may suffer adverse tax consequences, including having gains realized on the sale of our ordinary shares treated as ordinary income, rather than capital gain income, and having potentially punitive interest charges apply. Similar rules apply to distributions that are "excess distributions."

It is possible that the United States Internal Revenue Service could attempt to treat us as a PFIC for the 2015 year or prior tax years. The tests for determining PFIC status are applied annually and it is difficult to make accurate predictions of our future income, assets, activities and market capitalization, including fluctuations in the price of our

ordinary shares, which are relevant to this determination. Accordingly, there can be no assurance that we will not become a PFIC in 2016 or in subsequent years. For a discussion of the rules relating to passive foreign investment companies and related tax consequences, please see the section of this prospectus supplement entitled “U.S. Federal Income Tax Considerations” – “Tax Consequences if we are a Passive Foreign Investment Company.”

The price of our ordinary shares is subject to volatility. Such volatility may expose us to class actions against the Company and its senior executives.

The stock market in general and the market price of our ordinary shares, in particular, are subject to fluctuation. As a result, changes in our share price may be unrelated to our operating performance. The price of our ordinary shares has experienced volatility in the past and may continue to do so in the future. In the two year period ended December 31, 2015, the price of our ordinary shares has ranged from a high of \$3.84 per share to a low of \$0.88 per share. On December 31, 2014 and 2015, the closing price of our ordinary shares was \$1.01 per share and \$1.21 per share, respectively. The market price of our ordinary shares is and will continue to be subject to a number of factors, including:

- announcement of corporate transactions or other events impacting our revenues;
- announcements of technological innovations by us or by others;
- customer orders or new products or contracts;
- competitors' positions and other events related to this market;
- changes in the Company's estimations regarding looking forward statements and/or announcement of actual results that vary significantly from such estimations;
- changes in financial estimates by securities analysts;
- our earnings releases and the earnings releases of our competitors;
- other announcements, whether by the Company or others, referring to the Company's financial condition results of operations and changes in strategy;
- the general state of the securities markets (with particular emphasis on the technology and Israeli sectors thereof); and
- the general state of the credit markets, the current volatility of which could have an adverse effect on our investments.

These factors and any corresponding price fluctuations may materially and adversely affect the market price of our ordinary shares and may result in substantial losses by our investors. In addition to the volatility of the market price of our shares, the stock market in general and the market for technology companies in particular have been highly volatile and at times thinly traded. Investors may not be able to resell their shares following periods of volatility.

On January 6, 2015 the Company was served with a motion to approve a purported class action, naming the Company, its Chief Executive Officer and its directors as defendants. The motion was filed with the District Court of Tel-Aviv. The purported class action alleges breaches of duties by making false and misleading statements in the Company's SEC filings and public statements. Although the Company believes it has strong defense against these allegations and that the District Court should deny the motion to approve the class action, there is no assurance that the Company's position will be accepted by the District Court. In such case the Company may have to divert attention of its executives to deal with this class action as well as incur damages and expenses that may be beyond its insurance coverage for such cases, which cause a risk of loss and expenditures that may adversely affect its financial condition and results of operations.





Due to the size of their shareholdings, Yehuda and Zohar Zisapel have influence over matters requiring shareholder approval.

As of March 16, 2016, Yehuda Zisapel and Nava Zisapel beneficially owned, directly or indirectly, 4.61% of our outstanding ordinary shares; and Zohar Zisapel, our Chairman, beneficially owned, directly or indirectly, 13.9% of our outstanding ordinary shares. Such percentages include options which are exercisable within 60 days of March 16, 2016. Yehuda and Zohar Zisapel, who are brothers, do not have a voting agreement. Regardless, these shareholders may influence the outcome of various actions that require shareholder approval. Yehuda and Nava Zisapel have an agreement which provides for certain coordination in respect of sales of shares of Ceragon as well as for tag along rights with respect to off-market sales of Ceragon.

Our ordinary shares are traded on more than one market and this may result in price variations.

In addition to being traded on the Nasdaq Global Select Market, our ordinary shares are traded on the TASE. Trading in our ordinary shares on these markets take place in different currencies (U.S. dollars on Nasdaq and NIS on the TASE), and at different times (resulting from different time zones, trading days and public holidays in the United States and Israel). The trading prices of our ordinary shares on these two markets may differ due to these and other factors. Any decrease in the price of our ordinary shares on one market could cause a decrease in the trading price of our ordinary shares on the other market.

As a foreign private issuer we are permitted to follow certain home country corporate governance practices, instead of applicable SEC and Nasdaq Rules, which may result in less protection than is afforded to investors under rules applicable to domestic issuers.

As a foreign private issuer we are permitted to follow certain home country corporate governance practices and law instead of those rules and practices otherwise required by Nasdaq for domestic issuers. For instance, we have relied on the foreign private issuer exemption with respect to shareholder approval requirements for equity issuances and equity-based compensation plans and with respect to the Nasdaq requirement to have a formal charter for the compensation committee; See "Item 16G. Corporate Governance".

Following our home country corporate governance practices, as opposed to the requirements that would otherwise apply to a US company listed on Nasdaq, may provide less protection than is afforded to investors under the Nasdaq Rules applicable to domestic issuers.

#### Risks Related to Operations in Israel

Conditions in the Middle East and in Israel may adversely affect our operations.

Our headquarters, a substantial part of our research and development facilities and some of our contract manufacturers' facilities are located in Israel. Accordingly, political, economic and military conditions in Israel and the surrounding region may directly influence our operations. Specifically, we could be adversely affected by:

##### Hostilities involving Israel;

The interruption or curtailment of trade between Israel and its present trading partners;

A downturn in the economic or financial condition of Israel; and

· A full or partial mobilization of the reserve forces of the Israeli army;

Since its establishment in 1948, Israel has been subject to a number of armed conflicts that have taken place between it and its Arab neighbors. While Israel has entered into peace agreements with both Egypt and Jordan, Israel has no peace arrangements with any other neighboring countries.

Furthermore, violent uprisings against the regimes experienced in recent years in some Arab countries in the Middle East and North Africa, including in Egypt, Syria and Jordan, which border Israel, and the significant increase of hostile activities of ISIS, the Islamic State of Iraq and the Levant, in Syria, adjacent to Israel's northern border, and in the Sinai Peninsula, adjacent to Israel's southern border, all maintain a level of uncertainty in the region.

Despite the multiparty agreement reached between Iran and world powers, reports of its continuing nuclear development program have further heightened the antipathy between Israel and Iran.

In the last twenty years there has been a significant deterioration in Israel's relationship with the Palestinian Authority and a related increase in violence, including continued hostilities related to the Gaza Strip, which is controlled by the Hamas militant group. Efforts to resolve the problem have failed to result in a permanent solution. Further, since the beginning of 2015, we have been experiencing a wave of individual attacks against Israeli citizens, carried out by Palestinian individuals mostly from areas controlled by the Palestinian Authority, but also from Eastern Jerusalem and other parts of Israel. In 2014 Israel experienced another round of armed conflict with Hamas in the Gaza Strip, with missiles reaching the south and center region of the country.

All of the above raise a concern as to the stability in the region, which may affect the political and security situation in Israel and therefore could adversely affect our business, financial condition and results of operations.

Deterioration of relations with the Palestinian Authority has already started disrupting some of Israel's trading activities; certain countries, as well as various companies and organizations, primarily in the Middle East, but also in Malaysia and Indonesia, continue to participate in a boycott of Israeli companies and others that do business with Israel. The boycott, restrictive laws, policies or practices directed towards Israel or Israeli businesses could, individually or in the aggregate, have a material adverse effect on our business, for example, opportunities that we cannot pursue, or from which we will be precluded. Further deterioration of our relations with the Palestinian Authority, Hamas or countries in the Middle East could expand the disruption of international trading activities in Israel, may materially and negatively affect our business conditions and could harm our results of operations.

In addition, our business may be disturbed by the obligation of personnel to perform military service; in general, our Israeli employees, are subject to an obligation to perform reserve military service every once in a while, until they reach the age of 45 (or older, for reservists with certain occupations). In the event of a military conflict, these employees may be called to active duty for longer periods of time. In response to the increase in violence and terrorist activity in the past few years, there have been periods of significant call-ups for military reservists, and it is possible that there will be additional military reserve duty call-ups in the future. In case of further regional instability such employees who may include one or more of our key employees may be absent for extended periods of time which may materially adversely affect our business.

We can give no assurance that the political and security situation in Israel, as well as the economic situation, will not have a material impact on our business in the future.

We have received Israeli government grants for research and development expenditures, that restrict our ability to manufacture products and transfer technologies or know how outside of Israel.

