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

FORM 20-F

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

OR

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

For the fiscal year ended December 31, 2018

OR

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

For the transition period from _____ to _____

OR

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

Date of event requiring this shell company report _____

Commission file number 001-35135

SEQUANS COMMUNICATIONS S.A.

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

French Republic

(Jurisdiction of incorporation or organization)

15-55 Boulevard Charles de Gaulle

92700 Colombes, France

(Address of principal executive offices)

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(Name, telephone, e-mail and/or facsimile number and address of company contact person)

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

Title of each class	Name of each exchange on which registered
American Depositary Shares, each representing one ordinary share, nominal value €0.02 per share	New York Stock Exchange
Ordinary shares, nominal value €0.02 per share	New York Stock Exchange*

* Not for trading, but only in connection with the registration of American Depositary Shares.

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

Not Applicable
(Title of Class)

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

Not Applicable
(Title of Class)

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

Ordinary shares, nominal value €0.02 per share: 94,732,539 as of December 31, 2018

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 229.405 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, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", and "emerging growth company" in Rule 12b-2 of the Exchange Act.:

Large accelerated filer ☐

Accelerated filer ☒

Non-accelerated filer ☐

Emerging growth company ☐

Indicate by check mark which basis for 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 ☒

SEQUANS COMMUNICATIONS S.A.

FORM 20-F

ANNUAL REPORT FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018

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INTRODUCTION

Unless otherwise indicated, “Sequans Communications S.A.”, “Sequans Communications”, “the Company”, “we”, “us” and “our” refer to Sequans Communications S.A. and its consolidated subsidiaries.

In this annual report, references to the “euro” or “€” are to the euro currency of the European Union and references to “U.S. dollars” or “\$” are to United States dollars.

Reference to “the Shares” are references to Sequans Communications’ Ordinary Shares, nominal value €0.02 per share, and references to “the ADSs” are to Sequans Communications’ American Depositary Shares (each representing one Ordinary Share), which are evidenced by American Depositary Receipts (ADRs).

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are based on our management’s beliefs and assumptions and on information currently available to our management. All statements other than present and historical facts and conditions contained in this annual report on Form 20-F, including statements regarding our future results of operations and financial positions, business strategy, plans and our objectives for future operations, are forward looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. These forward-looking statements include, but are not limited to, those concerning the following:

- forecasts and trends in the markets in which we compete and in which our products are sold, including statements regarding the LTE markets and the expansion of the Internet of Things market;
- our expectations regarding our expenses, sales and operations;
- our expectations regarding our operating results;
- our expectations regarding our customer concentration;
- trends and challenges in the markets in which we operate, including average selling price reductions, cyclicity in the wireless communications industry and transitions to new process technologies;
- our ability to anticipate the future market demands and future needs of our customers;
- or ability to keep pace with and anticipate evolving industry standards, including 5G;
- our ability to achieve new design wins, or for design wins to result in shipments of our products at the levels and within the timeframes we currently expect;
- our plans for future products and enhancements of existing products;
- anticipated features and benefits of our current and future products;
- the sources of future demand for our products;
- our growth strategy elements and our growth rate;
- our ability to enter into strategic alliances or partnerships;
- our ability to develop or acquire complementary technologies or partner with others to bring to market solutions that integrate enhanced functionalities;
- our ability to protect and defend our intellectual property against potential third party intellectual property infringement claims;
- our ability to defend successfully against securities class-action litigation;
- our ability to maintain compliance with the NYSE continued listing requirements;
- general economic conditions in our domestic and international markets; and
- our future cash needs and our estimates regarding our capital requirements and our need for additional financing.

In some cases, you can identify forward-looking statements by terms such as “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “should,” “will,” “would” as well as similar expressions. Forward-looking statements reflect our current views with respect to future events, are based on assumptions and are subject to risks, uncertainties and other important factors. We operate in a very competitive and rapidly changing environment. New risks emerge from time to time. We cannot assure you that our plans, intentions or expectations will be achieved. Our actual results, performance or achievements could differ materially from those contemplated, expressed or implied by the forward-looking statements contained in this annual report, including, but not limited to, those factors described in “Item 3.D—Risk Factors”, “Item 4—Information on the Company” and “Item 5—Operating and Financial Review and Prospects”. Given these risks, uncertainties and other important factors, you should not place undue reliance on these forward-looking statements. All forward-looking statements attributable to us or persons acting on our behalf are expressly

qualified in their entirety by the cautionary statements set forth in this annual report. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. Except as required by law, we assume no obligation to update any forward-looking statements publicly, whether as a result of new information, future events or otherwise.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected Financial Data

The following tables set forth our selected consolidated financial and other data. You should read the following selected consolidated financial data in conjunction with “Item 5 — Operating and Financial Review and Prospects” and our consolidated financial statements and the related notes appearing elsewhere in this annual report. Our historical results are not necessarily indicative of results to be expected for future periods. The consolidated statements of operations data for the years ended December 31, 2016, 2017 and 2018, the consolidated statements of financial position data at December 31, 2016, 2017 and 2018, and the consolidated statements of cash flow data for the years ended December 31, 2016, 2017 and 2018 have been derived from our audited Consolidated Financial Statements included elsewhere in this annual report. The consolidated statement of operations data for the years ended December 31, 2014 and 2015, consolidated statement of financial position data at December 31, 2014 and 2015, and the consolidated statement of cash flow data for the year ended December 31, 2014 and 2015, have been derived from our audited Consolidated Financial Statements that are not included in this annual report.

Our financial statements included in this annual report were prepared in U.S. dollars in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board.

	Years ended December 31,				
	2014 ⁽¹⁾	2015 ⁽¹⁾	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
(in thousands, except per share data)					
Consolidated Statements of Operations Data:					
Revenue:					
Product revenue	\$ 19,836	\$ 24,669	\$ 34,581	\$ 37,353	\$ 28,938
Other revenue	2,766	7,863	10,998	10,910	11,312
Total revenue	22,602	32,532	45,579	48,263	40,250
Cost of revenue ⁽¹⁾ :					
Cost of product revenue	15,435	17,970	22,574	24,725	21,957
Cost of other revenue	346	1,481	3,022	2,397	2,405
Total cost of revenue	15,781	19,451	25,596	27,122	24,362
Gross profit	6,821	13,081	19,983	21,141	15,888
% of revenue	30%	40%	44%	44%	39%
Operating expenses ⁽²⁾ :					
Research and development	28,634	25,305	26,334	25,202	27,909
Sales and marketing	5,278	5,985	7,126	8,785	9,411
General and administrative	6,969	5,428	6,267	6,679	10,085
Total operating expenses	40,881	36,718	39,727	40,666	47,405
Operating income (loss)	(34,060)	(23,637)	(19,744)	(19,525)	(31,517)
Financial income (expense)	98	(3,448)	(4,759)	(6,335)	(5,675)
Profit (Loss) before income taxes	(33,962)	(27,085)	(24,503)	(25,860)	(37,192)
Income tax expense (benefit)	162	317	284	300	(968)
Profit (Loss)	\$ (34,124)	\$ (27,402)	\$ (24,787)	\$ (26,160)	\$ (36,224)
Basic earnings (loss) per share	\$ (0.58)	\$ (0.46)	\$ (0.39)	\$ (0.34)	\$ (0.39)
Diluted earnings (loss) per share	\$ (0.58)	\$ (0.46)	\$ (0.39)	\$ (0.34)	\$ (0.39)
Number of shares used for computing:					
Basic	59,142	59,145	63,805	77,668	93,767
Diluted	59,142	59,145	63,805	77,668	93,767

	At December 31,				
	2014 ⁽¹⁾	2015 ⁽¹⁾	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
(in thousands)					
Consolidated Statements of Financial Position Data:					
Cash, cash equivalents and short-term deposit	\$ 12,489	\$ 8,681	\$ 20,547	\$ 3,295	\$ 12,086
Total current assets	36,315	35,819	50,069	39,747	43,163
Total assets	49,415	48,856	65,077	57,056	62,574
Current and non-current loans and borrowings	5,846	26,482	29,310	30,655	48,834
Total current liabilities	19,048	29,132	31,467	27,938	27,198
Total equity (deficit)	25,115	(1,248)	8,860	4,148	(5,020)

	Year ended December 31,				
	2014 ⁽¹⁾	2015 ⁽¹⁾	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
	(in thousands)				
Consolidated Statements of Cash Flow Data:					
Net cash flow used in operating activities	\$ (24,406)	\$ (16,401)	\$ (15,589)	\$ (28,626)	(22,838)
Net cash flow used in investing activities	(5,625)	(5,345)	(5,270)	(6,477)	(8,766)
Net cash flow from financing activities	5,121	17,710	32,778	17,838	40,744
Net foreign exchange difference	(5)	(5)	(5)	11	(2)
Cash and cash equivalents at January 1	37,244	12,329	8,288	20,202	2,948
Cash and cash equivalents at December 31	12,329	8,288	20,202	2,948	12,086

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

(2) Includes share-based compensation as follows:

	Year ended December 31,				
	2014	2015	2016	2017	2018
	(in thousands)				
Cost of revenue	\$ 47	\$ 17	\$ 11	\$ 7	\$ 8
Operating expenses	1,230	850	1,111	1,631	1,804
Share-based compensation	\$ 1,277	\$ 867	\$ 1,122	\$ 1,638	\$ 1,812

Exchange Rate Information

In this annual report, for convenience only, we have translated the euro amounts reflected in our financial statements as of and for the year ended December 31, 2018 into U.S. dollars at the rate of €1.00 = \$1.1456, the noon buying rate for euros in New York City, as certified for customs purposes by the Federal Reserve Bank of New York, on December 31, 2018. You should not assume that, on that or on any other date, one could have converted these amounts of euros into U.S. dollars at that or any other exchange rate.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Our business faces significant risks. You should carefully consider all of the information set forth in this annual report and in our other filings with the United States Securities and Exchange Commission ("SEC"), including the following risk factors which we face, and which are faced by our industry. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. This report also contains forward-looking statements that involve risks and uncertainties. Our results could materially differ from those anticipated in these forward-looking statements, as a result of certain factors including the risks described below and elsewhere in this report and our other SEC filings. See "Special Note Regarding Forward-Looking Statements" on page 1.

Risks Related to Our Business and Industry

We have a history of losses and have experienced a significant decline in revenue from 2011, and we may not achieve or sustain profitability in the future, on a quarterly or annual basis.

We were established in 2003 and began operations in 2004, and have incurred losses on an annual basis since inception. We experienced net losses of \$24.8 million, \$26.2 million and \$35.7 million in 2016, 2017 and 2018, respectively. At December 31, 2018, our accumulated deficit was \$271.5 million. We expect to continue to incur significant expense related to the development of our LTE products and expansion of our business, including research and development and sales and administrative expenses. Additionally, we may encounter unforeseen difficulties, complications, product delays and other unknown factors that require additional expense. As a result of these expenditures, we will have to generate and sustain substantially increased revenue to achieve profitability. If we do not, we may not be able to achieve or maintain profitability, and we may continue to incur significant losses in the future.

Our industry is subject to rapid technological change that could result in decreased demand for our products and those of our customers, or result in new specifications or requirements for our products, each of which could negatively affect our revenues, margins and operating results.

The markets in which we and our customers compete or plan to compete are characterized by rapidly changing technologies and industry standards and technological obsolescence, including the emergence of IoT and 5G. Our ability to compete successfully depends on our ability to design, develop, manufacture, assemble, test, market and support new products and enhancements on a timely and cost-effective basis. A fundamental shift in technologies in any of our target markets could harm our competitive position within these markets. In addition, such shifts can cause a significant decrease in our revenues and adversely affect our operating results. Our failure to anticipate these shifts, to develop new technologies or to react to changes in existing technologies could materially delay our development of new products, which could result in product obsolescence, decreased revenue and a loss of design wins. The development of new technologies and products generally requires substantial investment before they are commercially viable. We intend to continue to make substantial investments in developing new technologies and products, including our LTE and 5G products, and it is possible that our development efforts will not be successful and that our new technologies and products will not be accepted by customers or result in meaningful revenue. If the semiconductor solutions we develop fail to meet market or customer requirements or expectations, or do not achieve market acceptance, our operating results and competitive position would suffer.

Our success and the success of our new products will depend on accurate forecasts of future technological developments, customer and consumer requirements and long-term market demand, as well as on a variety of specific implementation factors, including:

- accurate prediction of the size and growth of the LTE markets, and in particular the market for LTE-only, also referred to as single-mode LTE, products where no fall back to 2G or 3G technology is required, and the market for the variants of LTE optimized for the Internet of Things (the narrow band versions referred to as Cat M and NB-1);
- accurate prediction of the size and growth of the 5G market;
- accurate prediction of changes in device manufacturer requirements, technology, industry standards or consumer expectations, demands and preferences;
- accurate prediction of the growth of the Internet of Things market and the adoption of industry standards allowing devices to connect and communicate with each other;
- accurate prediction of the timing of commercial availability of LTE networks, including the network operators' deployment of Cat M and NB-1);
- timely and efficient completion of process design and transfer to manufacturing, assembly and testing, and securing sufficient manufacturing capacity to allow us to continue to timely and cost-effectively deliver products to our customers;
- market acceptance, adequate consumer demand and commercial production of the products in which our semiconductor solutions are incorporated;
- the quality, performance, functionality and reliability of our products as compared to competing products and technologies; and
- effective marketing, sales and customer service.

The markets for our semiconductor solutions are characterized by frequent introduction of next generation and new products with new features and functionalities, short product life cycles and significant price competition. If we or our customers are unable to manage product transitions in a timely and cost-effective manner, our business and results of operations would suffer. In addition, frequent technology changes and introduction of next generation products may result in inventory obsolescence, which could reduce our gross margins and harm our operating performance. If we fail to timely introduce new

products that meet the demands of our customers or our target markets, or if we fail to penetrate new markets, our revenue will decrease, and our financial condition would suffer.

Our LTE semiconductor solutions do not incorporate support for 2G or 3G protocols, and we currently focus on selling our solutions into the market for LTE-only devices. If the market for LTE-only devices materializes more slowly or at a lower volume level than we anticipate, our results of operations may be harmed.

Our current semiconductor solutions support only 4G protocols. As a result, our LTE strategy focuses primarily on selling into the LTE-only device market. The growth rate and size of the market for LTE-only devices is dependent on a number of factors, including the degree of geographic and population coverage by LTE networks. If this coverage does not continue to materialize as quickly as we expect, if fewer LTE carriers than we expect offer comprehensive LTE coverage in their geographic operating areas, or if these LTE carriers require support for 2G or 3G protocols in a larger proportion of their overall device portfolio than we expect, then demand for LTE-only semiconductor solutions like ours would be lower and our results of operations would be harmed.

If we are unsuccessful in developing and selling new products on a timely and cost-effective basis or in penetrating new markets, in particular the single-mode LTE market, our business and operating results would suffer.

We depend on the commercial deployment of 4G wireless communications equipment, products and services to grow our business, and our business may be harmed if wireless carriers delay or are unsuccessful in the commercial deployment of 4G technology or the adoption of Cat M and NB-1 standards, or if they deploy technologies that are not supported by our solutions.

We depend upon the continued commercial deployment of 4G wireless communications equipment, products and services based on our technology. Deployment of new networks by wireless carriers requires significant capital expenditures, well in advance of any revenue from such networks. In the past, wireless carriers have cancelled or delayed planned deployments of new networks, including, for example, commercial retail service in the Indian market. If existing deployments are not commercially successful or do not continue to grow their subscriber base, or if new commercial deployments of 4G networks are delayed or unsuccessful, our business and financial results would be harmed.

During network deployment, wireless carriers often anticipate a certain rate of subscriber additions and, in response, operators typically procure devices to satisfy this forecasted demand. If the rate of deployment of new networks by wireless carriers is slower than we expect or if 4G technology is not as widely adopted by consumers as we expect, the rate of subscriber additions may be slower than expected, which will reduce the sales of our products and cause OEMs and ODMs to hold excess inventory. This would harm our sales and our financial results.

As we expand into the broader Internet of Things market, we will similarly depend on the commercial deployment of narrow band LTE variants, beginning with Cat M and, later, Cat NB-1. The adoption of the Cat M and Cat NB-1 standards is expected to expand the market for Internet of Things devices. If the Cat M or Cat NB-1 standards are not successfully adopted and deployed, are further delayed or if competing standards for Internet of Things devices become favored by wireless carriers, we may not be able to successfully commercialize our Cat M and Cat NB-1 chipsets, which would harm our sales and our financial results.

In the future we are likely to have similar dependencies regarding the deployment of 5G networks.

In addition, wireless carriers may choose to deploy technologies not supported by our solutions. If a technology that is not supported by our semiconductor solutions gains significant market share or is favored by a significant wireless carrier, we could be required to expend a significant amount of time and capital to develop a solution that is compatible with that alternative technology. If we are not successful, we could lose design wins with respect to that technology and our business and financial results would be harmed. Moreover, once a competitor's solution is chosen by a wireless carrier, OEM or ODM we will have difficulty supplanting those solutions with ours.

We or our customers may be required to obtain licenses for certain so-called "essential patents" in order to comply with applicable standards, which could require us to pay additional royalties on certain of our products. If we or our customers are unable to obtain such licenses, our business, results of operations, financial condition and prospects would be harmed.

We or our customers may be required to obtain licenses for third-party intellectual property. In particular, we may be required to obtain licenses to certain third-party patents, so-called "essential patents," that claim features or functions that are incorporated into applicable industry standards and that we are required to provide in order to comply with the standard. If we need to license any third-party intellectual property, essential patents or other technology, we could be required to pay royalties

on certain of our products. In addition, while the industry standards bodies and antitrust laws in certain countries may require participating companies to license their essential patents on fair, reasonable, and nondiscriminatory terms, there can be no assurances that we will be able to obtain such licenses on commercially reasonable terms or at all. Although we have implemented a dedicated standard essential patents licensing-in reference policy, our inability to obtain required third-party intellectual property licenses on commercially reasonable terms or at all could harm our business, results of operations, financial condition or prospects. If our customers are required to obtain such licenses, there can be no assurances that their businesses will not be adversely affected. In addition, if our competitors have significant numbers of essential patents and/or patent license rights, they could be at an advantage in negotiating with our customers or potential customers, which could influence our ability to win new business or could result in downward pressure on our average selling prices.

If we fail to successfully develop, commercialize, produce and sell our module product line, our business, revenue and operating results may be harmed.

In 2013, we introduced a new product module line. Our modules incorporate many components in addition to our chipsets. We may lack the purchasing power to acquire at competitive prices certain components required to produce modules, and we do not expect to be able to command selling prices for those modules that allow us to maintain traditional semiconductor-only margins for the full module. Currently, and in the coming year at least, modules could represent a large portion of our revenue mix, which would negatively impact our overall gross margin. Certain large customers may decide to buy the modules directly from the manufacturers who purchase our chipsets, rather than us, in order to reduce their costs. This may result in a reduction of our revenue and gross profit, but an improvement of overall gross margin percentage, compared to the case where we sell the modules ourselves.

Module components may be sourced from numerous different suppliers. Some of these components may periodically be in short supply or be subject to long lead times, which could affect our ability to meet customer demand for our modules, therefore delaying our revenue. In addition, we rely on various contract manufacturers to produce our modules. If these manufacturers encounter any issues with production capacity, quality or reliability of their products, it could adversely affect our revenue and our reputation in the market. If our ability to expand our product platform is significantly delayed or if we are unable to leverage our module as expected, our business and financial condition could be materially and adversely affected.

If customers request from us, and we agree to provide, a wide variety of module variants or stock-keeping units, or SKUs, to support different operators or different end-applications, our expenses associated with developing, sourcing and certifying our module products would increase. In addition, managing supply and demand across multiple SKUs may increase the possibility that we will under-or over-forecast a given SKU, resulting in either delayed revenue or excess inventory.

Participating in the module business could create a perception among our customers that we are competing with them if they are also in the module business, which could impair our chipset business prospects with such customers. The module can be considered an end product with full LTE functionality; therefore, there is market pressure for us to sell our modules with standard essential IP indemnification from manufacturers of products not normally incorporating a communication function. We intend to negotiate license agreements for the module in order to offer standard indemnification to our manufacturing partners, but there can be no assurance that we will be successful in obtaining licenses for standard essential IP on acceptable terms.

We have significant ongoing capital requirements that could have a material effect on our business and financial condition if we are unable to generate sufficient cash from operations.

Our business requires significant capital investment to carry out extensive research and development in order to remain competitive. At the same time, demand for our products is highly variable and there have been downturns. If our cash on hand, net proceeds from financing activities and cash generated from operations are not sufficient to fund our operations and capital requirements, we may be required to limit our growth, or enter into financing arrangements at unfavorable terms, any of which could harm our business and financial condition.

Additionally, we anticipate that strategic alliances and partnerships will be an important source of revenue and possible financing for us going forward. If we are unable to develop alliances with or otherwise attract investment from strategic partners, or if strategic partners are not willing to enter into transactions with us on favorable terms, our business and financial condition could be harmed.

A portion of our software development and testing activity is outsourced to a third-party provider based in Kiev, Ukraine. If political developments in Ukraine and Russia escalate to open hostilities, some of our product development activities and some customer software support activities could be adversely affected.

While we have our key engineering competencies in-house, primarily in France, the United Kingdom and the United States, we outsource some applications software development and testing activities to an independent third-party provider of engineering services. We work with a dedicated team of 30 software engineers based in Kiev, Ukraine. As a result of the decision of the Russian government to annex the Crimea region of Ukraine, the United States and the European Community have imposed economic sanctions on Russia. If Ukraine experiences further political instability, these engineers may be unable to work for a sustained period of time, which could adversely impact our research and development operations. We also have our own electronic equipment physically in place in Kiev, which could be at risk in the event of violence in the region. We have developed a contingency plan to trigger if the engineers in Kiev are unable to continue working on their projects for us, but if our contingency plan is not effective, we could suffer delays in product introduction or delays in resolution of customer software bugs, which could have a negative impact on our revenues.

We depend on a small number of customers for a significant portion of our revenue. If we fail to retain or expand customer relationships, our business could be harmed.

A significant amount of our total revenue is attributable to a small number of customers, and we anticipate that this will continue to be the case for the foreseeable future. These customers may decide not to purchase our semiconductor solutions at all, to purchase fewer semiconductor solutions than they did in the past or to alter the terms on which they purchase our products. In addition, to the extent that any customer represents a disproportionately high percentage of our accounts receivable, our exposure to that customer is further increased should they be unable or choose not to pay such accounts receivable on a timely basis or at all.

Our top ten customers accounted for 86%, 78% and 86% of our total revenue in 2016, 2017 and 2018, respectively. The following table summarizes customers representing a significant portion of total revenue:

Customer	% of total revenues for the year ended December 31,			% of our accounts receivable at
	2016	2017	2018	December 31,
				2018
ATM Electronics	Less than 10%	16%	32%	38%
Techfront	Less than 10%	Less than 10%	13%	12%
Comtech	29%	17%	Less than 10%	16%
Gemtek	15%	Less than 10%	Less than 10%	—

ATM is a distributor who serves multiple customers in China and Taiwan. We expect that some of these customers, particularly those above 10% during 2018, could each continue to represent at least 10% of our revenue in 2019 as the market for single-mode LTE devices is in its early stages and is still concentrated in a relatively small number of device makers. The loss of any significant customer, a significant reduction in sales we make to them in general or during any period, or any issues with collection of receivables from customers would harm our financial condition and results of operations. Furthermore, we must obtain orders from new customers on an ongoing basis to increase our revenue and grow our business. If we fail to expand our customer relationships, our business could be harmed.

Consolidation among our customers could also lead to increased customer bargaining power, or reduced customer spending. Further, new business may be delayed if a key customer uses its leverage to push for terms that are worse for us and we nonetheless continue to negotiate for better terms, in which case revenue in any particular quarter or year may fail to meet expectations. Also, the loss of any of these customers or the failure to secure new contracts with these customers could further increase our reliance on our remaining customers. Further, if any of our key customers default, declare bankruptcy or otherwise delay or fail to pay amounts owed, or we otherwise have a dispute with any of these customers, our results of operations would be negatively affected in the short term and possibly the long term. These customers may seek to renegotiate pre-existing contractual commitments due to adverse changes in their own businesses or, in some cases, take advantage of contractual provisions that permit the suspension of contracted work for some period if their business experiences a financial hardship, which would harm our operating results. To the extent, our customer experiences liquidity constraints, we may incur bad debt expense, which may have a significant impact on its results of operations. Major customers may also seek pricing, payment, intellectual property-related, or other commercial terms that are less favorable to us, which may have a negative impact on our business, cash flow, revenue and gross margins. In addition, these events could cause significant fluctuations in results of operations because our expenses are fixed in the short term and it takes us a long time to replace customers or reassign resources.

We depend on one independent foundry to manufacture our products and do not have a long-term agreement with such foundry, and loss of this foundry or our failure to obtain sufficient foundry capacity would significantly delay our ability to ship our products, cause us to lose revenue and market share and damage our customer relationships.

Access to foundry capacity is critical to our business because we are a fabless semiconductor company. We depend on a sole independent foundry, Taiwan Semiconductor Manufacturing Company Limited, or TSMC, in Taiwan to manufacture our semiconductor wafers. Because we outsource our manufacturing to a single foundry, we face several significant risks, including:

- constraints in or unavailability of manufacturing capacity;
- limited control over delivery schedules, quality assurance and control, manufacturing yields and production costs; and
- the unavailability of, or potential delays in obtaining access to, key process technologies.

If we do not accurately forecast our capacity needs, TSMC may not have available capacity to meet our immediate needs, or we may be required to pay higher costs to fulfill those needs, either of which could harm our business, results of operations or financial condition.

The ability of TSMC to provide us with semiconductor wafers is limited at any given time by their available capacity, and we do not have a guaranteed level of manufacturing capacity. We do not have any agreement with TSMC and place our orders on a purchase order basis. As a result, if TSMC raises its prices or is not able to satisfy our required capacity for any reason, including natural or other disasters, allocates capacity to larger customers or to different sectors of the semiconductor industry, experiences labor issues or shortages or delays in shipment of semiconductor equipment or materials used in the manufacture of our semiconductors, or if our business relationship with TSMC deteriorates, we may not be able to obtain the required capacity and would have to seek alternative foundries, which may not be available on commercially reasonable terms, in a timely manner, or at all.

Locating and qualifying a new foundry would require a significant amount of time, which would result in a delay in production of our products. In addition, using foundries with which we have no established relationship could expose us to unfavorable pricing and terms, delays in developing and qualifying new products, unsatisfactory quality or insufficient capacity allocation. We place our orders on the basis of our customers' purchase orders and sales forecasts; however, foundries can allocate capacity to the production of other companies' products and reduce deliveries to us on short notice. Many of the customers of TSMC, or foundries that we may use in the future, are larger than we are, or have long-term agreements with such foundries, and as a result, those customers may receive preferential treatment from the foundries in terms of price, capacity allocation and payment terms. Any delay in qualifying a new foundry or production issues with any new foundry would result in lost sales and could damage our relationship with existing and future customers as well as our reputation in the market.

If our foundry vendor does not achieve satisfactory yields or quality, our reputation and customer relationships could be harmed.

The fabrication of semiconductor solutions such as ours is a complex and technically demanding process. Minor deviations in the manufacturing process can cause substantial decreases in yields, and in some cases, cause production to be suspended. TSMC, or foundries that we may use in the future, could, from time to time, experience manufacturing defects and reduced manufacturing yields. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by our foundry vendor could result in lower than anticipated manufacturing yields or unacceptable performance. Many of these problems are difficult to detect at an early stage of the manufacturing process and may be time consuming and expensive to correct. Poor yields from our foundry vendor, or defects, integration issues or other performance problems in our semiconductor solutions could cause us significant customer relations and business reputation problems, harm our financial results and result in financial or other damages to our customers. In addition, because we have a sole supplier of wafers, these risks are magnified because we do not have an alternative source to purchase from should these risks materialize. If TSMC fails to provide satisfactory products to us, we would be required to identify and qualify other sources, which could take a significant amount of time and would result in lost sales. In addition, we indemnify our customers for losses resulting from defects in our products, which costs could be substantial. A product liability or other indemnification claim brought against us, even if unsuccessful, would likely be time-consuming and costly to defend.

Our customers may cancel their orders, change production quantities or delay production, and if we fail to forecast demand for our products accurately, we may incur product shortages, delays in product shipments or excess or insufficient product inventory, which could harm our business.

We do not have firm, long-term purchase commitments from our customers. Substantially all of our sales are made on a purchase order basis, and in most cases, our customers are not contractually committed to buy any quantity of products from us

beyond firm purchase orders. Additionally, customers may cancel, change or delay purchase orders already in place with little or no notice to us. Because production lead times often exceed the amount of time required to fulfill orders, we often must manufacture in advance of orders, relying on an imperfect demand forecast to project volumes and product mix. Our ability to accurately forecast demand can be harmed by a number of factors, including inaccurate forecasting by our customers, changes in market conditions, changes in our product order mix and demand for our customers' products. Even after an order is received, our customers may cancel these orders or request a decrease in production quantities. Any such cancellation or decrease subjects us to a number of risks, most notably, that our projected sales will not materialize on schedule or at all, leading to unanticipated revenue shortfalls and excess or obsolete inventory, which we may be unable to sell to other customers. Alternatively, if we are unable to project customer requirements accurately, we may not manufacture enough semiconductor solutions, which could lead to delays in product shipments and lost sales opportunities in the near term, as well as force our customers to identify alternative sources, which could affect our ongoing relationships with these customers. We have in the past had customers significantly increase their requested production quantities with little or no advance notice. If we do not fulfill customer demands in a timely manner, our customers may cancel their orders, and we may be subject to customer claims for cost of replacement. Underestimating or overestimating demand would lead to insufficient, excess or obsolete inventory and could harm our operating results, cash flow and financial condition, as well as our relationships with our customers and our reputation in the marketplace.

If customers do not design our semiconductor solutions into their product offerings, or if our customers' product offerings are not commercially successful, our revenue and our business would be harmed.

We sell our semiconductor solutions directly to OEMs who include them in their products, and to ODMs who include them in their products that they supply to OEMs. As a result, we rely on OEMs to design our semiconductor solutions into the products they sell. Because our semiconductor solutions are generally a critical component of our customers' products, they are typically incorporated into our customers' products at the design stage, and the sales cycle typically takes 12 months or more to complete. Without these design wins, our revenue and our business would be significantly harmed. We often incur significant expenditures on the development of a new semiconductor solution without any assurance that an OEM will select our semiconductor solution for design into its own product. Because the types of semiconductor solutions we sell are a critical aspect of an OEM's product, once an OEM designs a competitor's semiconductor into its product offering, it becomes significantly more difficult for us to sell our semiconductor solutions to that customer for a particular product offering as changing suppliers involves significant cost, time, effort and risk for the customer. Further, if we are unable to develop new products in a timely manner for inclusion in such products, or if major defects or errors that might significantly impair performance or standards compliance are found in our products after inclusion by an OEM, OEMs will be unlikely to include our semiconductor solutions into their products and our reputation in the market and future prospects would be harmed.

Furthermore, even if an OEM designs one of our semiconductor solutions into its product offering, we cannot be assured that its product will be commercially successful and that we will receive any revenue from that OEM. This risk is heightened because 4G technology is rapidly emerging and many of our customers, particularly in the Internet of Things market, do not have significant experience designing products utilizing 4G technology. If our customers' products incorporating our semiconductor solutions fail to meet the demands of their customers or otherwise fail to achieve market acceptance, our revenue and business would be harmed.

If we are unable to compete effectively, we may not increase or maintain our revenue or market share, which would harm our business.

We may not be able to compete successfully against current or potential competitors. If we do not compete successfully, our revenue and market share may decline. In the LTE market, we face or expect to face competition from established semiconductor companies such as Altair Semiconductor (a Sony Corporation subsidiary), HiSilicon Technologies (a Huawei subsidiary), Mediatek, Nordic Semiconductor, Qualcomm Incorporated, Samsung Electronics Co. Ltd. and Spreadtrum, as well as smaller actors in the market such as GCT Semiconductor. Many of our competitors have longer operating histories, significantly greater resources and name recognition, and a larger base of existing customers than us. The significant resources of these larger competitors may allow them to respond more quickly than us to new or emerging technologies or changes in customer requirements or to bring new products to market in a more timely manner than us. For example, some competitors may have greater access or rights to complementary technologies, including GNSS (GPS), blue tooth, sensors, graphic processing, etc., and we may need to develop or acquire complementary technologies or partner with others to bring to market solutions that integrate enhanced functionalities. We expect to pursue such transactions or partnerships if appropriate opportunities arise. However, we may not be able to identify suitable transactions or partners in the future, or if we do identify such transactions or partners, we may not be able to complete them on commercially acceptable terms, or at all. In addition, these competitors may have greater credibility with our existing and potential customers. Further, many of these competitors are

located in Asia or have a significant presence and operating history in Asia and, as a result, may be in a better position than we are to work with manufacturers and customers located in Asia. Moreover, many of our competitors have been doing business with customers for a longer period of time and have well-established relationships, which may provide them with advantages, including access to information regarding future trends and requirements that may not be available to us. In addition, some of our competitors may provide incentives to customers or offer bundled solutions with complementary products, which could be attractive to some customers, or adopt more aggressive pricing policies, which may make it difficult for us to gain or maintain market share.

Our ability to compete effectively will depend on a number of factors, including:

- our ability to anticipate market and technology trends and successfully develop products that meet market needs;
- our ability to deliver products in large volume on a timely basis at competitive prices;
- our success in identifying and penetrating new markets, applications and customers;
- our ability to accurately understand the price points and performance metrics of competing products in the market;
- our products' performance and cost-effectiveness relative to those of our competitors;
- our ability to develop and maintain relationships with key customers, wireless carriers, OEMs and ODMs;
- our ability to secure sufficient high-quality supply for our products;
- our ability to conform to industry standards while developing new and proprietary technologies to offer products and features previously not available in the 4G market;
- our ability to develop or acquire complementary technologies or to partner with others to bring to market products with enhanced functionalities; and
- our ability to recruit design and application engineers with expertise in wireless broadband communications technologies and sales and marketing personnel.

If we experience material changes to the competitive structure of our industry due to cooperation or consolidation among our competitors, we may not increase or sustain our revenue or market share, which would harm our business.

Our current or future competitors may establish cooperative relationships among themselves or with third parties. In addition, there has been consolidation within our industry over the past several years, notably the acquisition of smaller competitors by larger competitors with significantly greater resources than ours. These events may result in the emergence of new competitors with greater resources and scale than ours that could acquire significant market share, which could result in a decline of our revenue and market share. Our ability to maintain our revenue and market share will depend on our ability to compete effectively despite material changes in industry structure. If we are unable to do so, we may not increase or sustain our revenue or market share, which would harm our business. In addition, actual or speculated consolidation among competitors, or the acquisition by, or of, our partners and/or resellers by competitors can increase the competitive pressures faced by us as customers may delay spending decisions or not purchase our products at all. Consolidation could also delay spending or require us to reduce the prices of our products to compete, which could also adversely affect our business.

If we are unable to effectively manage our business through periods of economic or market slow-down and any subsequent future growth, we may not be able to execute our business plan and our operating results could suffer.