We have received grants from the Industrial Research and Development Administration (formerly and more commonly known as the Office of Chief Scientist – "OCS") for the financing of a significant portion of our research and development expenditures in Israel. Even following full repayment of any OCS grants, and unless otherwise agreed by the applicable authority of the OCS, we must nevertheless continue to comply with the requirements of the Encouragement of Industrial Research and Development Law, 1984 and regulations promulgated there under (the "R&D Law").

Among other requirements of the R&D Law, including the obligation to pay royalties to the OCS, the R&D Law requires that the manufacture of products, which incorporate know how developed with OCS funds, be carried out in Israel, unless the OCS provides its approval for manufacture outside of Israel. This approval, if obtained, may be subject to various conditions, including the repayment of increased royalties. Transfer of the know-how developed with OCS funds and any right derived there from to third parties is generally prohibited, unless approved by the research committee of the OCS, in special cases, subject to the receipt by the OCS of certain payments. These

restrictions and requirements for payment may impair our ability to sell our technology assets or to outsource or transfer development or manufacturing activities with respect to any product or technology outside of Israel and to reduce the consideration available to our shareholders in a transaction involving the transfer outside of Israel of technology or know how developed with OCS funding (such as a merger or similar transaction), by any amounts that we are required to pay to the OCS.

For information regarding the above-mentioned and other restrictions imposed by the R&D Law, please see Item 4. "INFORMATION ON THE COMPANY- B. Business Overview - The Industrial Research and Development Administration, formerly – the Israeli Office of Chief Scientist."

The tax benefits to which we are currently entitled from our approved enterprise program and our beneficiary enterprise program require us to satisfy specified conditions, which, if we fail to meet, would deny us from these benefits in the future; further, if such tax benefits are reduced or eliminated in the future, we may be required to pay increased taxes.

The Company has capital investment programs that have been granted approved enterprise status ("Approved Programs") and a program under beneficiary enterprise status pursuant to the Law for the Encouragement of Capital Investments, 1959 ("Beneficiary Program"). When we begin to generate taxable income from these approved or beneficiary enterprise programs, the portion of our income derived from these programs will be exempt from tax for a period of two years and will be subject to a reduced tax for an additional eight years thereafter, depending on the percentage of our share capital held by non-Israelis. The benefits available to an approved enterprise program are dependent upon the fulfillment of conditions stipulated under applicable law and in the certificate of approval. If we fail to comply with these conditions, in whole or in part, we may be required to pay additional taxes for the period in which we benefited from the tax exemption or reduced tax rates and would likely be denied these benefits in the future. The amount by which our taxes would increase will depend on the difference between the then applicable tax rate for regular enterprises and the rate of tax, if any, that we would otherwise pay as an approved enterprise or beneficiary enterprise, and the amount of any taxable income that we may earn in the future.

In addition, the Israeli government may reduce or eliminate in the future, tax benefits available to approved or beneficiary enterprise programs. Our approved and beneficiary program and the resulting tax benefits may not continue in the future at their current levels or at any level and the legislation regarding Preferred Enterprise may not be applicable to us or may not fully compensate us for such change. The termination or reduction of these tax benefits would likely increase our tax liability. The amount, if any, by which our tax liability would increase will depend upon the rate of any tax increase, the amount of any tax benefit reduction, and the amount of any taxable income that we may earn in the future. For a description of legislation on "Preferred Enterprise" see Item 10. "ADDITIONAL INFORMATION; Taxation; Tax Benefits under the 2011 Amendment".

It may be difficult to enforce a U.S. judgment against us or our officers and directors, or to assert U.S. securities laws claims in Israel.

We are incorporated under the laws of the State of Israel. Service of process upon our directors and officers, almost all of whom reside outside the United States, may be difficult to obtain within the United States. Furthermore, because the majority of our assets and investments, and almost all of our directors and officers, are located outside the United States, any judgment obtained in the United States against us or any of our directors and officers may not be collectible within the United States.

Additionally, it may be difficult to enforce civil liabilities under U.S. securities law in original actions instituted in Israel; Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws because Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear such a claim, it is not certain whether Israeli law or U.S. law will be applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact by an expert witness, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel that addresses these matters.

Your rights and responsibilities as a shareholder will be governed by Israeli law which differs in some respects from the rights and responsibilities of shareholders of U.S. companies.

Since we are incorporated under Israeli law, the rights and responsibilities of our shareholders are governed by our Articles of Association and Israeli law. These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders in United States-based corporations. In particular, a shareholder of an Israeli company has a duty to act in good faith and in a customary manner in exercising its rights and performing its obligations towards the company and other shareholders and to refrain from abusing its power in the company, including, among other things, in voting at the general meeting of shareholders on certain matters, such as an amendment to a company's articles of association, an increase of a company's authorized share capital, a merger of a company and approval of related party transactions that require shareholder approval. A shareholder also has a general duty to refrain from discriminating against other shareholders. In addition, a controlling shareholder or a shareholder who knows that it possesses the power to determine the outcome of a shareholders' vote or to appoint or prevent the appointment of an office holder in a company or has another power with respect to a company, has a duty to act in fairness towards such company. Israeli law does not define the substance of this duty of fairness and there is limited case law available to assist us in understanding the nature of this duty or the implications of these provisions. These provisions may be interpreted to impose additional obligations and liabilities on our shareholders that are not typically imposed on shareholders of U.S. corporations.

Provisions of Israeli law may delay, prevent or make undesirable an acquisition of all or significant portion of our shares or assets.

Israeli corporate law regulates mergers and requires that a tender offer be effected when certain thresholds of percentage ownership of voting power in a company are exceeded (subject to certain conditions); See "Item 10.B. MEMORANDUM AND ARTICLES OF ASSOCIATION - Mergers and Acquisitions under Israeli Law." Further, Israeli tax considerations may make potential transactions undesirable to us or to some of our shareholders if the country of residence of such shareholder does not have a tax treaty with Israel (thus not granting relief from payment of Israeli taxes). With respect to mergers, Israeli tax law provides tax deferral in certain circumstances but makes the deferral contingent on the fulfillment of numerous conditions, including a holding period of two years from the date of the transaction, during which certain sales and dispositions of shares of the participating companies are restricted. Moreover, with respect to certain share swap transactions, the tax deferral is limited in time, and when such time expires, the tax becomes payable even if no actual disposition of the shares has occurred. See Item 6. "DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES –Mergers and Acquisitions under Israeli Law". For more information regarding such required approvals please see Item 4. "INFORMATION ON THE COMPANY - B. Business Overview - The Industrial Research and Development Administration, formerly – the Israeli Office of Chief Scientist."

In addition, in accordance with the Restrictive Trade Practices Law, 1988, and the R&D Law, approvals regarding a change in control (such as a merger or similar transaction) may be required in certain circumstances.

These provisions of Israeli law could have the effect of delaying or preventing a change in control and may make it more difficult for a third party to acquire us or for our shareholders to elect different individuals to our board of directors, even if doing so would be beneficial to our shareholders, and may limit the price that investors may be willing to pay in the future for our ordinary shares.

#### ITEM 4. INFORMATION ON THE COMPANY

##### A. History and Development of the Company

We were incorporated under the laws of the State of Israel on July 23, 1996 as Gigamet Ltd. We changed our name to Ceragon Networks Ltd. on September 6, 2000. We operate under the Israeli Companies Law. Our registered office is located at 24 Raoul Wallenberg Street, Tel Aviv 69719, Israel and the telephone number is 972-3-543-1000. Our web

address is [www.ceragon.com](http://www.ceragon.com). Information contained on our website does not constitute a part of this annual report.

Our agent for service of process in the United States is Ceragon Networks, Inc., our wholly owned U.S. subsidiary and North American headquarters, located at Overlook at Great Notch, 150 Clove Road, 9th Floor, Little Falls, NJ 07424.



## B. Business Overview

We are the number one wireless backhaul specialist company in terms of unit shipments and global distribution of our business, providing innovative wireless backhaul solutions to global wireless backhaul markets. We provide wireless backhaul solutions that enable cellular operators and other wireless service providers, to deliver voice, data and other multimedia services, enabling smart-phone applications such as Internet browsing, social networking applications, image sharing, music and video applications. We also provide our solutions for wireless backhaul to other vertical markets such as public safety, utilities and oil and gas offshore drilling platforms. Our wireless backhaul solutions use microwave and millimeter-wave radio technologies to transfer large amounts of telecommunication traffic between wireless 4G, 3G and other cellular base station technologies (distributed, or centralized with dispersed remote radio heads) and the core of the service provider's network. We are also a member of industry consortiums of companies, which attempt to better define future technologies in ICT (Information and Communication Technologies) markets, such as Open Networking Foundation (ONF), Metro Ethernet Forum (MEF), European Telecommunications Standards Institute (ETSI) and others.