Our future operating results depend to a large extent on our ability to successfully manage our business through periods of economic or market slow-down, and periods of subsequent expansion and growth. To manage our growth successfully and handle the responsibilities of being a public company, we believe we must, among other things, effectively:

- recruit, hire, train and manage additional qualified engineers for our research and development activities, especially in the positions of design engineering, product and test engineering, and applications engineering;
- add additional sales personnel and expand sales offices;
- add additional finance and accounting personnel;
- implement and improve our administrative, financial and operational systems, procedures and controls; and
- enhance our information technology support for enterprise resource planning and design engineering by adapting and expanding our systems and tool capabilities, and properly training new hires as to their use.

Furthermore, to remain competitive and manage future expansion and growth, we must carry out extensive research and development, which requires significant capital investment. New competitors, technological advances in the semiconductor industry or by competitors, our entry into new markets, or other competitive factors may require us to invest significantly greater resources than we anticipate. If we are required to invest significantly greater resources than anticipated without a corresponding increase in revenue, our operating results could decline. Additionally, our periodic research and development expenses may be independent of our level of revenue, which could negatively impact our financial results. Finally, there can be no guarantee that our research and development investments will result in products that create additional revenue.

During periods of economic or market slow-down, we must also effectively manage our expenses to preserve our ability to carry out such research and development. With our initial success in introducing new LTE products and gaining design wins during 2015, we increased our investment in research and development in 2016, as well as sales and marketing, general and administrative and other functions to support the growth of our business and maintained them at about the same level in 2017. In 2018, as we expected that the market for our CatM solutions would begin ramping significantly, we increased our investment in research and development and sales in marketing. In addition, a stronger euro versus the U.S. dollar, resulted in increased operating expenses in 2018. Given the delay experienced in the ramp in the CatM market, we intend to reduce operating expenses somewhat in 2019. We are likely to incur product and market development costs earlier than some of the anticipated benefits, and the return on these investments, if any, may be lower, may develop more slowly than we expect, or may not materialize at all, which could harm our operating results.

If we are unable to manage our business during both periods of economic or market slow-down and periods of growth effectively, we may not be able to take advantage of market opportunities or develop new products, and we may fail to satisfy customer requirements, maintain product quality, execute our business plan or respond to competitive pressures, any of which could harm our operating results.

The average selling prices of our semiconductor solutions have historically decreased over time and will likely do so in the future, which could harm our gross profits and financial results.

Average selling prices of our semiconductor solutions have historically decreased over time, and we expect such declines to continue to occur. Our gross profits and financial results will suffer if we are unable to offset reductions in our average selling prices by reducing our costs, developing new or enhanced semiconductor solutions on a timely basis with higher selling prices or gross profits, or increasing our sales volumes. Even if we are successful in reducing our costs or improving sales volumes, such improvements may not be sufficient to offset declines in average selling prices in the future. Additionally, because we do not operate our own manufacturing, assembly or testing facilities, we may not be able to reduce our costs and our costs may even increase, either of which would reduce our margins. We have reduced the prices of our semiconductor solutions in line with, and at times in advance of, competitive pricing pressures, new product introductions by us or our competitors and other factors. We expect that we will have to do so again in the future.

Any increase in the manufacturing cost of our products would reduce our gross margins and operating profit.

The semiconductor business is characterized by ongoing competitive pricing pressure from customers and competitors. Accordingly, any increase in the cost of our products, whether by adverse purchase price or manufacturing cost variances or due to other factors, will reduce our gross margins and operating profit. We do not have long-term supply agreements with our manufacturing, testing or assembly suppliers, and we typically negotiate pricing on a purchase order by purchase order basis. Consequently, we may not be able to obtain price reductions, or anticipate or prevent future price increases from our suppliers. Because we have a sole supplier of wafers and limited sources of testing and assembly, we may not be able to negotiate favorable pricing terms from our suppliers. These and other related factors could impair our ability to control our costs and could harm our operating results.

The semiconductor and communications industries have historically experienced significant fluctuations with prolonged downturns, which could impact our operating results, financial condition and cash flows.

The semiconductor industry has historically been cyclical, experiencing significant downturns in customer demand. Because a significant portion of our expenses is fixed in the near term or is incurred in advance of anticipated sales, we may not be able to decrease our expenses rapidly enough to offset any unanticipated shortfall in revenue. If this situation occurs, it could harm our operating results, cash flow and financial condition. Furthermore, the semiconductor industry has periodically experienced periods of increased demand and production constraints. If this occurs, we may not be able to obtain sufficient quantities of our semiconductor solutions to meet the increased demand, resulting in lost sales, loss of market share and harm to our customer relationships. We may also have difficulty in obtaining sufficient assembly and testing resources from our subcontract manufacturers. Any factor adversely affecting the semiconductor industry in general, or the particular segments of the industry that we target, may harm our ability to generate revenue and could negatively impact our operating results.

The communications industry has experienced pronounced downturns, and these cycles may continue in the future. A future decline in global economic conditions could have adverse, wide-ranging effects on demand for our semiconductor solutions and for the products of our customers, particularly wireless communications equipment manufacturers or other participants in the wireless industry, such as wireless carriers. Inflation, deflation and economic recessions that harm the global economy and capital markets also harm our customers and our end consumers. Specifically, the continued deployment of new 4G networks requires significant capital expenditures and wireless carriers may choose not to undertake network expansion

efforts during an economic downturn or time of other economic uncertainty. Our customers' ability to purchase or pay for our semiconductor solutions and services, obtain financing and upgrade wireless networks could be harmed, and networking equipment providers may slow their research and development activities, cancel or delay new product development, reduce their inventories and take a cautious approach to acquiring our products, which would have a significant negative impact on our business. If such economic situations were to occur, our operating results, cash flow and financial condition could be harmed. In the future, any of these trends may also cause our operating results to fluctuate significantly from year to year, which may increase the volatility of the price of the ADSs.

Though we rely to a significant extent on proprietary intellectual property, we may not be able to obtain, or may choose not to obtain, sufficient intellectual property rights to provide us with meaningful protection or commercial advantage.

We depend significantly on intellectual property rights to protect our products and proprietary technologies against misappropriation by others. We generally rely on the patent, trademark, copyright and trade secret laws in Europe, the United States and certain other countries in which we operate or in which our products are produced or sold, as well as licenses and nondisclosure and confidentiality agreements, to protect our intellectual property rights.

We may have difficulty obtaining patents and other intellectual property rights, and the patents and other intellectual property rights we have and obtain may be insufficient to provide us with meaningful protection or commercial advantage. We currently do not apply for patent protection in all the countries in which we operate. Instead we select and focus on key countries for each patent family. In addition, the protection offered by patents and other intellectual property rights may be inadequate or weakened for reasons or circumstances that are out of our control. For instance, we may not be able to obtain patent protection or secure other intellectual property rights in all the countries in which we have filed patent applications or in which we operate, and under the laws of such countries, patents and other intellectual property rights may be or become unavailable or limited in scope.

We may not be able to adequately protect or enforce our intellectual property against improper use by our competitors or others and our efforts to do so may be costly to us, which may harm our business, financial condition and results of operations.

Our patents and patent applications, or those of our licensors, could face challenges, such as interference proceedings, opposition proceedings, nullification proceedings and re-examination proceedings. Any such challenge, if successful, could result in the invalidation or narrowing of the scope of any such patents and patent applications. Any such challenges, regardless of their success, would also likely be time-consuming and expensive to defend and resolve, and would divert management time and attention. Further, our unpatented proprietary processes, software, designs and trade secrets may be vulnerable to disclosure or misappropriation by employees, contractors and other persons. While we generally enter into confidentiality agreements with such persons to protect our intellectual property, we cannot assure you that our confidentiality agreements will not be breached, that they will provide meaningful protection for our proprietary technology and trade secrets, or that adequate remedies will be available in the event they are used or disclosed without our authorization. Also, intellectual property rights are difficult to enforce in the People's Republic of China, or PRC, and certain other countries, particularly in Asia, where the application and enforcement of the laws governing such rights may not have reached the same level as compared to other jurisdictions where we operate, such as Europe and the United States. Consequently, because we operate in these countries and all of our manufacturing, testing and assembly takes place in Taiwan and Singapore, we may be subject to an increased risk that unauthorized parties may attempt to copy or otherwise use our intellectual property or the intellectual property of our suppliers or other parties with whom we engage or have licenses.

There can be no assurance that we will be able to protect our intellectual property rights, that our intellectual property rights will not be challenged, invalidated, circumvented or rendered unenforceable, or that we will have adequate legal recourse in the event that we seek legal or judicial enforcement of our intellectual property rights. Any inability on our part to adequately protect or enforce our intellectual property may harm our business, financial condition and results of operations. We may in the future initiate claims or litigation against third parties for infringement of our intellectual property rights to protect these rights, or to determine the scope and validity of our proprietary rights or the proprietary rights of competitors. These claims could result in costly litigation and the diversion of our technical and management personnel, and we may not prevail in making these claims.

Assertions by third parties of infringement by us or our customers of their intellectual property rights could result in significant costs and cause our operating results to suffer.

The markets in which we compete are characterized by rapidly changing products and technologies, and there is intense competition to establish intellectual property protection and proprietary rights to these new products and the related technologies. The semiconductor and wireless communications industries, in particular, are characterized by vigorous

protection and pursuit of intellectual property rights and positions, which has resulted in protracted and expensive litigation for many companies.

We may be unaware of the intellectual property rights of others that may cover some of our technology, products and services. In addition, third parties may claim that we or our customers are infringing or contributing to the infringement of their intellectual property rights.

We have in the past received, and as a public company operating in a highly competitive marketplace, we expect that in the future we will receive, communications and offers from various industry participants and others alleging that we have infringed or have misappropriated their patents, trade secrets or other intellectual property rights and/or inviting us to license their technology and intellectual property. Any lawsuits resulting from such allegations of infringement or invitations to license, including suits challenging LTE standards, could subject us to significant liability for damages and/or challenge our activities. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling products or using technology that contain the allegedly infringing intellectual property;
- abandon the opportunity to license our technology to others or to collect royalty payments;
- incur significant legal expenses;
- pay substantial damages to the party whose intellectual property rights we may be found to be infringing;
- redesign those products that contain the allegedly infringing intellectual property; or
- attempt to obtain a license to the relevant intellectual property from third parties, which may not be available on reasonable terms or at all.

Our customers could also become the target of litigation relating to the patents and other intellectual property rights of others. This could, in turn, trigger an obligation for us to provide technical support and/or indemnify such customers. These obligations could result in substantial expenses, including the payment by us of costs and damages relating to claims of intellectual property infringement. In addition to the time and expense required for us to provide support or indemnification to our customers, any such litigation could disrupt the businesses of our customers, which in turn could hurt our relationships with our customers and cause the sale of our products to decrease. We cannot assure you that claims for indemnification will not be made or that if made, such claims would not materially harm our business, operating results or financial conditions.

Any potential dispute involving our patents or other intellectual property could also include our industry partners and customers, which could trigger our indemnification obligations to them and result in substantial expense to us.

In any potential dispute involving our patents or other intellectual property, our licensees could also become the target of litigation, and certain customers have received notices of written offers from our competitors and others claiming to have patent rights in certain technology and inviting our customers to license this technology. Because we indemnify our licensees and customers for intellectual property claims made against them for products incorporating our technology, any litigation could trigger technical support and indemnification obligations in some of our license agreements, which could result in substantial payments and expenses by us. In addition to the time and expense required for us to supply support or indemnification to our licensees and customers, any such litigation could severely disrupt or shut down the business of our customers, which in turn could hurt our relations with our customers and cause the sale of our proprietary technologies and products to decrease.

Our failure to comply with obligations under open source licenses could require us to release our source code to the public or cease distribution of our products, which could harm our business, financial condition and results of operations.

Some of the software used with our products, as well as that of some of our customers, may be derived from so-called “open source” software that is generally made available to the public by its authors and/or other third parties. Such open source software is often made available to us under licenses, such as the GNU General Public License, which impose certain obligations on us in the event we were to make available derivative works of the open source software. These obligations may require us to make source code for the derivative works available to the public, and/or license such derivative works under a particular type of license, rather than the licenses we customarily use to protect our intellectual property. In addition, there is little or no legal precedent for interpreting the terms of certain of these open source licenses, including the determination of which works are subject to the terms of such licenses. While we believe we have complied with our obligations under the various applicable licenses for open source software, in the event the copyright holder of any open source software were to successfully establish in court that we had not complied with the terms of a license for a particular work, we could be required to release the source code of that work to the public and/or stop distribution of that work.

The complexity of our semiconductor solutions could result in unforeseen delays or expenses from undetected defects or design errors in hardware or software, which could reduce the market acceptance for our semiconductor solutions, damage our reputation with current or prospective customers and increase our costs.

Highly complex semiconductor solutions such as ours can contain defects and design errors, which, if significant, could impair performance or prevent compliance with industry standards. We have not in the past, but may in the future, experience such significant defects or design errors. In addition, our semiconductor solutions must be certified by individual wireless carriers that such solutions function properly on the carrier's network before our solutions can be designed into a particular product. If any of our semiconductor solutions have reliability, quality or compatibility problems from defects or design errors, we may not be able to successfully correct these problems in a timely manner, or at all. Furthermore, we may experience production delays and increased costs correcting such problems. Issues in the carrier certification process, which varies among carriers, may also create delays. Consequently, and because our semiconductor solutions are a critical component of our customers' products, our reputation may be irreparably damaged, and customers may be reluctant to buy our semiconductor solutions, which could harm our ability to retain existing customers and attract new customers and harm our financial results. In addition, these defects or design errors or delays in the carrier certification process could interrupt or delay sales to our customers. If any of these problems are not found until after we have commenced commercial production of a new semiconductor solution, we may be required to incur additional development costs and product recalls, repairs or replacement costs. Furthermore, we provide warranties on our products ranging from one to two years, and thus may be obligated to refund sales with respect to products containing defects, errors or bugs. These problems may also result in claims against us by our customers or others, all of which could damage our reputation and increase our costs.

We are subject to risks inherent in our international operations.

Our international revenues account for a substantial majority of our total revenues. As a result, we must provide significant service and support globally. We intend to maintain or expand our international operations and expect to incur costs doing so. We cannot assure you that we will be able to recover our investments in international markets. Our results of operations could be adversely affected by a variety of factors, including:

- the longer payment cycles associated with many foreign customers;
- the typically longer periods from placement of orders to revenue recognition in certain international and emerging markets;
- currency fluctuations;
- the difficulties in interpreting or enforcing our agreements and collecting receivables through many foreign countries' legal systems;
- unstable regional political and economic conditions or changes in restrictions on trade among countries;
- changes in the political, regulatory, safety or economic conditions in a country or region;
- the imposition by governments of additional taxes, tariffs, global economic sanctions programs or other restrictions on foreign trade;
- any inability to comply with export or import laws and requirements or any violation of sanctions regulations, which may result in enforcement actions, civil or criminal penalties and restrictions on exports;
- any increase in the cost of trade compliance functions to comply with changes to regulatory requirements; and
- the possibility that it may be more difficult to protect our intellectual property in foreign countries.

In addition, our global operations are subject to numerous U.S. and foreign laws and regulations, including those related to anti-corruption, tax, corporate governance, imports and exports, financial and other disclosures, privacy and labor relations. These laws and regulations are complex and may have differing or conflicting legal standards, making compliance difficult and costly. In addition, there is uncertainty regarding how proposed, contemplated or future changes to these complex laws and regulations could affect our business. We may incur substantial expense in complying with the new obligations to be imposed by these laws and regulations, and we may be required to make significant changes in our business operations, all of which may adversely affect our revenues and our business overall. If we violate these laws and regulations we could be subject to fines, penalties or criminal sanctions, and may be prohibited from conducting business in one or more countries. Although we have implemented policies and procedures to help ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors, agents or partners will not violate such laws and regulations. Any violation individually or in the aggregate could have a material adverse effect on our operations and financial condition.

The decision by British voters to exit the European Union may negatively impact our operations.

In June 2016, a majority of voters in the United Kingdom elected to withdraw from the European Union (often referred to as Brexit) in a national referendum. As of the date of this Annual Report, the British Parliament has not agreed upon the terms of the withdrawal. On April 10, 2019, the leaders of the other member countries of the European Union agreed to extend the deadline for Brexit until October 31, 2019. The referendum and ongoing negotiations have created significant uncertainty about the future relationship between the United Kingdom and the European Union.

If the United Kingdom leaves the European Union with no agreement, it will likely have an adverse impact on labor and trade in addition to creating further short-term uncertainty and currency volatility. In the absence of a future trade deal, the United Kingdom's trade with the European Union and the rest of the world would be subject to tariffs and duties set by the World Trade Organization. Any adjustments we make to our business and operations as of Brexit could result in significant time and expense to complete.

While we have not experienced any material financial impact from Brexit on our business to date as we only make intercompany sales from Sequans Communications Ltd., our United Kingdom subsidiary, to Sequans Communications S.A., we cannot predict its future implications. Any impact from Brexit on our business and operations over the long term will depend, in part, on the outcome of tariff, tax treaties, trade, regulatory, and other negotiations the United Kingdom conducts.

The loss of any of our key personnel could seriously harm our business, and our failure to attract or retain specialized technical, management or sales and marketing employees could impair our ability to grow our business.

We believe our future success will depend in large part upon our ability to attract, retain and motivate highly skilled management, engineering and sales and marketing personnel. The loss of any key employees or the inability to attract, retain or motivate qualified personnel, including engineers and sales and marketing personnel could delay the development and introduction of and harm our ability to sell our semiconductor solutions. We believe that our future success is dependent on the contributions of Georges Karam, our co-founder and chief executive officer, and Bertrand Debray, our co-founder and chief operating officer. The loss of the services of Dr. Karam, Mr. Debray, other executive officers or certain other key personnel could materially harm our business, financial condition and results of operations. For example, if any of these individuals were to leave unexpectedly, we could face substantial difficulty in hiring qualified successors, and could experience a loss in productivity during the search for any such successor and while any successor is integrated into our business and operations.

Our key technical and engineering personnel represent a significant asset and serve as the source of our technological and product innovations. We plan to recruit additional design and application engineers with expertise in wireless broadband communications technologies. We may not be successful in attracting, retaining and motivating sufficient technical and engineering personnel to support our anticipated growth. In addition, to expand our customer base and increase sales to existing customers, we will need to hire additional qualified sales personnel. The competition for qualified marketing, sales, technical and engineering personnel in our industry is very intense. If we are unable to hire, train and retain qualified marketing, sales, technical and engineering personnel in a timely manner, our ability to grow our business will be impaired. In addition, if we are unable to retain our existing sales personnel, our ability to maintain or grow our current level of revenue will be harmed.

Rapidly changing standards could make our semiconductor solutions obsolete, which would cause our operating results to suffer.

We design our semiconductor solutions to conform to standards set by industry standards bodies such as the Institute of Electrical and Electronics Engineers, Inc. (IEEE), the 3rd Generation Partnership Project (3GPP) and Open Mobile Alliance (OMA). We also depend on industry groups such as the Global Certification Forum (GCF) and the PTS Type Certification Review Board (PTCRB) to help certify and maintain certification of our semiconductor solutions. If our customers adopt new or competing industry standards that are not compatible with our semiconductor solutions, if industry groups fail to adopt standards compatible with our semiconductor solutions or if our customers are requiring chip certifications that we did not design our products for, our existing semiconductor solutions would become less desirable to our customers and our sales would suffer. The emergence of markets for our products is affected by a variety of factors beyond our control. In particular, our semiconductor solutions are designed to conform to current specific industry standards. Competing standards may emerge that are preferred by our customers, which could also reduce our sales and require us to make significant expenditures to develop new semiconductor solutions. For example, as we expand into the Internet of Things market, we expect to face additional competition from companies such as SIGFOX or others using LoRa Wireless RF technology, a long range, low power consumption and data transmission protocol for Internet of Things devices. Wireless carriers have started testing 5G technology, the next phase of mobile telecommunications standards, which is expected to be introduced in scale to the market by 2020. If we are unable to successfully develop or commercialize products for the 5G standard, our semiconductor solutions could become obsolete, which would cause our sales and financial results to suffer. Governments and foreign regulators may adopt standards that are incompatible with our semiconductor solutions, favor alternative technologies or adopt stringent regulations that would impair or make commercially unviable the deployment of our semiconductor solutions. In addition, existing standards may be challenged as infringing upon the intellectual property rights of other companies or may become obsolete.

We outsource our assembly, testing, warehousing and shipping operations to third parties, and if these parties fail to produce and deliver our products in a timely manner and in accordance with our specifications, our reputation, customer relationships and operating results could suffer.

We rely on third parties for the assembly, testing, warehousing and shipping of our products. We rely on United Test and Assembly Center Ltd., or UTAC; Siliconware Precision Industries Limited, or SPIL; StatschipPac Limited, or SPC; and other third-party assembly and test subcontractors for assembly and testing chipsets. We rely on Universal Scientific Industrial (Shanghai) Ltd., or USI, for manufacturing of our modules. We further rely on a single company for logistics and storage. We depend on these parties to supply us with material of a requested quantity in a timely manner that meets our standards for yield, cost and manufacturing quality. We are unable to maintain the same level of oversight and control of these outsourced operations as we would if we were to conduct them internally.

The services provided by these vendors could be subject to disruption for a variety of reasons, including natural disasters, such as earthquakes, labor disputes, power outages, or if our relationship with a vendor is damaged. If we experience problems at a particular location, we would be required to transfer the impacted services to a backup vendor, which could be costly and require a significant amount of time. During such a transition, we would be required to meet customer demand from our then-existing inventory, as well as any partially finished goods that can be modified to the required product specifications, which may not be possible or cost effective. Further, we do not have any long-term agreements with any of these vendors. If one or more of these vendors terminates its relationship with us, allocates capacity to other customers or if we encounter any problems with our supply chain, it could harm our ability to ship our products to our customers on time and in the quantity required, which in turn could cause an unanticipated decline in our sales and possibly damage our customer relationships.

Certain natural disasters, such as coastal flooding, large earthquakes or volcanic eruptions, may negatively impact our business. Any disruption to the operations of our foundry and assembly and testing subcontractors could cause significant delays in the production or shipment of our products.

If coastal flooding, a large earthquake, volcanic eruption or other natural disaster were to directly damage, destroy or disrupt TSMC's manufacturing facilities or the facilities of our testing and assembly contractors, it could disrupt our operations, delay new production and shipments of existing inventory, or result in costly repairs, replacements or other costs, all of which would negatively impact our business. For example, substantially all of our semiconductor solutions are manufactured and assembled by third-party contractors located in Taiwan and Singapore. The risk of an earthquake or tsunami in Taiwan or Singapore, such as the major earthquakes that occurred in Taiwan in December 2006 and February 2016, and elsewhere in the Pacific Rim region, is significant due to the proximity of major earthquake fault lines to the facilities of our foundry vendor and assembly and testing subcontractors. Even if these facilities are not directly damaged, a large natural disaster may result in disruptions in distribution channels or supply chains. Although our third-party contractors did not suffer any significant damage as a result of the most recent earthquakes, the February 2016 earthquake caused shipment delays in the first and second quarter of 2016, and the occurrence of additional earthquakes or other natural disasters could result in the disruption of our foundry vendor or assembly and testing capacity. For instance, the recent earthquake and tsunami in Japan, though it did not directly cause damage to any of our third-party contractors, may impair the ability of such contractors to procure components from vendors in Japan, and alternative suppliers may not be available in a timely manner or at all, and may impair the ability of our customers to procure components other than ours that are necessary to their production process, which in turn could result in a slowing of their production, and consequently, of purchases of our products. Any disruption resulting from such events could cause significant delays in the production or shipment of our semiconductor solutions as well as significant increases in our transportation costs until we are able to shift our manufacturing, assembling or testing from an affected contractor to an alternative vendor.

We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased costs.

To remain competitive, we expect to continue to transition our semiconductor products to increasingly smaller geometries and to achieve higher levels of design integration. These ongoing efforts require us from time to time to modify the manufacturing processes for our semiconductor solutions and to redesign some solutions, which in turn may result in delays in product deliveries. We periodically evaluate the benefits of migrating to new process technologies to reduce cost and improve performance. We may face difficulties, delays and increased expenses as we transition our products to new processes. We depend on our relationship with TSMC and our testing and assembly subcontractors to transition to new processes successfully. We cannot assure you that TSMC or our testing and assembly subcontractors will be able to effectively manage the transition or that we will be able to maintain our relationship with TSMC or our testing and assembly vendors or develop relationships with new foundries and vendors if necessary. If TSMC, any of our subcontractors or we experience significant delays in transitioning

to smaller geometries or fail to efficiently implement transitions, we could experience reduced manufacturing yields, or delays in product deliveries and increased costs, all of which could harm our relationships with our customers, our margins and our operating results. As new processes become more prevalent, we expect to continue to integrate greater levels of functionality, as well as end-customer and third-party intellectual property, into our products. However, we may not be able to achieve higher levels of design integration or deliver new integrated products on a timely or cost-effective basis.

Changes in current laws or regulations or the imposition of new laws or regulations could impede the sale of our products or otherwise harm our business.

Wireless networks can only operate in the spectrum allowed by regulators and in accordance with rules governing how that spectrum can be used. Regulators in various countries have broad jurisdiction over the allocation of spectrum for wireless networks, and we therefore rely on these regulators to provide sufficient spectrum and usage rules. For example, countries such as China, India, Japan or Korea heavily regulate all aspects of their wireless communication industries, and may restrict spectrum allocation or usage. If further restrictions were to be imposed over the frequency bands where our semiconductor solutions are designed to operate, we may have difficulty selling our products in those regions. In addition, our semiconductor solutions operate in the 2.5 and 3.5 gigahertz, or GHz, bands, which in some countries is also used by government and commercial services such as military and commercial aviation. European and United States regulators have traditionally protected government uses of the 2.5 and 3.5 GHz bands by setting power limits and indoor and outdoor designation, and by requiring that wireless local area networking devices not interfere with other users of the band such as government and civilian satellite services. Changes in current laws or regulations or the imposition of new laws and regulations in the markets in which we operate regarding the allocation and usage of the 2.5 and 3.5 GHz band, may harm the sale of our products and our business, financial condition and results of operations.

Adverse outcomes in tax disputes could subject us to tax assessments and potential penalties.

From time to time, we are subject to tax audits that could result in tax assessments and potential penalties, particularly with respect to claimed research tax credits due to the judgment involved in determining which projects meet the tax code's criteria for innovation and fundamental research. For example, in May 2015, we received notification from the United Kingdom tax authorities that they made inquiries regarding the calculation method used in our 2014 United Kingdom research tax credit. We disagreed with the tax authorities' position and defended our position, but ultimately the tax authorities' position prevailed and we settled the matter in 2016 for approximately the amount of the provision recorded in 2015: £170,000 (\$252,000). Our actual costs for any disputes in the future may be materially different from the provisions recorded if we are not successful in our appeal of any assessment, which could have a material adverse effect on our business.

Regulations related to "conflict minerals" may force us to incur additional expenses, may result in damage to our business reputation and may adversely impact our ability to conduct our business.

In August 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the SEC adopted requirements for companies that use certain minerals and derivative metals (referred to as "conflict minerals," regardless of their actual country of origin) in their products. Some of these metals are commonly used in electronic equipment and devices, including our products. Depending on various circumstances, these requirements require companies to investigate, disclose and report whether or not such metals originated from the Democratic Republic of Congo or adjoining countries. We have an extremely complex supply chain, with numerous suppliers (many of whom are not obligated by the law to investigate their own supply chains) for the components and parts used in each of our products. As a result, we may incur significant costs to comply with the diligence and disclosure requirements, including costs related to determining the source of any of the relevant metals used in our products. In addition, because our supply chain is so complex, we may not be able to sufficiently verify the origin of all the relevant metals used in our products through the due diligence procedures that we implement, which may harm our business reputation. We may also face difficulties in satisfying customers if they require that we prove or certify that our products are "conflict free." Key components and parts that can be shown to be "conflict free" may not be available to us in sufficient quantity, or at all, or may only be available at significantly higher cost to us. If we are not able to meet customer requirements, customers may choose to disqualify us as a supplier. Any of these outcomes could adversely impact our business, financial condition or results of operations.

Fluctuations in foreign exchange rates may harm our financial results.

Our functional currency is the U.S. dollar. Substantially all of our sales are denominated in U.S. dollars and the payment terms of all of our significant supply chain vendors are also denominated in U.S. dollars. We incur operating expenses and hold assets and liabilities denominated in currencies other than the U.S. dollar, principally the euro, and to a lesser extent the British pound sterling, the Chinese yuan and the New Israeli shekel. As a result, our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates, primarily the U.S. dollar to euro exchange rate. As we grow our operations, our exposure to foreign currency risk could become more significant. If there had been a 10% increase or decrease in the exchange rate of the U.S. dollar to the euro, as measured using the Company's 2018 weighted average exchange rate of one euro = \$1.1852, we estimate the impact, in absolute terms, on operating expenses for the year ended December 31, 2018 would have been \$4.4 million.

Our exposure to foreign currency risk may change over time as business practices evolve and economic conditions change.

We from time to time enter into foreign currency hedging contracts primarily to reduce the impact of variations in the U.S. dollar to euro exchange rate on our operating expenses denominated in euros. However, hedging at best reduces volatility and helps to lock in a target rate for the following six to twelve months but cannot eliminate the fundamental exposure and may not be effective.

Our business and operations could suffer in the event of security breaches.

Attempts by others to gain unauthorized access to our information technology systems are becoming more sophisticated. These attempts, which might be related to industrial or other espionage, include covertly introducing malware to our computers and networks and impersonating authorized users, among others. Hackers may also develop and deploy viruses, worms and other malicious software programs that attack or otherwise exploit security vulnerabilities in our systems or products. Attacks may create system disruptions, cause shutdowns or result in the corruption of our engineering data, which could result in delays in product development or software updates and harm our business. Additionally, the theft, unauthorized use or publication of our intellectual property and/or confidential business information could harm our competitive position, reduce the value of our investment in research and development and other strategic initiatives or otherwise adversely affect our business. To the extent that any security breach results in inappropriate disclosure of our customers' or business partners' confidential information, we may incur liability as a result. We could also suffer monetary and other losses, including reputational harm, which costs we may not be able to recover. We seek to detect and investigate all security incidents and to prevent their recurrence, but in some cases, we might be unaware of an incident or its magnitude and effects. While we have identified some incidents involving attempts at unauthorized access, we are not aware of any that have succeeded. We expect to continue to devote resources to the security of our information technology systems.

Our global operations are subject to risks for which we may not be adequately insured.

Our global operations are subject to many risks including errors and omissions, infrastructure disruptions, such as large-scale outages or interruptions of service from utilities or telecommunications providers, supply chain interruptions, third-party liabilities and fires or natural disasters. No assurance can be given that we will not incur losses beyond the limits or outside the scope of coverage of our insurance policies. From time-to-time, various types of insurance may not be available on commercially acceptable terms or, in some cases, at all. We cannot assure you that in the future we will be able to maintain existing insurance coverage or that premiums will not increase substantially. We maintain limited insurance coverage and in some cases no coverage for natural disasters and sudden and accidental environmental damages as these types of insurance are sometimes not available or available only at a prohibitive cost. Accordingly, we may be subject to an uninsured or under-insured loss in such situations.

Changes in International Financial Reporting Standards ("IFRS") could adversely affect our financial results and may require significant changes to our internal accounting systems and processes.

We prepare our consolidated financial statements in conformity with IFRS. These principles are subject to interpretation by the International Accounting Standard Board and various bodies formed to interpret and create appropriate accounting principles and guidance. The IFRS periodically issues new accounting standards on a variety of topics. For information regarding new accounting standards, please refer to Note 2.2 of Notes to Consolidated Financial Statements under the heading "Changes in accounting policy and disclosures." These and other such standards generally result in different accounting principles, which may significantly impact our reported results or could result in variability of our financial results.

In preparing our financial statements we make certain assumptions, judgments and estimates that affect amounts reported in our consolidated financial statements, which, if not accurate, may significantly impact our financial results.

In preparing our financial statements, we make assumptions, judgments and estimates for a number of items. These assumptions, judgments and estimates are drawn from historical experience and various other factors that we believe are reasonable under the circumstances as of the date of the consolidated financial statements. Actual results could differ materially from our estimates, and such differences could significantly impact our financial results.

Risks Related to Material Weaknesses in Our Internal Control Over Financial Reporting

Pursuant to the Sarbanes-Oxley Act of 2002, we are required to document and test our internal control procedures and to provide a report by management on internal control over financial reporting, including management's assessment of the effectiveness of such control.

In the context of the preparation of our 2018 consolidated financial statements, we identified a deficiency in our internal control over financial reporting that constituted a material weakness in our internal control over financial reporting. We determined that our management's review controls and other controls over the accounting and presentation of complex, non-routine transactions were not adequately designed and documented. In 2018, the complex, non-routine transaction that exposed the material weakness was the amendment of convertible bonds issued in prior years as well as the issuance of new financial instruments with equity components and their associated deferred tax impacts. Specifically, our management identified that our controls lacked sufficient specificity, including evaluation of all relevant accounting standards for these complex transactions.

We have historically relied on internal resources to address complex and unusual IFRS accounting treatment, such as in the case of our convertible bonds. In an effort to remediate our material weakness, we intend to engage an external consultant with appropriate training, to assist us with respect to the documentation of assumptions used and the development of accounting positions.

Although we are working to remedy the material weakness, there can be no assurance as to when the remediation will be completed, and we can give no assurances that other material weaknesses will not arise in the future. Failure to comply with Section 404 of the Sarbanes-Oxley Act could also potentially subject us to sanctions or investigations by the SEC or other regulatory authorities. Deficiencies, including any material weakness, in our internal control over financial reporting that have not been remediated or that may occur in the future could result in misstatements of our results of operations, restatements of our financial statements, a decline in our stock price, suspension or delisting of our ADSs from the New York Stock Exchange, or otherwise materially adversely affect our business, reputation, results of operations and financial condition.

Risks Related to Ownership of Our Shares and ADSs

Fluctuations in our operating results on a quarterly or annual basis and difficulty predicting our quarterly operating results could cause the market price of the ADSs to decline.

Our revenue and operating results have fluctuated significantly from period to period in the past and will do so in the future. As a result, you should not rely on period-to-period comparisons of our operating results as an indication of our future performance. In future periods, our revenue and results of operations may be below the expectations of analysts and investors, which could cause the market price of the ADSs to decline.

Factors that may cause our operating results to fluctuate include but are not limited to:

- reductions in orders or cancellations by our customers;
- changes in customer mix, the mix of products and services sold and the mix of geographies in which our products and services are sold;
- reduced visibility into our customers' spending plans and associated revenue;
- current and potential customer, partner and supplier consolidation and concentration;
- price and product competition, long sales, qualification and implementation cycles, and unpredictable ordering patterns;
- changes in the size, growth or growth prospects of the LTE and Internet of Things markets;
- changes in the competitive dynamics of our market, including new entrants or pricing pressures, and our ability to compete in the LTE and Internet of Things markets;
- timing and success of commercial deployments of and upgrades to 4G wireless networks;

- timely availability, at a reasonable cost, of adequate manufacturing capacity with the sole foundry that manufactures our products;
- our ability to successfully define, design and release new products in a timely manner that meet our customers' needs;
- timing and growth rate of revenues from the LTE and Internet of Things markets;
- changes in manufacturing costs, including wafer, testing and assembly costs, mask costs and manufacturing yields;
- the timing of product announcements by competitors or us;
- costs associated with litigation, especially related to intellectual property or securities class actions;
- costs associated with any violation of the U.S. Foreign Corrupt Practices Act, the United Kingdom Bribery Act, or other similar foreign laws;
- impairment of our ability to transact business in the European Union, uncertainty as to national laws and regulations, including intellectual property rights, following the United Kingdom's vote to leave the European Union;
- changing economic and political conditions at a global or local level;
- how well we execute on our strategy and operating plans and the impact of changes in our business model that could result in significant restructuring charges; and
- our ability to achieve targeted cost reductions.