In addition to providing our solutions, we also offer our customers a comprehensive set of turn-key professional services, including: advanced network and radio planning, site survey, solutions development, network rollout, maintenance, training and more. Our services include utilization of powerful project management tools in order to streamline deployments of complex wireless networks, thereby reducing time and costs associated with network set-up, and allowing a faster time-to-revenue. Our experienced teams can deploy hundreds of wireless backhaul links every week, and our rollout project track record includes hundreds of thousands of links already installed and in operation with a variety of industry-leading operators.

Designed for Internet Protocol (IP) network configurations, including risk-free migration from legacy to next-generation backhaul networks, our solutions provide fiber-like connectivity for next generation Ethernet/Internet Protocol, or IP-based, networks; for legacy circuit-switched, or SONET/SDH, networks and for hybrid networks that combine IP and circuit-switching technologies. Our solutions support all wireless access technologies, including LTE-Advanced, LTE, HSPA, EV-DO, CDMA, W-CDMA, WiFi and GSM. These solutions allow wireless service providers to cost-effectively and seamlessly evolve their networks from circuit-switched and hybrid concepts to all-IP packet-based concepts, thereby meeting the increasing demand of a growing number of subscribers and the increasing needs for mobile multimedia services. Our products also serve evolving network architectures including all-IP long haul networks.

We also provide our solutions to other non-carrier vertical markets such as oil and gas companies, public safety organizations, businesses and public institutions, broadcasters, energy utilities and others that operate their own private communications networks. Our solutions are deployed by more than 460 service providers of all sizes, as well as in hundreds of private networks, in more than 130 countries.

In March 2013, we received \$113.7 million of credit facilities which replaced all of the Company's existing credit facilities, including the agreement with Bank Hapoalim B.M. entered into in 2011 (the "Bank Hapoalim Agreement") and other short term credit facilities with other banks. In October 2013 and again in April 2014, we obtained the bank syndicate's consent for temporary less restrictive financial covenants. Most of the less restrictive financial covenants were in effect until October 1, 2014, except for one less restrictive financial covenant, which was in effect until March 31, 2015. After each date, the respective original covenants again apply. On March 31, 2015 we signed additional amendment with the banks syndicate that included primarily changes in our credit line structure, in some of our covenants, an extension of the credit facility period until June 30, 2016 and a gradual reduction of the maximum amount of loans from \$63.5 million to \$50 million by February 28, 2016. On March 10, 2016 we signed a further amendment to the credit facility agreement, which extended the credit facility repayment date till March 31, 2017 under the same terms of the previous amendment. See Item 5. "OPERATING AND FINANCIAL REVIEW AND PROSPECTS; B. Liquidity and Capital Resources," for a more detailed discussion.

In December 2014, we announced a significant new restructuring of our operations to reduce our operational costs. As part of the restructuring effort, we realigned operations, reduced head count and implemented other cost reduction measures in order to lower our breakeven point and improve profitability. The restructuring plan included consolidating or relocating certain offices and reduction of staff functions and several operations positions, as well as other measures. In connection with this restructuring, we incurred restructuring charges of \$6.8 million and \$1.2 million in the fourth quarter of 2014 and the first quarter of 2015, respectively.

## Wireless Backhaul; Short-haul, Long-haul and Small Cells Backhaul

Deployed by operators worldwide, today's wireless base stations handle many different technologies such as smart phones, tablets and PCs. Voice and data traffic generated by these high-end devices are then gathered and transmitted via the backhaul transport network to the radio frequency (RF), or wireless, network. Wireless backhaul offers network operators a cost-efficient alternative to wire-line (copper/fiber) connectivity. Support for high capacities means that all value-added services can be supported, while the high reliability of wireless systems provide for lower maintenance costs. Because they require no trenching, wireless links can also be set up much faster and at a fraction of the cost of wire-line solutions. On the operator's side, this translates into an increase in operational efficiency and faster time-to-market, as well as a shorter timetable to achieving new revenue streams.

The wireless backhaul market is divided into two main market segments. The first is a market segment in which operators invest resources and efforts to select the best wireless backhaul solution that will meet their wireless backhaul needs, in terms of the ability to improve their business operational efficiency, services reliability and their customers' (subscribers') quality of experience. This market segment is referred to as best-of-breed. The other market segment is characterized by operators that do not select the wireless backhaul solution, since this decision is made by a network's solution provider retained by the operator. This network solution provider delivers an end-to-end solution and the equipment required to operate the entire network, including the wireless backhaul equipment. Operators in this segment of the market often view the wireless backhaul solution as a "commodity", which should deliver network connectivity, without optimization of network and other resources, and a solution which does not play a primary role within the end-to-end network rollout considerations. This segment of the market is referred to as bundled-deals.

Ceragon serves the best-of-breed segment of the market and specializes in a range of solutions, which we believe provide high value for our customers:

Shorthaul solutions, which typically provide a wireless link capacity of up to 1 Gbps per link and are used to carry voice and data services over distances of between several hundred feet to 10 miles. Short-haul links are deployed in access applications wirelessly connecting the individual base-stations and cellular towers to the core network. Short-haul solutions are also used in a range of non-carrier "vertical" applications such as broadcast, state and local government, public safety, education and off-shore communication for oil and gas platforms.

Long-haul solutions, which typically provide a capacity of up to 5 Gbps, are used in the "highways" of the telecommunication backbone network. These links are used to carry services at distances of 10 to 50 miles, and, using the right planning, configuration and equipment, can also bridge distances of 100 miles.

Ceragon has more than once been the first to introduce new products and features to the market, including the first solution for wireless transmission of 155 Mbps at 38 GHz, the first native IP wireless transmission offering. More recently, we introduced a variety of technological enhancements including the first hitless/errorless 8-step Adaptive Coding and Modulation (ACM) technology (2007); first native Ethernet multi-channel long-haul radio with ACM (2010); unique asymmetric transfer mode and multi-layer compression (2011); and 1024QAM Long-Haul IP radio with 9 step ACM (2012) The industry's first multi-core radio solution supporting 2048 QAM and 4x4 MIMO (2012) and the industry's first and only "Advanced Frequency Reuse" technology. This technology, based on the Company's multicore technology allows operators to flexibly deploy the wireless base stations exactly where those are needed, without being bound to wireless backhaul deployment limitations as a result of interferences from various other links, which are often deployed in a dense carrier's network.

## Industry Background

The market demand for wireless backhaul is being generated primarily by cellular operators, wireless broadband service providers, businesses and public institutions that operate private networks. This market is fueled by the continuous customer growth in developing countries, and the explosion in mobile data usage in developed countries. Traditionally based on circuit-switched solutions such as T1/E1 or SONET/SDH, the market for wireless backhaul has shifted over the past several years, mostly to more flexible higher capacity and cost efficient architectures, based on IP/Ethernet technologies. The main catalyst of the shift towards IP/Ethernet-based networks as a whole, and the wireless backhaul in particular, has been the vast adoption of 4G/LTE wireless service technology in developed markets (predominantly the United States, Canada, Europe and some parts of Asia Pacific). While the adoption of 4G/LTE has yet to occur in some emerging markets (Latin America, Africa and other countries in Asia Pacific), 3G base stations deployed over recent years in emerging markets have also been relying on IP/Ethernet-based wireless backhaul, further fueling the market adoption of IP-based backhaul.

Rapid subscriber growth and the proliferation of advanced smartphones, tablets and other high data consuming devices, have significantly increased the amount of traffic that must be carried over a cellular operator's backhaul infrastructure. As a result, existing transport capacity is heavily strained, creating a bottleneck that hinders service delivery and quality.

With the growth in adoption of 4G/LTE and LTE-A, which provides even higher subscriber capacity, cellular operators are seeking strategies for new services, using new technologies which will allow further business growth, by facilitating quick and cost efficient enablement of new services for more connected subscribers (either human or machine). Amongst those are next generation cellular 5G technologies and Software Defined Networks (SDN) technologies. Next generation cellular 5G services technologies, for which the standard is not anticipated to be ratified before 2017, are expected to allow the support for a 1,000 fold larger amount of subscribers with up to 1 Gbps service capacity for many. The need for supporting 5G service capacities will require wireless backhaul with higher capacity and scalability to support 5G services.

SDN technologies are designed to enable fast network rollout with simplified interoperability between vendors by decoupling certain functions from network devices (routers and switches) and centralizing the control functions, traditionally performed by these dedicated network devices, within an SDN network controller. This change will leave the network devices to handle the data transport alone. Together with 5G, SDN may allow fast service enablement, thus requiring a flexible and scalable network infrastructure, to allow for fast and cost effective network implementation and optimization.