Moreover, sales of our semiconductor solutions fluctuate from period to period due to cyclicalities in the semiconductor industry and the short product life cycles and wide fluctuations in product supply and demand characteristic of this industry. We expect these cyclical conditions to continue. Due to our limited operating history, we have yet to experience an established pattern of seasonality. However, business activities in Asia generally slow down in the first quarter of each year during the lunar new year period, which could harm our sales and results of operations during the period. Our expense levels are relatively fixed in the short-term and are based, in part, on our future revenue projections. If revenue levels are below our expectations, we may experience declines in margins and profitability or incur a loss from our operations. As a result, our quarterly operating results are difficult to predict, even in the near term, which may result in our revenue and results of operations being below the expectations of analysts and investors, and which could cause the market price of the ADSs to decline.

If securities or industry analysts cease to publish research reports about us or our industry, or if they adversely change their recommendations regarding the ADSs, the market price for the ADSs and trading volume could decline.

The trading market for the ADSs is influenced by research reports that industry or securities analysts publish about us or our industry. If one or more analysts who cover us downgrade the ADSs, the market price for the ADSs would likely decline. If one or more of these analysts ceases coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which, in turn, could cause the market price or trading volume for the ADSs to decline.

We have no present intention to pay dividends on our ordinary shares in the foreseeable future and, consequently, your only opportunity to achieve a return on your investment during that time is if the price of the ADSs appreciates.

We have no present intention to pay dividends on our ordinary shares in the foreseeable future. Any recommendation by our board of directors to pay dividends will depend on many factors, including our financial condition, results of operations, legal requirements and other factors. Accordingly, if the price of the ADSs falls in the foreseeable future, you will incur a loss on your investment, without the likelihood that this loss will be offset in part or at all by potential future cash dividends. In addition, even if we were to pay a dividend on our ordinary shares, French law may prohibit paying such dividends to holders of the ADSs or the tax implications of such payments may significantly diminish what you receive.

French law may limit the amount of dividends we are able to distribute and exchange rate fluctuations may reduce the amount of U.S. dollars you receive in respect of any dividends or other distributions we may pay in the future in connection with your ADSs.

Although our consolidated financial statements are denominated in U.S. dollars, under French law, the determination of whether we have been sufficiently profitable to pay dividends is made on the basis of our unconsolidated annual financial statements under the French commercial code in accordance with generally accepted accounting principles in France, which we refer to as French GAAP. Therefore, we may be more restricted in our ability to declare dividends than companies not based in France. In addition, exchange rate fluctuations may affect the amount of euros that we are able to distribute, and the amount in U.S. dollars that our shareholders receive upon the payment of cash dividends or other distributions we declare and pay in euros, if any. These factors could harm the value of the ADSs, and, in turn, the U.S. dollar proceeds that holders receive from the sale of the ADSs.

You may not be able to exercise your right to vote the ordinary shares underlying your ADSs.

Holders of ADSs may exercise voting rights with respect to the ordinary shares represented by the ADSs only in accordance with the provisions of the deposit agreement. The deposit agreement provides that, upon receipt of notice of any meeting of holders of our ordinary shares, the depositary will, as soon as practicable thereafter, fix a record date for the determination of ADS holders who shall be entitled to give instructions for the exercise of voting rights. Upon timely receipt of notice from us, if we so request, the depositary shall distribute to the holders as of the record date (i) the notice of the meeting or solicitation of consent or proxy sent by us and (ii) a statement as to the manner in which instructions may be given by the holders.

You may instruct the depositary of your ADSs to vote the ordinary shares underlying your ADSs. Otherwise, you will not be able to exercise your right to vote, unless you withdraw the ordinary shares underlying the ADSs you hold. However, you may not know about the meeting far enough in advance to withdraw those ordinary shares. If we ask for your instructions, the depositary, upon timely notice from us, will notify you of the upcoming vote and arrange to deliver our voting materials to you. We cannot guarantee you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your ordinary shares or to withdraw your ordinary share so that you can vote them yourself. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions, or for the manner of carrying out voting instructions. This means that you may not be able to exercise your right to vote, and there may be nothing you can do if the ordinary shares underlying your ADSs are not voted as you requested.

You may be subject to limitations on the transfer of your ADSs.

Your ADSs, which may be evidenced by ADRs, are transferable on the books of the depositary. However, the depositary may close its books at any time, or from time to time when it deems expedient in connection with the performance of its duties. The depositary may refuse to deliver, transfer or register transfers of your ADSs when our books or the books of the depositary are closed, or at any time, if we or the depositary think it is advisable to do so because of any requirement of law, government or governmental body, or under any provision of the deposit agreement, or for any other reason.

As a foreign private issuer, we are exempt from a number of rules under the U.S. securities laws and are permitted to file less information with the SEC than a U.S. company, our ordinary shares are not listed, and we do not intend to list our shares, on any market in France, our home country. This may limit the information available to holders of the ADSs.

We are a “foreign private issuer”, as defined in the SEC’s rules and regulations and, consequently, we are not subject to all of the disclosure requirements applicable to public companies organized within the United States. For example, we are exempt from certain rules under the Exchange Act that regulate disclosure obligations and procedural requirements related to the solicitation of proxies, consents or authorizations applicable to a security registered under the Exchange Act, including the U.S. proxy rules under Section 14 of the Exchange Act. In addition, our officers and directors are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. Moreover, while we have and expect to continue to submit quarterly interim consolidated financial data to the SEC under cover of the SEC’s Form 6-K, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. public companies, and are not required to file quarterly reports on Form 10-Q or current reports on Form 8-K under the Exchange Act. Furthermore, our ordinary shares are not listed, and we do not currently intend to list our ordinary shares on any market in France, our home country. As a result, we are not subject to the reporting and other requirements of listed companies in France. For instance, we are not required to publish quarterly or semi-annual financial statements. Accordingly, there is less publicly available information concerning our company than there would be if we were a U.S. public company.

As a foreign private issuer, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from NYSE corporate governance listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with NYSE corporate governance listing standards.

As a foreign private issuer listed on the NYSE, we are subject to NYSE corporate governance listing standards. However, NYSE rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in France, which is our home country, may differ significantly from NYSE corporate governance listing standards. For example, neither the corporate laws of France nor our by-laws require a majority of our directors to be independent, and we could include non-independent directors as members of our compensation committee and nominating committee, and our independent directors would not necessarily hold regularly scheduled meetings at which only independent directors are present. Currently, we intend to comply with the NYSE corporate governance listing standards to the extent possible under French law. However, if we choose to change such practice to follow home country practice in the future,

our shareholders may be afforded less protection than they otherwise would under NYSE corporate governance listing standards applicable to U.S. domestic issuers.

U.S. holders of the ADSs may suffer adverse tax consequences if we are characterized as a Passive Foreign Investment Company.

Generally, if for any taxable year 75% or more of our gross income is passive income, or at least 50% of our assets are held for the production of, or produce, passive income, we would be characterized as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes. To determine if at least 50% of our assets are held for the production of, or produce, passive income, we may use the market capitalization method for certain periods. Under the market capitalization method, the total asset value of a company would be considered to equal the fair market value of its outstanding shares plus outstanding indebtedness on a relevant testing date. Because the market price of the ADSs has fluctuated substantially and is likely to fluctuate in the future, and the market price may affect the determination of whether we will be considered a PFIC, there can be no assurance that we will not be considered a PFIC for any taxable year. While we do not believe we were a PFIC for 2018, there is no assurance that we will not be a PFIC in 2019 or later years. If we are characterized as a PFIC, U.S. holders of the ADSs may suffer adverse tax consequences, including having gains realized on the sale of the ADSs treated as ordinary income, rather than capital gain, the loss of the preferential rate applicable to dividends received on the ADSs by individuals who are U.S. holders, having interest charges apply to distributions by us and the proceeds of ADS sales and additional reporting requirements. We do not expect to provide to U.S. holders, the information needed to report income and gain pursuant to a “qualified electing fund” election, which election would alleviate some of the adverse tax consequences of PFIC status, and we make no undertaking to provide such information in the event that we are a PFIC. See “Item 10.E—Taxation—Material United States Federal Income Tax Consequences.”

We are subject to legal actions that could distract our management and increase costs, which may adversely affect our financial condition or our reputation.

In August 2017, two securities class action lawsuits were filed, which were consolidated into a single lawsuit in September 2017, alleging violations of the U.S. federal securities laws by us, our President and CEO, and our Chief Financial Officer. The plaintiffs asserted claims primarily based on purported misrepresentations regarding Sequans’ revenue recognition policy in its Annual Reports on Form 20-F for the fiscal years ended 2015 and 2016. In May 2018, we along with our President and CEO, and Chief Financial Officer filed a pre-motion letter requesting permission to file a motion to dismiss the complaint, a request that was granted on August 21, 2018. The motion to dismiss was fully briefed and filed (along with lead plaintiffs’ opposition briefing) in November 2018. The parties await the Court’s decision on the previously-filed motion to dismiss. In the fourth quarter of 2018, we recorded a \$352,000 provision for legal proceedings based on our estimate of the expected losses under this claim.

At this time, we are unable to estimate the ultimate outcome of this legal matter and its impact on us. However, an unfavorable outcome in any lawsuit or proceeding could have an adverse impact on our business, financial condition and results of operations. Further, if our stock price is volatile, we may become involved in further litigation. Any current or future litigation, regardless of its merits, could result in substantial costs and a diversion of our management’s attention and resources that are needed to successfully run our business.

You may be unable to recover in civil proceedings for U.S. securities laws violations.

We are a corporation organized under the laws of France. The majority of our directors are citizens and residents of countries other than the United States, and the majority of our assets are located outside of the United States. Accordingly, it may be difficult for investors to obtain jurisdiction over us or our directors in courts in the United States and enforce against us or them judgments obtained against us or them. In addition, we cannot assure you that civil liabilities predicated upon the federal securities laws of the United States will be enforceable in France.

The rights of shareholders in companies subject to French corporate law differ in material respects from the rights of shareholders of corporations incorporated in the United States.

We are a French company with limited liability. Our corporate affairs are governed by our by-laws and by the laws governing companies incorporated in France. The rights of shareholders and the responsibilities of members of our board of directors are in many ways different from the rights and obligations of shareholders in companies governed by the laws of U.S. jurisdictions. For example, in the performance of its duties, our board of directors is required by French law to consider the interests of our company, its shareholders, its employees and other stakeholders, rather than solely our shareholders and/or

creditors. It is possible that some of these parties will have interests that are different from, or in addition to, your interests as a shareholder.

Our by-laws and French corporate law contain provisions that may delay or discourage a takeover attempt.

Provisions contained in our by-laws and the corporate laws of France, the country in which we are incorporated, could make it more difficult for a third party to acquire us, even if doing so might be beneficial to our shareholders. In addition, provisions of our by-laws impose various procedural and other requirements, which could make it more difficult for shareholders to effect certain corporate actions. These provisions include the following:

- our shares are in registered form only, and we must be notified of any transfer of our shares in order for such transfer to be validly registered;
- our by-laws provide for directors to be elected for three-year terms, and we intend to elect one third of the directors every year;
- our shareholders may grant our board of directors, broad authorizations to increase our share capital;
- our board of directors has the right to appoint directors to fill a vacancy created by the resignation, death or removal of a director, subject to the approval by the shareholders of such appointment at the next shareholders' meeting, which prevents shareholders from having the sole right to fill vacancies on our board of directors;
- our board of directors can only be convened by its chairman except when no board meeting has been held for more than two consecutive months;
- our board of directors' meetings can only be regularly held if at least half of the directors attend either physically or by way of secured telecommunications;
- approval of at least a majority of the shares entitled to vote at an ordinary shareholders' general meeting is required to remove directors with or without cause;
- advance notice is required for nominations for election to the board of directors or for proposing matters that can be acted upon at a shareholders' meeting; and
- the sections of the by-laws relating to the number of directors and election and removal of a director from office may only be modified by a resolution adopted by 66 2/3% of our shareholders present or represented at the meeting.

The exercise or conversion of outstanding stock options, founders' warrants, restricted shares, warrants and convertible notes into ordinary shares will dilute the percentage ownership of our other shareholders and the sale of such shares may adversely affect the market price of the ADSs.

As of March 22, 2019, there were outstanding stock options, founders' warrants, restricted shares and warrants to purchase an aggregate of approximately 8.3 million of our ordinary shares, and more restricted shares, options and warrants will likely be granted in the future to our officers, directors, employees and consultants. We also have outstanding two issuances of convertible notes: one issued in 2015 with further subscription of notes in 2018 (the "2015 Notes"), and one issued in 2016 (the "2016 Notes"). The 2015 Notes may be converted into 13.7 million ADSs at a conversion price of \$1.70 per ADS and the 2016 Notes may be converted into 3.5 million ADSs at a conversion price of \$2.25 per ADS. In September 2018 we issued 1,800,000 warrants with an exercise price of \$1.70 per ADS to the holder of the 2015 Notes. In October 2018 we issued 816,716 warrants with an exercise price of \$1.35 to the venture debt lender in connection with a €12,000,000 debt financing done at that time. In February 2019, we issued 9,392,986 warrants with an exercise price of €0.02 to a strategic investor. We may issue additional warrants or convertible notes in connection with acquisitions, borrowing arrangement or other strategic or financial transactions. The exercise of outstanding stock options, warrants, or convertible notes, and the vesting of restricted shares, will dilute the percentage ownership of our other shareholders. The exercise of these options, warrants and convertible notes and the vesting of restricted shares, with the subsequent sale of the underlying ordinary shares could cause a decline in the market price of the ADSs.

We are subject to the Continued Listing Criteria of the New York Stock Exchange (NYSE), and our failure to satisfy these criteria may result in the delisting of our ADSs.

On December 31, 2018, we received written notification from the NYSE that we were not in compliance with the continued listing standard set forth in Section 802.01C of the NYSE Listed Company Manual (Section 802.01C) because the average closing price of our ADSs was less than \$1.00 per share over a consecutive 30 trading-day period. On March 1, 2019, we received written notification from the NYSE confirming that we have regained compliance with the continued listing standard set forth in Section 802.01C. We regained compliance under Section 802.01C after our closing share price on February 28, 2019 and our average closing share price for the 30 trading-day period ending February 28, 2019 both exceeded \$1.00.

There can be no assurance that our stock price will continue to close above \$1.00 per share and we will remain compliant with the Continued Listing Criteria of the NYSE. If our ADSs are ever delisted and we are not able to list our ADSs on another

national securities exchange, we expect our securities would be quoted on an over-the-counter market. If this were to occur, our stockholders could face significant material adverse consequences, including limited availability of market quotations for our ADSs and reduced liquidity for the trading of our securities. In addition, we could experience a decreased ability to issue additional securities and obtain additional financing in the future. There can be no assurance that an active trading market for our ADSs will develop or be sustained.

If we raise additional capital in the future, your ownership in us could be diluted.

Any issuance of equity we may undertake in the future to raise additional capital could cause the price of the ADSs to decline, or require us to issue shares or ADSs at a price that is lower than that paid by holders of our shares or ADSs in the past, which would result in those newly issued shares or ADSs being dilutive. If we obtain funds through a credit facility or through the issuance of debt or preferred securities, these securities would likely have rights that are senior to your rights as an ADS holder, which could impair the value of the ADSs.

Item 4. Information on the Company

A. History and Development of the Company

Our History

Sequans Communications S.A. was incorporated as a *société anonyme* under the laws of the French Republic on October 7, 2003, for a period of 99 years. We are registered at the Nanterre Commerce and Companies Register under the number 450 249 677. Our principal executive offices are located at 15-55 boulevard Charles de Gaulle, 92700 Colombes, France, and our telephone number is +33 1 70 72 16 00. Our agent for service of process in the U.S. is GKL Corporate/Search, Inc., One Capitol Mall, Suite 660, Sacramento, California 95814.

Our website is www.sequans.com. The information on, or that can be accessed through, our website is not part of this annual report.

As of the date of this annual report, there has been no indication of any public takeover offers by third parties in respect of our ADSs or ordinary shares or by the Company in respect of other companies' shares.

Principal Capital Expenditures

Our capital expenditures including purchase of intangible assets for the years ended December 31, 2016, 2017 and 2018 amounted to \$5.4 million, \$6.4 million and \$9.2 million, respectively. They primarily consisted of purchases related to LTE product development as well as capitalized development costs. We anticipate our capital expenditures in the year ended December 31, 2019 to be primarily for ongoing 4G and 5G product development. We anticipate our capital expenditure in 2019 to be financed from our cash on hand plus financing from strategic alliances, R&D project financing, debt and/or equity. Should we decide to broaden our product range by acquiring or developing complementary technologies, we would need additional capital expenditures in order to support development of multi-mode or multi-feature products.

B. Business Overview

Overview

We are a fabless designer, developer and supplier of 4G LTE semiconductor solutions for wireless mobile broadband and “Internet of Things” (IoT) applications, with a specific focus on the single-mode device market. Our solutions incorporate baseband processor and radio frequency, or RF, transceiver integrated circuits, or ICs, along with our proprietary signal processing techniques, algorithms and software stacks. Our high performance ICs deliver high throughput, low power consumption and high reliability in a small form factor and at a competitive price.

We believe the single-mode LTE, or LTE-only, device market is a potentially large and underserved segment of the overall LTE device market, and that these devices are characterized by attractive attributes not typically found in the traditional multi-mode device market, which include legacy 2G and 3G wireless technologies. Specifically, we believe there are significant advantages in size, power consumption, product cost, development costs and certification costs for our customers producing LTE-only devices compared to their more expensive, larger, more power hungry and more complex multi-mode counterparts. Furthermore, we believe a growing proportion of cellular-connected IoT devices, such as industrial machine-to-machine (M2M) devices as well as asset tracking devices, consumer devices and wearables, will integrate 4G LTE connectivity solutions as result of the recent or expected shutdowns of many 2G networks and the longevity and technical advantages of 4G LTE in this market. In addition, the completion of 3GPP Release 13 in 2016 ratified two new LTE categories targeting low complexity, low

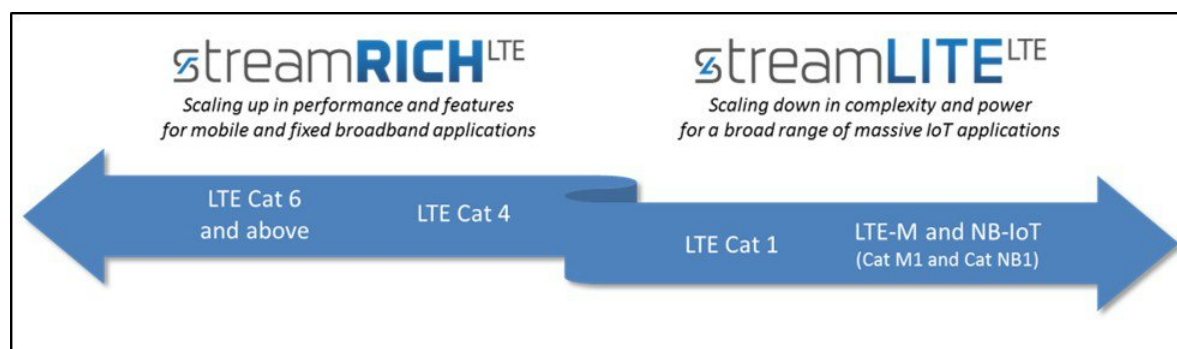
data-use machine-type communications. Cat M (also known as Cat M or Cat M1) and NB-IoT (also known as LTE Cat NB1) enable dramatically better power efficiency, reduced module costs and better coverage for IoT devices compared to traditional LTE or even 2G or 3G solutions. As a result, we believe that the LTE-only market will continue to increase, especially as operators fully deploy their LTE networks, as the volume of data traffic continues to grow, and as the IoT market adopts the new connectivity technologies. We believe our LTE solutions are among the most highly optimized, efficient and mature solutions in the industry, and that they are differentiated from those of both the multi-mode (2G/3G/4G) solution providers and from rivals providing single-mode 4G LTE solutions. With the evolution of the standard toward 5G, compatibility with 4G will be a requirement. We believe we will be able to deliver dual mode (4G and 5G) products leveraging all our past 4G development efforts and reinforcing our position in both the IoT and broadband space.

We have successfully brought to market seven generations of 4G wireless chipsets, including four generations of LTE chipsets, with an eighth generation planned for 2019. The cost, size and power efficiency of our LTE chip designs, coupled with our deep understanding of system-level architecture, our advanced wireless signal processing intellectual property and our RF expertise, enable us to provide high-performance, low-power and cost-efficient 4G semiconductor solutions, allowing us to target a wide range of wireless broadband and IoT devices. In the broadband data device market, our solutions serve as the core wireless communications platform in these devices, including USB dongles; portable routers; embedded wireless modems for computing and multimedia devices; and customer-premises equipment, such as fixed wireless broadband access modems, routers and residential gateways. In the IoT device markets, our solutions provide connectivity for industrial devices in transportation, security, asset and people tracking, retail, smart energy, smart city, agriculture, healthcare and other applications. We also expect to see strong growth in the IoT market in consumer applications such as personal and property trackers.

From 2005 through December 31, 2018, we shipped approximately 29.4 million 4G baseband-based semiconductor solutions, which have been deployed by leading wireless carriers around the world.

Our LTE solutions are currently in commercial deployments in the United States, Canada, Italy, France, Germany, United Kingdom, Indonesia, Malaysia, Philippines, Japan, China, South Korea, India, Australia, Brazil and elsewhere.

Our LTE product line comprises two families: our StreamrichLTE™ family addresses the high-performance, feature-rich broadband device segment, while the StreamliteLTE™ family is designed specifically to address the unique price/performance requirements of the “Internet of Things” market, including connected consumer electronics and machine-to-machine devices. The figure below highlights our portfolio strategy, which allows us to target a variety of applications with purpose-built, price/performance-optimized chipset solutions.



In 2013, we introduced the EZLinkLTE™ family of LTE modules, which provide all-in-one connectivity solutions that are designed to simplify the task, and reduce the cost, of embedding LTE into mobile computers, tablets, and machine-to-machine devices. Several different EZLinkLTE modules have been certified by Verizon Wireless, AT&T, T-Mobile US, Sprint, KDDI, DOCOMO, and Orange for use on their LTE networks, and are shipping in various commercial devices. The module strategy was put in place primarily to seed the market with our technology and accelerate time-to-market for us and our customers during a period when traditional cellular module vendors were not providing LTE-only solutions. We have seen this shift significantly over the past three years, with multiple module vendors now offering LTE-only modules. It is our goal to increasingly rely on module vendors to provide these solutions, allowing us to focus our sales on chipsets.

According to the Global Mobile Suppliers Association (GSA), the number of LTE devices shipped annually will increase from 1.4 billion in 2018 to 2.2 billion in 2023, representing a CAGR of approximately 9%. Over 10 billion LTE devices are expected to ship over this time frame, and according to ABI Research, more than 1.9 billion of them will be single-mode LTE

devices for the IoT market. The firm goes on to project that the single-mode LTE IoT device market will grow at a CAGR of nearly 100% in this period to reach annual shipments of 910 million units in 2023 for the IoT market.

Our LTE solutions are incorporated into devices sold by many leading OEMs and ODMs, including in the Verizon Wireless Ellipsis Jetpack MHS900L portable router, the Gemalto Cinterion® ELS31 LTE Category 1 and EMS31 Category M1 industrial M2M modules, the AT&T IMS2 module and in a variety of devices and modules produced by AsiaTEL, Foxconn, Gemtek, Geotab, Geotrak, Huawei, LinkLabs, Netcomm, Nimbelink, Orion Labs, Pycom, Remo Wireless, Sercomm, USI, Technicolor, Wisol, Wistron NeWeb, ZMTel, ZTEWeLink and others.

Industry Background

Evolution of Wireless Networks

The use of wireless communications devices has increased dramatically in the past decade, and mobile phones and wireless data services have become an integral part of day-to-day communication. According to the February 2018 Cisco® Visual Networking Index, mobile data traffic is expected to increase seven-fold from 2017 to 2022, a compound annual growth rate of 46%, and by 2022 over 77.5% of this data will run on 4G networks.

This increase in wireless data traffic has been driven by two primary trends. First, the pervasiveness of the Internet with its vast array of rich media content and applications along with users' desire to be connected anywhere and anytime using a variety of different wireless devices is driving a fundamental change in wireless data usage models and increasing demand for high speed wireless data connectivity. Second, rapid advances in performance and functionality have resulted in mobile phones evolving from solely voice-centric communications devices into data-intensive devices, such as smartphones and tablets, that support high-definition video, bandwidth-intensive Internet applications and streaming multimedia content, all of which require additional wireless network throughput. On top of this, the price point, size and low power consumption of the more recent LTE variants, Cat M1 and Cat NB1, are expected to facilitate a proliferation of IoT devices connected using LTE and further driving wireless data traffic. As a result, wireless carrier networks using 2G or 3G technology, originally designed primarily for voice traffic, strained to reliably handle the dramatic increase in wireless broadband data demand. This has been a major driver of the rapid shift by operators in many regions to 4G LTE technology to better meet this demand.

Wireless technologies historically have evolved through successive generations of protocols driven by the need for more efficient networks with greater bandwidth and capacity to handle a rising number of subscribers and increasing usage of broadband data services. Launched in 1991, 2G wireless networks, based on the Global System for Mobile Communications, or GSM, standard, and later the IS-95 standard based on Code Division Multiple Access, or CDMA, technology, were the first mobile telephone networks to use digital technology to digitize and compress voice traffic for more efficient use of spectrum bandwidth. These networks were designed primarily to support voice traffic, although ultimately, they were capable of supporting data rates up to 64 kilobits per second, or Kbps, using a circuit-switched data connection.

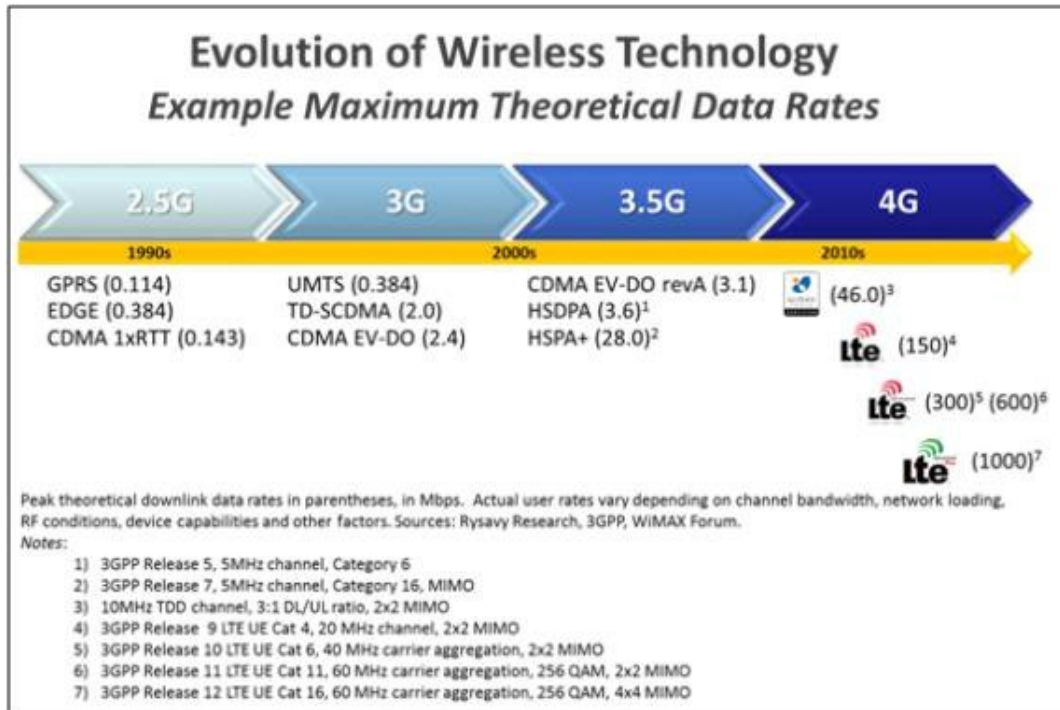
In the late 1990s, 3rd Generation Partnership Project, or 3GPP, began defining 3G networks based on the Universal Mobile Telecommunications System, or UMTS, standard. The first UMTS networks were established in the early 2000s and ultimately supported peak downlink data rates of 28 Mbps and higher. In parallel to these 3GPP efforts, 3rd Generation Partnership Project 2, or 3GPP2, defined the specifications for CDMA2000, which supported 1xEV-DO (Evolution Data Only) implementations capable of up to 3.1 Mbps downlink speeds.

Despite the advances in data rates provided by these improvements on both the 3GPP and 3GPP2 paths, these 2G and 3G networks remain constrained by legacy technologies that were designed primarily for voice traffic, which are characterized by limited throughput and inefficient utilization of spectrum. Unable to effectively address the fast-growing demand for wireless broadband data services in a cost-effective manner using legacy 2G and 3G networks, most wireless carriers have moved to what are commonly referred to as '4G' networks using LTE technology, which provide much higher peak downlink and uplink speeds in a more spectrally-efficient manner. The first version of the 3GPP LTE specification, Release 8, defined four User Equipment (UE) categories, or performance levels. UE Category 1 provides peak downlink speeds of 10 Mbps, and uplink of 5 Mbps. UE Category 2 provides 50 Mbps downlink and 25 Mbps uplink, while Categories 3 and 4 deliver 100 Mbps and 150 Mbps downlink, respectively, each with a peak uplink speed of 50 Mbps. In subsequent releases of the 3GPP LTE specifications, Releases 10 and later, called LTE-Advanced, additional improvements in features and performance were specified. These LTE-Advanced networks are already deployed by at least 187 operators worldwide, according to a February 2017 report by the Global Mobile Suppliers Association. The initial versions of LTE-Advanced can provide as much as 300 Mbps of downlink speed (3GPP Release 10 UE Category 6), with subsequent versions providing downlink speeds of up to 600 Mbps and peak uplink speeds of up to 100 Mbps (3GPP Release 12 User Equipment Category 12). More recently, several UE Categories (16 and above, introduced as part of 3GPP Release 12 and 13) have specified speeds up to or exceeding 1 gigabit per

second (Gbps). These higher speed categories involve aggregating multiple carriers, applying higher-order MIMO antenna technology, and more advanced modulation techniques.

In 2016, the first operators began deploying the variants of LTE optimized for IoT (Cat M and NB-IoT). Operating in licensed spectrum, low power wide area networks can provide low cost, yet secure, connectivity to battery-powered devices in both rural and urban locations. Following successful pilots involving a wide variety of use cases, Cat M and NB-IoT connectivity has now been deployed across North America, East Asia and in many European countries. According to GSMA, 87 Cat M/NB-IoT commercial network launches were already made over the world by February 2019, up from 42 networks in February 2018.

The figure below provides a simplified perspective on the evolution of wireless technologies providing ever-increasing performance:



Wireless carriers are seeking to quickly deploy and transition existing wireless data services to more efficient 4G networks, which require less capital expenditure for a given amount of data throughput. At the same time, potential average revenue per account, or ARPA, can be increased by providing value-added mobile broadband services and solutions that are better enabled by the speed and performance of 4G networks. According to the November 2018 Cisco® Visual Networking Index, internet protocol video traffic will account for 82% of total mobile data traffic by 2022, which is particularly problematic for legacy networks to support economically. These factors are key drivers of the move by mobile network operators to LTE technology.

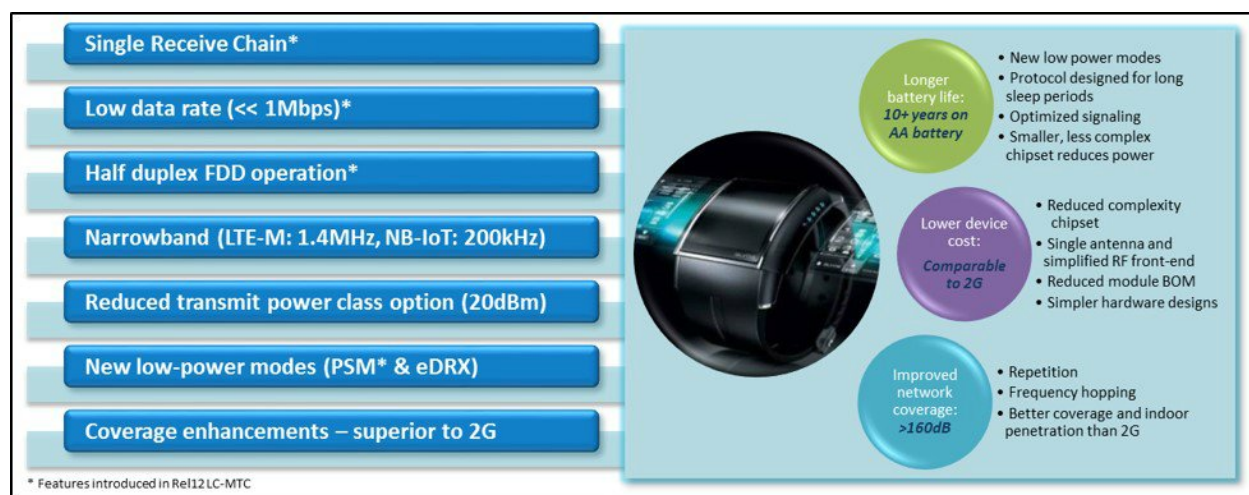
Additionally, carriers in developing regions are increasingly embracing 4G wireless technology as a cost-effective and easier-to-deploy alternative to wireline networks for delivering broadband capability to subscribers. According to a 2018 report by the International Telecommunications Union, in the developing regions of the world, internet penetration was projected to reach 51.2% by the end of 2018, up from 41.3% at the end of 2017. 4G wireless technology is being deployed in many of these developing regions to increase access to broadband services. This trend is expected to continue, especially as the higher UE category implementations approach gigabit per second performance levels.

While increasing demand for mobile and fixed broadband connectivity is driving LTE technology along a performance vector, the emerging IoT market is pushing wireless technology along a different vector. Many M2M and IoT applications are moving to LTE connectivity for its expected longevity, and because the technology is being optimized for improved coverage, reduced power consumption and lower cost. Many machine-to-machine connections are of the “set it and forget it” variety, and are expected to remain operational for ten or more years, sometimes powered by a battery. According to the November 2018 Cisco® Visual Networking Index, global M2M traffic is expected to grow at a 47% CAGR from 2017 to 2022, and over 14.6 billion M2M modules are expected to be connected by 2022. The overall surge in the number of mobile and M2M connections

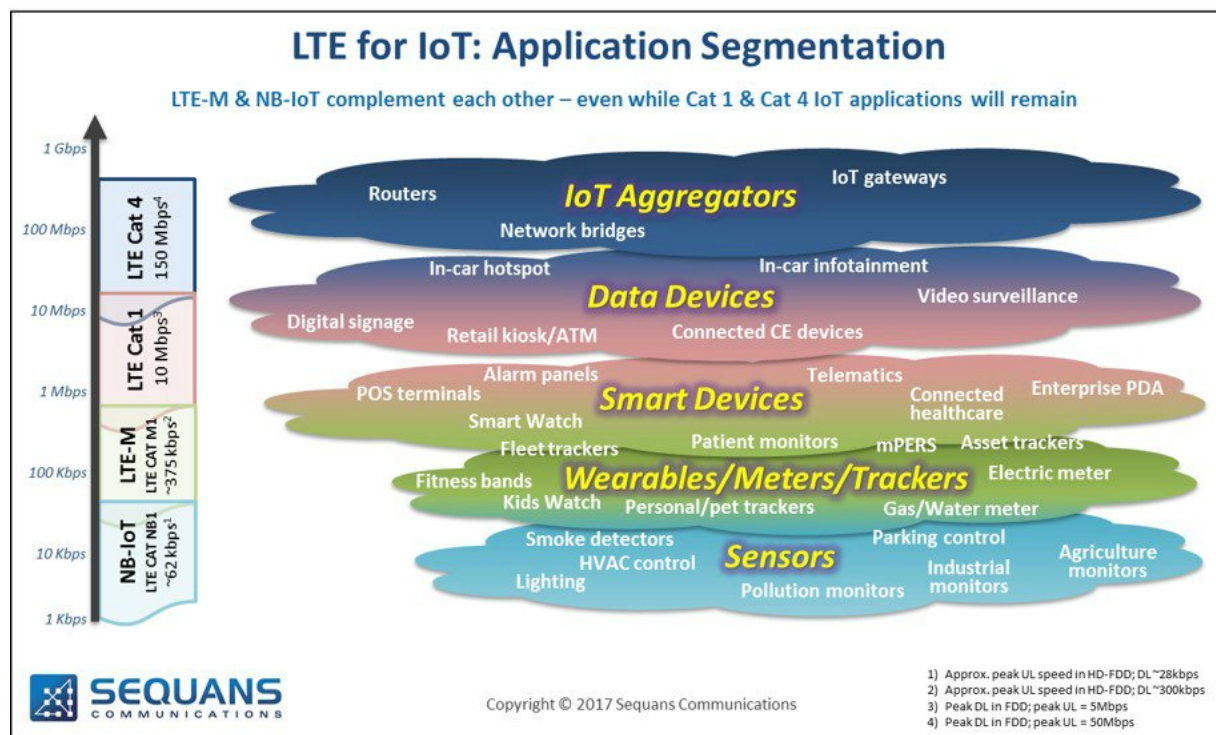
and the traffic they produce, coupled with the relative scarcity of available wireless spectrum, has prompted a number of operators, including AT&T in the United States and others in South Korea and Japan, to shut down their aging 2G networks so they can re-farm the spectrum for use with 4G LTE technology. As a result, many new machine-to-machine and “Internet of Things” device deployments are incorporating LTE technology, despite the fact that some may not need the throughput performance provided by traditional LTE UE Categories.

The industry has introduced new variants of LTE which optimize for low power consumption and reduced complexity, rather than high speed, in order to address the needs of machine-to-machine and other connected objects in the IoT. Specifically, in 2015 and 2016, LTE Category 1, with a peak downlink speed of 10 Mbps, was deployed by operators such as Verizon, T-Mobile, AT&T and NTT DoCoMo to enable their IoT and M2M customers to move from legacy 2G and 3G technology to LTE.

Meanwhile, 3GPP has defined LTE-based standards for Machine-Type Communications (MTC), introducing narrower bandwidths, reduced complexity, reduced throughput, improved coverage and reduced power modes to the LTE standard. These new MTC features began to be introduced in 3GPP Release 12, with further additions and optimizations in Releases 13, 14 and 15. The optimizations are summarized in the graphic below.



3GPP Release 13, completed in mid-2016, introduced Cat M, also called LTE Category M1, featuring 1.4 MHz bandwidth and peak speeds under 1 Mbps; and it also introduced a narrowband IoT (NB-IoT) category, also called Category NB1, with 200 kHz bandwidth and peak speeds under 200 kbps. The 3GPP Release 14 completed in June 2017 has added a higher data rate and multicast support, has improved positioning and has enhanced VoLTE and mobility for Category M. For Category NB1, Release 14 has added positioning, exclusive chip identification, multicast and low power class (14Bdm). These new categories provide excellent power efficiency, enabling years-long battery life for the devices they connect. They also provide superior network coverage and reduced module costs compared to their predecessor technologies, including traditional LTE, 2G and 3G. In addition, these new technologies are compatible with existing LTE networks, generally via a software upgrade to the network infrastructure already deployed, and they can operate on the same spectrum already deployed by LTE operators. This combination of attributes is expected to drive significant demand for these technologies in M2M and IoT applications. The graphic below depicts how various LTE categories might map to a range of IoT applications.



4G Wireless Networks

4G architecture represents a fundamental technological change in the design of wireless communication networks. 2G and 3G networks were originally designed to support voice communications and utilize older circuit switching technology based on wireline telephone system design concepts. Circuit switching technology is inflexible as it requires a continuous dedicated connection between the source and destination of the communication, and is inefficient as network capacity is wasted on connections that are established but not in continuous use. 4G, which employs concepts such as packet switching and internet protocol, or IP, improves the scalability and performance of data networks. Packet switching technology makes more efficient use of network capacity for data communication by transmitting data in packets over multiple shared connections as compared to a dedicated connection. OFDMA and MIMO have emerged as key technologies that increase efficient use of spectrum, signal reliability, throughput and range in 4G networks compared to 2G and 3G networks.

- **OFDMA** is a digital modulation and access technique that achieves significantly higher throughput within a given frequency spectrum than the TDMA and CDMA techniques used in 2G and 3G wireless networks. OFDMA splits the wireless signal into multiple lower frequency sub-signals spread throughout available spectrum during transmission, effectively reducing the demands on the network for each sub-signal and enabling increased overall speed and performance.
- **MIMO** is a smart antenna technology that enables higher data throughput and signal range without requiring additional bandwidth or transmit power. MIMO employs multiple antennae to more efficiently transmit and receive wireless data.

The throughput and range extension capabilities of OFDMA and MIMO technologies also enable infrastructure installations to cover a larger service area and provide increased network capacity, thereby reducing capital expenditures for wireless carriers.

LTE has become the dominant technology for 4G wireless broadband access, particularly among large mobile operators who have historically deployed 3GPP or 3GPP2 technology. The GSA counted 710 commercial LTE networks in 217 countries as of January 31, 2018, making it the fastest developing mobile communications system technology ever. Worldwide subscribers were estimated at 3.74 billion at the end of September 2018 by GSA. Leading this trend, according to GSA, the Asia-Pacific region was estimated to represent 65.2% of global subscriptions followed by Europe with 12.4% and North America with 10.4% at the end of September 2018. According to GSA, LTE subscribers will exceed 5.96 billion by 2022. The number of LTE devices shipped annually will increase from 1.4 billion in 2018 to 1.1 billion in 2023.

The rapid pace of deployment of LTE networks worldwide implies that in some regions, operators already have or are preparing to achieve LTE coverage at parity or better compared to their 2G or 3G coverage footprint. Verizon Wireless for instance has said that it has substantially completed its LTE network build as of mid-2013, achieving population coverage parity

with their 3G network of over 98%. Meanwhile, South Korean and Japanese LTE operators achieved 100% population coverage in 2012. In this environment, many devices will not require 2G or 3G support. Currently, this is especially true outside of the handset market, in devices such as tablets, laptops, mobile hotspots, USB modems, consumer electronics devices, and M2M applications. In these data devices the usage models are data-centric rather than voice-centric, and there are significant advantages in size, power consumption, product cost, development costs and certification costs for LTE-only implementations compared to their more expensive, larger, more power hungry and more complex multi-mode equivalents. In some regions, LTE-only handsets may emerge as well, particularly for domestic market use. These LTE-only device-level advantages, coupled with the network-level economic benefits to carriers, imply that a significant market exists for LTE-only devices. Over 10 billion LTE devices are expected to ship over this time frame, and according to ABI Research, 1.9 billion of them will be single-mode LTE devices for the IoT market. ABI research projects that the single-mode LTE IoT device market will grow at a CAGR of 100% in this period to reach annual IoT device shipments of 910 million units in 2023.

Challenges Faced By 4G Wireless Semiconductor Providers

Suppliers of 4G semiconductor solutions face significant challenges:

- *Execution Challenges.* The rapid evolution of wireless protocols, such as LTE to LTE Advanced, requires sustained product development excellence and ongoing collaboration with carriers to meet market technology needs. Subscriber demand and carriers' push to increase revenues by providing new and higher performance devices have driven OEM and ODM product life cycles to become shorter and require semiconductor solution providers to adhere to quick time-to-market schedules while providing fast and efficient transition from design-in to volume production. In addition, wireless carriers require semiconductor solutions to undergo extensive certification qualification and interoperability testing prior to mass production.
- *Technology Challenges.* In order to increase throughput with minimal cost, wireless carriers require more efficient use of spectrum through the implementation of complex signal processing algorithms, such as OFDMA and MIMO, that require a significant amount of system-level and software expertise in addition to IC design knowledge. In addition, OEM and ODM customers' desire for continuous improvements in power efficiency, reduced form factor and lower cost require rapid design cycles employing increasingly advanced silicon processes, improved RF transceiver performance and integration of additional features. Furthermore, until LTE networks are fully deployed by the carrier, the need to provide an optimal user experience in areas of poor network coverage or areas where coverage changes from 2G or 3G to 4G requires multi-mode system designs that are capable of seamlessly transitioning between the technologies.

Our Competitive Strengths

We believe the following competitive strengths enable us to address the challenges faced by 4G wireless semiconductor providers:

- ***A strong track record of execution in 4G.*** We believe we are well positioned in the single-mode LTE market, with approximately 80 customers having already launched or in the development phase of products using Sequans LTE chipsets, and in particular we have become recognized as a market leader in LTE for IoT chipsets. We were an early provider of WiMAX products and have been shipping our wireless broadband semiconductor solutions since 2005. We have released seven generations of 4G semiconductor solutions – including four generations of LTE – that have been deployed in a variety of devices including smartphones, USB dongles, tablets, mobile routers, broadband access CPEs, in-car telematics devices and industrial IoT devices. Since we released our first LTE product in 2010, we have accomplished the following milestones:
 - announced a collaboration in February 2016, with Skyworks for developing IoT-optimized RF front-end solutions for Sequans LTE for IoT chipsets;
 - introduced in February 2016, Sequans' fourth-generation LTE chip, Monarch, the world's first 3GPP Release 13 LTE Category M and narrowband IoT capable chipsets, targeting low data-use IoT applications;
 - announced in March 2016, the certification of Sequans' Calliope LTE Cat 1 chipset with Japan's largest operator, NTT DoCoMo;
 - announced in May 2016, the certification of Sequans' Calliope LTE Cat 1 chipset at AT&T;
 - in October 2016, announced four customer design wins for Sequans' Monarch Cat M chip, including Gemalto, LinkLabs, Nimbelink and Encore Networks;

- disclosed in January 2017, that Verizon had certified Sequans' Monarch Cat M chip in December 2016, making it the world's first carrier-certified Cat M chip;
- announced in January 2017, that Geotab selected Sequans' Calliope LTE Cat 1 chipset for use in vehicle telematics devices;
- in February 2017, completed Europe's first Cat M data call with Telefónica in Spain;
- announced in February 2017, that Orion Labs selected the Monarch Cat M chip for their voice-enabled wearables products and that Huawei had selected the Monarch Cat M chip for a family of IoT modules;
- in February 2017, certified the LTE Cat 1 chipset for VoLTE on T-Mobile's network;
- in April 2017, announced a collaboration with Wisol for LTE for IoT modules;
- announced in July 2017, an IoT design win using our Monarch Cat M chip for Positioning Universal's GPS Tracker Devices;
- in August 2017, disclosed that Askey Computer had selected our LTE-Advanced chipset to design broadband wireless access devices;
- introduced in September 2017, our LTE tracker platform developed in collaboration with STMicroelectronics to Connect and Locate Objects Everywhere ("CLOE");
- in September 2017, completed AT&T certification of our LTE for IoT module;
- announced IoT design wins in September 2017: Sercomm's IoT tracker, the Spartan GoCam LTE for IoT surveillance camera and Geotab's GO8 LTE telematics device;
- in December 2017, completed AT&T validation of the Monarch LTE platform
- announced IoT design wins in January 2018: Sercomm's LTE IoT Button Device, Asiatelco Cat M modules and devices;
- in January 2018, disclosed that we would collaborate with NTT DOCOMO to accelerate adoption of Cat M technology in Japan and that our Monarch platform successfully delivers VoLTE on an Cat M1 network;
- in February 2018, announced that BOLT! of Indonesia had launched a new LTE CPE using our LTE-Advanced chips;
- announced IoT design wins in February 2018: Remo Wireless' IoT tracker devices for customers worldwide using the CLOE IoT platform, the Wagz dog collar and Gemtek's new Cat M IoT tracker;
- in February 2018, announced two new IoT products: the Monarch SiP, in collaboration with Skyworks, and Monarch N, our NB-IoT only platform;
- in March 2018, certified our LTE Cat 1 chipset with KDDI;
- in April 2018, announced Monarch LTE chip is validated for Cat M1 on SoftBank network;
- disclosed in May 2018, that Verizon certified Sequans Cat M/NB-IoT Monarch SiP;
- partnered in July 2018, with NTT DOCOMO to accelerate adoption of NB-IoT technology in Japan;
- announced in July 2018, the successful testing of Monarch chip on Orange network;
- Sequans, Gemtek, and Telrad delivered in September 2018 new LTE solutions for the 3.5 GHz CBRS spectrum band;
- introduced in September 2018, new LTE Cat 1 module for Sprint IoT;
- announced in September 2018, the first Orion LTE-enabled wearable, Orion Sync;
- introduced in January 2019, with GeoTraq a new line of LTE for IoT cellular modules;
- in January 2019, collaborated with Polymer Logistics and Sequans on Cat M smart IoT tracker for pallet tracking for use on USA networks;
- brought in January 2019, with Asiatelco new Cat M vehicle trackers to market;

- announced in January 2019, Abside Networks Selected Sequans' Cassiopeia technology for new customized devices for LTE private networks;
- announced in February 2019, Sequans worked with STMicroelectronics to deliver Cat M/NB-IoT connected MCU solutions;
- announced in February 2019, Daatrics selected Monarch to power Neebo baby wearable;
- introduced in February 2019, Monarch 2: the second generation of the world's most advanced LTE for IoT chip platform;
- announced in February 2019, new Cat M module for Orange's live booster program is powered by Sequans Monarch Technology;
- announced in February 2019, Monarch Cat M technology is certified for use on Telstra;
- partnered in March 2019, with Deutsche Telekom on integrated SIM for IoT; and
- announced in March 2019, collaborating with Lockheed Martin on world-first LTE over satellite solution.
- ***Understanding of wireless system-level architecture and expertise in signal processing.*** We have an end-to-end understanding of wireless system-level architectures and networks based on our team's experience in a broad range of wireless technologies including 2G, 3G, Wi-Fi, WiMAX and LTE. This enables us to serve as a trusted advisor to wireless carriers, OEMs and infrastructure vendors to optimize the performance of their 4G devices and networks. For example, our solutions offer improved standby-mode battery life in 4G devices as a result of our in-depth understanding of the interactions between the device and the network and of our implementation of advanced power-saving techniques in our solutions. For instance, we have implemented a proprietary technique called Dynamic Power Management in our Monarch chip that assures the longest possible battery life for IoT devices by dynamically adapting the chip's deep-sleep implementation to the traffic patterns of various IoT use cases. (UPDATE)
- ***High performance solutions for 4G applications.*** Our solutions offer high performance for use in a wide array of 4G-enabled devices. The key performance characteristics of our solutions include: (UPDATE)
 - high throughput with peak downlink data transfer rates of 150 Mbps in our LTE solutions and up to 300 Mbps in our LTE-Advanced solution;
 - high power efficiency in both active and idle modes using our patented idle mode optimization algorithms that improve standby time and help maximize device battery life;
 - support for an advanced technology called hybrid automatic repeat request, or hybrid ARQ, which significantly enhances RF link robustness and throughput, improving mobility and range;
 - inclusion of LTE broadcast support in our LTE solutions using a feature called evolved multimedia broadcast multicast service, or eMBMS, which enables carriers to deliver new multimedia services in an economical and spectrally efficient manner;
 - development and integration of a unique LTE interference mitigation technology, Sequans Active Interference Rejection (Sequans AIRTM) into our LTE solutions for improved cell edge performance, enhanced network capacity and enhanced user experience;
 - support for LTE-Advanced features, including carrier aggregation, a capability of creating a single virtual wide channel from two different narrower channels, resulting in higher throughput;
 - integration of complete on-chip support for Voice over LTE (VoLTE), including support for high-definition voice using wideband codecs; and
 - support for LTE-Advanced technology band 48 for CBRS solutions.
- ***Highly optimized 4G solutions.*** We have successfully produced and ramped into commercial production seven generations of 4G system-on-chip, or SoC, semiconductor solutions. This experience has resulted in what we believe to be one of the industry's most efficient implementations, providing high performance at low cost and low power consumption. Some of our solutions have integrated the baseband processor and the RF transceiver into a single die, resulting in extremely high integration, small footprint and low cost. With the introduction of our Monarch Cat M/NB-IoT chip in 2016, we delivered a very high level of integration, providing baseband, RF transceiver, power

management and memory all in a single chip of less than 50mm². And in February 2017, we announced our Monarch SX Cat M system-on-chip, with even more integration, including an application processor, graphics processor and display controller, sensor hub and media processing engine, along with our Monarch Cat M/NB-IoT modem, all in a single chip, further reducing the design effort for makers of IoT devices. In February 2018, we announced our Monarch SiP, an all-in-one solution that enables ultra-compact IoT devices, and Monarch N, our chipset optimized for Cat NB1/NB2 single-mode. In February 2019, we announced our second generation Category M chipset, the Monarch 2. Furthermore, our comprehensive software solutions help our customers get to market quickly with an optimized, mature and field proven solution. Our highly optimized solutions offer key advantages for both ourselves and our end customers:

- Lower overall system cost for our end customers, coupled with higher functionality and smaller form factor. Our ability to integrate digital and RF functions into a single device also allows us to maintain higher product margins as we believe device manufacturers are willing to pay a premium for our integrated 4G solutions, while also enabling us to reduce our manufacturing costs for wafer fabrication, assembly and testing.
- The implementation of advanced “known good die” and wafer-level chip-scale packaging (WL CSP) technology, which reduces chip cost and design footprint, enables the creation of very small and cost-effective LTE modules
- Simplified product design for device manufacturers, as our solutions incorporate all key components required for a 4G device in a single die or package. For instance, our Monarch chip incorporates baseband processor, RF transceiver, power management and memory in a single 6.5 x 8 mm package. We believe these advantages enable our products to be incorporated into leading edge devices that offer a high-quality user experience, as well as accelerate our end customers’ time-to-market.
- Proprietary embedded protocol software that has been exhaustively tested with major base station vendors’ equipment to ensure reliable performance in the field. We also offer host software that facilitates rapid development of high performance device drivers, connection managers and other key application-layer software functionality.
- Provide lowest power consumption with 1µA PSM and eco-Paging™ for optimized Extended Discontinuous Reception (eDRX), a feature that allows IoT devices to remain inactive for longer periods.
- Optimized network selection Cat M/NB-IoT with the proprietary feature IoT-Select™ VoLTE support
- ***Long-term relationships with wireless carriers.*** We have developed close relationships with wireless carriers around the world, helping them to test their new networks and specific features of those networks. We believe these relationships are critical to being able to certify our products quickly and to help our customers to certify and deploy their products efficiently.

Our Strategy

Our goal is to be a leading provider of next-generation single-mode wireless semiconductors by providing best-in-class solutions that enable mass-market adoption of 4G technologies worldwide. Key elements of our strategy include:

- ***Identifying and optimally serving LTE-only market segments.*** As the LTE market grows and matures, and as operators aggressively build out their LTE networks and refarm their 2G and 3G spectrum to support demand for data capacity on LTE, we expect to see significant growth in the demand for single-mode LTE, or LTE-only, devices. In our estimation, this demand will come from three areas:
 - 1) Internet of Things and M2M devices: Increasingly, established mobile network operators are looking beyond the saturated smartphone marketplace to add the devices and users needed to maintain profitable growth. One area of particular interest to these operators is the opportunity to add connected ‘things’ (rather than people) to their networks. The traditional machine-to-machine market is considered a subset of this larger connected objects space, often called “The Internet of Things” (or IoT). While a large number of IoT connections are expected to use WiFi, Bluetooth or some other local-area or personal-area networking technology, there are many applications for wide-area connectivity which can be addressed by cellular networks. Applications for cellular connectivity include smart utility meters, asset tracking, industrial automation and monitoring, retail, smart cities, consumer wearables, agriculture and environmental monitoring, mobile/remote healthcare, security and more. Given the rapid move to LTE by network operators, the spectral efficiency and low latency of LTE networks, and the longer life cycles of some of these applications, the use of LTE in many of these applications is expected to increase, despite the fact many of them do not require high throughput. According to data from ABI Research, over 1.3 billion LTE-based

modules and wearable devices will ship from 2017 to 2022. This trend toward the use of LTE in the IoT market began with the arrival of cost- and power-optimized Category 1 LTE solutions in 2015, and is expected to accelerate with the arrival of machine type communications (MTC)-optimized 3GPP Release 13/14/15 LTE solutions, which define Cat M and NB-IoT user equipment categories. Among other things, these new specifications simplify the LTE requirements, reducing cost and power even further, such that these Release 13/14/15 implementations are expected to rival 2G in terms of cost and power. Our StreamliteLTE family is targeted at the IoT market, and our world-first Calliope Category 1 LTE chipset platform, announced in January 2015, is certified and shipping in commercial products. Monarch, the world's first Cat M/NB-IoT chip, was announced in February 2016, and is now certified and/or shipping in devices for Verizon, AT&T, as well as carriers in Japan and Europe. More carrier approvals are anticipated in 2019.

- 2) **Broadband devices:** Mobile routers, also called mobile hotspots, provide convenient, on-the-go Internet access via WiFi for users in homes, offices, hotel rooms, vehicles and outdoor locations. Fixed-location (non-mobile) routers provide broadband Internet access for homes and businesses. Mobile routers are popular with customers of traditional mobile operators, and because of the favorable economics of LTE networks compared to 2G and 3G networks, and the potential for heavy data consumption by a mobile router user, LTE-only versions of this device type may become more common. Fixed, or home, routers (also sometimes generically called broadband wireless CPE, or customer premise equipment) are being deployed as a 'last-mile' or wireless local loop solution by emerging operators to provide basic broadband access where it may be prohibitively expensive to deploy wireline broadband infrastructure using fiber, cable or DSL. Single mode LTE-only designs are a logical choice for these home routers for cost and performance reasons, and because the devices are not mobile and therefore do not need to 'fall back' to a 2G or 3G connection. ABI Research projects that, together, shipment of LTE-only IoT and fixed wireless broadband devices will exceed 1.1 billion units from 2017 to 2022. Solutions from both our StreamrichLTE family (Cassiopeia LTE-Advanced platform, for instance) and our StreamliteLTE family (Monarch and Colibri LTE chipset platform) can ideally address these device types.
 - 3) **Vertical applications, including public safety:** The public safety and emergency responders equipment market is undergoing a technology transition that favors the use of LTE in terminals and handhelds. We have several products in both our StreamrichLTE family (Cassiopeia LTE-Advanced platform, for instance) and our StreamliteLTE family (Colibri LTE chipset platform) that can ideally address these device types. LTE is also being adopted for use in delivering ground-to-aircraft broadband Internet connectivity for commercial aircraft, and in other vertical markets in aviation and military applications.
- ***Accelerating our, and our customers', time to market and reducing our customers' development costs.*** In 2013, we introduced the EZLinkLTE™ family of LTE-only modules. By packaging our LTE semiconductor solutions in a complete, turnkey module form factor and certifying them with key wireless carriers, we expect to catalyze the market for LTE-only devices, speed time to market for customer wishing to incorporate LTE connectivity in their devices, and reduce the cost and complexity for our customers. And by pre-integrating and validating third-party WiFi chipset designs, we are able to help our mobile router customers get to market faster. In addition, our highly integrated, single-chip Monarch Cat M solution minimizes the design effort for IoT device makers. In February 2017, we announced our Monarch SX Cat M system-on-chip, with even more integration, including an application processor, graphics processor and display controller, sensor hub and media processing engine, along with our Monarch Cat M/NB-IoT modem, all in a single chip, further reducing the design effort for makers of IoT devices and modules. And in February 2018, we announced Monarch SiP, a highly integrated system-in-package that combines the Monarch with a front-end radio module from Skyworks to create an all-in-one design that simplifies the design process, shortens development time, is pre-certified by operators that have certified the Monarch and is optimized for space-constrained IoT products such as sensors, trackers and wearables, where the size is extremely important.
 - ***Leveraging our multiple generations of 4G chip design experience to become a leader in advanced LTE technology and cost efficiency.*** We have more than ten years and seven generations of 4G chip design experience, resulting in highly optimized and cost-efficient chip implementations and deep technical expertise, allowing us to be among the first in the industry to deliver new capabilities to market, as well as to enable extremely cost-competitive solutions. For example, in February 2013, we announced Cassiopeia, a third generation LTE chipset platform with support for LTE Advanced features, including carrier aggregation support for up to 40MHz aggregated bandwidth and 300 Mbps Category 6 downlink performance, the only such capability in the industry at that time. In May 2013, we introduced our EZLinkLTE™ family of LTE-only modules, aimed at speeding time to market for our customers. The cost and power efficiency achieved from our multiple generations of 4G modem design has enabled us to deliver our StreamliteLTE family of products at attractive price points, enabling LTE connectivity to be embedded in a wide range of cost-sensitive IoT applications in both consumer and machine-to-machine applications. The most recent members of

our StreamliteLTE family are our fourth generation LTE chip, Monarch, an Cat M/NB-IoT single-chip, announced in February 2016. A year later, we announced Monarch SX, a highly-integrated SoC that integrates an application processor, media processor, sensor hub and display controller alongside the Monarch Cat M/NB-IoT modem. And in February 2018, we announced Monarch N, a Release 14/15 NB-IoT platform designed and optimized for pure NB-IoT operation. Monarch N is highly integrated and includes all primary functions in a small chip scale package (CSP), enabling modules smaller than 10 x 10 mm.

- ***Partnering with other leading technology companies to complement our technology offerings.*** We regularly collaborate with ecosystem partners who provide complementary technology or strengthen our capabilities to address customer needs and competitive pressure. For instance, we have worked closely with Skyworks Solutions to ensure the availability of RF front-end modules that are optimized for use with our LTE chipsets to simplify the RF design task for our customers and in March 2018 announced the Monarch SiP combining the Skyworks RF front-end module with our Monarch chipset. We have collaborated with STMicroelectronics to develop IoT design kits that help customers easily integrate our Monarch Cat M/NB-IoT platform with a range of STMicroelectronics' microcontrollers. We have also integrated STMicroelectronics' GNSS chip with the Monarch platforms to create CLOE, Connecting and Locating Objects Everywhere, an integrated solution for all kinds of trackers. And we have partnered with TCL to jointly develop next generation 5G wireless technologies in order to accelerate their development.








Our Solutions








We have developed a portfolio of 4G semiconductor solutions to address a variety of applications and market segments. We offer baseband solutions used to encode and decode data based on 4G protocols that serve as the core wireless processing platform for a 4G device; RF transceivers used to transmit and receive wireless transmissions; and highly integrated SoC solutions that combine these and other functions into a single die or package. Some of our SoC solutions integrate the baseband and RF transceiver functions, in some cases with an applications processor and memory. This advanced integration reduces the size, cost, design complexity and power consumption of the 4G solution. In 2013, we introduced a family of LTE modules that vastly simplify the task of embedding LTE connectivity in many computing, consumer and machine-to-machine devices.




All of our baseband, SoC products and modules are provided with comprehensive software, including relevant source code and tools, to enable manufacturers to easily integrate our solutions into their devices in a wide variety of environments, including Apple MAC OSX, Microsoft Windows, Chrome OS and embedded operating systems such as Android and Linux. In addition, we provide our customers with design support, in the form of reference designs that specify recommended methods for interconnecting our chips to surrounding devices, such as host processors, memory and RF front-end components as well as tools to integrate with products from major automatic test equipment vendors. Further, we provide our customers with a warranty, for a period of one to two years, that our solutions are free from defects in materials and workmanship and will operate in material conformance with the provided specifications, entitling the customer to have the defective product repaired or replaced at our expense.

Many of today's LTE-enabled devices, including home routers, tablets, laptops and mobile hotspots, tend to require the highest performance and richest set of features in their LTE solution, driven by consumer demand for these attributes and by a highly competitive device market. For these performance segments, we typically propose our StreamrichLTE family of products, as these solutions deliver the required higher performance and comprehensive feature set. However, in the nascent market for connected devices in segments like consumer electronics and machine-to-machine modules, attributes like size, power consumption and cost are often much more important than raw performance. For these products, we typically propose our StreamliteLTE family of products, which provide performance levels suitable for these kinds of devices in a smaller, more power-efficient and more cost-effective implementation.

Our primary products during the last three financial years are summarized in the table below.

Platform Name Chipset ID Family	Description	Tablets/ Embedded Laptops	Mobile Routers	IoT and M2M	CPE	Key Features
MonarchSiP SON66430 	LTE Release 13/14 dual- mode LTE M1/ NB1			•		Ultra-compact complete LTE System in Package; integrated baseband, RF, pSRAM, power management, front-end and passives; eco-Paging™ for optimized eDRX; power class options 20 and 23dBm; IoT-Select™ optimized network selection Cat M/NB-IoT
MonarchSX SON3340 	LTE Release 13/14 SoC			•		LTE UE Category M1 and NB1 supported; MCU, sensor hub, GPU, media engine, Baseband, RF transceiver, memory and power management integrated in a single package.
V7M200 	Monarch-based surface-mount all-in-one LTE module for Verizon Wireless			•		20mm x 21mm x 1.5mm, surface-mountable module with integrated, clocks, Flash, and RF front-end supporting bands 4 and 13; Verizon Wireless and FCC certified.
Monarch SON3330 	LTE Release 13/14 BB+RF+ PMIC+RAM			•		LTE UE Category M1 and NB1 supported; Baseband, RF transceiver, memory and power management integrated in a single package; power-optimized for IoT and M2M applications requiring lower throughput.
Calliope SON3223 	LTE Release 9/10 BB			•		40nm technology, 10Mbps CAT1 peak throughput, USB and HS UART interfaces, integrated processor, cost- and power-optimized for IoT and M2M applications requiring lower throughput. WLCSP.
Colibri SON3221 	LTE Release 9/10 BB	•	•	•	•	40nm technology, 150Mbps CAT4 peak throughput, USB and HS UART interfaces, integrated processor, optimized price/performance for mobile computing and high performance M2M markets. WLCSP.
Colibri / Calliope SON3241 	LTE RF	•	•	•	•	Supports 700-900MHz and 1.8-2.7GHz, up to 20 MHz bandwidth. WLCSP.

Platform Name Chipset ID Family	Description	Tablets/ Embedded Laptops	Mobile Routers	IoT and M2M	CPE	Key Features
VZ130O 	Calliope-based surface-mount all-in-one LTE module for U.S. networks			•	•	20mm x 21mm x 1.5mm, surface-mountable module with integrated power management, clocks, Flash and DDR memories, and RF front-end supporting bands 4 and 13; Verizon Wireless and GCF certified. eMBMS and VoLTE capable
VZ120O 	Calliope-based surface-mount all-in-one LTE module for Verizon Wireless network			•	•	20mm x 21mm x 1.5mm, surface-mountable module with integrated power management, clocks, Flash and DDR memories, and RF front-end supporting bands 4 and 13; Verizon Wireless and GCF certified. eMBMS and VoLTE capable
VZ22Q 	Colibri-based surface-mount all-in-one LTE module for Verizon Wireless network	•	•	•		20mm x 21mm x 1.5mm, surface-mountable module with integrated power management, clocks, Flash and DDR memories, and RF front-end supporting bands 4 and 13; Verizon Wireless and GCF certified. eMBMS and VoLTE capable
VZ22M 	Colibri-based M.2 form-factor LTE module for Verizon Wireless network	•		•	•	M.2 module with integrated power management, clocks, Flash and DDR memories, and RF front-end supporting bands 4 and 13; Verizon Wireless and GCF certified. eMBMS and VoLTE capable
US60L 	Colibri-based surface-mount all-in-one LTE module for multiple US carrier networks	•	•	•		31.5 x 22 x 1.85 mm, surface-mountable module with integrated power management, clocks, Flash and DDR memories, and RF front-end supporting bands 2, 4, 5, 12, 13 and 17; AT&T certified. eMBMS and VoLTE capable
Cassiopeia SQN3220/ SQN3220sc 	LTE-Advanced Release 10 BB	•			•	Carrier aggregation up to 20 + 20 MHz
Mont Blanc/ Cassiopeia SQN3240/ SQN3242/ SQN3244 	LTE RF	•	•	•	•	Supports FDD and TDD 700 MHz – 2.7 GHz, up to 20 MHz bandwidth

Platform Name Chipset ID Family	Description	Tablets/ Embedded Laptops	Mobile Routers	IoT and M2M	CPE	Key Features
Mont Blanc SQN3120 	LTE Release 9 BB	•	•	•	•	40nm technology, 150Mbps Category 4 peak throughput, USB, SDIO and gigabit Ethernet interfaces, embedded SDRAM plus integrated processor.
Mont Blanc SQN5120 	LTE Release 9 + WiMAX BB		•		•	As in SQN3120, plus integrated WiMAX baseband, seamless WiMAX-LTE handover support
Mont Blanc SQN3140 	LTE RF	•	•	•	•	Supports 2.3—2.7 GHz and 3.3—3.8 GHz TDD LTE bands, up to 20 MHz bandwidth

Abbreviations used in this table: BB = baseband processor, CPE = customer premise equipment, EOL = product declared end-of-life, FDD = frequency division duplexing, IoT = Internet of Things, nm = nanometer, PMIC = power management IC, RF = radio frequency transceiver, SDRAM = Synchronous Dynamic Random Access Memory, SiP = system in package, SoC = system-on-chip, TDD = time division duplexing, VoIP = Voice over Internet Protocol.

In February 2016, we announced a Release 13/14 chipset, Monarch, capable of supporting both Cat M and NB-IoT. Monarch includes the baseband processor, RF transceiver and power management circuitry in a single package. It is targeted at lower data-use IoT applications, including sensors, wearables and utility meters.

In February 2017, we announced Monarch SX, a system-on-chip that integrates an ARM Cortex M4 processor, a sensor hub, a media processing engine, a graphics processor and display controller alongside the Monarch Cat M/NB-IoT modem, in a single chip.

In February 2018, we announced Monarch SiP, a highly integrated system-in-package that combines the Monarch with a front-end radio module from Skyworks to create an all-in-one design that simplifies the design process, shortens development time, is pre-certified by operators that have certified the Monarch and is optimized for space-constrained IoT products such as sensors, trackers and wearables, where the size is extremely important.

In February 2018, we announced a Release 14/15 chipset, Monarch N, an NB-IoT platform designed and optimized for pure NB-IoT operation. Monarch N is highly integrated and includes all primary functions in a small chip scale package (CSP), enabling modules smaller than 10 x 10 mm.