The wireless backhaul domain of the network will require adaptation to these industry trends by enabling far higher capacities, with ultra-low latency for high service quality and a high degree of wireless backhaul resource optimization that will be incorporated within the wireless backhaul network infrastructure. Network optimization is expected to be achieved, in part, by the use of SDN technologies with wireless backhaul optimization applications, which shall exploit network intelligence gathered by SDN controllers within the network.

## Cellular Operators

In order to address the strain on backhaul capacity, cellular operators have a number of alternatives, including leasing existing fiber lines, laying new fiber optic networks or deploying wireless solutions. Leasing existing lines requires a significant increase in operating expenses and, in some cases, requires the wireless service provider to depend on a direct competitor. Laying new fiber-optic lines is capital-intensive and these lines cannot be rapidly deployed. The deployment of high capacity and ultra-high capacity point-to-point wireless links represents a scalable, flexible and cost-effective alternative for expanding backhaul capacity. Supporting data rates of 1 Gbps and above, over a single radio unit, wireless backhaul solutions enable cellular operators to add capacity only as required while significantly

reducing upfront and ongoing backhaul costs.

Some of today's backhaul networks, primarily in emerging markets, still employ a large number of circuit switched (or TDM) solutions - whether T1/E1 or high-capacity SDH/SONET. These networks, originally designed to carry voice-only services, have a limited bandwidth capacity and offer no cost-efficient scalability model. The surge in mobile data usage, fueled by anticipation and adoption of 4G/LTE, drives operators to migrate their networks to a more flexible, feature-rich and cost optimized IP/Ethernet architecture. Additionally, the surge in data usage in densely populated areas drives operators to explore new network architectures that utilize a variety of small-cell technologies requiring the deployment of dense wireless backhaul network in various microwave and millimeter-wave spectral bands. As operators transition to 4G/LTE and LTE-Advanced, all of which are IP-based wireless access technologies, they look for ways to benefit from IP technology in the backhaul while maintaining support for their primary legacy services.

26

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In order to ensure the success of this backhaul network migration phase, operators require solutions that can support their legacy transport technology (TDM) while providing all the advanced IP/Ethernet capabilities and functionalities. This is because, in most cases, 4G/LTE base stations are co-located with 2G/3G base stations, and thus share the same backhaul network. Cellular operators therefore seek “hybrid” wireless backhaul solutions that can carry both types of traffic seamlessly over a single network, to facilitate their network migration. Our solutions, which support any network architecture and include both all-IP as well as hybrid products, offer operators a simple and quick network modernization plan.

#### Wireless Broadband Service Providers

For wireless broadband service providers, which offer alternate high data access, high-capacity backhaul is essential for ensuring continuous delivery of rich media service across their high-speed data networks. If the backhaul network and its components do not satisfy the service providers’ need for cost-effectiveness, resilience, scalability or ability to supply sufficient capacity, then the efficiency and productivity of the network may be seriously compromised. While both wireless and wire-line technologies can be used to build these backhaul systems, many wireless service providers opt for wireless point-to-point microwave solutions. This is due to a number of advantages of the technology including: rapid installation, support for high-capacity data traffic, scalability and lower cost-per-bit compared to wire-line alternatives.

#### Other Vertical Markets

Many large businesses and public institutions require private high bandwidth communication networks to connect multiple locations. These private networks are typically built using IP-based communications infrastructure. This market includes educational institutions, utility companies, oil and gas industry, broadcasters, state and local governments, public safety agencies and defense contractors. These customers continue to invest in their private communications networks for numerous reasons, including security concerns, the need to exercise control over network service quality and redundant network access requirements. As data traffic on these networks rises, we expect that businesses and public institutions will continue to invest in their communications infrastructure, including backhaul equipment. Like wireless service providers, customers in this market demand a highly reliable, cost-effective backhaul solution that can be easily installed and scaled to their bandwidth requirements. Approximately 20% of our business is associated with private network operators.

#### Wireless vs. Fiber Backhaul

Though fiber-based networks can easily support the rapid growth in bandwidth demands, they carry high initial deployment costs and take longer to deploy than wireless. Certainly, where fiber is available within several hundred feet of the operator’s point of presence, with ducts already in place, and when there are no regulatory issues that prohibit the connection – fiber can become the operator’s preferred route. In almost all other scenarios, high-capacity wireless backhaul using microwave and millimeter-wave technologies, is significantly more cost efficient. In fact, in most cases the return-on-investment from fiber installations can only be expected in the long term, making it hard for operators to achieve lower costs per bit and earn profits in a foreseeable future.

Wireless microwave and millimeter-wave backhaul solutions on the other hand are capable of delivering high bandwidth, carrier-grade Ethernet and TDM services. Our wireless backhaul solutions are suitable for all capacities up to 2.5 Gbps over a single radio connection (or “link”) and may be scaled up to higher degree of multiple Gbps using intelligent wireless carriers bonding technologies for bonding several radio frequency carriers together. Unlike fiber, wireless solutions can be set up quickly and are more cost efficient on a per-bit basis from the outset. In many countries, microwave backhaul links are deployed as alternative routes to fiber, ensuring on-going communication in case of fiber-cuts and network failures. Millimeter-wave backhaul links over short distances are expected to be used for this purpose as well, as millimeter-wave spectrum becomes readily available in various countries, at acceptable costs.



## Licensed vs. License-exempt Wireless Backhaul

Service providers select the optimal available transmission frequency based on the rainfall intensity in the transmission area and the desired transmission range. The regulated, or licensed, bands are allocated by government licensing authorities for high-capacity wireless transmissions. The license grants the licensee the exclusive use of that spectrum for a specific use thereby eliminating any interference issues. Licensed microwave spectrum is typically the choice of leading operators around the world because it matches the bandwidth and interference protection they require. Our products operate in the 4 – 42 GHz microwave frequency bands, the principal licensed bands currently available for commercial use throughout the world, as well as in the 70, 80 GHz frequency bands, known as the E-band spectrum, for use in ultra-high (beyond 1 Gbps capacity) for relatively short-distance links, required for the radio access network (RAN) backhaul, as well as small cell backhaul within the radio access network.

License-exempt products typically operate in the “sub-6 GHz” 2.4 – 5.85 GHz band or in the 24 GHz spectrum band. These systems can be deployed without any regulatory approval. Due to limited availability of spectrum, and the narrow bandwidth of frequency channels in this range, licensed-exempt systems can carry limited network capacity. Often operating in a near-line-of-sight (NLOS) mode, these systems also suffer from high signal loss which puts more limitations on their ability to provide high capacities for network traffic use. Another disadvantage is that because these frequencies are unregulated, it is impossible to ensure high, carrier-grade quality of service and high availability. There are, however, applications in which service providers, public or private, may use license-exempt spectrum products, for instance in enterprises, education, utility, financial, or public safety. Cellular operators and wireless ISPs may also use license-exempt spectrum solutions where NLOS is the only means to connect two end-points. For the license-exempt wireless networks market we offer products that are designed to operate in the “sub-6 GHz” frequencies.

Recently, the license exempt “Sub 6GHz” spectrum is being considered for providing a backhaul solution for cellular small cells situated on street-level fixtures such as lamp poles in urban locations. Though prone to interference by other license-exempt spectrum users, these products may provide some solution to the requirement of wireless backhaul within such small cells network environments, where relatively lower capacity is required.

## Industry Trends and Developments

Software Defined Networking (SDN) is an emerging concept aimed at simplifying network operations and allowing network engineers and administrators to quickly respond to a fast-changing business environment. SDN delivers network architectures that transition networks from a world of task-specific dedicated network devices, to a world of optimization of network performance through network intelligence incorporated within network controllers performing control functions and network devices, which perform traffic (data-plane) transport. Our IP-20 platform, which we launched during 2013, is an SDN-ready solutions suite that is built around a powerful software-defined engine and may be incorporated within the SDN network architecture. Our SDN architecture is envisioned to provide a set of applications that can achieve end-to-end wireless backhaul network optimization by intelligently making use of the scarce network resources, such as spectrum and power consumption.

The emergence of small cells presents backhaul challenges that differ from those of traditional macro-cells. Small cells can be used to provide a second layer of coverage in 4G/LTE networks, resulting in higher throughput and data rates for the end-user. Although small cell deployments are still evolving and are as of yet not showing significant volumes, Ceragon already offers tailored solutions for forward looking mobile operators. Our small-cell wireless backhaul portfolio includes a variety of compact all-outdoor solutions that provide operators with optimal flexibility in meeting their unique physical, capacity, networking, and regulatory requirements.