In February 2019, we also announced a release 14/15 chipset, Monarch 2, the second generation of Monarch. Optimized for Cat M1/NB1/NB2, Monarch 2 is a highly integrated chip (baseband, RF, pSRAM, and power management) for optimized cost and power. The solution includes an embedded application CPU 3.6-312MHz MCU for adaptive power/performance ratio, a secure element, an Integrated Universal Integrated Circuit Card (iUICC), Evaluation Assurance Level 5, government grade security and embedded GNSS positioning.

Competition

The wireless semiconductor business is very competitive. We believe that our competitive strengths will enable us to compete favorably in the LTE markets. The following are the primary elements on which companies in our industry compete:

- functionality, form factor and cost;
- product performance, as measured by network throughput, signal reach, latency and power consumption;
- track record of providing high-volume deployments in the industry; and
- systems knowledge.

In the LTE market, we expect to face competition from established semiconductor companies such as Huawei, Intel Corporation, Mediatek, Qualcomm Incorporated, Samsung Electronics Co. Ltd., Sony Corporation and Spreadtrum, as well as smaller actors in the market such as GCT Semiconductor or newcomers such as Nordic Semiconductor.

Many of our competitors have longer operating histories, significantly greater resources and name recognition, and a larger base of existing customers than us. In addition, some of them may provide incentives to customers or offer bundled solutions with complementary products, which could be attractive to some customers, or adopt more aggressive pricing policies to offset what we believe are the performance and cost advantages of our solutions.

Business Development, Sales and Marketing

Our business development efforts are focused on developing relationships with wireless carriers to identify the potential product opportunities at each carrier. Our sales efforts are focused on determining which OEMs and ODMs are most likely to win in the various carrier product opportunities and securing design wins for mobile broadband devices to be manufactured by the OEMs and ODMs. We work closely with key players across the 4G wireless broadband industry to understand their requirements and enable them to certify and deploy 4G solutions in high volume.

Our business development team is organized regionally and by wireless carrier. In addition to identifying new business opportunities based on the wireless carriers' product launch plan, the business development team also works to understand the wireless carriers' future technological requirements, so that we can incorporate appropriate features in our product roadmap. We have a business development team of both dedicated employees and outside contractors.

Our sales force is organized regionally to provide account management and customer support functions as close to customer physical locations as practical. As of December 31, 2018, we had a direct sales force serving our OEM and ODM customers in the Asia-Pacific region, including Taiwan, China, Korea and Japan; Europe; the Middle East and North and South America. In the United States, China, Japan and Korea, we supplement our direct sales team with local distributors and/or sales representatives who handle certain customer communications, logistics and customer support functions.

Our sales force works closely with a team of technical support personnel. This team assists customers in solving technical challenges during the design, manufacturing implementation and certification phases of a customer's product life cycle. The information obtained from customer support is then communicated back to the direct product development teams to be considered in future software releases or hardware development. This high-touch approach allows us to facilitate the successful certification and acceptance by the wireless carriers of our customers' products, which speeds time-to-market for our customers and reinforces our role as a trusted advisor to our customers.

Our sales cycles typically take 12 months or more to complete and our solutions are generally incorporated into our customers' products at the design stage. Prior to an end customer's selection and purchase of our solutions, our sales force and technical support engineers provide our end customers with technical assistance in the use of our solutions in their products. Once our solution is designed into a customer's product offering, it becomes more difficult for a competitor to sell its semiconductor solutions to that end customer for that particular product offering given the significant cost, time, effort and risk involved in changing suppliers. In addition, once we win a particular design with an end customer, we believe our ability to penetrate other product families at that end customer increases significantly.

Our marketing strategy is focused on enabling broad adoption of 4G solutions and communicating our technology advantages to the marketplace. This includes building awareness of and preference for our technology at wireless carriers who generate demand for 4G-enabled devices. By working to understand carrier services strategies, device roadmaps and technical requirements, we believe we are better positioned to drive our roadmap to meet these needs, to influence their choice of technology suppliers, and to identify manufacturers in the wireless industry who are best prepared to serve the needs of the wireless carrier. Our technical and business relationships with Verizon Wireless, T-Mobile, AT&T, Sprint, NTT DoCoMo, Softbank, KDDI and other operators have allowed us to anticipate requirements and develop solutions tailored for their respective networks, which helped us secure several design wins and launch multiple products. For instance, in 2016, Gemalto's ELS31 LTE Category 1 M2M module was certified at Verizon, our Calliope LTE Category 1 chipset was certified by AT&T, T-Mobile and NTT DoCoMo, D-Link launched an industrial IoT modem using our Colibri LTE Category 4 chipset, ZTEWelink introduced a CPE based on our Cassiopeia LTE-Advanced chipset, and Nimbelinek, LinkLabs and Encore Networks all launched Cat M devices based on Sequans' Monarch Cat M chip; in 2017, our Monarch Category M platform was certified by Verizon and AT&T, our VoLTE functionality on our Category 1 chipset was certified by T-Mobile, we completed Europe's first Cat M data call with Telefonica in Spain, and numerous new design wins were announced, particularly for IoT; and in 2018 KDDI has certified our Calliope LTE Category 1 chipset, SoftBank has validated our Category M1 Monarch chip set, and Verizon has certified our Monarch SiP. With DOCOMO we have partnered to help mature the Cat M and NB-IoT networks. In

addition to these carrier relationships, Sequans has successfully won customer design with Aprotect, Trackimo, Connected Holding, Polymer in Category M and Telrad /Gemtek on CBRS. We have also announced our partnership with PoLTE for integrating its low-cost positioning software solution.

Our marketing team is also responsible for product management, strategic planning, product roadmap creation, OEM, ODM and wireless carrier business development and corporate communications. All of these functions are aimed at strengthening the competitiveness of our solutions in response to evolving industry needs and competitive activities, and at articulating the value proposition of our technology throughout the 4G broadband wireless industry. Our business development, sales and marketing organizations work closely together to ensure that evolving industry requirements are reflected in our product plans, and that customers have early access to our roadmaps and can communicate the value of our technology to the wireless carriers. This end-to-end value chain management approach is designed to grow and preserve our market share in the segments we serve.

As of December 31, 2018, we had 40 employees and three outside contractors in our business development, sales, customer support and marketing team.

Customers

We maintain relationships with 4G wireless carriers and with OEMs and ODMs who supply devices to those carriers and their end users. We do not typically sell directly to wireless carriers, except from time to time in the context of selling services to enable new technologies or markets being developed by the carrier. Our sales are conducted on a purchase order basis with OEMs, ODMs, contract manufacturers or system integrators, or to a lesser extent with distributors who provide certain customer communications, logistics and customer support functions.

Our top ten customers accounted for 86%, 78% and 86% of our total revenue in 2016, 2017 and 2018, respectively. ATM Electronic, a distributor serving multiple end customers in China and Taiwan, accounted for 16% and 32% of our revenue in 2017 and 2018, respectively, and less than 10% in 2016. Gemtek accounted for 15% in 2016 and less than 10% in 2017 and in 2018. Quanta Computer accounted for 13% of our revenue in 2018 and less than 10% in 2017 and 2016. Comtech, a distributor serving multiple end customers in China and Taiwan, accounted for 29% of our revenue in 2016, 17% in 2017 and less than 10% in 2018. The following is a list of our top ten customers, in alphabetical order, based on total revenue during 2018:

- ATM Electronic
- Comtech
- Gamma Purchasing LLC Dish
- Geotab
- Lockheed Martin
- Macnica Galaxy Inc
- NTT Docomo
- Quanta Computer
- TCL Communications Ltd
- Zioncom Technology Ltd

Manufacturing

We operate a fabless business model and use third-party foundries and assembly and test contractors to manufacture, assemble and test our semiconductor solutions. Our sole foundry vendor is TSMC. In our latest products, we use 65nm and 40nm standard RF, mixed-signal and digital CMOS production processes. The use of these commercially available standard processes is designed to enable us to produce our products more cost-effectively and, by migrating to lower process geometries, we expect to achieve advantages in cost, size and power consumption.

We use UTAC, STATShipPAC and Silicon Precision Industries for most of our assembly and testing. We rely on extensive simulation, practical application and standardized test bed studies to validate and verify our products.

We use USI (Universal Scientific Industrial (Shanghai) Company Limited) and Asiatel Technologies Co. for manufacturing of our modules.

We closely monitor the production cycle from wafer to finished goods by reviewing electrical parameters and manufacturing process and test yield data. We also run routine reliability monitoring programs to ensure long term product reliability. This enables us to operate certain test processes on demand to reduce the time-to-market for our products and to help ensure their quality and reliability. We are ISO 9001 certified, and all of our major suppliers and subcontractors are required to have quality management systems certified to ISO 9000 and ISO 14000 levels, as well as appropriate environmental control programs.

We do not have manufacturing agreements with our foundry or with our testing and packaging or module vendors, other than a framework agreement with UTAC, and we place our orders with our foundry and other vendors on a purchase order basis. See “Risk Factors—Risks Related to Our Business and Industry”.

Intellectual Property

We rely on a combination of intellectual property rights, or IPR, including patents, trade secrets, copyrights and trademarks, and contractual protections, to protect our core technology and intellectual property. At December 31, 2018, we had 37 issued and allowed United States patents, 22 European patents, and 40 pending United States and European patents. The first of our issued and allowed patents is not expected to expire until 2025.

In addition to our own intellectual property, we have also entered into a number of licensing arrangements pursuant to which we license third-party technologies and intellectual property. In particular, we have entered into such arrangements for certain technologies embedded in our semiconductor, hardware and software designs. These are typically non-exclusive contracts provided under royalty-accruing or paid-up licenses. These licenses are generally perpetual or automatically renewed for so long as we continue to pay any royalty that may be due and in the absence of any uncured material breach of the agreement. Certain licenses for technology used for development of a particular product are for a set term, generally at least two years, with a renewal option, and can be easily replaced with other currently available technology in subsequent product developments. In the event that such licenses are not renewed, they nevertheless continue with regard to products distributed in the field. Except for our licenses to the so called “essential patents” described below, we do not believe our business is dependent to any significant degree on any individual third-party license.

In the past, we have entered into licensing arrangements with respect to so called “essential patents” that claim features or functions that are incorporated into applicable industry standards and that we are required to provide in order to comply with the standard. We may be required to enter into such licensing arrangements in the future in order to comply with applicable industry standards, in particular with respect to the sales of our module products, which have full LTE functionality. We believe that general practice in the industry is that essential patent holders’ licensing policy is to license only to licensees selling a full LTE product, not to component vendors.

In 2015, we entered into an agreement to license the patent portfolio of Gemalto S.A., including at least one patent which may be considered essential for the LTE standard.

Facilities

Our principal executive offices are located in Colombes, France, consisting of approximately 21,625 square feet under a lease that expires in December 2023, but which may be cancelled in December 2020. This facility accommodates our principal research and development, product marketing, and finance and administrative activities.

We have a 4,236 square-foot facility in Winnersh Triangle, England, which accommodates a research and development center under a lease expiring in October 2020. We have a 1,973 square-foot facility in Petach Tikva, Israel, which houses a small research and development team, and sales and technical support personnel, under a lease that expires in December 2020. We have a 1,600 square foot office in Singapore under a lease expiring in February 2020. We have a 2,318 square-foot facility in Burnsville, Minnesota for engineering personnel under a lease that expires in January 2024. We have a 645 square-foot facility in Kista, Sweden under a lease that expires in April 2020. We rent additional office space in Sophia-Antipolis, France; Salo, Finland; Taipei, Taiwan; Shanghai and Shenzhen, China; Seoul, South Korea and in Bedminster, New Jersey under short-term lease agreements.

We do not own any real property. We believe that our leased facilities are adequate to meet our current needs and that additional facilities will be available on suitable, commercially reasonable terms to accommodate any future needs.

C. *Organizational Structure*

The Company is the ultimate parent of the group comprised of the Sequans Communications S.A. and its subsidiaries at December 31, 2018:

Name	Country of incorporation	Year of incorporation	% equity interest
Sequans Communications Ltd.	United Kingdom	2005	100
Sequans Communications Inc.	United States	2008	100
Sequans Communications Ltd. Pte.	Singapore	2008	100
Sequans Communications (Israel) Ltd.	Israel	2010	100

D. *Property, Plants and Equipment*

For a discussion of property, plants and equipment, see “Item 4.B—Business Overview—Facilities.”

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

Summary

We are a fabless designer, developer and supplier of 4G LTE semiconductor solutions for wireless broadband applications. Our solutions incorporate baseband processor and RF transceiver ICs along with our proprietary signal processing techniques, algorithms and software stacks. Our high performance ICs deliver high throughput, low power consumption and high reliability in a small form factor and at a low cost.

We shipped 3.2 million semiconductor units during 2018, compared to 3.3 million units during 2017 and 2.6 million units during 2016. Our total revenue was \$40.3 million in 2018, \$48.3 million in 2017 and \$45.6 million in 2016.

We currently have more than 80 end customers worldwide, consisting primarily of OEMs and ODMs for modules, telematics devices, tracking devices, security devices, CPE, home routers, mobile routers, embedded devices and other data devices. We derive a significant portion of our revenue from a small number of end customers, and we anticipate that we will continue to do so for the foreseeable future. We do not have long-term purchase agreements with any of our end customers, and substantially all of our sales are made on a purchase order basis. We expect that the percentage of revenue derived from each end customer may vary significantly due to the order patterns of our end customers, the timing of new product releases by our end customers, and consumer demand for the products of our end customers. Customers representing more than 10% of total revenue in any of the years 2016, 2017 or 2018 and their locations are as follows:

Customer	Customer Location	% of total revenue for the year ended December 31,		
		2016	2017	2018
A	Taiwan	Less than 10%	16%	32%
B	China	Less than 10%	Less than 10%	13%
C	Taiwan	29%	17%	Less than 10%
D	China	15%	Less than 10%	Less than 10%

Our Consolidated Financial Statements for 2016, 2017 and 2018, have been prepared in accordance with IFRS as issued by the IASB.

A. *Operating Results*

Revenue

Our total revenue consists of product revenue and other revenue. The Company recognizes revenue when, or as, it transfers control of promised goods or services to its customers in an amount that reflects the consideration to which it expects to be entitled to in exchange for those goods and services.

The Company applies a five-step approach in determining the amount and timing of revenue to be recognized: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when the performance obligation is satisfied.

When a contract includes multiple promised goods and services, the Company evaluates each component to determine whether they represent separate performance obligations and determines the appropriate allocation of the contract consideration to each identified performance obligation based on estimated relative stand-alone selling prices.

Product Revenue

We derive the large majority of our revenue from the sale of semiconductor solutions for 4G wireless broadband and narrowband applications, and we currently expect to continue to do so for the foreseeable future. Our solutions are sold both directly to our end customers and indirectly through distributors.

Our sales cycles typically take 12 months or more to complete, and our solutions are generally incorporated into our end customers' products at the design stage. Prior to an end customer's selection and purchase of our solutions, our sales force and applications engineers provide our end customers with technical assistance in the use of our solutions in their products. Once our solution is designed into an end customer's product offering, it becomes more difficult for a competitor to sell its semiconductor solutions to that end customer for that particular product offering given the significant cost, time, effort and risk involved in changing suppliers. In addition, once we win a particular design with an end customer, we believe our ability to penetrate other product families at that end customer increases significantly.

Our product revenue is also affected by changes in the unit volume and average selling prices, or ASPs, of our semiconductor solutions. Our products are typically characterized by a life cycle that begins with higher ASPs and lower volumes as our new products use more advanced designs or technology and are usually incorporated into new devices that consumers adopt over a period of time. This is followed by broader market adoption with higher volumes and ASPs that are lower than initial levels, due to the maturity of the technology, greater availability of competing products or less demand as our end customers' products reach the end of their life cycle.

In the second half of 2013, we had initial sales of our module products, which have continued through 2018. We introduced our modules in order to accelerate market adoption of LTE functionality in data devices such as consumer devices and machine-to-machine devices. The ASP of the module is much higher than the ASP of our semiconductor solutions as many other components are added in order to provide a complete LTE solution.

The proportion of our product revenue that is generated from the sale of various products, also referred to as product mix, affects our overall ASP, product revenue and profitability. Given the varying ASPs of our solutions, any material change in our product mix may affect our gross margins and operating results from period to period. We expect to continue to broaden our product portfolio by introducing new solutions.

Other Revenue

Other revenue consists of the sale of licenses to use our technology solutions and revenue from associated annual software maintenance and support services, as well as revenue from technical support services and development services. Development services include advanced technology development services for technology partners and product development and integration services for customers, and wireless operators.

We license the right to use our solutions, including embedded software that enables our end customers to customize our solutions for use in their products. The license generally is perpetual and covers unlimited product designs by the end customer. We expect that we will continue to sign new license agreements as we begin working with new customers, but we do not expect that such licenses will generate significant revenues.

Development services agreements typically call for a number of milestones to be delivered over several quarters, with revenue generally recognized on the percentage of completion method as the contract progresses. With the execution of several agreements with large companies such as TCL, Gemalto, Lockheed Martin, Thales and others, development service revenue increased in 2016, decreased slightly in 2017 as some large contracts from prior years were completed and increased slightly in 2018.

With the continuation in 2019 of many of the development services contracts executed in 2018, as well as our expectation that we will continue to enter into similar agreements, we expect other revenue, compared to 2018, to increase slightly in future periods as we continue to provide services on particularly complex projects, and in the short term it is likely to remain a significant percentage of our total revenue.

The following table sets forth our total revenue by region for the periods indicated. We categorize our total revenue geographically based on the location to which we invoice.

	Year ended December 31,		
	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
	(in thousands)		
Asia:			
Taiwan	\$ 5,421	\$ 8,126	\$ 16,704
China (including Hong-Kong)	24,623	21,819	11,638
Rest of Asia	3,256	2,664	2,172
Total Asia	33,300	32,609	30,514
Europe, Middle East, Africa	5,730	5,641	855
Americas:			
United States of America	6,468	7,896	7,042
Rest of Americas	81	2,117	1,839
Total Americas	6,549	10,013	8,881
Total revenue	\$ 45,579	\$ 48,263	\$ 40,250

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

We categorize our total revenue based on technology.

	Year ended December 31,		
	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
	(in thousands)		
Broadband	\$ 30,100	\$ 27,900	\$ 11,657
IOT	8,401	11,568	19,679
Vertical	7,078	8,795	8,914
Total revenue	\$ 45,579	\$ 48,263	\$ 40,250

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

Additionally, we categorize our total revenue based on product and service revenue including license revenue and development and other services.

	Year ended December 31,		
	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
	(in thousands)		
Product	\$ 34,581	\$ 37,353	\$ 28,938
License	1,338	2,838	2,707
Development and other services	9,660	8,072	8,605
Total revenue	\$ 45,579	\$ 48,263	\$ 40,250

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

Cost of Revenue

Our cost of revenue includes cost of product revenue and cost of other revenue.

Cost of Product Revenue

A significant portion of our cost of semiconductor solution product revenue consists of the cost of wafers manufactured by third-party foundries and costs associated with assembly and test services. Cost of product revenue is impacted by manufacturing variances such as cost and yield for wafer, assembly and test operations and package cost. To a lesser extent, cost of product revenue includes expenses relating to depreciation of production mask sets, the cost of shipping and logistics, royalties, personnel costs, including share-based compensation expense, valuation provisions for excess inventory and warranty costs.

For our module products, the cost of product revenue includes not only the cost of the semiconductor solution but also other components such as power amplifiers and filters, as well as greater packaging costs.

Early in the life cycle of our products, we typically experience lower yields and higher associated costs. Over the life cycle of a particular product, our experience has been that the cost of product revenue has typically declined as volumes increase and test operations mature, while ASPs generally decline.

We use third-party foundry, assembly and test subcontractors, which are primarily located in Asia, to manufacture, package and test our semiconductor solutions. We purchase processed wafers from our fabrication supplier, currently TSMC. We also rely on third-party assembly and test subcontractors to assemble, package and test our products, and on third-party logistics specialists for logistics and storage. We generally do not have long-term agreements with our suppliers. Our obligations with our vendors for manufacturing, assembly and testing are generally negotiated on a purchase order basis.

Cost of Other Revenue

As most of the costs related to other revenue are incurred as part of our normal research and development efforts, we allocate to cost of other revenue only the specific incremental costs related to providing maintenance and technical support and generating development services revenue.

Gross Profit

Our gross profit is affected by a variety of factors, including our product and revenue mix, the ASPs of our products, the volumes sold, the purchase price of fabricated wafers, assembly and test service costs and royalties, provision for inventory valuation charges, and changes in wafer, assembly and test yields. We expect our gross profit will fluctuate over time depending upon competitive pricing pressures, the timing of the introduction of new products, product and revenue mix, volume pricing, variances in manufacturing costs and the level of royalty payments to third parties possessing intellectual property necessary for our products.

Operating Expenses

Research and Development

We engage in substantial research and development efforts to develop new products and integrate additional capabilities into our core products. Research and development expense consists primarily of personnel costs, including share-based compensation, for our engineers engaged in design and development of our products and technologies. These expenses also include the depreciation cost of intellectual property licensed from others for use in our products and depreciation of capitalized internal development costs, and directly expensed product development costs, which include external engineering services, cost of development software and hardware tools, cost of fabrication of mask sets for prototype products, external laboratory costs for certification procedures, equipment depreciation and facilities expenses.

We expect research and development expense to decrease slightly in the short-term as we complete development of the current LTE products in our roadmap and then increase again in the medium-term as we enhance and expand our features and offerings for our product portfolio and continue to develop new products for LTE and 5G, which will require additional resources and investments. The decrease expected in the short-term also reflects an expected weakening of the value of the euro versus the U.S. dollar which has a significant impact on our R&D headcount expense, as this is concentrated in France.

Under IFRS, research and development expense is required to be capitalized if certain criteria are met and then amortized over the life of the product. A small amount of development costs was capitalized in 2016 (\$22,000). In 2017, we capitalized

costs related to the development of the chipsets for LTE Category M, the Monarch and Monarch 2 for an amount of \$1.9 million (net of research tax credit for \$0.3 million); in 2018 we continued to capitalize costs related to Monarch 2 and began capitalizing costs for the LTE Category NB Monarch N for a total amount of \$3.4 million (net of research tax credit for \$0.5 million). We expect that we may be able continue to capitalize development costs going forward if the relevant accounting criteria are met.

Research and Development Incentives

In France and the United Kingdom, we receive certain tax incentives based on the qualifying research and development expense incurred in those jurisdictions. When the incentive is available only as a reduction of taxes owed, such incentive is accounted for as a reduction of tax expense; otherwise, it is accounted for as a government grant with the benefit recorded as a reduction of research and development expense. We expect to be able to continue to qualify for such tax incentives in these jurisdictions in future periods. We expect the tax incentives, which are based on a percentage of qualifying research and development expense, to remain fairly stable in the short term. For 2018, we recorded a net amount of approximately \$3.0 million in tax incentives compared with \$3.3 million in 2017.

In France, we also receive incentives in the form of grants from agencies of the French government and the European Union, based on qualifying research and development expense incurred pursuant to collaborative programs carried out with other companies and universities. These incentives are recorded as a reduction of research and development expense and are recognized when there is a reasonable assurance that the grant will be received, and all relevant conditions will be complied with. For 2018, we recorded approximately \$1.1 million in grants compared with approximately \$3.1 million in 2017. In 2016, 2017 and 2018, we received \$0.6 million, \$1.1 million and \$1.6 million, respectively, in advances on grants and debt financing related to a large research project funded by the French government, called FELIN. The total value of the project funding to date for the Company is €7.0 million (\$9.0 million) and was to be received over three years but due to a re-negotiation of the project, payment was extended with final payment received in March 2019. Of the €7.0 million, €3.0 million is in the form of a grant and €4.0 million is in the form of interest-bearing debt to be repaid beginning in 2019 and through 2022. We expect that the amounts we recognize from such grants overall will decrease in 2019. In 2016 and 2017, we received \$0.4 million and \$1.6 million, respectively, in advances on grants and debt financing related to a second large research project funded by the French government, called LTE4PMR. The total value of the project funding for the Company is €2.1 million (\$2.3 million) to be received over four years. Of the €2.1 million, €0.7 million is in the form of a grant and €1.4 million is in the form of interest-bearing debt to be repaid beginning in 2020 and through 2024.

Sales and Marketing

Sales and marketing expense consists primarily of personnel costs, including sales commissions, and share-based compensation for our business development, sales, customer support and marketing personnel, commissions paid to independent sales agents, marketing fees paid to industrial partners, the costs of advertising and participation in trade shows. We expect the size of our business development, sales and marketing organization to decrease slightly in 2019 and expect sales and marketing expense to decrease slightly.

General and Administrative

General and administrative expense consists primarily of personnel costs and share-based compensation for our finance, human resources, purchasing, quality and administrative personnel; professional services costs related to recruiting, accounting, tax and legal services; bad debt expense, investor relations costs; insurance; and depreciation. Information technology and facilities expenses are accounted for as overhead and allocated across all departments of the Company based on a pro rata basis. We expect general and administrative expense to decrease slightly in 2019.

Interest Income (Expense), Net

Interest income consists of interest earned on cash and cash equivalent balances. We have historically invested our cash primarily in commercial bank accounts, short term deposits and money market funds.

Interest expense relates to our convertible debt issued in 2015, 2016 and 2018; our venture debt issued to Harbert European Specialty Lending Company II S.a.r.l in 2018; our government debt put in place in 2015; our accounts receivable financing facility put in place in 2014; and research project loans received from 2014 to 2018.

Change in Fair Value of Convertible Debt Embedded Derivative

In April 2015, we issued convertible debt. The option component of this convertible debt was recorded as an embedded derivative at fair value. As long as the conversion price was subject to change, the embedded derivative was revalued at each balance sheet date, with the change in value recorded in financial income (expense). The embedded derivative value was fixed in April 2016 when the conversion price was no longer subject to change and the fair value of the embedded derivative at that date was transferred from liabilities to shareholder's equity.

In April 2016, we issued convertible debt. The option component of this convertible debt was recorded as an embedded derivative at fair value at the issuance date with the change in value recorded in financial income (expense) until the conversion price was fixed on May 12, 2016. At that date, the fair value of the embedded derivative was transferred from liabilities to shareholder's equity.

Convertible debt amendments

On October 30, 2017, the convertibles notes were amended to extend the term of the notes and reduce the conversion rate for one convertible debt agreement. The change in fair value of the conversion options before and after the amendment has been recorded in Other Capital Reserves in shareholders' equity. The debt components on October 30, 2017 have been re-measured based on the extended term of the notes using the effective interest rate calculated at the date of issue of each convertible note. The impact of the term extension and reduction of the conversion rate has been recorded in the Consolidated Statements of Operations in "Convertible debt amendments" for a loss of \$322,000.

On September 27, 2018, the convertible notes issued in 2015 were amended to extend the term of the notes and reduce the conversion rate for the 2015 convertible debt agreement. The fair value of the debt just prior to amendment was estimated in order to record a loss on extinguishment of \$265,000 recorded as Convertible debt amendments in the Consolidated Statements of Operations. The new debt was then recorded at its fair value assuming a market rate of interest, with the calculated value of the conversion option of \$4,559,000 with the net change in the value upon amendment of \$3,788,000 recorded in Other Capital Reserves in shareholders' equity.

In addition, all of the convertible notes issued in 2015 and convertible notes with a principal amount of \$6 million issued in 2016 were amended to allow the convertible notes to be subordinated to new debt to be issued by the Company. The holder of the remaining convertible notes issued in 2016 with a principal value of \$1 million did not agree to amend the terms and therefore the Company redeemed the principal and accrued interest in October 2018.

Foreign Exchange Gain (Loss), Net

Foreign exchange gain (loss) represents exchange gains and losses on our exposures to non-U.S. dollar denominated transactions, primarily associated with the changes in exchange rates between the U.S. dollar and the euro, and re-measurement of foreign currency balances at reporting date. As a result of our international operations, we are subject to risks associated with foreign currency fluctuations. Almost all of our revenues are in U.S. dollars and a portion of our expenses are also in U.S. dollars. However, a significant portion of our personnel costs is in euros and some long-term items on our balance sheet are also denominated in euros. We use hedging instruments in order to reduce volatility in operating expenses related to exchange rate fluctuations. We classify foreign exchange gains and losses related to hedges of euro-based operating expenses as operating expenses.

Income Tax Expense (Benefit)

We are subject to income taxes in France, the United States and numerous other jurisdictions. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. As a result, we recognize tax liabilities based on estimates of whether additional taxes will be due. These tax liabilities are recognized when we believe that certain positions may not be fully sustained upon review by tax authorities, notwithstanding our belief that our tax return positions are supportable. Our effective tax rates differ from the statutory rate primarily due to any valuation allowance, the tax impact of local taxes, international operations, research and development tax credits, tax audit settlements, non-deductible compensation, and transfer pricing adjustments. In respect of our subsidiaries outside of France, we operate on a "cost plus" basis.

In France, we have significant net deferred tax assets resulting from net operating loss carry forwards, tax credit carry forwards and deductible temporary differences that reduce our taxable income. Our ability to realize our deferred tax assets

depends on our ability to generate sufficient taxable income within the carry back or carry forward periods provided for in the tax law for each applicable tax jurisdiction. Following the issuance of convertible debts and debt with warrants attached, we have deferred tax liabilities resulting from the bifurcation of the conversion feature and warrants from the debts. The deferred tax liabilities have allowed us to recognize deferred tax assets, subject to certain limitations on their use under French tax law. In 2018, \$1,818,000 was recognized as deferred tax liabilities through shareholders' equity (deficit) under IAS 12, *Income Taxes*. Deferred tax assets of \$1,162,000 were recognized through income tax benefit on our consolidated statement of operations. Over time, as we generate taxable income, we expect our tax rate to increase significantly.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations is based on our Consolidated Financial Statements contained elsewhere in this annual report, which are prepared in accordance with IFRS as described in Note 2 to our Consolidated Financial Statements.

Some of the accounting methods and policies used in preparing our Consolidated Financial Statements under IFRS are based on complex and subjective assessments by our management or on estimates based on past experience and assumptions deemed realistic and reasonable based on the circumstances concerned. The actual value of our assets, liabilities and shareholders' equity and of our earnings could differ from the value derived from these estimates if conditions changed and these changes had an impact on the assumptions adopted. We believe that the most significant management judgments and assumptions in the preparation of our financial statements are described below.

Revenue Recognition

Through December 31, 2017, our policy for revenue recognition, in instances where multiple deliverables are sold contemporaneously to the same counterparty, was in accordance with IAS 18.13. When we entered into contracts for the sale of products, licenses and maintenance and support and development services, we evaluated all deliverables in the arrangement to determine whether they represented separate units of accounting, each with its own separate earnings process, and their relative fair value. Such determination required judgment and was based on an analysis of the facts and circumstances surrounding the transactions. We applied judgment for contracts when the first year of maintenance was included in the software license price. For such contracts, an amount equal to the relative fair value of one year of maintenance was deducted from the value of the license and recognized as revenue over the period of maintenance. The difference between license and maintenance services invoiced and the amount recognized in revenue was recorded as deferred revenue.

In accordance with IAS 18, revenue from technical support and development services was generally recognized using the percentage-of-completion method when the outcome of the contract could be estimated reliably. This occurs when total contract revenue and costs can be estimated reliably, and it is probable that the economic benefits associated with the contract will flow to the Company and the stage of contract completion can be measured. Estimating the cost to complete the services requires judgment. We based our estimate on the estimated hours and level of engineer to complete the project, plus any external costs required to perform the services. In certain circumstances, revenue was recognized based on the achievement of contract milestones. We recognized revenue on milestones when the milestone was substantive based on technical merits, and we had obtained customer acceptance that the milestone had been achieved.

Effective January 1, 2018, we adopted IFRS 15, Revenue from Contracts with Customers, with modified retrospective application approach, meaning that the effect of adoption recorded in opening retained deficit. Upon the adoption of the new guidance, arrangements with customers are considered contracts if all the following criteria are met: (a) parties have approved the contract and are committed to perform their respective obligations; (b) each party's rights regarding the goods or services to be transferred can be identified; (c) payment terms related to the goods or services to be transferred can be identified; (d) the contract has commercial substance and (e) collectability of substantially all of the consideration is probable.

The standard's core principle is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard creates a five-step model to achieve its core principle: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the separate performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation.

Our contracts with customers often include promises to transfer multiple products and/or services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Judgment is also required to determine the stand-alone selling price ("SSP") for each

distinct performance obligation. In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs.

We recognize revenue when we satisfy the performance obligation by transferring the control over a product to the customer. Judgment is required to assess the pattern of transfer of control, in particular with regards to products' sales to distributors and the rendering of services. Where we render services to the customers, they usually correspond to a single performance obligation which is satisfied over time, which are accounted for using the percentage-of-completion method, electing an input method of estimated costs as a measure of performance completed.

We rely on estimates around the total estimated costs to complete the contract ("Estimated Costs at Completion"). Total Estimated Costs at Completion include direct labor, material and subcontracting costs. Due to the nature of the efforts required to be performed to meet the underlying performance obligation, determining Estimated Costs at Completion is subject to many variables. Management quarterly reviews the progress and performance of open contracts in order to determine the best estimate of Estimated Costs at Completion. As part of this process, management reviews information including, but not limited to, any outstanding key contract matters, progress towards completion, the project schedule, identified risks and opportunities, and the related changes in estimates of costs. The risks and opportunities include management's judgment about the ability and cost to achieve the project schedule, technical requirements, and other contract.

Trade receivables

We maintain an allowance for doubtful accounts for potential estimated losses resulting from our customers' inability to make required payments. Impairment losses on trade accounts receivable are estimated using the expected loss method, in order to take into account the risk of payment default throughout the lifetime of the receivables. Based on an analysis of historical credit losses, we have not applied any expected credit losses to our outstanding receivables as of the reporting date beyond specific provisions for doubtful accounts. If we receive information that the financial condition of our customers has deteriorated, resulting in an impairment of their ability to make payments, or there are indicators that amounts receivable will become uncollectible, additional allowances could be required. We record an allowance for any specific account we consider as doubtful based on the particular circumstances of the account. The carrying amount of the receivable is thus reduced through the use of an allowance account, and the amount of the charge is recognized in the Consolidated Statement of Operations. Subsequent recoveries, if any, of amounts previously provided for are credited against the same line in the Consolidated Statement of Operations. When a trade accounts receivable is uncollectible, it is written-off against the allowance account for trade accounts receivable.

Inventories

Inventories consist primarily of the cost of semiconductors, including wafer fabrication, assembly, testing and packaging; components; and modules purchased from subcontractors. We write down the carrying value of our inventories to the lower of cost (determined using the moving average method) or net realizable value (estimated market value less estimated costs of completion and the estimated costs necessary to make the sale). We write down the carrying value of our inventory for estimated amounts related to lower of cost or net realizable value, obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated net realizable value. The estimated net realizable value of the inventory is based on historical usage and assumptions about future demand, future product purchase commitments, estimated manufacturing yield levels and market conditions on a product-by-product basis. Once established, inventory reserves are not reversed until the related inventory has been sold or scrapped. Actual demand may differ from forecasted demand and these differences may have a material effect on recorded inventory values and cost of revenue.

When we consider future demand for a product, there are a number of factors that we take into consideration, including purchase orders and forecasts from customers, which in normal market conditions give us visibility for the next three months and some view on the following three months, our own internal projections based on customer inputs and new business opportunities, and estimates of market potential based on reports from industry analysts. The time horizon considered for future demand varies depending on the nature of the product, meaning we consider if the product is newly-introduced or approaching end-of-life, if the product is in finished good form or in component form, and if the product is incorporated in a large or small number of different end-user products from few or many customers.

We evaluate the realizability of our inventory at each balance sheet date. In doing so, we consider, among other things, demand indicated by our customers, overall market potential based on input from operators and analysts, and the remaining estimated commercial life of our products.

In 2016, 2017 and 2018, we recorded provisions for slow-moving LTE inventory totaling \$0.1 million, \$0.2 million and \$0.2 million, respectively. In 2017, all the WiMAX inventory, fully depreciated in previous years, was physically scrapped, resulting in a provision reversal of \$2.8 million.

Share-Based Compensation

We have various share-based compensation plans for employees and non-employees. The expense recorded in our statement of operations for equity awards under these plans is affected by changes in valuation assumptions. For example, the fair value of stock options is estimated by using the binomial model on the date of grant based on certain assumptions, including, among others, expected volatility, the expected option term and the expected dividend payout rate.

For the years ended December 31, 2016, 2017 and 2018, the assumption for expected volatility has been based on the Company's historical volatility since the initial public offering in 2011.

We recognize compensation expense only for the portion of share options that are expected to vest. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from our estimates.

For 2016, 2017 and 2018, we recorded employee share-based compensation expense of \$1.1 million, \$1.6 million and \$1.8 million, respectively. Share-based compensation expense related to non-employees was not material for 2016, 2017 and 2018.

Functional Currency

We use the U.S. dollar as the functional currency of Sequans Communications S.A. due to the high percentage of our revenues, cost of revenue, capital expenditures and operating costs, other than those related to headcount and overhead, which are denominated in U.S. dollars. Our IPO proceeds, the proceeds from our follow-on offerings and the proceeds from issuance of convertible debt were also denominated in U.S. dollars. However, the venture debt with Harbert European Specialty Lending Company II S.a.r.l. issued in 2018 and all debt and equity proceeds that we received since our inception prior to our initial public offering were denominated in euros.

Each subsidiary determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. As of each reporting date, the assets and liabilities of each subsidiary are translated into the U.S. dollar, our functional and reporting currency, at the rate of exchange at the balance sheet date and each subsidiary's statement of operations is translated at the average exchange rate for the year. Exchange differences arising on the translation are taken directly to a separate component of equity, cumulative translation adjustments.

Fair Value of Financial Instruments

The Company determined that the fair values of cash, trade receivables and trade payables approximate their carrying amounts largely due to the short-term maturities of these instruments.

Where no active market exists, we establish fair value by using a valuation technique determined to be the most appropriate in the circumstances, regarding compound debt instruments, the fair value of the debt component was determined using a valuation model that requires judgment, including estimating the change in value of the Company at different dates and market yields applicable to the Company's straight debt (without the conversion option). The assumptions used in calculating the value of the conversion option represent the Company's best estimates based on management's judgment and subjective future expectations.

Deferred Tax Assets and Liabilities

Deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for operating losses and tax credit carryforwards. Management makes assumptions, judgments and estimates to determine our deferred tax assets and liabilities.

Research and Development Costs

Costs incurred internally in research and development activities are charged to expense until technological feasibility has been established for the project. Once technological feasibility is established, development costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a

product is established. We have determined that technological feasibility for our software products is reached after all high-risk development issues have been resolved. Generally, this occurs when the preliminary design review has been completed.

Results of Operations

The following tables set forth a summary of our consolidated results of operations for the periods indicated. This information should be read together with our Consolidated Financial Statements and related notes included elsewhere in this annual report. The results of operations in any period are not necessarily indicative of the results that may be expected for any future period.

Comparison of Years Ended December 31, 2017 and 2018

	Year ended December 31,		Change
	2017 ⁽¹⁾	2018 ⁽¹⁾	%
	(in thousands)		
Revenue:			
Product revenue	\$ 37,353	\$ 28,938	(23)%
Other revenue	10,910	11,312	4
Total revenue	48,263	40,250	(17)
Cost of revenue:			
Cost of product revenue	24,725	21,957	(11)
Cost of other revenue	2,397	2,405	—
Total cost of revenue	27,122	24,362	(10)
Gross profit	21,141	15,888	(25)
Operating expenses:			
Research and development	25,202	27,909	11
Sales and marketing	8,785	9,411	7
General and administrative	6,679	10,085	51
Total operating expenses	40,666	47,405	17
Operating income (loss)	(19,525)	(31,517)	61
Financial income (expense):			
Interest income (expense), net	(4,612)	(5,376)	17
Other financial expense	—	(400)	100
Convertible debt amendments	(322)	(265)	(18)
Foreign exchange gain (loss)	(1,401)	366	(126)
Profit (Loss) before income taxes	(25,860)	(37,192)	
Income tax expense (benefit)	300	(968)	(423)
Profit (Loss)	\$ (26,160)	\$ (36,224)	

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The following table sets forth a summary of our statements of operations as a percentage of total revenue:

	Year ended December 31,	
	2017	2018
	(% of total revenue)	
Revenue:		
Product revenue	77	72
Other revenue	23	28
Total revenue	100	100
Cost of revenue:		
Cost of product revenue	51	55
Cost of other revenue	5	6
Total cost of revenue	56	61
Gross profit	44	39
Operating expenses:		
Research and development	52	69
Sales and marketing	18	23
General and administrative	14	25
Total operating expenses	84	117
Operating income (loss)	(40)	(78)
Financial income (expense):		
Interest income (expense), net	(10)	(13)
Other financial expense	—	(1)
Convertible debt amendments	(1)	(1)
Foreign exchange gain (loss)	(3)	1
Profit (Loss) before income taxes	(54)	(92)
Income tax expense (benefit)	1	(2)
Profit (Loss)	(55)	(90)

Revenue

Product Revenue

Product revenue decreased 23% from \$37.4 million in 2017 to \$28.9 million in 2018. The IoT business experienced strong growth, with Cat 1 chip volume tripling in 2018 and a more moderate increase in Cat 1 module volumes, as a major US operator's extension of CDMA activations in the second half of last year caused one of our major Cat1 module customers to delay deployment of LTE solutions on this network. During 2018, the LTE M products ramped up and grew more than 50% year over year. This overall IoT growth was more than offset by a decline in the broadband business, particularly in emerging markets. The broadband business has suffered from our decision to focus our development efforts on the IoT business rather than on a second generation Cat 6 product offering. Total IoT product revenue grew 92% from \$9.1 million in 2017 to \$17.8 million in 2018 and accounted for approximately 61% of total product revenue. Total broadband product revenue decreased 60% from \$27.6 million in 2017 to \$11.1 million in 2018.

In 2018, we shipped approximately 3.2 million of units of LTE products compared to 3.4 million units in 2017. We expect strong IoT growth in 2019, supported by continued shipment of Cat 1 products in both U.S. and Japan and the ramp of Cat M particularly during the second half of 2019. We believe that the broadband business will remain stable or decline slightly in the short-term, but could be a source of growth longer term, as new design wins are launched by our customers and as we evolve our products toward 5G technology.

Other Revenue

Other revenue increased 4% from \$10.9 million in 2017 to \$11.3 million in 2018, reflecting an increase in development services revenue with new projects signed during the year and higher maintenance revenue.

Development services revenue increased from \$7.7 million in 2017 to \$8.0 million in 2018. License revenue decreased slightly from \$2.8 million in 2017 to \$2.7 million in 2018, and maintenance revenue increased from \$300,000 in 2017 to \$600,000 in 2018.

Cost of Revenue

Cost of product revenue decreased 11% from \$24.7 million in 2017 to \$22.0 million in 2018 due to lower product and manufacturing costs associated with the decreased number of units sold. Cost of other revenue remained flat at \$2.4 million in 2017 and 2018.

Gross Profit

Gross profit decreased 25% from \$21.1 million in 2017 to \$15.9 million in 2018, and the gross margin percentage decreased from 43.8% in 2017 to 39.5% in 2018, primarily due to a reduction of product gross margin. Product gross margin percentage decreased from 33.8% in 2017 to 24.1% in 2018 due to the impact of a higher percentage of lower-margin module sales in the product revenue mix compared to 2017.

Research and Development

Research and development expense increased 11% from \$25.2 million in 2017 to \$27.9 million in 2018 primarily due to higher headcount expenses, lower research and development credit and lower grant recognition partially offset by more capitalized costs related to the development of the chipsets for Cat M recorded in 2018. Headcount expenses in euros were impacted by a higher average foreign exchange rate between euros and US dollars in 2018 compared to 2017.

Research and development incentives decreased from \$6.4 million in 2017 to \$4.1 million in 2018. In the years ended December 31, 2018 and 2017, we capitalized costs related to the development of the chipsets for Cat M, the Monarch and Monarch 2 (\$3.4 million, net of research tax credit of \$0.5 million and \$1.9 million, net of research tax credit of \$0.3 million, respectively). In the year ended December 31, 2018, \$100,000 of other development costs were capitalized related mainly to operator certification (\$59,000 in 2017).

Research and development costs associated with product development (including normal customer support which generates product improvements) are recorded in operating expense. In some cases, we have negotiated agreements with customers and partners whereby we provide certain development services beyond our normal practices or planned product roadmap. Amounts received from these agreements are recorded in other revenue. Incremental costs, including both internal resources and out-of-pocket expenses, that we incur as a result of the commitments in the agreements are recorded in cost of other revenue, rather than in research and development expense. Other research and development costs related to the projects covered by the agreements, but which we would have incurred without the existence of such agreements are recorded in research and development expense.

There were 203 employees and independent contractors in research and development at December 31, 2018 compared to 235 at December 31, 2017. Some of this reduction is due to a reorganization in 2018 in which 21 technical support engineers were transferred from engineering to customer support in Sales and Marketing.

Sales and Marketing

Sales and marketing expense increased 7% from \$8.8 million in 2017 to \$9.4 million in 2018. There were 43 employees and independent contractors in sales and marketing at December 31, 2018 compared to 28 employees at December 31, 2017. Some of this increase is due to a reorganization in 2018 in which 21 technical support engineers were transferred from engineering to customer support in Sales and Marketing.

General and Administrative

General and administrative expense increased 51% from \$6.7 million in 2017 to \$10.1 million in 2018 primarily due to an increase in bad debt expense and legal fees. Bad debt expenses are related primarily to aged trade receivables, which the Company no longer expects to collect. There were 21 employees in general and administrative at December 31, 2018 compared to 20 at December 31, 2017.

Interest Income (Expense), Net

Net interest expense increased to \$5.4 million in 2018 compared to \$4.6 million in 2017. The increase in interest expense in 2018 reflected the issuance of \$4.5 million in new convertible debt at the end of September 2018 and €12 million of venture debt at the end of October 2018. Interest income was insignificant in both years.

Convertible debt amendment, other financial expenses

On October 30, 2017, the convertible notes issued on April 14, 2015 and April 27, 2016 were amended to extend the term of the notes issued in 2015 from April 14, 2018 to April 14, 2019 and the term of the notes issued in 2016 from April 27, 2019 to April 27, 2020. In addition, the conversion price of the notes issued in 2016 was decreased from \$2.71 to \$2.25. Following the extension of the term, the change in fair value of the conversion options before and after the amendment was calculated to be \$3,418,000 and was recorded as financial expense. The debt components on October 30, 2017 were remeasured to take into account the new terms using the effective interest rate calculated at the date of issue of each convertible note. The debts were reduced by a total amount of \$3,096,000 recorded in financial income in 2017.

On September 27, 2018, the convertible notes issued on April 14, 2015 and April 27, 2016 were amended to extend the term of the notes issued in 2015 from April 14, 2019 to April 14, 2020, to decrease the conversion price of the notes issued in 2015 from \$1.85 to \$1.70 and to permit the subordination of the convertible notes to new debt to be issued by the Company. In addition, warrants to purchase 1.8 million shares of Sequans were issued to the holder of the amended convertible notes. Following the amendment signed in September 27, 2018, the fair value of the debt just prior to amendment was estimated in order to record a loss on extinguishment of \$265,000 recorded as Convertible debt amendments in the Consolidated Statements of Operations. On October 30, 2018 and in connection with entering into the bond issuance agreement, the Company retired convertible notes issued on April 27, 2016 and due on April 27, 2020, with a principal amount of \$1 million, by paying the principal and accrued interest due as of October 30, 2018 to the noteholder. The impact of the retirement was recorded as financial expenses in 2018 for an amount of \$400,000.

Foreign Exchange Gain (Loss), Net

We had a net foreign exchange gain of \$0.4 million in 2018 compared to a net foreign exchange loss of \$1.4 million in 2017 primarily due to movements in the U.S. dollar versus the euro.

Income Tax Expense (Benefit)

In 2018, we recorded current tax expense of \$210,000 arising from taxable income incurred at certain subsidiaries, and a deferred tax benefit amounting to \$1,178,000, mainly due to the recognition of deferred tax assets that were determined to be realizable as a result of the deferred tax liability recorded (through equity) related to convertible debt and debt with warrants attached. The deferred tax liability resulted from the recognition of the equity components following the separation between the equity and liability components of these financial instruments. In 2017, we recorded current tax expense of \$273,000 arising from taxable income incurred at certain subsidiaries, and deferred tax expense amounting to \$27,000.

Comparison of Years Ended December 31, 2016 and 2017

	Year ended December 31,		Change
	2016 ⁽¹⁾	2017 ⁽¹⁾	%
	(in thousands)		
Revenue:			
Product revenue	\$ 34,581	\$ 37,353	8%
Other revenue	10,998	10,910	(1)
Total revenue	45,579	48,263	6
Cost of revenue:			
Cost of product revenue	22,574	24,725	10
Cost of other revenue	3,022	2,397	(21)
Total cost of revenue	25,596	27,122	6
Gross profit	19,983	21,141	6
Operating expenses:			
Research and development	26,334	25,202	(4)
Sales and marketing	7,126	8,785	23
General and administrative	6,267	6,679	7
Total operating expenses	39,727	40,666	2
Operating income (loss)	(19,744)	(19,525)	(1)
Financial income (expense):			
Interest income (expense), net	(3,686)	(4,612)	25
Other financial expense	(83)	—	(100)
Convertible debt amendments	—	(322)	100
Change in the fair value of convertible debt embedded derivative	(1,583)	—	(100)
Foreign exchange gain (loss)	593	(1,401)	(336)
Profit (Loss) before income taxes	(24,503)	(25,860)	
Income tax expense (benefit)	284	300	6
Profit (Loss)	\$ (24,787)	\$ (26,160)	

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The following table sets forth a summary of our statement of operations as a percentage of total revenue:

	Year ended December 31,	
	2016	2017
	(% of total revenue)	
Revenue:		
Product revenue	76	77
Other revenue	24	23
Total revenue	100	100
Cost of revenue:		
Cost of product revenue	50	51
Cost of other revenue	7	5
Total cost of revenue	56	56
Gross profit	44	44
Operating expenses:		
Research and development	58	52
Sales and marketing	16	18
General and administrative	14	14
Total operating expenses	88	84
Operating income (loss)	(44)	(40)
Financial income (expense):		
Interest income (expense), net	(8)	(10)
Convertible debt amendments	—	(1)
Change in the fair value of convertible debt embedded derivative	(3)	—
Foreign exchange gain (loss)	1	(3)
Profit (Loss) before income taxes	(54)	(54)
Income tax expense (benefit)	1	1
Profit (Loss)	(55)	(55)

Revenue

Product Revenue

Product revenue increased 8% from \$34.6 million in 2016 to \$37.4 million in 2017, driven primarily by customers with broadband access products for emerging markets and emerging carriers as well as by customers selling both broadband access and IoT products in the U.S, Japan and South Korea. During 2017, the ramp in Cat 1 product shipments led to our first year of meaningful IoT product revenue. The strong growth in the IoT business was offset by a decline in the broadband business, particularly during the second half of the year. Total IoT revenue grew 43% from \$8.4 million in 2016 to \$12.0 million in 2017 and accounted for approximately 25% of total revenue. Total broadband revenue decreased 7% from \$30.1 million in 2016 to \$27.9 million in 2017. The largest factor in the decline was a change in subscription pricing by one major operator, leading to a slow-down in end sales of two products deployed on that network. Increased revenues also reflect a product mix with a higher percentage of module sales; modules have a higher average selling price than chipsets.

In 2017, we shipped approximately 3.4 million of units of LTE products compared to 2.6 million units in 2016. We expect strong IoT growth in 2018, supported by the continuous shipment of Cat 1 products in both U.S. and Japan and the ramp of Cat M particularly during the second half of 2018. We believe that the broadband business will remain a major source of growth as newer broadband customers continue to ramp with new operators in emerging markets and new opportunities outside the emerging and Verizon markets, and, longer term, as we evolve toward 5G services.

Other Revenue

Other revenue decreased 1% from \$11.0 million in 2016 to \$10.9 million in 2017, reflecting a decrease in development services revenue as some large projects from prior years were completed, largely offset by higher license and maintenance revenue.

Development services revenue decreased from \$9.3 million in 2016 to \$7.7 million in 2017. License revenue increased from \$1.5 million in 2016 to \$3.0 million in 2017, and maintenance revenue decreased from \$200,000 in 2016 to \$160,000 in 2017.

Cost of Revenue

Cost of product revenue increased 10% from \$22.6 million in 2016 to \$24.7 million in 2017 due to higher product and manufacturing costs associated with the increased number of units sold and more modules in the revenue mix in 2017 compared to 2016. Cost of other revenue decreased 21% from \$3.0 million in 2016 to \$2.4 million in 2017, reflecting the 17% decrease of development services revenue, some of which involved re-selling external services, such as certification costs.

Gross Profit

Gross profit increased 6% from \$20.0 million in 2016 to \$21.1 million in 2017, while gross margin percentage remained stable at 43.8%, primarily due to an improved other revenue gross margin. Product gross margin percentage decreased from 34.7% in 2016 to 33.8% in 2017 due to the impact of a higher percentage of lower-margin module sales in the product revenue mix compared to 2016.

Research and Development

Research and development expense decreased 4% from \$26.3 million in 2016 to \$25.2 million in 2017 primarily due to a higher research and development credit, higher grant recognition and more capitalized costs related to the development of the chipsets for LTE Category M recorded in 2017, partially offset by an increase of headcount expenses.

These expenses are net of research and development incentives earned during the periods, which are accounted for as a reduction of research and development expense. Research and development incentives increased from \$3.7 million in 2016 to \$6.4 million in 2017. In the year ended December 31, 2016, \$22,000 of development costs were capitalized related mainly to operator certification (\$59,000 in 2017). In the year ended December 31, 2017, we capitalized costs related to the development of the chipsets for LTE Category M, the Monarch and Monarch 2 (\$1.9 million, net of research tax credit of \$ 0.3 million).

Research and development costs associated with product development (including normal customer support which generates product improvements) are recorded in operating expense. In some cases, we have negotiated agreements with customers and partners whereby we provide certain development services beyond our normal practices or planned product roadmap. Amounts received from these agreements are recorded in other revenue. Incremental costs, including both internal resources and out-of-pocket expenses, that we incur as a result of the commitments in the agreements are recorded in cost of other revenue, rather than in research and development expense. Other research and development costs related to the projects covered by the agreements, but which we would have incurred without the existence of such agreements are recorded in research and development expense.

There were 235 employees and independent contractors in research and development at December 31, 2017 compared to 186 at December 31, 2016.

Sales and Marketing

Sales and marketing expense increased 23% from \$7.1 million in 2016 to \$8.8 million in 2017. The increase primarily reflects the reinforcement of the sales team beginning in mid-2016, including the hiring of the Chief Marketing Officer and the Vice President Worldwide Sales, and the marketing team beginning of 2017. While there were 28 employees and independent contractors in sales and marketing at December 31, 2017 compared to 29 employees at December 31, 2016, we had increased headcount early in 2017 followed by a decrease in the latter part of 2017.

General and Administrative

General and administrative expense increased 7% from \$6.3 million in 2016 to \$6.7 million in 2017 primarily due to an increase in stock-based compensation and headcount. There were 20 employees in general and administrative at December 31, 2017 compared to 17 at December 31, 2016.

Interest Income (Expense), Net

Net interest expense increased to \$4.6 million in 2017 compared to \$3.7 million in 2016. Interest expense reflected a full year of interest on the convertible debt issued in April 2016. Interest income was insignificant in both years.

Convertible debt amendment

On October 30, 2017, the convertible notes issued April 14, 2015 and April 27, 2016 were amended to extend the term of the notes issued in 2015 from April 14, 2018 to April 14, 2019 and the term of the notes issued in 2016 from April 27, 2019 to April 27, 2020. In addition, the conversion price of the notes issued in 2016 was decreased from \$2.71 to \$2.25. Following the extension of the term, the change in fair value of the conversion options before and after the amendment was calculated to be \$3,418,000 and was recorded as financial expense. The debt components on October 30, 2017 were remeasured to take into account the new terms using the effective interest rate calculated at the date of issue of each convertible note. The debts were reduced by a total amount of \$3,096,000 recorded in financial income.

Change in Fair Value of Convertible Debt Embedded Derivative

In April 2015, we issued convertible debt. For the first year of the debt term, the conversion price was subject to change in certain circumstances if we issued equity at a price lower than the nominal conversion rate of \$1.85. This option component of the convertible debt has been recorded as an embedded derivative at fair value in accordance with the provisions of IAS 39 *Financial Instruments: Recognition and Measurement*. The fair value was determined using a valuation model that requires judgment, including estimating the change in value of the Company at different dates and market yields applicable to the Company's straight debt (without the conversion option). The assumptions used in calculating the value of the conversion represent the Company's best estimates based on management's judgment and subjective future expectations. As long as the conversion price was subject to change, the embedded derivative was revalued at each balance sheet date, with the change in value recorded in financial income (expense). On April 14, 2015, the initial fair value of the embedded derivative was \$4,055,000. The embedded derivative value was fixed in April 2016 at a value of \$8,324,000 when the conversion price was no longer subject to change. The change of this fair value from December 31, 2015 of 2,233,000 was recorded as financial expense in the Consolidated Statement of Operations for the year ended December 31, 2016.

In April 2016, we issued additional convertible debt. The conversion price was based on the average market price during the period beginning on April 28, 2016 and ending on May 12, 2016, resulting in a short-term embedded derivative period. The final conversion price was \$2.7126 per ADS. The fair value of the embedded derivative on the issuance date was calculated to be \$2,597,000 and was recalculated to be \$1,947,000 when the conversion rate was fixed on May 12, 2016. The change of this fair value of \$650,000 was recorded as financial income in the Consolidated Statement of Operations for the year ended December 31, 2016.

Foreign Exchange Gain (Loss), Net

We had a net foreign exchange loss of \$1.4 million in 2017 compared to a net foreign exchange gain of \$593,000 in 2016 primarily due to movements in the U.S. dollar versus the euro.

Income Tax Expense (Benefit)

In 2017, we recorded current tax expense of \$273,000 arising from taxable income incurred at certain subsidiaries, and a deferred tax expense amounting to \$27,000. In 2017, we recorded current tax expense of \$272,000 arising from taxable income incurred at certain subsidiaries, and deferred tax expense amounting to \$12,000. Deferred tax assets have not been recognized in 2017 or 2016 with respect to our losses as we have not generated taxable profits since beginning operations in 2004.

Selected Quarterly Results of Operations

The following table presents our unaudited quarterly results of operations for 2017 and 2018. This unaudited quarterly information has been prepared on the same basis as our audited Consolidated Financial Statements and includes all adjustments necessary for the fair presentation of the information for the quarters presented. You should read this table together with our Consolidated Financial Statements and the related notes thereto included in this annual report. Our quarterly results of operations will vary in the future. The results of operations for any quarter are not necessarily indicative of results for the entire year and are not necessarily indicative of any future results.

	Three months ended							
	March 31, 2017	June 30, 2017	Sept. 30, 2017	Dec. 31, 2017	March 31, 2018	June 30, 2018	Sept. 30, 2018	Dec. 31, 2018
	(in thousands) (unaudited)							
Revenue:								
Product revenue	\$ 9,640	\$ 10,159	\$ 8,869	\$ 8,685	\$ 7,635	\$ 9,921	\$ 7,526	\$ 3,856
Other revenue	2,790	3,058	2,430	2,632	3,599	2,737	2,759	2,217
Total revenue	12,430	13,217	11,299	11,317	11,234	12,658	10,285	6,073
Cost of revenue ⁽¹⁾ :								
Cost of product revenue	5,989	7,064	5,678	5,994	5,861	7,127	6,026	2,943
Cost of other revenue	589	591	615	602	689	549	664	503
Total cost of revenue	6,578	7,655	6,293	6,596	6,550	7,676	6,690	3,446
Gross profit	5,852	5,562	5,006	4,721	4,684	4,982	3,595	2,627
Operating expenses ⁽¹⁾ :								
Research and development	6,194	6,254	6,769	5,985	7,519	7,152	6,750	6,488
Sales and marketing	2,496	2,072	2,014	2,203	2,485	2,518	2,229	2,179
General and administrative	1,411	1,323	1,786	2,159	1,971	2,276	2,545	3,294
Total operating expenses	10,101	9,649	10,569	10,347	11,975	11,946	11,524	11,961
Operating income (loss)	(4,249)	(4,087)	(5,563)	(5,626)	(7,291)	(6,964)	(7,929)	(9,334)
Financial income (expense):								
Interest income (expense), net	(1,038)	(1,194)	(1,202)	(1,178)	(1,227)	(1,240)	(1,278)	(1,631)
Other financial expense	—	—	—	—	—	—	—	(400)
Convertible debt amendments	—	—	—	(322)	—	—	(685)	420
Foreign exchange gain (loss)	(246)	(626)	(90)	(439)	(212)	188	58	332
Profit (Loss) before income taxes	(5,533)	(5,907)	(6,855)	(7,565)	(8,730)	(8,016)	(9,834)	(10,613)
Income tax expense (benefit)	71	83	65	81	19	74	78	(1,139)
Profit (Loss)	\$ (5,604)	\$ (5,990)	\$ (6,920)	\$ (7,646)	\$ (8,749)	\$ (8,090)	\$ (9,912)	\$ (9,474)

(1) Includes share-based compensation as follows:

	Three months ended							
	March 31, 2017	June 30, 2017	Sept. 30, 2017	Dec. 31, 2017	March 31, 2018	June 30, 2018	Sept. 30, 2018	Dec. 31, 2018
	(in thousands) (unaudited)							
Cost of revenue	\$ 3	\$ 2	\$ 2	\$ —	\$ 3	\$ 3	\$ 2	\$ —
Operating expenses	338	305	308	680	529	523	444	308
Share-based compensation	\$ 341	\$ 307	\$ 310	\$ 680	\$ 532	\$ 526	\$ 446	\$ 308

The following table sets forth a summary of our quarterly statement of operations as a percentage of total revenue:

	Three months ended							
	March 31, 2017	June 30, 2017	Sept. 30, 2017	Dec. 31, 2017	March 31, 2018	June 30, 2018	Sept. 30, 2018	Dec. 31, 2018
	(% of revenue) (unaudited)							
Revenue:								
Product revenue	78	77	78	77	68	78	73	63
Other revenue	22	23	22	23	32	22	27	37
Total revenue	100	100	100	100	100	100	100	100
Cost of revenue:								
Cost of product revenue	48	53	50	53	52	56	59	48
Cost of other revenue	5	5	6	5	6	5	6	8
Total cost of revenue	53	58	56	58	58	61	65	57
Gross profit	47	42	44	42	42	39	35	43
Operating expenses:								
Research and development	50	47	60	53	67	57	66	107
Sales and marketing	20	16	18	19	22	20	22	36
General and administrative	11	10	15	20	18	17	24	54
Total operating expenses	81	73	93	92	107	94	112	197
Operating income (loss)	(34)	(31)	(49)	(50)	(65)	(55)	(77)	(154)
Financial income (expense):								
Interest income (expense), net	(8)	(9)	(11)	(10)	(11)	(10)	(12)	(27)
Other financial expense	—	—	—	—	—	—	—	(7)
Convertible debit amendments	—	—	—	(3)	—	—	—	7
Change in the fair value of convertible debt embedded derivative	—	—	—	—	—	—	—	—
Foreign exchange gain (loss)	(2)	(5)	(1)	(4)	(2)	1	1	5
Profit (Loss) before income taxes	(44)	(45)	(61)	(67)	(78)	(64)	(95)	(176)
Income tax expense (benefit)	1	—	—	1	—	—	1	(19)
Profit (Loss)	(45)	(45)	(61)	(68)	(78)	(64)	(96)	(156)

Product revenues decreased from the second half of 2017 (except in the second quarter of 2018) due to weakness in our broadband business. This weakness primarily related to subscription pricing changes made by a large U.S. operator impacting end product sales for two of our customers in 2017 and to lower sales in emerging markets in 2018 from our decision in earlier years to focus our product development efforts on the IoT business rather than on a second-generation Cat 6 product offer. These quarterly decreases were partially offset by strong growth of the IoT business with revenue from Cat 1 chipset sales and the ramp up of the Cat M products during the first half of 2018. Cat M revenue stalled during the second half of the year because of a delay in the market. We continue to experience volatility in quarterly revenue as many of the new design wins either ramp with some delay versus expectations, or do not ramp smoothly over time. Other revenue has an inherent fluctuation due to the timing of the execution of software licenses and development services. Other revenue in first quarter of 2018 was unusually high due to a number of new development services starting and more license revenue.

Cost of product revenue in general increased and decreased, consistent with the increases and decreases in product revenue quarter to quarter. Cost of other revenue remained flat in 2018 compared to 2017; incremental costs incurred by the Company and related to development service agreements negotiated with customers and partners to develop services are recorded in cost of other revenue.

Gross margin remained below 45% in 2017 and 2018 (except in the first quarter of 2017 and in the last quarter 2018) as we continued to generate a significant portion of our revenues from our LTE modules with lower margins than our chip solutions.

Research and development expenses increased in the third quarter of 2017 reflecting lower capitalized costs and higher staff costs. Fourth quarter 2017 research and development expenses decreased, primarily due to higher recognition of grants and research tax credit. Research and development expenses decreased from the first quarter of 2018 due to a reorganization in which 21 technical support engineers were transferred from engineering to customer support in Sales and Marketing. The decrease from the third quarter of 2018 reflected seasonality in the third quarter, decrease on headcount and a weaker euro compared to the U.S. dollar.

Sales and marketing expense increased in 2018 compared to 2017. The increase reflects the reorganization in 2018.

General and administrative expense has tended to increase over time. Fourth quarter of 2017 increased significantly, primarily due to stock based compensation expenses related to grants awarded during the quarter. Fourth quarter of 2018 increased due to bad debt expense and accrual of the expected costs to be incurred related to the ongoing securities class action lawsuit.

Interest expense increased in the fourth quarter of 2017 due to the impact of the convertible debt amendments signed on October 31, 2017. The fourth quarter of 2018 reflects the impact of the convertible debt amendments signed on September 27, 2018, an increase of interest expense due to an additional convertible debt issued in September 27, 2018 and a venture debt contracted on October 26, 2018. Interest income was insignificant. Foreign exchange gains and losses resulted primarily from the change in the U.S. dollar to euro exchange rate and remeasurement of euro-based assets and liabilities at settlement or balance sheet date.

Income tax income increased in the fourth quarter of 2018 due to the recognition of deferred tax assets as a result of deferred tax liabilities recognized (through equity) upon the separation between the equity and debt components of the convertible debt and debt issued with warrants.

We have yet to experience an established pattern of seasonality. However, business activities in Asia generally slow-down in the first quarter of each year during the Chinese New Year period, which could harm our sales and results of operations during the period.

B. *Liquidity and Capital Resources*

Sources of Liquidity

Our cash and cash equivalents and short-term investments were \$12.1 million at December 31, 2018. We believe that our available cash and cash equivalents, proceeds from government funding of research programs and proceeds from expected financing activities (from institutional or strategic investors, or from the capital markets) will be sufficient to fund our operations for at least the next 12 months.

Since inception, we have financed our operations primarily through proceeds from the issues of our shares, convertible notes and venture debt, which totaled €54.7 million (\$73.1 million) from 2004 to the end of 2010; from the \$59.1 million in net proceeds from our initial public offering on the New York Stock Exchange in April 2011 and from \$96.4 million in net proceeds from our follow-on public offerings in February and November 2013, September 2016, June 2017 and January 2018.

In June 2014, the Company entered into a factoring agreement with a French financial institution whereby a line of credit was made available equal to 80-90% of the face value of accounts receivable from qualifying customers. The Company transfers to the finance company all invoices issued to qualifying customers and the customers are instructed to settle the invoices directly with the finance company. At December 31, 2018, \$10.3 million had been drawn on the line of credit and recorded as a current borrowing.

In October 2014, Bpifrance, the financial agency of the French government, provided funding to the Company in the context of a long-term research project, estimated to be completed over a 3-year period. The total funding will amount to €7.0 million (\$9.0 million) comprising a portion in the form of a grant (€3.0 million or \$3.8 million) and a portion in the form of a loan (€4.0 million or \$5.2 million). The funding will be paid in installments after milestones defined in the contract. The advance will be repaid from March 31, 2019 to September 30, 2022 and bears interests at a 1.53% fixed contractual rate. In 2014, the Company received €2.1 million (\$2.7 million) as a grant and €1.0 million (\$1.2 million) as a loan. In 2016 and 2017, the Company received €0.6 million and €1 million respectively (\$0.6 million and \$1.1 million respectively) as a loan. In 2018, the Company received €0.4 million (\$0.5 million) as a grant and €0.9 million (\$1.1 million) as a loan. The final funding is expected to be received in the first quarter 2019 for approximately \$1.1 million.

In April 2015, we completed the sale of a \$12 million convertible note in a private placement transaction. The convertible note matures in April 2021 (after the amendments signed in October 2017 and September 2018 to extend the term) and bears interest at a rate of 7% per year, paid in kind annually on the anniversary of the issuance of the note. After amendment in September 2018, the note is convertible, at the holder's option, into the company's ADSs at a conversion rate of 588.2353 ADSs for each \$1,000 principal amount of the note, subject to certain adjustments, which equates to an initial conversion price of \$1.70 per ADS. In addition, we issued warrants to purchase 1,800,000 shares to the holder of this note in connection with the September 2018 amendment with an exercise price of \$1.70.

In September 2015, the Company received two loans from the financial agency of the French government for a total amount of €2 million (\$2.2 million). One loan of €1 million bears interest at 5.24% per year, paid quarterly; the second loan of €1 million is interest-free. The interest-free loan has been revalued using the 5.24% interest rate payable on the other loan. Both loans have seven-year terms with the principal being amortized on a quarterly basis beginning in September 2017.

In January 2016, Bpifrance provided a funding to the Company for a new long-term research project, estimated to be completed over a 27-month period. The total of the funding amounts to €2.1 million (\$2.3 million) comprising a portion in the form of a grant (€60.7 million or \$0.7 million) and a portion in the form of a forgivable loan (€1.4 million or \$1.6 million). The funding will be paid in four installments: the first tranche at the contract signature date, the second, the third and the fourth installments after milestones defined in the contract. The forgivable loan advance will be repaid, except if the project is a commercial failure, from July 1, 2020 to July 1, 2024 and bears interests at a 1.17% fixed contractual rate. In 2016 and 2017, the Company received €0.3 million and €0.2 million, respectively (\$0.4 million and \$0.2 million, respectively) as grant proceeds. In 2017, the Company €1.2 million (\$1.4 million) as a loan. The next funding is expected to be received by the second half of 2019 for approximately \$0.4 million.