The network sharing business model is growing in popularity among mobile network operators (MNOs) who are faced with increasing competition from over-the-top players and an ever-growing capacity crunch. Network sharing can be particularly effective in the backhaul portion of mobile networks, especially as conventional macro cells evolve into super-sized macro sites that require exponentially more bandwidth for wireless backhaul. It has become abundantly clear that in these new scenarios, a new breed of wireless backhaul solutions with a significant investment is required. Our IP-20 platform supports network sharing concepts by addressing both the ultra-high capacities required for carrying multiple operator traffic, as well as the policing for ensuring that each operator's service level agreement (SLA) is maintained. The IP-20 platform can deliver up to several Gbps of data over a single link. At the same time, by employing advanced hierarchical quality of service (H-QoS) mechanisms, the IP-20 platform ensures fairness and policy enforcement on a shared network.

While green-field deployments tend to be all IP-based, the overwhelming portion of network infrastructure investments goes into upgrading, or "modernizing" existing cell-sites to fit new services with a lower total cost of ownership. Modernizing is more than a simple replacement of network equipment. It helps operators build up a network with enhanced performance, capacity and service support. For example, Ceragon offers a variety of innovative mediation devices that eliminate the need to replace costly antennas that are already in deployment. In doing so, we help our customers to reduce the time and the costs associated with network upgrades. The result: a smoother upgrade cycle, short network down-time during upgrades and faster time to revenue.

A growing market for non-mobile backhaul applications which includes: Offshore communications for the oil and gas as well as the shipping industry, require a unique set of solutions for use on moving rigs and vessels; Broadcast networks that require robust, highly reliable communication for the distribution of live video content either as a cost efficient alternative to fiber, or as a backup for fiber installations. Smart Grid networks for utilities, as well as local and national governments that seek greater energy efficiency, reliability, and scale.

A growing demand for high capacity, IP-based long haul solutions in emerging markets. This demand is driven by the need of operators to connect more communities to 3.5G and 4G mobile added value services, and a lack of alternative (wire-line) backbone telecommunication infrastructure in these emerging markets.

Market consolidation in the wireless backhaul segment continues. This trend was made evident in our acquisition of Nera and DragonWave's acquisition of the microwave division of Nokia Siemens Networks.

Subscriber growth continues mainly in emerging markets such as India, Africa and Latin America.

## Our Solutions

We offer a broad product portfolio of innovative, field-proven, high capacity wireless backhaul solutions, which incorporate our unique multicore technology. Our multicore technology is a key element in our differentiation within the wireless backhaul market, serving the best-of-breed market segment. Our multicore technology is comprised of high order of digital signal carriers imbedded in modems having multiple baseband cores, designed for microwave and millimeter-wave communications, and RF integrated circuits (RFIC), which support the entire available microwave and millimeter-wave spectrum. We integrate our multicore technology into sub systems and complete wireless backhaul solutions that deliver high value for our customers. With our approach to solutions, from system-on-a-chip design, all the way to solutions design, we enable cellular operators, other wireless service providers, public safety organizations, utility companies and private network owners to effectively obtain a range of benefits:

Increase business operational efficiency by reducing network related expenses: our customers are able to obtain the required capacity with one-quarter of the spectrum needed otherwise, double network capacity without adding more equipment simply by remotely expanding wireless link capacity, significantly reduce energy related expenses by utilizing our energy efficient products, use smaller antennas thereby reducing telecommunication tower leasing costs,

and improve their staff productivity with the use of a single wireless backhaul platform for their longhaul, shorthaul and small cells backhaul needs. We offer a range of solutions for quick and simple modernization of wireless networks to 4G/LTE, 4.5G/LTE-A technologies, which significantly contribute to our customers' ability to modernize and expand their service networks.

Our wireless backhaul solutions are offered across the widest range of frequencies from 4GHz microwaves to 86GHz millimeter-waves. This provides our customer more flexibility in deploying its wireless backhaul infrastructure, as it enables the customer to select the spectrum available in customer's market, from a wider range of frequencies. Any transport network topology is supported to enable high network availability and resiliency, including ring, mesh, tree and chain topologies.

Enhance customers' (subscribers) quality of experience: our multicore technology allows our customers to improve subscriber (user) quality of experience generated from the voice, data and multimedia services that they provide to their customers. Our solutions enable our customers deliver services with the flexibility to deploy wireless bases stations and other types of communication sites, exactly where needed, in order to maximize their customers' quality of experience. We do so by providing a solution, which can dramatically reduce the interference between wireless backhaul links, thereby allowing more flexibility for deploying wireless backhaul wherever needed.

Our Hierarchical Quality of Service (H-QoS) technology allows our customers offer a high order of SLAs (Service Level Agreements) to their customers, which increase their customers' satisfaction and in turn can provide an additional source of revenues.

Ensure peace of mind: Our solutions utilize the latest in microwave and millimeter-wave technology, incorporated in-house developed System on Chips (baseband and RF integrated circuits), and use the latest advances in SMT (Surface-mount technologies) - based manufacturing – allowing our customers to benefit from the highest service availability across their Ceragon - based wireless backhaul network.

We provide our customers with future solutions already built-in to their Ceragon installed base; We invest a significant amount of effort in designing and providing solutions, which are not only backward compatible with our earlier product generations, but allow our customers to reuse the radio units and antennas of their Ceragon links installed based, thereby replacing only the low labor-consuming indoor (sheltered) units - thus benefiting from the latest wireless backhaul performance of our latest technology across their Ceragon installed base. Moreover, our solutions support both TDM - Time Division Multiplexing (E1/T1, STM-1/OC-3) and IP/Ethernet within the same wireless backhaul equipment, providing our customers with high flexibility in network transition from legacy circuit-based connectivity to 4G and other IP/Ethernet-based connectivity, at their desired pace of transition - while achieving long-term operational efficiency, high service quality and availability.

Design to Cost. We see increasing demand for smaller systems with low power consumption and a cost structure that fits today's business environment in the diverse markets, seeking wireless backhaul solutions. We believe that this complicated puzzle can only be solved through vertical integration from system to chip level. Our strategy to drive performance up while driving cost down is achieved through our investment in modem and RF (radio frequency) integrated circuit (IC) design. Our advanced chipsets, which are already in use in hundreds of thousands of units in the field, integrate all the radio functionality required for high-end microwave and millimeter-wave systems. By owning the technology and controlling the complete system design, we achieve a very high level of vertical integration. This, in turn, yields systems that have superior performance, due to our ability to closely integrate and fine-tune the performance of all the radio components. By significantly reducing the number of components in the system and simplifying its design, we have made our solutions easier to manufacture. We have introduced automated testing that allows us to speed up production while lowering the costs for electronic manufacturing services manufacturers. Thus we believe we are able to achieve one of the lowest per-system cost positions in the industry and can offer our customers further savings through compact, low power consumption designs – which is becoming a key parameter in the ability of operators to deploy their networks, while meeting operational efficiency targets.

As an example, our FibeAir IP-20C, which can quadruple the link capacity over a single frequency channel, has nearly the same footprint as our RFU-C which is a single-channel radio unit, and not a full system. This achievement could not have been possible without our full control of the entire design and production process



Strategic Partnerships. Ceragon maintains strategic partnerships with third party solution vendors and network integrators. Through these relationships Ceragon develops interoperable ecosystems, enabling operators to profitably evolve mobile networks by using complementary backhaul alternatives.

## Our Products

Our portfolio of products utilizes microwave and millimeter-waves radio technologies that provide our customers with a wireless connectivity that dynamically adapts to weather conditions and optimizes range and efficiency for a given frequency channel bandwidth. Our products are typically sold as a complete system comprised of four components: an outdoor unit, an indoor unit, a compact high-performance antenna and a network management system. We offer all-packet microwave radio links, with optional migration from TDM to Ethernet. Our products include integrated networking functions for both TDM and Ethernet.

We offer our products in three configurations: All-indoor, All-outdoor and Split-mount.

Split-mount solutions consist of:

Indoor units which are used to convert the transmission signals from digital to intermediate frequency signals and vice versa, process and manage information transmitted to and from the outdoor unit, aggregate multiple transmission signals and provide a physical interface to wire-line networks.

Outdoor units or Radio Frequency Units (RFU), which are used to control power transmission, convert intermediate frequency signals to radio frequency signals and vice versa, and provide an interface between antennas and indoor units. They are contained in compact weather-proof enclosures fastened to antennas. Indoor units are connected to outdoor units by standard coaxial cables.

All-indoor solutions refer to solutions in which the entire system (indoor unit and RFU) reside in a single rack inside a transmission equipment room. A waveguide connection transports the radio signals to the antenna mounted on a tower. All indoor equipment is typically used in long-haul applications.

All-outdoor solutions combine the functionality of both the indoor and outdoor units in a single, compact device. This weather-proof enclosure is fastened to an antenna, eliminating the need for rack space or sheltering as well as the need for air conditioning.

Pointing accuracy solutions for high vibration environments. These are advanced microwave radio systems for use on moving rigs/vessels where the antenna is stabilized in one or two axes, azimuth or azimuth/elevation.

Antennas are used to transmit and receive microwave radio signals from one side of the wireless link to the other. These devices are mounted on poles typically placed on rooftops, towers or buildings. We rely on third party vendors to supply this component.

End-to-End Network Management. Our network management system uses standard management protocol to monitor and control managed devices at both the element and network level and can be easily integrated into our customers' existing network management systems.

An antenna, an RFU and an indoor unit comprise a terminal. Two terminals are required to form a radio link, which typically extends across a distance of several miles and can extend across a distance of over 100 miles. The specific distance depends upon the customer's requirements and chosen modulation scheme, the frequency utilized, the available line of sight, local rain patterns and antenna size. Each link can be controlled by our network management system or can be interfaced to the network management system of the service provider. The systems are available in

both split-mount, including an indoor and outdoor unit, all-indoor and all-outdoor installations.

31

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The IP-20 Platform provides a wide range of solutions for any configuration requirement and diverse networking scenarios. Composed of high-density multi-technology nodes and integrated radio units of multiple radio technologies ranging from 4GHz and up to 86GHz, it offers ultra-high capacity of multiple Gbps with flexibility in accommodating for every site providing high performance terminals for all-indoor, split-mount and all-outdoor configurations.

	Short-Haul					Long-Haul	
Product	FibeAir IP-20G & IP-20GX	FibeAir IP-20N / IP-20A*	FibeAir IP-20C	FibeAir IP-20S	FibeAir IP-20E	FibeAir IP-20C HP	FibeAir IP-20LH
Description	Multi-Radio Technology Edge Node	Multi-Radio Technology Aggregation Node	Compact All-Outdoor Multi-Core Node	Compact All-Outdoor Node	Compact All-Outdoor Node for E-band (70-80GHz)	Compact, high power, multi-carrier trunk	Ultra-high power multi-carrier trunk with HP-radio ODU's
Interfaces	1GE, FE, and E1/T1	10GE, 1GE, FE, E1/T1	1GE	1GE	1GE	10GE, 1GE, STM-1/OC-3, E1/T1 Note: support for some interfaces requires use of IP-20N/IP-20A IDU	10GE, 1GE, FE, STM-1/OC-3, E1/T1
Site Configuration	Split-mount		All-outdoor			All-outdoor / Split Mount (with IP-20N or IP-20A IDU)	All-indoor / Split-mount
Transport Technology	Hybrid and/or all-packet		All-packet			All-packet and/or Hybrid	Hybrid and/or
Typical Applications	Cellular operators, Wireless service providers, Incumbent local exchange carriers, Private Networks (Public Safety, First Responders, state/local gov. institutions and Utility Companies)	Cellular operators, Wireless service providers, Incumbent local exchange carriers, Private Networks (Public Safety, First Responders, state/local gov. institutions and Utility Companies)	Cellular operators, Wireless ISPs, , Private Networks (Public Safety, First Responders, state/local gov. institutions and Utility Companies)	Cellular operators, Wireless ISPs, , Private Networks (Public Safety, First Responders, state/local gov. institutions and Utility Companies)	Cellular operators, Wireless ISPs, , Private Networks (Public Safety, First Responders, state/local gov. institutions and Utility Companies)	Cellular operators, Wireless ISPs, Private Networks (Public Safety, First Responders, state/local gov. institutions and Utility Companies)	Cellular operators, Wireless service providers, Incumbent local exchange carriers, Private Networks (Public Safety, First Responders, state/local gov. institutions and Utility Companies)
Type of Customers	Cellular operators,	Cellular operators,	Cellular operators,	Cellular operators,	Cellular operators,	Cellular operators, Wireless service	Cellular operators,

Wireless ISPs, Private Network providers, Government institutions	Wireless ISPs, Private Network providers, Government institutions	Wireless ISPs, Private Network providers, Government institutions	Wireless ISPs, Private Network providers, Government institutions	Wireless ISPs, Private Network providers, Government institutions	providers, Incumbent local exchange carriers, Private Network providers	Wireless service providers, Incumbent local exchange carriers, Private Network providers
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Operating  
system

Unified operating system (CeraOS), uniformly supporting entire IP-20 platform series of products

End-to-End networking, services and radio capabilities

\* ANSI version



Our network management system (NMS) can be used to monitor network element status, provide statistical and inventory reports, download software and configuration to elements in the network, and provide end-to-end service management across the network. Our NMS solutions support all IP-20 platform products, as well as our legacy FibeAir IP-10 and Evolution products through a single user interface.

Network  
Management  
System (NMS)

Description User-friendly Network Management System designed for managing large scale wireless back haul networks. Optimized for centralized operation and maintenance of a complete network with an intuitive graphical interface for managing performance, end-to-end configuration, faults and system security.

Key Features Managing wireless backhaul networks; Fault management; Configuration & performance management; Network awareness; Full FCAPS Support Redundancy & Backup; Pay as you Grow with Software Key Mechanism;

Northbound  
Interfaces;  
Multi-platform  
Operating  
System Support

Our IP-based network products use native IP technology. Our hybrid products use our hybrid concept which allows them to transmit both native IP and native circuit-switched TDM traffic simultaneously over a single radio link. Native IP refers to systems that are designed to transport IP-based network traffic directly rather than adapting IP-based network traffic to existing circuit-switched systems. This approach increases efficiency and decreases latency. Our products provide effectively seamless migration to gradually evolve the network from an all circuit-switched and hybrid concept to an all IP-based packet.

As telecommunication networks and services become more demanding, there is an increasing need to match the indoor units' advanced networking capabilities with powerful and efficient radio units. Our outdoor RFUs are designed with sturdiness, power, simplicity, and compatibility in mind. As such, they provide high-power transmission for both short and long distances and can be assembled and installed quickly and easily. The RFUs can operate with different Ceragon indoor units, according to the desired configuration, addressing any network need be it cellular, backbone, rural or private backhaul networks.

Our RFUs deliver a maximum capacity over 80 MHz channels with configurable modulation schemes from QPSK to 2048QAM. High spectral efficiency is ensured by using the same bandwidth for double the capacity, using a single channel, with vertical and horizontal polarizations. This feature is implemented with a built-in cross polarization interference canceller (XPIC) mechanism. Ceragon was also the first wireless backhaul solutions vendor to introduce a fully functioning LoS 4x4 MIMO (Multiple Inputs, Multiple Outputs) radio. Taking advantage of LoS MIMO technology, our solutions quadruple the available capacity over a single frequency channel using a single, compact FibeAir IP-20C device.

#### Our Services

Roll Out Services. Since 2012, we are responsible for installing part of the links we ship. We offer complete solutions and services for the design and implementation of telecommunication networks, as well as the expansion or integration of existing ones. We have a global projects and services group that operates alongside our products groups. Under this group we offer our customers a comprehensive set of turn-key services including: advanced network and radio planning, site survey, solutions development, installation, maintenance, training and more. Our services include utilization of powerful project management tools in order to streamline deployments of complex wireless networks, thereby reducing time and costs associated with network set-up, and allowing faster time to revenue. Our experienced teams can deploy hundreds of "wireless backhaul links" every week, and our rollout project track-record includes hundreds of thousands of links already installed and in operation with a variety of tier 1 operators.

We are committed to providing high levels of service and implementation support to our customers. Our sales and network field engineering services personnel work closely with customers, system integrators and others to coordinate network design and ensure successful deployment of our solutions.

We support our products with documentation and training courses tailored to our customers' varied needs. We have the capability to remotely monitor the in-network performance of our products and to diagnose and address problems that may arise. We help our customers to integrate our network management system into their existing internal network operations control centers.

### Our Customers

We have sold our products through a variety of channels to over 460 service providers as well as to hundreds of private networks in more than 130 countries. Our principal customers are wireless service providers that use our products to expand backhaul network capacity, reduce backhaul costs and support the provision of advanced telecommunications services. In 2015, we continued to maintain our positioning as the number one wireless backhaul specialist, in terms of unit shipments and global distribution of our business. While most of our sales are direct, we do reach a number of these customers through OEM or distributor relationships. We also sell systems to large enterprises and public institutions that operate their own private communications networks through system integrators, resellers and distributors. Our customer base is diverse in terms of both size and geographic location.

In 2015, customers from the Europe region contributed 14% of total yearly revenue. Our sales in Latin America and Africa reached 24% and 10% of yearly revenue in 2015, respectively. Our sales in Asia Pacific (excluding India), North America and India in 2015 were 9%, 13% and 30%, respectively.