On April 27, 2016, we raised net proceeds of \$7.0 million from the sale of convertible notes to certain institutional investors in a private placement transaction. The convertible notes mature in April 2020 (after the amendment signed in October 2017 to extend the term of one year) and bear interest at a rate of 7% per year, paid in kind annually on the anniversary of the issuance of the note. The notes are convertible, at the holder's option, into the Company's ADSs at \$2.25. (the initial conversion price was \$2.7126 per ADS and was decreased to \$2.25 per ADS in the amendment signed in October 2017). On October 30, 2018 and in connection with entering into the bond issuance agreement, the Company retired convertible notes issued on April 27, 2016 and due on April 27, 2020, with a principal amount of \$1 million, by paying the principal and accrued interest due as of October 30, 2018 to the noteholder.

On September 27, 2018, the Company sold a convertible note in the principal amount of \$4.5 million to an institutional investor in a private placement transaction. The convertible note has the same terms as the convertible note issued in 2015, after amendments: matures in April 2021, bears interest at a rate of 7% per year, paid in kind annually on April 14th, and is convertible, at the holder's option, into the Company's ADSs at a conversion rate of \$1.70 per ADS.

All remaining convertible notes issued in 2015, 2016 and 2018 are held by one institutional investor, Nokomis Capital.

On October 26, 2018, the Company entered into a bond issuance agreement with Harbert European Specialty Lending Company II S.a.r.l (the “Harbert”) whereby Harbert agreed to loan to the Company €12 million (\$13.8 million), at a stated rate of interest of 9%, to be repaid monthly over 42 months (the “Bond”). The Bond is secured by various assets of the Company, including intellectual property, and is senior to all the convertible notes. Also, on October 26, 2018, the Company issued to Harbert, for a total subscription price of \$1.00, warrants to acquire 816,716 ADSs at an exercise price of \$1.34 per ADS. Such warrants are exercisable at any time and expire October 26, 2028.

On February 18, 2019, a new strategic investor subscribed for warrants for a total subscription price of approximately \$8.4 million in support of accelerating Sequans’ existing 5G product roadmap. Upon the closing of this transaction, the Company issued to the investor a total of 9,392,986 warrants. The warrants are exercisable upon 61 days’ notice to Sequans at an exercise price of €0.02 per share/ADS into 9,392,986 of our ordinary shares/ADS. The warrants expire 15 years from the issuance date.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Net cash used in operating activities	\$ (15,589)	\$ (28,626)	\$ (22,838)
Net cash used in investing activities	\$ (5,270)	\$ (6,477)	\$ (8,766)
Net cash from financing activities	\$ 32,778	\$ 17,838	\$ 40,744
Net increase (decrease) in cash and cash equivalents	\$ 11,919	\$ (17,265)	\$ 9,140

Cash Flows from Operating Activities

Net cash used in operating activities during 2018 was \$22.8 million, reflecting a net loss (before income tax) of \$37.2 million, increases in inventories of \$0.9 million and decreases in trade and other receivables of \$5.8 million, in research tax credit receivable of \$0.6 million, in trade payables and other liabilities of \$3.9 million and in government grant advances and deferred revenue of \$1.1 million. These and other smaller working capital adjustments were a net \$0.1 million use of cash. In addition, there were several non-cash charges, including depreciation and amortization of \$6.2 million, non-cash interest expense of \$5.4 million and share-based compensation expense of \$1.8 million during the period.

Net cash used in operating activities during 2017 was \$28.6 million, reflecting a net loss (before income tax) of \$25.9 million, increases in trade and other receivables of \$7.1 million and in research tax credit receivable of \$1.1 million, and decreases in inventories of \$1.3 million, in trade payables and other liabilities of \$5.9 million, in government grant advances and deferred revenue of \$2.5 million. These and other smaller working capital adjustments were a net \$15.6 million use of cash. In addition, there were several non-cash charges, including depreciation and amortization of \$5.6 million, non-cash interest expense of \$4.6 million and share-based compensation expense of \$1.6 million during the period.

Net cash used in operating activities during 2016 was \$15.6 million, reflecting a net loss (before income tax) of \$24.5 million, increases in inventories of \$4.6 million and in trade payables and other liabilities of \$2.4 million and decreases in government grant advances and deferred revenue of \$1.8 million, in research tax credit receivable of \$1.0 million and in trade and other receivables of \$0.7 million. These and other smaller working capital adjustments were a net \$2.4 million use of cash. In addition, there were several non-cash charges, including depreciation and amortization of \$5.3 million, the change in the fair value of the convertible debt embedded derivative of \$1.6 million, non-cash interest expense of \$3.7 million and share-based compensation expense of \$1.1 million during the period.

Cash Used in Investing Activities

Cash used in investing activities during 2018, 2017 and 2016, consisted primarily of purchases of property and equipment and intangible assets of \$5.4 million, \$4.2 million and \$5.4 million, respectively, and of capitalized development expenditures of \$3.8 million, \$2.2 million and \$22,000, respectively.

Cash Flows from Financing Activities

Net cash provided by financing activities was \$40.7 million in 2018, reflecting \$20.8 million in net proceeds from our follow-on public offering in January 2018, \$13.6 million in net proceeds from issuance of venture debt, \$4.4 million from net proceeds from the issuance of convertible debt, \$1.6 million proceeds from research project financing and \$2.9 million net

proceeds drawn on the factoring line of credit, offset by a \$1.2 million repayment of convertible debt and accrued interest, \$0.6 million repayment of government loan and \$0.8 million payment of interest.

Net cash provided by financing activities was \$17.8 million in 2017, reflecting \$14.9 million in net proceeds from our follow-on public offering in June 2017, \$1.0 million from issue of warrants and exercise of stock options/warrants, and \$2.7 million proceeds from research project financing, offset by \$0.3 million net repayment on the factoring line of credit and by \$0.3 million payment of interest.

Net cash provided by financing activities was \$32.8 million in 2016, reflecting \$23.6 million in net proceeds from our follow-on public offering in September 2016, \$6.9 million net proceeds from the issuance of convertible debt, \$1.2 million net proceeds drawn on the factoring line of credit, and \$1.0 million proceeds from government project financing, offset by payment of interest and final repayment of finance lease liabilities.

Operating and Investing Requirements

We expect our operating expenses to be slightly lower in each quarter of 2019 compared to the average quarterly rate of 2018, in particular due to the weaker euro compared to the U.S. dollar already experienced in 2019 compared to 2018 and due to headcount reductions made in late 2018. We expect that investments in tangible and intangible assets are likely to decrease slightly due to the timing and nature of product development activity expected in 2019.

Based on our current plans and after giving effect to our sale of warrants to a new strategic investor in February 2019, we currently believe that our available capital resources will be adequate to satisfy our cash requirements at least for 12 months from the date of this annual report. If our plans change, or if we do not achieve profits or if our profitability is significantly lower than anticipated, we may need additional financing.

If our available cash balances are insufficient to satisfy our liquidity requirements, we may seek to sell equity or convertible debt securities or enter into a credit facility, which may contain restrictive covenants. The sale of equity and convertible debt securities may result in dilution to our shareholders and those securities may have rights senior to those of the ADSs. If we raise additional funds through the issue of convertible debt securities, these securities could contain covenants that would restrict our operations.

Our estimates of the period of time through which our financial resources will be adequate to support our operations and the costs to support research and development and our sales and marketing activities are forward-looking statements and involve risks and uncertainties, and actual results could vary materially and negatively as a result of a number of factors, including the factors discussed in “Item 3.D—Risk Factors”. We have based our estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect.

Our short and long-term capital requirements will depend on many factors, including the following:

- our ability to generate cash from operations or to minimize the cash used in operations;
- our ability to control our costs;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights, or participating in litigation-related activities; and
- the acquisition of businesses, products and technologies.

C. *Research and Development, Patents and Licenses, etc.*

We engage in substantial research and development efforts to develop new products and integrate additional capabilities into our core products. Our research and development team of 203 employees and consultants, at December 31, 2018, includes experienced semiconductor designers, software developers and test engineers. Key areas of expertise include wireless systems architecture, SoC architecture, digital and RF IC design, digital signal processing, embedded real-time and application software design, protocol stack development, hardware and software integration, quality assurance test development and scripting and field testing. Our team has significant experience in the principal wireless domains, including 2G, 3G, 4G LTE, 5G and other wireless communication technologies such as Wi-Fi. Nearly 80% of our employee engineers have more than 10 years of experience in their specific domain, and 94% of our engineers hold masters degrees.

The ability to successfully integrate and mass-produce digital and/or RF functionality in advanced process technology with acceptable yields is a significant industry challenge. Due to the robustness of our silicon design and verification methodologies, we have demonstrated competency in repeatedly achieving production-capable products with the first version of our chip designs, reducing time to market and avoiding costs associated with additional design revisions. Each of our first three generations of 40nm LTE baseband and our first four 65nm LTE RF products, as well as our earlier 65nm WiMAX SoC

products, were production-ready from the initial version of the design. We believe this experience positions us well for our migration to denser process geometries such as 28nm, 22nm or 16nm for our future high-end products and for further integration for low cost and low power in our future chipsets for IoT. Looking ahead to future generations such as 5G, we expect this competency will serve us well as we develop ever more complex designs in more advanced process technologies.

We design our products with careful attention to quality, flexibility, cost-and power-efficiency requirements. Our 4G modem architecture, which has been refined through multiple generations of integrated circuit designs, is designed to optimize hardware and software partitioning to provide more flexibility and better cost without compromising performance. As a result, we achieve equivalent or higher throughput and lower power consumption in a smaller die size than other single-mode LTE chip competitors.

Since February 2009, we have been certified as ISO 9001 compliant, an international standard set by the International Organization for Standardization, or ISO, that sets forth requirements for an organization's quality management system. We believe this certification gives our customers confidence in our quality control procedures. We also participate in a number of organizations and standards bodies, including the 3rd Generation Partnership Project (3GPP), Open Mobile Alliance (OMA), the PTS Type Certification Review Board (PTCRB) the Global Certification Forum, the GSMA, European Telecommunications Standards Institute (ETSI) and CTIA—The Wireless Association. In addition, we participate in multiple European Union and French collaborative projects for advanced studies focusing on future evolutions of the 4G technology or addressing the longer term 5G technology challenges.

Our research and development expense was \$26.3 million for 2016, \$25.2 million for 2017 and \$27.9 million for 2018.

D. *Trend Information*

Other than these items, or as disclosed elsewhere in this annual report, including in “Item 5. A. Operating Results”, we are not aware of any trends, uncertainties, demands, commitments or events that are reasonable likely to have a material adverse effect on our net revenues, income, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial condition.

E. *Off-Balance Sheet Arrangements*

Since our inception, we have not engaged in any off-balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

F. *Contractual Obligations*

The following table summarizes our outstanding contractual obligations at December 31, 2018 and the effect those obligations are expected to have on our liquidity and cash flows in future periods:

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
			(in thousands)		
Liabilities:					
Government grant advances	\$ 144	\$ —	\$ 144	\$ —	\$ —
Research project financing	5,389	238	3,016	2,062	73
Government loans	1,695	499	962	234	—
Convertible debt and accrued interests	31,221	—	7,864	23,357	—
Venture debt	16,425	2,057	12,316	2,052	
Trade payables	9,412	9,412	—	—	—
Interest-bearing receivables financing	10,295	10,295	—	—	—
Deferred tax liabilities	691	691	—	—	—
Other current liabilities	4,654	4,654	—	—	—
Total	<u>\$ 79,926</u>	<u>\$ 27,846</u>	<u>\$ 24,302</u>	<u>\$ 27,705</u>	<u>\$ 73</u>
Off-balance sheet commitments:					
Operating leases	2,058	1,387	669	—	2
Inventory component and equipment purchase commitments	5,592	5,592	—	—	—
Total	<u>\$ 7,650</u>	<u>\$ 6,979</u>	<u>\$ 669</u>	<u>\$ —</u>	<u>\$ 2</u>

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

Executive Officers and Directors

The following table sets forth information about our executive officers and directors as the date of this annual report.

Name	Age	Position(s)
<i>Executive Officers</i>		
Dr. Georges Karam	57	Chairman of the Board and Chief Executive Officer
Deborah Choate	55	Chief Financial Officer
Bertrand Debray	54	Chief Operating Officer
Didier Dutronc	59	Chief Marketing Officer
Nikhil Taluja	47	Vice President Worldwide Sales
<i>Directors</i>		
Wesley Cummins	41	Director
Mailys Ferrere	56	Director
Yves Maitre	56	Director
Richard Nottenburg	65	Director
Hubert de Pesquidoux	53	Director
Dominique Pitteloud	57	Director
Alok Sharma	54	Director
Zvi Slonimsky	69	Director

Executive Officers

Dr. Georges Karam has served as our chairman of the board and chief executive officer since the company was founded in 2003. Before founding Sequans, Dr. Karam was vice president of cable access at Juniper Networks, running the cable engineering and marketing departments and managing the cable sales launch in the Europe, Middle East and Africa region. He joined Juniper Networks when the company acquired Pacific Broadband Communications (PBC), where he was vice president of engineering and general manager for Europe. Dr. Karam has served in a variety of senior management positions at Alcatel, SAGEM and Philips. He is a senior member of IEEE, has authored numerous technical and scientific papers and holds several patents in digital communications. Dr. Karam holds a PhD in signal processing and communication theory from Ecole Nationale Supérieure des Télécommunications, Paris.

Deborah Choate has served as our chief financial officer since July 2007. Prior to joining Sequans, she was chief financial officer at Esmertec AG from September 2005 to June 2007 and at Wavecom SA, from August 1998 to August 2004, and vice president of finance at Platinum Equity from October 2004 to September 2005. Earlier in her career, she was an audit partner with Ernst & Young. Ms. Choate has 35 years of experience in management, finance and accounting, including over 20 years working with technology companies, in particular communications hardware, software and services. Ms. Choate holds a BS in business administration from the University of California at Berkeley.

Bertrand Debray has served as our chief operating officer since July 2013 and prior to that as vice president, engineering since the company was founded in 2003. Before joining Sequans, Mr. Debray was director of hardware and ASIC development in the cable product division at Juniper Networks. He joined Juniper Networks after the company acquired Pacific Broadband Communications, where he played the same role and was significantly involved in developing the cable product and team. Mr. Debray has held technical and management positions at Alcatel. He has 20 years' experience in large project development covering all access technologies, including wireless, satellite and cable. Mr. Debray holds a MSE from Ecole Nationale Supérieure des Télécommunications, Paris.

Didier Dutronc has served as chief marketing officer since March 2016. From January 2014 until March 2016, Mr. Dutronc was a director of Tapcheck Limited and Asia Business Consulting Limited both based in Hong Kong and providing services for companies targeting the IoT market. Previously, Mr. Dutronc served as senior vice president and general manager, M2M Embedded Solutions Business Unit at Sierra Wireless from February 2009 until October 2013. He also worked for Wavecom as general manager Handset BU (until Wavecom was acquired by Sierra Wireless). Earlier, he held positions at Alcatel Optronics USA, Alcatel Optronics France and Texas Instruments. Mr. Dutronc holds a BS in Electrical Engineering from ESME Sudria (France) and a MBA from IAE of Paris.

Nikhil Taluja has served as our vice president of worldwide sales since September 2016. From July 2013 until August 2016, Mr. Taluja was vice president of sales at SK hynix, a leading supplier of DRAM and Flash memory solutions, where he led the sales organization for the Americas. From March 2012 until July 2013, Mr. Taluja led the Americas' sales and marketing organizations at ST-Ericsson, the former multinational supplier of wireless semiconductor products, including LTE solutions. From November 2007 until March 2012, Mr. Taluja held various other sales and marketing position at ST-Ericsson. Mr. Taluja has more than 20 years of sales, product marketing and business development experience, including having worked for Texas Instruments and TranSwitch, specifically in the areas of wireless and wireline communications and has co-authored three patents in the field of near field communications (NFC). Mr. Taluja holds an M.S. in electrical engineering and a BS in computer engineering and mathematics from Kansas State University.

Directors

Wesley Cummins has served as a director since June 2018. Mr. Cummins has been an analyst with Nokomis Capital, LLC, an investment advisory firm and major shareholder of the Company, since 2013. Previously, Mr Cummins was an analyst for Harvey Partners from March 2011 to September 2012. Prior to that, he was employed by B. Riley & Co., an investment banking firm, where he served in positions of increasing responsibility, beginning first as an equity research analyst in 2002, then a director of research, capital markets director, and finally as president of B. Riley until his departure in 2011. Mr. Cummins is also a board member of Telenav, Inc., a connected car company, and Vishay Precision Group, a measurement solutions company.

Mr. Cummins holds a BS in finance and accounting from Washington University (St. Louis).

Mailys Ferrere has served as a director since June 2017. Ms. Ferrere currently leads Bpifrance Large Venture, a late-stage venture capital fund investing in French companies to help them grow into global leaders. Bpifrance Large Venture has invested in over 30 companies in the tech, biotech and greentech spaces, including the Company. Before joining Bpifrance Large Venture in 2013, Ms. Ferrère was an Investment Director at the Fonds Stratégique d'Investissement. Previously, she was an

equity capital markets banker at a number of banks, including Natixis. Ms. Ferrere is also a board member of DBV Technologies, Valneva SE, Innate Pharma and Euronext Paris. She is a graduate of Sciences Po (IEP Paris).

Yves Maitre has served as a director since June 2014. Mr. Maitre is currently Executive VP for Connected Objects and Partnerships at Orange Corporate where he is responsible for managing Orange's relationships with global device makers as well as partnering with ecosystem players from chipset upwards to internet companies. Prior to joining Orange, Mr. Maitre spent six years working for the consumer electronics company Thomson. He was President of Key MRO America, a subsidiary of Thomson United States and whilst living in Singapore he worked for Thomson Asia as Director of Manufacturing Supply Chain and Product Management. Before Thomson, Mr. Maitre spent five years as the COO of Quante-Pouyet, a subsidiary of 3M, making connectors for the telecoms business. He is also a board member of Orange China and several midsize / start-up companies. Mr. Maitre is an Engineering graduate in Nuclear Physics from Polytech Grenoble (France).

Richard Nottenburg has served as a director since June 2016. He is currently an Executive Partner at OceanSound Partners LP, a private equity firm, and an investor in various early stage technology companies. Previously, Dr. Nottenburg served as president, chief executive officer, and member of the board of directors of Sonus Networks, Inc. from 2008 through 2010. From 2004 until 2008, Dr. Nottenburg was an officer with Motorola, Inc., ultimately serving as its executive vice president, chief strategy officer and chief technology officer. He served on the boards of Aeroflex Corporation from 2010 until 2014, PMC Sierra, where he was a member of the audit committee, from 2011 until 2016 and Violin Memory where he served as Chairman from 2014 until 2017. Dr. Nottenburg is currently a member of the board of directors of Verint Systems Inc., where he is chairman of the compensation committee. He previously served on the boards of directors of PMC-Sierra Inc., Aeroflex Holding Corp., Anaren, Inc., Converse Technology, Inc. and Violin Memory, Inc. Dr. Nottenburg has a BSEE in Electrical Engineering from New York University, an MSEE in Electrical Engineering from Colorado State University and a PhD in Electrical Engineering from Ecole Polytechnique Federal Lausanne.

Hubert de Pesquidoux has served as a director since March 2011. Mr. de Pesquidoux is an Executive Partner at Siris Capital, a private equity firm focused on making control investments in data/telecom, technology and technology-enabled business service companies in North America. From 1991 until December 2009, Mr. de Pesquidoux held various positions at the telecommunications company Alcatel-Lucent SA (and its predecessor, Alcatel S.A. and its affiliates), where he most recently served as Chief Financial Officer from November 2007 until December 2008 and as President of the Enterprise business from November 2006 until December 2008. Mr. de Pesquidoux was also previously a member of the Alcatel Executive Committee and held various executive positions including President and Chief Executive Officer of Alcatel North America, Chief Executive Officer of Alcatel Canada (formerly NewbridgeNetworks) and Chief Financial Officer of Alcatel USA. Mr. de Pesquidoux also served as the Chairman of the Board of Tekelec and currently serves as a director and audit committee chair of Criteo S.A., as a director of Transaction Network Services, as executive chairman of Premiere Global Services, Inc. and Mavenir Systems, Inc. He is also a member of the University of Pittsburgh Medical Center Information Technology Board of Visitors, which advises UPMC on matters generally related to information technology strategy, acquisition and implementation. Mr. de Pesquidoux holds a Master in Law from University of Nancy II, a Master in Economics and Finance from Institut d'Etudes Politiques de Paris, a DESS in International Affairs from University of Paris Dauphine and was a laureate in the "Concours Général de Droit".

Dominique Pitteloud has served as a director since January 2005. Mr. Pitteloud has been a Managing Partner with Ginko Ventures in Geneva since 2015, was a partner with Endeavour Vision from 2007 to 2015, and was a principal at Vision Capital from 2001 to 2007. Mr. Pitteloud is also an advisor to ASSIA, a provider of DSL management solutions. Mr. Pitteloud also serves as a director of number of private companies. Prior to becoming a venture capitalist, Mr. Pitteloud was vice president of marketing at 8x8, a Silicon Valley semiconductor and telecommunication company, which he joined in 1999 as part of the acquisition of Odisei, a VoIP start-up from Sophia Antipolis, France. At Odisei, Mr. Pitteloud led the development of the company's business and financing activities. Prior to Odisei, Mr. Pitteloud held various engineering and management positions at Logitech, including Vice President of the scanner and video camera business units. Mr. Pitteloud received a BS in electrical engineering and telecommunications from the School of Business and Engineering in Vaud, Switzerland and an MBA from Santa Clara University.

Dr. Alok Sharma has served as a director since January 2011. Dr. Sharma has served as the Chief Executive Officer of Stratus Silver Lining, a private cloud-based software-as-a-service company, since 2014. From September 2010 to December 2012, Dr. Sharma was the chief executive officer of Accelera Inc., a company focused on building network optimization software for mobile broadband networks. From February 2009 to August 2010, Dr. Sharma was the Senior Vice President, Corporate Development and Alliances, at Aviat Networks (earlier known as Harris-Stratex, Microwave Division of Harris Corporation), where he was responsible for leading corporate strategy, mergers and acquisitions, as well as the development of key strategic relationships for the company. Beginning in June 2004, Dr. Sharma was the founder and chief executive officer of

Telsima Corporation, a provider of WiMAX broadband wireless solutions, until it was acquired by Aviat Networks in February 2009. Prior to Telsima, Dr. Sharma was the vice president and general manager of the Worldwide Cable Business at Juniper Networks from December 2001 to May 2003. Before Juniper Networks, Dr. Sharma was the founder and chief executive officer of Pacific Broadband Communications, which was acquired by Juniper Networks in December 2001. Prior to that, Dr. Sharma held senior management and technical positions at Hewlett Packard, Fujitsu/Amdahl, Integrated Device Technology and Siara Systems, a metro routing company acquired by Redback/Ericsson. Dr. Sharma holds a bachelor of engineering from the Indian Institute of Technology, Roorkee, India and a PhD in electrical engineering from the University of Wisconsin-Madison, and holds seven patents.

Zvi Slonimsky has served as a director since November 2006. Since 2005, Mr. Slonimsky has been chairman of the board of several Israeli high tech companies, currently including several private companies as well as Awear, Maradin and Surf, and previously Alvarion, Extricom, Pentalum and Teledata. He served as CEO of Alvarion Ltd. from 2001 to October 2005, following Alvarion's establishment via merger of BreezeCOM and Floware in August 2001. Prior to the merger, Mr. Slonimsky was CEO of BreezeCom. Before that, he served as president and CEO of MTS Ltd. and was general manager of DSP Group, Israel. Earlier in his career, he held senior positions at several Israeli telecom companies, including C.Mer and Tadiran. Mr. Slonimsky holds a BSEE and a MSEE from the Technion Israel Institute for Technology and an MBA from Tel-Aviv University.

Mr. Karam has agreed to support the designation of a director by Bpifrance to serve on our Board as long as Bpifrance owns at least 5% of our outstanding shares or voting rights. Ms. Ferrere is Bpifrance's designated representative.

B. Compensation

Compensation of Executive Officers and Directors

The aggregate compensation paid and benefits in kind granted by us to our executive officers and directors, including share-based compensation, for the year ended December 31, 2018 was approximately \$3.9 million. For the year ended December 31, 2018, we estimate that approximately \$16,000 of the amounts set aside or accrued to provide pension, retirement or similar benefits to our employees was attributable to our executive officers.

Our non-employee directors, and directors who are permitted to receive remuneration by their employers, are entitled to the following annual compensation:

Attendance fees	\$ 20,000
Attendance fees for lead independent director	\$ 20,000
Attendance fees for board committee chairperson	
Audit committee	\$ 12,000
Compensation committee	\$ 9,000
Nominating and corporate governance committee	\$ 5,000
Attendance fees for board committee members	
Audit committee	\$ 6,000
Compensation committee	\$ 4,500
Nominating and corporate governance committee	\$ 2,500

In addition, our non-employee directors and directors who are so permitted by their employers, are also entitled to the following equity awards:

Annual award for continuing board members⁽¹⁾⁽²⁾ Warrants to purchase 30,000 shares

- (1) The annual equity award for continuing board members has an exercise price equal to the fair market value of the ADSs on the date of grant and will fully vest on the earlier of (a) the three year anniversary of the date of grant of the award and (b) the date immediately preceding the date of the annual meeting of our shareholders for the third year following the year of grant for the award, subject to the non-employee director's continued service to us through the vesting date.

A non-employee director will receive an annual warrant award only if he or she has served on the board of directors for at least the preceding twelve months.

(2) All such awards will become fully vested upon a change of control.

No cash or warrants were awarded to Ms. Fererre in accordance with the restrictions of her employment agreement with Bpifrance Large Venture.

Employment Agreements with Executive Officers

We have entered into a managing director agreement with Georges Karam, our chairman and chief executive officer. See “Item 7.B—Related Party Transactions—Agreements with Executive Officers and Directors—Employment Agreement”. We have entered into standard employment agreements with each of our other executive officers. There are no arrangements or understanding between us and any of our other executive officers providing for benefits upon termination of their employment, other than as required by applicable law.

Equity Plans

Beginning in 2004, we have issued to our employees and consultants stock options, founders' warrants and warrants to purchase our ordinary shares, and restricted share awards. Due to French corporate law and tax considerations, we have issued such equity awards under four types of equity plans, collectively referred to in this discussion as our equity plans. Our equity plans provide for the issue of restricted free shares or stock options to employees pursuant to our Stock Option and Restricted Share Award Plans; warrants to our business partners, including consultants and advisors, who have long-term relationships with us and advise us on a regular basis, pursuant to our BSA Subscription Plans; and prior to our initial public offering in the United States in April 2011, founders' warrants to employees in France until the time of our initial public offering, pursuant to our BCE Subscription Plans. Founders' warrants are a specific type of option available to qualifying young companies in France and have a more favorable tax treatment for both the employee and the employer compared to stock options, but otherwise function in the same manner as stock options, in particular in terms of vesting. Following completion of our initial public offering in the United States in April 2011, we no longer issue founders' warrants.

Under French law, the creation of each of these equity plans and the issuance of the underlying shares must be approved at the shareholders' general meeting. The shareholders may delegate to our board of directors the authority to finalize the form of the plans and to grant the securities within a period that cannot exceed 18 months for restricted share awards, founders' warrants and warrants, and 38 months for stock options. The shareholders have nevertheless historically delegated the authority to our board to grant these securities within a period that cannot exceed 12 months. Once approved by the shareholders' general meeting, these equity plans cannot be extended either in duration or in size. We have therefore implemented new equity plans each year.

From 2004 through March 29, 2019, our shareholders have approved and authorized the issuance of an aggregate of 16,505,500 shares under our equity plans. At March 29, 2019, there were outstanding stock options, founders' warrants and warrants to purchase a total of 5,865,992 of our shares issued under our equity plans at a weighted average exercise price of \$3.11, of which 3,086,200 were held by our directors and executive officers at a weighted average exercise price of \$3.39 per share. Of these outstanding stock options, founders' warrants and warrants, at March 29, 2019, options and warrants to purchase 5,164,166 ordinary shares were vested and exercisable, of which 2,566,992 were held by our directors and executive officers. At March 29, 2019, there were 2,467,390 unvested restricted share awards outstanding, of which 1,232,813 were held by our directors and executive officers. As of March 29, 2019, 289,653 restricted shares (157,812 held by our directors and executive officers) had vested but were not yet freely transferable under the restrictions of the plans.

The stock options, founders' warrants and warrants granted under each of our equity plans were granted on substantially the same terms. In general, vesting of the stock options and founders' warrants occurs over four years, with 25% vesting after an initial 12 months and the remaining 75% vesting monthly over the remaining 36 months or twelve quarters, or may be immediate when linked to employee performance. Restricted shares also generally vest over four years with either 25% vesting after an initial 12 months or 50% vesting after the initial 24 months, and the remainder vesting over the remaining 12 or 8 quarters, respectively. In 2017 only, we added a restricted share plan with vesting based on company financial performance over two years. In addition, restricted shares cannot be sold during the first 24 months after the grant date. In general, vesting of other warrants may be either on a monthly basis over a two-year or four-year period, or may be immediate, depending on the nature of the service contract with the consultant or adviser. The stock options, founders' warrants and warrants generally expire ten years after the date of grant if not exercised earlier. In general, when a stock option, restricted share or founders warrant holder's employment service with us, or a warrant holder's service with us, terminates for any reason, his or her stock options

or restricted shares or founders' warrants or warrants, as the case may be, will no longer continue to vest following termination. The holder may exercise any vested stock options or founders' warrants or warrants for a period of 30-90 days. In the event of death, the holder's heirs or beneficiaries shall have a period of six months to exercise such founders' warrants, stock options or warrants. In the event that a third party acquires a 100% interest in us, an employee holder of stock options, restricted shares and founders' warrants, who is subsequently dismissed has the right to exercise all of his or her options or warrants within 30 days, notwithstanding the current vesting schedule, and all unvested restricted shares shall vest immediately, conditional upon such dismissal being at least one year from grant date and subject to the same requirement to hold the restricted shares until two years from the grant date. In the event of a change of control, as defined in the warrant equity plans subject to vesting, warrants that are not yet exercisable will become exercisable for 30 days following the effective date of the change of control.

Since our public listing in April 2011, the exercise price of the stock options or warrants is the fair market value of the shares on the date of grant as determined by our board of directors, typically the closing price of the ADSs on the grant date. Prior to the public listing, the exercise price of the stock options, founders' warrants and warrants was equal to the estimated fair value of the shares on the date of grant, based on our valuation, as negotiated with new investors, at the time of the last round of financing prior to the grant or based upon independent valuation analyses.

In the event of certain changes in our share capital structure, such as a consolidation or share split or dividend, appropriate adjustments will be made to the numbers of shares and exercise prices under outstanding stock options, founders' warrants and warrants.

The following table provides information regarding the options to purchase our ordinary shares and restricted shares held by each of our directors and officers who beneficially own greater than one percent of our ordinary shares or have options to purchase more than one percent of our ordinary shares as of March 29, 2019:

Name (Title)	Restricted Shares (1)			Options		
	Number Unvested	Number Vested, Trading Restricted	Grant Date Fair Value	Number	Exercise Price	Expiration Date
Dr. Georges Karam, Chairman and Chief Executive Officer	131,250	—	\$1.73	500,000	€6.26 (\$7.67)	Mar. 8, 2021
	93,750	56,250	\$3.67	50,000	\$2.04	Dec. 13, 2022
	262,500	87,500	\$1.73	150,000	\$1.90	Dec. 12, 2023
	500,000		\$0.95	170,000	\$1.58	July 22, 2024
				130,000	\$1.25	Dec. 11, 2024
				98,000	\$1.94	Apr. 21, 2025
				170,000	\$1.55	July 20, 2025
				100,000	\$1.97	Dec. 14, 2025
Bertrand Debray, Chief Operating Officer	13,125	—	\$1.73	150,000	€6.26 (\$7.67)	Mar. 8, 2021
	20,625	9,375	\$1.78	24,000	\$2.04	Dec. 13, 2022
	80,000		\$0.95	24,000	\$1.90	Dec. 12, 2023
				50,000	\$1.58	July 22, 2024
				28,000	\$1.25	Dec. 11, 2024
				50,000	\$1.55	July 20, 2025
				24,000	\$1.97	Dec. 14, 2025

(1) The restricted shares also vest over four years with 25% vesting after an initial 12 months and the remainder vesting over the remaining 36 months. The restricted shares cannot be sold during the first 24 months after the grant date.

C. Board Practices

In accordance with French law governing a *société anonyme*, our business is overseen by our board of directors and by our chairman. The board of directors has appointed Dr. Karam as our chairman, who also serves as our chief executive officer.

Subject to the prior authorization of the board of directors for certain decisions as required under French law, the chief executive officer has full authority to manage our affairs.

Our board of directors is responsible for, among other things, presenting our accounts to our shareholders for their approval and convening shareholder meetings. The board of directors also reviews and monitors our economic, financial and technical strategies. The directors are elected by the shareholders at an ordinary general meeting. Under French law, a director may be an individual or a corporation and the board of directors must be composed at all times of a minimum of three members.

Within the limits set out by the corporate purposes (*objet social*) of our company and the powers expressly granted by law to the shareholders' general meeting, the board of directors may deliberate upon our operations and make any decisions in accordance with our business. However, a director must abstain from voting on matters in which the director has an interest. The board of directors can only deliberate if at least half of the directors attend the meeting in the manners provided for in our by-laws. Decisions of the board of directors are taken by the majority of the directors present or represented. Under French law, our directors and chief executive officer may not, under any circumstances, borrow money from us or obtain an extension of credit or obtain a surety from us.

Our board of directors currently consists of nine directors, which is the maximum permitted under our by-laws. Pursuant to the terms of senior debt issued to Harbert European Special Lending Company II S.a.r.l. ("Harbert"), the Board approved on October 23, 2018, the nomination of an observer to the Board representing Harbert. Our board of directors has determined that each of Messrs. Cummins, Maitre, Nottenburg, de Pesquidoux, Pitteloud and Slonimsky and Ms. Ferrere qualify as independent under the applicable rules and regulations of the SEC and the NYSE.

Under our by-laws, the sections of the by-laws relating to the number of directors, election and removal of a director from office may be modified only by a resolution adopted by 66 2/3% of our shareholders present or represented. A director's term expires at the end of the ordinary shareholders' general meeting convened to vote upon the accounts of the then-preceding fiscal year and is held in the year during which the term of such director comes to an end unless such director's term expires earlier in the event of a resignation or removal. The following table sets forth the names of the directors of our company, the dates of their initial appointment as directors and the expiration dates of their current term.

Name	Current position	Year of appointment	Term expiration year
Georges Karam	Chairman	2003	2021
Wesley Cummins	Director	2018	2021
Mailys Ferrere	Director	2017	2020
Yves Maitre	Director	2014	2020
Richard Nottenburg	Director	2016	2019
Hubert de Pesquidoux	Director	2011	2020
Dominique Pitteloud	Director	2005	2019
Alok Sharma	Director	2011	2019
Zvi Slonimsky	Director	2006	2021
Mailys Ferrere	Director	2017	2020

Each director is elected for a three-year term by a vote of the majority of the shareholders present or represented. Under French law, a director who is an individual cannot serve on more than five boards of directors or supervisory boards in corporations (*société anonyme*) registered in France; directorships in companies controlled by us, as defined in article L.233-16 of the French Commercial Code, are not taken into account.