The following table summarizes the distribution of our revenues by region, stated as a percentage of total revenues for the years ended December 31, 2013, 2014 and 2015:

Region	Year Ended December					
	31,		2014		2015	
North America	9	%	11	%	13	%
Europe	18	%	16	%	14	%
Africa	20	%	15	%	10	%
India	8	%	25	%	30	%
APAC (excluding India)	11	%	11	%	9	%
Latin America	34	%	22	%	24	%

### Sales and Marketing

We sell our products through a variety of channels, including direct sales, OEMs, resellers, distributors and system integrators. Our sales and marketing staff, including supporting functions, includes approximately 523 employees in numerous countries worldwide, who work together with local agents, distributors and OEMs to expand our business.

We are a supplier to four key OEMs which together accounted for approximately 7% of our revenues in 2015. System integrators distributors and resellers accounted for approximately 12% of our revenues for 2015. We are focusing our efforts on direct sales, which accounted for approximately 75% of our revenues for 2015, because we believe that this is the way to provide more value to our customers. We also plan to develop additional strategic relationships with equipment vendors, system integrators, distributors, resellers, networking companies and other industry suppliers with the goal of gaining greater access to our target markets.

Our marketing efforts include advertising, public relations and participation in industry trade shows and conferences.

#### Manufacturing and Assembly

Our manufacturing process consists of materials planning and procurement, assembly of indoor units and outdoor units, final product assurance testing, quality control and packaging and shipping. With the goal of streamlining all manufacturing and assembly processes, we have implemented an outsourced, just-in-time manufacturing strategy that relies on contract manufacturers to manufacture and assemble circuit boards and other components used in our products and to assemble and test indoor units and outdoor units for us. The use of advanced supply chain techniques has enabled us to increase our manufacturing capacity, reduce our manufacturing costs and improve our efficiency.

We outsource most of our manufacturing operations to major contract manufacturers in Israel, Malaysia, Singapore, the Philippines, Hungary and Ukraine. On March 18, 2015 we signed a contract with a certain contract manufacturer to outsource our production facility in Slovakia and the production transfer to that manufacturer was carried out during 2015. Most of our warehouse operations are outsourced to subcontractors in Israel, the Philippines, and Singapore. The raw materials for our products come primarily from the United States, Europe and Asia Pacific.

We comply with standards promulgated by the International Organization for Standardization and have received certification under the ISO 9001, ISO 14001 and OHSAS 18001 standards. These standards define the procedures required for the manufacture of products with predictable and stable performance and quality, as well as environmental guidelines for our operations and safety assurance.

Our activities in Europe require that we comply with European Union Directives with respect to product quality assurance standards and environmental standards including the “RoHS” (Restrictions of Hazardous Substances) Directive.

#### Research and Development

We place considerable emphasis on research and development to improve and expand the capabilities of our existing products, to develop new products, with particular emphasis on equipment for transitioning to IP-based networks, and to lower the cost of producing both existing and future products. We intend to continue to devote a significant portion of our personnel and financial resources to research and development. As part of our product development process, we maintain close relationships with our customers to identify market needs and to define appropriate product specifications. In addition, we intend to continue to comply with industry standards and, in order to participate in the formulation of European standards, we are full members of the European Telecommunications Standards Institute.

Our research and development activities are conducted mainly at our facilities in Tel Aviv, Israel and also at our subsidiaries in Greece and Romania. As part of the restructuring activities in 2013, we closed our research and development activities in Bergen, Norway. As of December 31, 2015, our research, development and engineering staff consisted of 190 employees. Our research and development team includes highly specialized engineers and technicians with expertise in the fields of millimeter-wave design, modem and signal processing, data communications, system management and networking solutions.

Our research and development department provides us with the ability to design and develop most of the aspects of our proprietary solutions, from the chip-level, including both application specific integrated circuits, or ASICs and RFICs, to full system integration. Our research and development projects currently in process include extensions to our leading IP-based networking product lines and development of new technologies to support future product concepts. In addition, our engineers continually work to redesign our products with the goal of improving their manufacturability and testability while reducing costs.



## Intellectual Property

To safeguard our proprietary technology, we rely on a combination of patent, copyright, trademark and trade secret laws, confidentiality agreements and other contractual arrangements with our customers, third-party distributors, consultants and employees, each of which affords only limited protection. We have a policy which requires all of our employees to execute employment agreements which contain confidentiality provisions.

Our patent portfolio may not be as extensive as those of our competitors. As a result, we may have limited ability to assert any patent rights in negotiations with, or in counterclaiming against, competitors who assert intellectual property rights against us. To date, we have 17 patents granted in the United States and other foreign jurisdictions including the EPO (European Patent Office) and 4 patent applications pending in the United States and other foreign jurisdictions including the EPO. We cannot assure you that any patents will actually be issued or that the scope of any issued patent will adequately protect our intellectual property rights.

We have registered trademarks as follows:

for the standard character mark Ceragon Networks and our logo in the United States, Israel, and the European Union;

for the standard character mark Ceragon Networks in Canada;

for the standard character mark CERAGON in Russia, Morocco, Israel, Mexico, Malaysia, United States, South Africa, the Philippines, Argentina, Venezuela and Colombia and International Registration (protection granted in Australia, Iceland, Bosnia & Herzegovina, Switzerland, Croatia, Norway, Russia, South Korea, Ukraine, CTM (European Union), Turkey, Singapore and Macedonia);

for our design mark for FibeAir in the United States, Israel and the European Union;

for the standard character mark FibeAir in the United States;

for the standard character mark CeraView in Israel and the European Union; and

For the standard character mark Native2 in India.

We have pending trademark applications as follows:

for the standard character mark CERAGON in Indonesia, India, Nigeria, and International Registration (protection pending in China, Egypt, Kenya and Vietnam).

## Competition

The market for wireless equipment is rapidly evolving, fragmented, highly competitive and subject to rapid technological change. We expect competition, which may differ from region to region, to persist, intensify and increase in the future, especially if rapid technological developments occur in the broadband wireless equipment industry or in other competing high-speed access technologies.

We compete with a number of wireless equipment providers worldwide that vary in size and in the types of products and solutions they offer. Our primary competitors include large wireless equipment manufacturers (“generalists”) such as Fujitsu Limited, Huawei Technologies Co., Ltd., L.M. Ericsson Telephone Company, NEC Corporation, Nokia and ZTE Corporation. In addition to these primary competitors, a number of other smaller wireless backhaul equipment suppliers, including Aviat Networks, DragonWave Inc., and SIAE Microelettronica S.p.A offer or develop products that compete with our products.

We also expect consolidation to continue as the wireless equipment market continues to be highly competitive and, as a result, faces strong price pressures. We expect to continue to be a leader in the best-of-breed segment of the wireless backhaul market in terms of market share, technology and innovation, providing significant value to our customers.

36

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We expect that continued market pressures will drive further consolidation within equipment manufacturers competing with us and which focus solely on the best-of-breed segment of the wireless backhaul market. Examples of such previous consolidations are our acquisition in 2011 of Nera, the acquisition by Dragonwave of the wireless division of Nokia (formerly NSN), and the merger of the wireless divisions of Harris and Stratex Networks.

We expect further consolidations will take place within the “generalists”; the most recent is the merger between Nokia and Alcatel-Lucent, while Nokia itself is the result of a previous joint venture between Nokia and Siemens, and Alcatel-Lucent is the result of a previous merger between Alcatel and Lucent.

Further market consolidations among industry “generalists” may drive some operators, which seek best-of-breed solutions, to seek “bundled” network solutions from these “generalists”, which today, in part, resell our products. This trend may put an additional strain on our competitiveness.

We believe we compete favorably on the basis of:

our focus on the mobile market and active involvement in shaping next generation standards and technologies, which deliver best customer value;

Our ability to expand to other vertical markets such as oil and gas and public safety, by drawing upon the capabilities of our technologies and solutions;

product performance, reliability and functionality, which assist our customers to achieve the highest value;

range and maturity of product portfolio, including the ability to provide solutions in every widely available microwave and millimeter-wave licensed and license-exempt frequency, as well as our ability to provide both circuit switch and IP solutions and therefore to facilitate a migration path for circuit-switched to IP-based networks;

cost structure;

focus on high-capacity, point-to-point microwave technology, which allows us to quickly adapt to our customers’ evolving needs;

range of rollout services offering for faster deployment of an entire network and reduced total cost of ownership; and

support and technical service, experience and commitment to high quality customer service

Our products also indirectly compete with other high-speed communications solutions, including fiber optic lines and other wireless technologies.

The Industrial Research and Development Administration, formerly – the Israeli Office of Chief Scientist

The Government of Israel encourages research and development projects in Israel through the Industrial Research and Development Administration, formerly and more commonly known as the OCS, pursuant to and subject to the provisions of the R&D Law.

Under the R&D Law, we applied for and were granted R&D grants. As a recipient of such grants we were required to pay the OCS royalties ranging between 3% to 5% of the revenues deriving from sales of products or services incorporating know how developed within funds received from the OCS, until 100% of the dollar value of the grant is repaid (plus LIBOR interest).





In December 2006, we entered into an agreement with the OCS to conclude our R&D grants sponsored by the OCS, and by 2008 completed paying all debts remaining therefrom. In each of 2013 and 2014 we received approval for a new R&D grant from the Government of Israel through the OCS in amounts of approximately \$0.7 million and \$0.9 million respectively, which were already received (the "Generic Plan"). The Generic Plan requires us to comply with the requirements of the R&D Law in the same manner applicable to previous grants, provided, however, that the obligation to pay royalties on sales of products based on technology or know how developed with the Generic Plan does not apply to us, but may apply, under certain conditions, to a recipient of the technology or know how developed with the Generic Plan, to the extent such is sold and/or transferred. Final approval of the 2015 grant under the Generic Plan is still pending.

The R&D Law generally requires that a product developed under a grant program be manufactured in Israel. However, upon the approval of the OCS, some of the manufacturing volume may be performed outside of Israel. Such approval may only be granted under various conditions, such as the repayment of increased royalties, in an amount equal to up to 300% of the total grant amount, plus applicable interest, or increase of 1% in the royalty rate, depending on the extent of the manufacturing that is to be conducted outside of Israel.

The R&D Law also provides that know-how developed with funds received from the OCS and any right derived therefrom may not be transferred to third parties, unless such transfer was approved in accordance with the R&D Law. The research committee operating under the OCS may approve the transfer of know how between Israeli entities, provided that the transferee undertakes all the obligations in connection with the R&D grant as prescribed under the R&D Law. In certain cases, such research committee may also approve a transfer of know how outside of Israel, in both cases subject to the receipt of certain payments, calculated according to a formula set forth in the R&D Law, in amounts of up to six (6) times the total amount of the grants, plus applicable interest (in case of transfer outside of Israel), and three (3) times of such total amount (in case the R&D activity related to the know how remains in Israel). Such approvals are not required for the sale or export of any products resulting from such R&D activity.

Further, the R&D Law imposes reporting requirements with respect to certain changes in the ownership of a grant recipient; it law requires the grant recipient and its controlling shareholders and foreign interested parties to notify the OCS of any change in control of the recipient or a change in the holdings of the means of control of the recipient that results in a non-Israeli becoming an interested party directly in the recipient and requires the new interested party to undertake to the OCS to comply with the R&D Law. For this purpose, "control" means the ability to direct the activities of a company (other than any ability arising solely from serving as an officer or director of the company), including the holding of 25% or more of the Means of Control, if no other shareholder holds 50% or more of such Means of Control. "Means of control" refer to voting rights or the right to appoint directors or the chief executive officer. An "interested party" of a company includes a holder of 5% or more of its outstanding share capital or voting rights, its chief executive officer and directors, someone who has the right to appoint its chief executive officer or at least one director, and a company with respect to which any of the foregoing interested parties owns 25% or more of the outstanding share capital or voting rights or has the right to appoint 25% or more of the directors. Accordingly, any non-Israeli who acquires 5% or more of our ordinary shares will be required to notify the OCS that it has become an interested party and to sign an undertaking to comply with the R&D Law. In addition, the rules of the OCS may require additional information or representations with respect to such events.

The R&D Law has been amended effective as of January 1, 2016. Under the amendment a new Industrial Research and Development Administration has been established and is in charge of implementing the governmental policy regarding the R&D Law (and has been given discretion in the implementation of the R&D Law for such purpose). However, and until prescribed otherwise, the existing provisions relating to the transfer of knowhow and manufacturing outside of Israel, as detailed above, shall remain in full force and effect with respect to benefits and funding approved or received prior to such date.

In addition to the grants described above, in March 2014, we agreed to participate in two "Magnet" Consortium Programs (the "Programs") sponsored by the OCS, which grants do not bear any royalty obligations. In the framework

of the Programs, intended to support innovative generic industry-oriented technologies, we are to cooperate with additional companies and research institutes. With respect to each of the years 2014 and 2015 we received an approval from the OCS for a sum of \$1.4 million under the Programs, most of which was already received. In 2016 we expect to receive additional sum of approximately \$1 million, subject to our compliance with the terms of the Programs. The R&D Law applies to the Programs, including the restrictions on transfer of know how or manufacturing outside of Israel, as described above.

38

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### C. Organizational Structure

We are an Israeli company that commenced operations in 1996. The following is a list of our significant subsidiaries:

Company	Place of Incorporation	Ownership Interest
Ceragon Networks, Inc.	New Jersey	100 %
Ceragon Networks AS	Norway	100 %
Ceragon Networks (India) Private Limited	India	100 %

### D. Property, Plants and Equipment

Our corporate headquarters and principal administrative, finance and operations departments are located at a leased facility of approximately 65,000 square feet of office space and 5,750 square feet of warehouse space, in Tel Aviv, Israel. The leases for the majority of this space will expire December 31, 2017.

We also lease the following space at the following properties:

in the United States, we lease approximately 5,350 square feet of new premises in Overlook at Great Notch, New Jersey, expiring September, 2021 and approximately 12,461 square feet of office space in Richardson, Texas expiring May 2018. The lease of our old premises in Paramus New Jersey expired in April 2015.

in Norway we lease approximately 12,000 square feet of office space in Bergen, expiring in May 2019;

in India, we lease approximately 11,737 square feet of office space in New Delhi expiring in October 2019.

We also lease space for other local subsidiaries to conduct pre-sales and marketing activities in their respective regions.

#### ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

#### ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion and analysis should be read in conjunction with our consolidated financial statements, the notes to those financial statements and other financial data that appear elsewhere in this annual report. In addition to historical information, the following discussion contains forward-looking statements based on current expectations that involve risks and uncertainties. Actual results and the timing of certain events may differ significantly from those projected in such forward-looking statements due to a number of factors, including those set forth in "Risk Factors" and elsewhere in this annual report. Our consolidated financial statements are prepared in conformity with U.S. GAAP.

## A. Operating Results

### Overview

We are the number one wireless backhaul specialist in terms of unit shipments and global distribution of our business. We provide wireless backhaul solutions that enable cellular operators and other wireless service providers to deliver voice and data services, enabling smart-phone applications such as Internet browsing, social networking applications, image sharing, music and video applications. Our wireless backhaul solutions use microwave technology to transfer large amounts of telecommunication traffic between base stations and small-cells and the core of the service provider's network.

We also provide our solutions to other non-carrier vertical markets such as oil and gas companies, public safety network operators, businesses and public institutions, broadcasters, energy utilities and others that operate their own private communications networks. Our solutions are deployed by more than 460 service providers of all sizes, as well as in hundreds of private networks, in nearly 130 countries.

In March 2013, we received \$113.7 million of credit facilities which replaced all of the Company's previous credit facilities. In October 2013 and again in April 2014, we obtained the bank syndicate's consent for temporary less restrictive financial covenants. On March 31, 2015 we reached an agreement with the bank syndicate under which our existing credit facility agreement was amended to reflect a reduction in our credit facility and to include, among other changes, certain relief under our covenants as well as an extension of the agreement until June 30, 2016. On March 10, 2016 we signed a further amendment to the credit facility agreement, which extended the credit facility repayment date till March 31, 2017 under the same terms of the previous amendment. For a more detailed discussion see below under B. Liquidity and Capital Resources.

In December 2014, we announced a significant new restructuring of our operations to reduce our operational costs. The restructuring plan is intended to realign operations, reduce head count and undertake other cost reduction measures in order to lower our breakeven point and improve profitability. Once the restructuring and other cost reduction measures are completed, they were expected to result in annual savings of approximately \$18 to \$22 million. The restructuring plan includes relocating certain offices and reducing staff functions and some operations positions, as well as other measures. In 2014 and the first quarter of 2015, we incurred restructuring charges of \$6.8 million and \$1.2 million respectively, both related primarily to the 2014 restructuring plan. In addition, in the fourth quarter of 2014 we incurred a \$4.4 million write-off of discontinued product inventory related to the restructuring plan.

In August 2014, the Company completed a public offering of its shares on Nasdaq. Total net proceeds from the issuance amounted to approximately \$45.1 million, net of issuance expenses in the amount of \$400 thousand.

In April 2014, we signed an agreement with Eltek ASA to settle all claims, counter claims, legal proceedings, and any other contingent or potential claims regarding alleged breaches of representations and warranties contained in the purchase agreement governing the Nera Acquisition in January 2011. Pursuant to the settlement agreement, we received \$17 million in cash.

### Industry Trends