Directors may resign at any time and their position as members of the board of directors may be revoked at any time by a majority vote of the shareholders present or represented at a shareholders' general meeting, excluding abstentions. The number of directors who are over 70 years old may not exceed one third of the total number of directors and the chairman of our board must not be over 65 years old. A director does not need to be a French national and there is no limitation on the number of terms that a director may serve. In case of removal without cause, directors may be entitled to damages.

Vacancies on our board of directors, including vacancies resulting from there being fewer than the maximum number of directors permitted by our by-laws, provided there are at least three directors remaining, may be filled by a vote of a simple majority of the directors then in office. The appointment must then be ratified by the next shareholders' general meeting.

Directors chosen or appointed to fill a vacancy shall be elected by the board for the remaining duration of the current term of the replaced director. In the event the board would be composed of less than three directors as a result of a vacancy, meetings of the board of directors shall no longer be permitted to be held except to immediately convene a shareholders' general meeting to elect one or several new directors so there are at least three directors serving on the board of directors, in accordance with French law.

Under French law, employees may be elected to serve as a director. However, such employee-director must perform actual functions separate from his/her role as director in order to retain the benefit of his/her employment agreement. The number of directors who are our employees cannot exceed one third of the directors then in office. No director can enter into an employment agreement with us after his/her election to the board of directors.

French law requires that companies having at least 50 employees for a period of 12 consecutive months have a *Comité d'Entreprise*, or Workers' Council, composed of representatives elected from among the personnel. Our Workers' Council was formed in 2007. Two of these representatives are entitled to attend all meetings of the board of directors and the shareholders, but they do not have any voting rights.

Directors are required to comply with applicable law and with our by-laws. Our directors may be jointly and severally liable for actions that they take that are contrary to our interests. Directors are jointly and severally liable for collective decisions. However, each director may avoid liability by proving that he or she acted diligently and with caution, in particular by not approving the decision at issue or even by resigning in the event of certain critical situations. In certain critical situations, in order to avoid liability for decisions made by the board, a director must resign from his or her office. Directors may be individually liable for actions fully attributable to them in connection with a specific mission assigned to them by the board of directors. As a director, the chairman of the board is liable under the same conditions. The chief executive officer may be liable with respect to third parties if he commits a fault that is severable from his duties and which is only attributable to him.

Directors' Service Contracts

See "Item 7.B—Related Party Transactions—Agreements with Executive Officers and Directors—Director Compensation and Agreements". There are no arrangements or understandings between us and any of our non-employee directors providing for benefits upon termination of their employment or service as directors of our company, other than as required by applicable law.

Board Leadership Structure

We believe that the interests of our shareholders are best served by maintaining our Board of Directors' flexibility in determining the board leadership structure that is best suited to the needs of the Company at any particular time. Our Board Internal Charter provides that where the Chairman is also the Chief Executive Officer, the independent directors will appoint a lead independent director to coordinate their efforts and activities. Yves Maitre currently services as lead independent director. The defined role of the lead independent director is designed to ensure a strong, independent and active Board of Directors. As set forth in the Board Internal Charter, the lead independent director has clearly delineated and comprehensive duties. These duties include:

- Presiding at all meetings of the board at which the chairman is not present, including executive sessions of the independent directors.
- Calling meetings of the independent directors.
- Serving as liaison between the independent directors and the chairman and chief executive officer.
- Collecting feedback from the board members in order to help the chairman finalize the meeting agendas.
- Based on feedback from the other board members, recommending to the chairman that a special board of directors meeting be called focused on a specific agenda.
- If a shareholder requests to talk with an independent director and not to the chairman and/or the chief executive officer, representing the board of directors for such communication in coordination with the chairman.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee.

Audit Committee

Our audit committee consists of Hubert de Pesquidoux, Richard Nottenburg and Dominique Pitteloud, with Mr. de Pesquidoux serving as chairperson. Our audit committee oversees our corporate accounting and financial reporting process and internal controls over financial reporting. Our audit committee evaluates the independent registered public accounting firm's qualifications, independence and performance; recommends to the shareholders with respect to the identity and compensation of the independent registered public accounting firm; approves the retention of the independent registered public accounting firm to perform any proposed permissible non-audit services; reviews our Consolidated Financial Statements; reviews our critical accounting policies and estimates and internal controls over financial reporting; discusses with management and the independent registered public accounting firm the results of the annual audit and the reviews of our quarterly Consolidated Financial Statements; and reviews the scope and results of internal audits and evaluates the performance of the internal auditor. Our board of directors has determined that each of our audit committee members meets the requirements for independence and financial literacy under the applicable rules and regulations of the SEC and the NYSE. Our board of directors has determined that Mr. de Pesquidoux is an audit committee financial expert as defined under the applicable rules of the SEC and has the requisite financial sophistication under the applicable rules and regulations of the NYSE. The audit committee operates under a written charter that satisfies the applicable rules of the SEC and the NYSE.

Compensation Committee

Our compensation committee consists of Zvi Slonimsky, Richard Nottenburg and Dominique Pitteloud, with Mr. Slonimsky serving as chairperson. Our compensation committee reviews and recommends policies relating to the compensation and benefits of our officers and employees, which includes reviewing and approving corporate goals and objectives relevant to compensation of our chief executive officer and other senior officers, evaluating the performance of these officers in light of those goals and objectives and setting compensation of these officers based on such evaluations. The compensation committee also recommends to the board of directors the issue of stock options and other awards. Our board of directors has determined that each member of our compensation committee meets the requirements for independence under the applicable rules and regulations of the SEC and the NYSE. The compensation committee operates under a written charter.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Yves Maitre and Zvi Slonimsky, with Mr. Maitre serving as chairperson. The nominating and corporate governance committee is responsible for making recommendations regarding candidates for directorships and the size and composition of our board. In making such recommendations, the nominating and corporate governance committee considers the skills and experience of the directors or nominees in the context of the needs of our board of directors as well as the directors' or nominees' diversity of skills and experience in areas that are relevant to our business and activities. In addition, the nominating and corporate governance committee is responsible for overseeing our corporate governance guidelines and reporting and making recommendations concerning governance matters. Our board of directors has determined that each member of our nominating and corporate governance committee meets the requirements for independence under the applicable rules and regulations of the NYSE. The nominating and corporate governance committee operates under a written charter.

D. *Employees*

At December 31, 2018, we had 227 full-time employees, of whom 148 were located in France, 23 were in the United Kingdom, 18 were in the United States, 9 were in Singapore, 9 were in Israel, 8 were in China, 5 were in Taiwan, 4 were in Sweden, and there was one employee in each of South Korea, Ukraine and Hong Kong. Management considers labor relations to be good. We also have independent contractors and consultants. At December 31, 2018, we had 29 dedicated engineers from Global Logic in Ukraine for software development and testing, and also had 17 independent contractors in both research and development and sales and marketing in France, Finland, the United Kingdom, the United States and Japan.

At each date shown, we had the following employees, broken out by department and geography:

	At December 31,		
	2016	2017	2018
Department:			
Research and development	148	185	176
Sales and marketing	41	26	24
General and administration	17	19	21
Operations	7	8	6
Total	213	238	227
Geography:			
Europe, Middle East, Africa	165	188	185
Asia	28	31	24
Americas	20	19	18
Total	213	238	227

E. *Share Ownership*

For information regarding the share ownership of our directors and executive officers, please refer to “Item 6.B.—Compensation—Equity Plans” and “Item 7.A—Major Shareholders.”

Item 7. Major Shareholders and Related Party Transactions

A. *Major Shareholders*

The following table sets forth information with respect to the beneficial ownership of our shares as of March 29, 2019:

- each person, or group of affiliated persons, known by us to own beneficially more than 5% of our outstanding ADSs or ordinary shares;
- each of our executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting or investment power with respect to those securities, and include shares subject to options that are exercisable within 60 days after the date of this annual report. Such shares are also deemed outstanding for purposes of computing the percentage ownership of the person holding the option, but not the percentage ownership of any other person.

For the purpose of calculating the percentage of shares beneficially owned by any shareholder, this table lists applicable percentage ownership based on 94,934,713 ordinary shares outstanding as of March 29, 2019.

Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares. To our knowledge, none of our selling shareholders is a broker-dealer or is affiliated with a broker-dealer.

Unless otherwise indicated in the footnotes to the table, the address of each individual listed in the table is c/o Sequans Communications S.A., 15-55 boulevard Charles de Gaulle, 92700 Colombes, France.

	Ordinary Shares Beneficially Owned	
	Number	Percent
5% Shareholders		
Bpifrance Participations ⁽¹⁾	12,085,561	12.7%
Nokomis Capital, L.L.C. ⁽²⁾	9,609,513	9.9%
AWM Investment Co. Participations ⁽³⁾	9,214,784	9.7%
Divisar Partners QP, L.P. ⁽⁴⁾	7,170,592	7.6%
Dr. Georges Karam ⁽⁵⁾	4,414,992	4.6%
Executive Officers and Directors		
Dr. Georges Karam ⁽⁵⁾	4,414,992	4.6%
Deborah Choate ⁽⁶⁾	362,920	*
Wesley Cummins	-	-
Bertrand Debray ⁽⁷⁾	1,205,284	1.3%
Didier Dutronc ⁽⁸⁾	125,823	*
Mailys Ferrere	-	-
Yves Maitre ⁽⁹⁾	201,696	*
Richard Nottenburg ⁽¹⁰⁾	636,674	*
Hubert de Pesquidoux ⁽¹¹⁾	122,736	*
Dominique Pitteloud ⁽¹²⁾	150,333	*
Alok Sharma ⁽¹³⁾	110,514	*
Zvi Slonimsky ⁽¹⁴⁾	130,723	*
Nikhil Taluja ⁽¹⁵⁾	172,292	*
All executive officers and directors as a group (13 persons) ⁽¹⁶⁾	7,633,987	7.8%

* Represents beneficial ownership of less than 1%.

- (1) Based on a Schedule 13D/A filed with the SEC on January 18, 2018 and information provided to the Company. Includes 12,085,561 shares held by Bpifrance Participations S.A., or Bpifrance. Bpifrance is the wholly owned subsidiary of BPI-Groupe (bpifrance), or BPI. The Caisse des Dépôts et Consignations, or CDC, and EPIC BPI-Groupe, or EPIC, each hold 50% of the share capital of BPI and jointly control BPI. Nicolas Dufourcq is the Chief Executive Officer of Bpifrance and he may be deemed to have shared voting and investment power over the shares held by Bpifrance. Paul-François Fournier is the director of the Innovation Business Unit of Bpifrance and Mailys Ferrère is the director of the Large Venture Fund of Bpifrance, and they may be deemed to have shared voting and investment power over the shares held by Bpifrance. None of BPI, CDC, EPIC, Nicolas Dufourcq, Paul-François Fournier or Mailys Ferrère holds any shares directly. BPI may be deemed to be the beneficial owner of 12,085,561 shares, indirectly through its sole ownership of Bpifrance. CDC and EPIC may be deemed to be the beneficial owner of 12,085,561 shares, indirectly through their joint ownership and control of BPI. Nicolas Dufourcq, Paul-François Fournier and Mailys Ferrère disclaim beneficial ownership of the shares held by Bpifrance. The principal address for Bpifrance, BPI, EPIC, and Nicolas Dufourcq is 6-8 Boulevard Haussmann, 75009 Paris, France.
- (2) Based on a Schedule 13D/A filed with the SEC on January 23, 2018. Includes 7,628,513 shares held by Nokomis Capital, L.L.C., or Nokomis Capital, purchased by Nokomis Capital through the accounts of certain private funds and managed accounts (collectively, the Nokomis Accounts) and approximately 1,981,000 Ordinary Shares receivable upon conversion of presently convertible notes. Nokomis Capital is prohibited from converting the presently convertible notes held by them to obtain ownership in excess of 9.9%. Nokomis Capital serves as the investment adviser to the Nokomis Accounts and may direct the voting and disposition of the shares held by the Nokomis Accounts. As the principal of Nokomis Capital, Brett Hendrickson holds voting and investment power with respect to all securities beneficially owned by the Nokomis Accounts. The address of Nokomis Capital is 2305 Cedar Springs Rd., Suite 420, Dallas, TX 75201.
- (3) Based on a Schedule 13G/A filed with the SEC on February 13, 2019. Includes 9,214,784 shares held by AWM Investment Company, Inc., a Delaware corporation ("AWM"), that is the investment adviser to Special Situations Cayman Fund, L.P., a Cayman Island limited partnership ("CAYMAN"), Special Situations Fund III QP, L.P., a Delaware limited partnership ("SSFQP") Special Situations Private Equity Fund, L.P., a Delaware limited partnership ("SSPE"), Special Situations Technology Fund, L.P., a Delaware limited partnership ("TECH") and Special Situations

Technology Fund II, L.P., a Delaware limited partnership ("TECH II"), (CAYMAN, SSFQP, SSPE, TECH and TECH II, will hereafter be referred to as the "Funds"). As the investment adviser to the Funds, AWM holds sole voting and investment power over 821,877 held by CAYMAN, 2,419,276 shares held by SSFQP, 943,621 shares held by SSPE, 743,566 Shares held by TECH and 4,286,444 Shares held by TECH II. Austin W. Marxe ("Marxe"), David M. Greenhouse ("Greenhouse") and Adam C. Stettner ("Stettner") are members of: SSCayman, L.L.C., a Delaware limited liability company ("SSCAY"), the general partner of CAYMAN; MGP Advisers Limited Partnership, a Delaware limited partnership ("MGP"), the general partner of SSFQP; MG Advisers, L.L.C., a New York limited liability company ("MG"), the general partner of SSPE; and SST Advisers, L.L.C., a Delaware limited liability company ("SSTA"), the general partner of TECH and TECH II. Marxe, Greenhouse and Stettner are also controlling principals of AWM. The principal business address for AWM is c/o Special Situations Funds, 527 Madison Avenue, Suite 2600, New York, NY 10022.

- (4) *Based on a Schedule 13G/A filed with the SEC on February 13, 2019. Includes 6,611,096 shares held by Divisar Partners QP, LP and 559,496 shares held by Divisar Partners, L.P.. Divisar Capital Management LLC is an investment advisor that is registered under the Investment Advisors Act of 1940. Divisar Capital Management LLC, which serves as the general partner and investment manager to each of Divisar Partners QP, L.P. and Divisar Partners, L.P., (collectively "the Funds"), may be deemed to be the beneficial owner of all shares held by the Funds. Mr. Steven Baughman, as Managing Member of Divisar Capital Management LLC, with the power to exercise investment and voting discretion, may be deemed to be the beneficial owner of all shares held by the Funds. Pursuant to Rule 13d-4 under the Securities Exchange Act of 1934, as amended, each of the Funds expressly disclaims beneficial ownership over any of the securities reported in this statement, and the filing of this statement shall not be construed as an admission that either of the Funds are the beneficial owner of any of the securities reported herein.*
- (5) *Includes 1,374,458 shares subject to options that are exercisable and restricted shares that vest within 60 days of March 29, 2019.*
- (6) *Includes 302,617 shares subject to options that are exercisable and restricted shares that vest within 60 days of March 29, 2019.*
- (7) *Includes 91,200 shares held by Mr. Debray as custodian for his sons. Includes 344,417 shares subject to options that are exercisable and restricted shares that vest within 60 days of March 29, 2019.*
- (8) *Includes 65,833 shares subject to options that are exercisable and restricted shares that vest within 60 days of March 29, 2019.*
- (9) *Includes 58,333 shares subject to warrants that are exercisable within 60 days of March 29, 2019.*
- (10) *Includes 36,667 shares subject to warrants that are exercisable within 60 days of March 29, 2019.*
- (11) *Includes 80,333 shares subject to warrants that are exercisable within 60 days of March 29, 2019.*
- (12) *Includes 80,333 shares subject to warrants that are exercisable within 60 days of March 29, 2019.*
- (13) *Includes 80,333 shares subject to warrants that are exercisable within 60 days of March 29, 2019.*
- (14) *Includes 80,333 shares subject to warrants that are exercisable within 60 days of March 29, 2019.*
- (15) *Includes 127,292 shares subject to options that are exercisable and restricted shares that vest within 60 days of March 29, 2019.*
- (16) *Includes 2,630,949 shares subject to options and warrants that are exercisable and restricted shares that vest within 60 days of March 29, 2019.*

None of our principal shareholders have voting rights different than our other shareholders.

At March 29, 2019, there were 94,242,240 of our ADSs outstanding, representing 94,723,505 our ordinary shares or 99.8% of our outstanding ordinary shares. At such date, there were 222 holders of record registered with the Bank of New York Mellon, depository of our ADSs.

B. Related Party Transactions

Since January 1, 2018, we have engaged in the following transactions with our directors and executive officers, holders of more than 5% of our voting securities and affiliates of our directors, executive officers and 5% shareholders.

Under French law, agreements entered into directly or indirectly between us and either one of our officers or one of our shareholders owning more than 10% of our shares, or any company controlling one of our shareholders owning more than 10% of our shares, are subject to the prior approval of the board of directors and must be ratified by our ordinary shareholders' general meetings on the basis of a specific report issued by our statutory auditors on such agreements. Our managing director agreement with Georges Karam described below has been submitted to the prior approval of the board of directors and have been or will be submitted to our shareholders at each annual shareholders' general meeting.

Agreements with Major Shareholders

Bpifrance

In October 2014, Bpifrance, the financial agency of the French government, provided funding to the Company in the context of a long-term research project, estimated to be completed over a 3-year period. In December 2016, Bpifrance and the Company signed an amendment to extend the period from three to four years. The total funding remains unchanged and amounts to €6,967,000 (\$8,988,000) comprising a portion in the form of a grant (€2,957,000 or \$3,815,000) and a portion in the form of a forgivable loan (€4,010,000 or \$5,173,000). The funding will be paid in three installments: the first tranche at the contract signature date, the second and the third installments after milestones defined in the contract. The forgivable loan advance will be repaid, except if the project is a commercial failure, from March 31, 2019 to September 30, 2022 and bears interest at a 1.53% fixed contractual rate. In the event of commercial success, defined as sales of the product developed under this program in excess of €350 million (\$425 million) during a period of three years, then the Company shall pay a bonus to Bpifrance of 1% of annual revenues generated by products issued from the project.

In September 2015, the Company received two loans from the financial agency of the French government for a total amount of €2 million (\$2.2 million). One loan of €1 million bears interest at 5.24% per year, paid quarterly; the second loan of €1 million is interest-free. The interest-free loan has been revalued using the 5.24% interest rate payable on the other loan. Both loans have seven-year terms with the principal being amortized on a quarterly basis beginning in September 2017.

In January 2016, Bpifrance provided funding to the Company for a new long-term research project, estimated to be completed over a 27-month period. The total of the funding amounts to €2,095,000 (\$2,288,000) comprising a portion in the form of a grant (€668,000 or \$729,000) and a portion in the form of a forgivable loan (€1,427,000 or \$1,558,000). The funding will be paid in four installments: the first tranche at the contract signature date, the second, the third and the fourth installments after milestones defined in the contract. The forgivable loan advance will be repaid, except if the project is a commercial failure, from July 1, 2020 to July 1, 2024 and bears interests at a 1.17% fixed contractual rate. In the event of commercial success, defined as sales of the product developed under this program in excess of €3 million (\$3.3 million), then the Company shall pay for 4 consecutive years after the date of the termination of the refund 13% of the revenues generated by the sales of the products or services (up to a maximum of €600,000, or \$655,000, over a period of 10 years).

On January 18, 2018, Bpifrance Participations purchased 3,125,000 ADSs, each ADS representing one ordinary share, at a price of \$1.60 per ADS in connection with our public offering in which we issued a total of 14,375,000 ordinary shares.

Nokomis Capital, L.L.C.

In April 2015, we completed the sale of a \$12 million convertible note to an affiliate of Nokomis Capital, L.L.C. in a private placement transaction. The convertible note is an unsecured obligation of the Company, was to mature in April 2018 and bears interest at a rate of 7% per year, paid in kind annually on the anniversary of the issuance of the note. The note is convertible, at the holder's option, into the company's ADSs at a conversion rate of \$1.85 per ADS. On April 27, 2016, we completed the sale of a \$6.0 million convertible note to an affiliate of Nokomis Capital, L.L.C. in a private placement transaction. The convertible note is an unsecured obligation of the Company, was to mature in April 2019 and bear interest at a rate of 7% per year, paid in kind annually on the anniversary of the issuance of the notes. The notes are convertible, at the holder's option, into the Company's ADSs at a conversion price of \$2.7126 per ADS. In 2017, we amended the terms of both notes to extend the maturity dates each by one year and to change the conversion price of the notes issued in 2016 from \$2.7126 per ADS to \$2.25 per ADS. As part of the agreement, a representative of Nokomis Capital, L.L.C. became a board observer in November 2017 and became a board member after approval of shareholders at the June 2018 annual meeting.

On January 18, 2018, Nokomis Capital, L.L.C. purchased 3,125,000 ADSs, each ADS representing one ordinary share, at a price of \$1.60 per ADS in connection with our public offering in which we issued a total of 14,375,000 ordinary shares.

On September 27, 2018, the Company amended the terms of the convertible note issued to Nokomis Capital, L.L.C. in 2015 to extend by two years the maturity of the note to April 14, 2021. In addition, the conversion price was reduced from \$1.85 to \$1.70. Lastly, Nokomis Capital, L.L.C. agreed to subordinate this note to new debt then in negotiation by the Company. Also, on September 27, 2018, the Company amended the terms of the convertible note issued to Nokomis Capital, L.L.C. in 2016 to subordinate the note to the new debt then in negotiation by the Company.

On September 27, 2018, the Company issued and sold a convertible note in the principal amount of \$4.5 million to Nokomis Capital, L.L.C. This note shall be convertible into the Company's ADSs at a conversion price of \$1.70 per ADS and otherwise has the same terms as the convertible note issued in April 2015, as amended. It is an unsecured obligation of the Company, will mature on April 14, 2021 and is not redeemable prior to maturity at the option of the Company.

Also, on September 27, 2018, the Company issued to Nokomis Capital, L.L.C., for a total subscription price of \$1.00, warrants to acquire 1,800,000 ADSs at an exercise price of \$1.70 per ADS. Such warrants are exercisable at any time and expire April 14, 2021.

On October 26, 2018, the Company further amended the convertible notes with Nokomis Capital, L.L.C. issued in 2015, 2016 and 2018 to clarify the terms of the subordination of these convertible notes to the Company's new bondholder.

On April 30, 2019, Nokomis Capital, L.L.C. issued a firm commitment to purchase a new convertible note for \$3 million, converting at \$1.21 per ADS, on substantially similar terms as their convertible note issued in April 2015 with a maturity in April 2021.

Agreements with Executive Officers and Directors

Employment Agreement

We have entered into a managing director agreement with Georges Karam, our chairman and chief executive officer, which contains provisions regarding salary, severance payment and benefits. If Dr. Karam is terminated for any reason, he is entitled to a lump sum severance payment equal to one year of base salary and bonus, plus accelerated vesting of his founders' warrants, stock options and restricted share awards. In accordance with French law, our chief executive officer ("directeur général" or "managing director") cannot be an employee in connection with the performance of his duties in such capacity. The managing director agreement entered into with Dr. Karam does not constitute and does not contain the compulsory provisions under French law to be construed as, an employment agreement. Therefore, Dr. Karam does not benefit from the status of employee nor from any benefit that French laws and regulations grant to employees. The managing director agreement only sets forth the terms and conditions, including compensation, under which Dr. Karam performs his duties as chief executive officer.

Director Compensation and Agreements

The non-employee members of our board of directors and directors who are permitted to receive remuneration by their employers, receive compensation based on our director compensation policy. A description of the cash compensation and equity awards that non-employee members of our board of directors will be entitled to receive is described under "Item 6. B—Compensation—Compensation of Executive Officers and Directors".

Other Agreements

On April 30, 2019, Dr. Karam issued a commitment to loan up to \$700,000 to the Company, if the Company needs additional liquidity.

Stock Options, Founders' Warrants and Warrants

Since our inception, we have granted restricted shares, stock options, founders' warrants and warrants to purchase our shares to certain of our executive officers and to our non-employee directors and directors who are permitted by their employers to receive warrants. For more information about our option and warrant plans see "Item 6. B—Compensation—Equity Plans".

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

Consolidated Financial Statements

We have appended our consolidated financial statements at the end of this annual report, starting at page F-1, as part of this annual report.

Legal Proceedings

On August 9, 2017, a putative securities class action captioned Andrew Renner v. Sequans Communications S.A., Georges Karam, and Deborah Choate (Case 1:17-cv-04665) was filed in the U.S. District Court for the Eastern District of New

York. The plaintiff alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 based on purported misrepresentations regarding Sequans' revenue recognition policy in the Company's Form 20-F annual reports filed on April 29, 2016 and March 31, 2017. The complaint seeks unspecified damages and costs and fees. On August 10, 2017, an almost identical class action complaint captioned Kevin Shillito v. Sequans Communications S.A., Georges Karam, and Deborah Choate (Case 2:17-cv-04707) was filed in the same court. On September 28, 2017, the Shillito action was consolidated with the Renner action. On October 10, 2017, candidates to be the lead plaintiff filed motions to appoint a lead plaintiff and lead counsel. On February 6, 2018, the Court appointed the lead plaintiffs and lead counsel. Lead plaintiffs filed their Consolidated Amended Complaint (the "CAC") on April 9, 2018, which did not significantly alter the allegations made in the earlier pleadings. On May 24, 2018, the Company, Mr. Karam and Ms. Choate filed a pre-motion letter requesting permission to file a motion to dismiss the CAC, a request that was granted on August 21, 2018. The motion to dismiss was fully briefed and filed (along with lead plaintiffs' opposition briefing) on November 30, 2018. On December 12, 2018, at the parties' request, the Court stayed the action pending a scheduled mediation. The mediation occurred on February 7, 2019, but did not result in a resolution of the case. On February 12, 2019, the Court lifted the stay, and the parties await the Court's decision on the previously-filed motion to dismiss.

We are not a party to any other material legal proceedings.

Dividend Policy

We have never declared or paid any cash dividends on our ordinary shares. We do not anticipate paying any cash dividends on our ordinary shares in the foreseeable future and intend to retain all available funds and any future earnings for use in the operation and expansion of our business.

Subject to the requirements of French law and our by-laws, dividends may only be distributed from our statutory retained earnings. See "Item 10. B—Memorandum and Articles of Association" for further details on the limitations on our ability to declare and pay dividends. Dividend distributions, if any, will be made in euros and converted into U.S. dollars with respect to the ADSs, as provided in the deposit agreement.

B. Significant Changes

No significant changes have occurred since December 31, 2018, except as otherwise disclosed in this annual report.

Item 9. The Offer and Listing

A. Listing Details

Our ADSs have been listed on the New York Stock Exchange under the symbol "SQNS" since April 15, 2011. Prior to that date, there was no public trading market for ADSs or our ordinary shares.

B. Plan of Distribution

Not applicable.

C. Markets

Our ADS have been listed on the New York Stock Exchange under the symbol "SQNS" since April 15, 2011.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. *Expenses of the Issue*

Not applicable.

Item 10. Additional Information

A. *Share Capital*

Not applicable.

B. *Memorandum and Articles of Association*

The information set forth in our Registration Statement on Form F-3 (File No. 333-221919), filed with the SEC on December 6, 2017, under the heading “Description of Share Capital” is incorporated herein by reference.

C. *Material Contracts*

With the exception of the material agreements described in “Item 7.B Related Party Transactions—Agreements with Major Shareholders”, all contracts concluded by the Company during the two years preceding the date of this annual report were entered into in the ordinary course of business.

D. *Exchange Controls*

Under current French foreign exchange control regulations there are no limitations on the amount of cash payments that we may remit to residents of foreign countries. Laws and regulations concerning foreign exchange controls do, however, require that all payments or transfers of funds made by a French resident to a non-resident be handled by an accredited intermediary. All registered banks and substantially all credit institutions in France are accredited intermediaries.

E. *Taxation*

Material United States Federal Income Tax Consequences

The following is a description of the material United States federal income tax consequences of the acquisition, ownership and disposition of the ADSs. This description addresses only the United States federal income tax consequences to holders that are purchasers of the ADSs and hold such ADSs as capital assets (generally property held for investment). This description does not address tax considerations applicable to holders that may be subject to special tax rules, including:

- financial institutions or insurance companies;
- real estate investment trusts, regulated investment companies or grantor trusts;
- dealers or traders in securities or currencies;
- tax-exempt entities;
- certain former citizens or former long-term residents of the United States;
- persons that received the ADSs as compensation for the performance of services;
- persons that will hold the ADSs as part of a “hedging” or “conversion” transaction or as a position in a “straddle” for United States federal income tax purposes;
- holders that will hold the ADSs through a partnership or other pass-through entity;
- U.S. Holders, as defined below, whose “functional currency” is not the United States dollar; or
- holders that own, directly, indirectly or through attribution, 10.0% or more of the voting power or value of our shares.

Moreover, this description does not address the United States federal estate and gift or alternative minimum tax, or foreign, state or local tax, consequences of the acquisition, ownership and disposition of the ADSs.

This description is based on the United States Internal Revenue Code of 1986, as amended, or the “Code”, existing, proposed and temporary United States Treasury Regulations and judicial and administrative interpretations thereof, in each case as in effect and available on the date hereof. All of the foregoing is subject to change, which change could apply retroactively and could affect the tax consequences described below.

For purposes of this description, a “U.S. Holder” is a beneficial owner of the ADSs that, for United States federal income tax purposes, is:

- a citizen or resident of the United States;

- a corporation or other entity treated as a corporation for United States federal income tax purposes, created or organized in or under the laws of the United States or any state thereof, including the District of Columbia;
- an estate the income of which is subject to United States federal income taxation regardless of its source; or
- a trust if such trust has validly elected to be treated as a United States person for United States federal income tax purposes or if (1) a court within the United States is able to exercise primary supervision over its administration and (2) one or more United States persons have the authority to control all of the substantial decisions of such trust.

A “Non-U.S. Holder” is a beneficial owner of the ADSs that is neither a U.S. Holder nor a partnership, or other entity or arrangement treated as a partnership, for United States federal income tax purposes.

If a partnership or any other entity or arrangement treated as a partnership for United States federal income tax purposes holds the ADSs, the tax treatment of a partner in such partnership will depend on the status of the partner and the activities of the partnership. Such a partner or partnership is encouraged to consult its tax advisor as to its tax consequences.

You are encouraged to consult your tax advisor with respect to United States federal, state, local and foreign tax consequences of acquiring, owning and disposing of the ADSs.

For United States federal income tax purposes, you will be treated as the owner of our ordinary shares represented by your ADSs. Exchanges of ordinary shares for ADSs, and ADSs for ordinary shares, will not be subject to United States federal income tax.

Distributions with Respect to ADSs

If you are a U.S. Holder, for United States federal income tax purposes, the gross amount of any distribution made to you with respect to your ADSs (other than certain distributions, if any, of the ADSs distributed pro rata to all our shareholders), before reduction for any French taxes withheld therefrom, will be includible in your income as dividend income to the extent such distribution is paid out of our current or accumulated earnings and profits as determined under United States federal income tax principles. Subject to the discussion below under “Passive Foreign Investment Company Considerations”, non-corporate U.S. Holders may qualify for the lower rates of taxation with respect to dividends on ADSs applicable to long-term capital gains (i.e., gains from the sale of capital assets held for more than one year), provided that certain conditions are met, including certain holding period requirements and the absence of certain risk reduction transactions. However, such dividends will not be eligible for the dividends received deduction generally allowed to corporate U.S. Holders. Subject to the discussion below under “Passive Foreign Investment Company Considerations”, to the extent, if any, that the amount of any distribution by us exceeds our current and accumulated earnings and profits as determined under United States federal income tax principles, such excess amount will be treated first as a tax-free return of your adjusted tax basis in your ADSs and thereafter as capital gain. We do not expect to maintain calculations of our earnings and profits under United States federal income tax principles and, therefore, if you are a U.S. Holder you should expect that the entire amount of any distribution generally will be reported as dividend income to you.

Dividends, if any, paid to U.S. Holders in euros or currency other than the U.S. dollar (“Other Foreign Currency”) will be includible in income in a U.S. dollar amount based on the prevailing spot market exchange rate in effect on the date of actual or constructive receipt, whether or not converted into U.S. dollars at that time. Assuming dividends received in euros (or Other Foreign Currency) are converted into U.S. dollars on the day they are received, the U.S. Holder will not be required to recognize foreign currency gain or loss in respect of the dividend income. If, however, the payment is not converted at that time, a U.S. Holder will have a tax basis in euros (or Other Foreign Currency) equal to the U.S. dollar amount of the dividend included in income, which will be used to measure gain or loss from subsequent changes in exchange rates. Any gain or loss that a U.S. Holder recognizes on a subsequent conversion of euros (or Other Foreign Currency) into U.S. dollars (or on other disposition) will be U.S. source ordinary income or loss. U.S. Holders should consult their own tax advisors regarding the tax consequences to them if the dividends are paid in euros (or Other Foreign Currency).

Subject to certain conditions and limitations, French tax withheld on dividends may be deducted from your taxable income or credited against your United States federal income tax liability. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends, if any, that we distribute will constitute “passive category income”, or, in the case of certain U.S. Holders, “general category income”. A foreign tax credit for foreign taxes imposed on distributions may be denied if you do not satisfy certain minimum holding period requirements or if you engage in certain risk reduction transactions. If you are a U.S. Holder, dividends, if any, paid to you with respect to your ADSs will be treated as foreign source income, which may be relevant in calculating your foreign tax credit limitation. The rules relating to the determination of the foreign tax credit are complex, and you are encouraged to consult your tax advisor to determine whether and to what extent you will be entitled to this credit.

Subject to the discussion below under “Backup Withholding Tax and Information Reporting Requirements”, if you are a Non-U.S. Holder, you should not be subject to United States federal income or withholding tax on dividends received by you on your ADSs unless such income is effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base).

Sale, Exchange or Other Disposition of ADSs

Subject to the discussion below under “Passive Foreign Investment Company Considerations”, if you are a U.S. Holder, you will recognize capital gain or loss on the sale, exchange or other disposition of your ADSs equal to the difference between the amount realized on such sale, exchange or other disposition and your adjusted tax basis in your ADSs. If you are a non-corporate U.S. Holder, capital gain from the sale, exchange or other disposition of ADSs will be eligible for the preferential rate of taxation applicable to long-term capital gains if your holding period for such ADSs exceeds one year (i.e., such gain is long-term capital gain). Gain or loss, if any, recognized by a U.S. Holder will be treated as U.S. source gain or loss, as the case may be, for foreign tax credit limitation purposes. The deductibility of capital losses for United States federal income tax purposes is subject to limitations.

Subject to the discussion below under “Backup Withholding Tax and Information Reporting Requirements”, if you are a Non-U.S. Holder, you will not be subject to United States federal income or withholding tax on any gain realized on the sale or exchange of your ADSs unless:

- such gain is effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base); or
- you are an individual and have been present in the United States for 183 days or more in the taxable year of such sale or exchange and certain other conditions are met.

Passive Foreign Investment Company Considerations

A non-U.S. corporation will be classified as a “passive foreign investment company”, or a PFIC, for United States federal income tax purposes for any taxable year in which, after applying certain look-through rules, either

- at least 75% of its gross income is “passive income”; or
- at least 50% of the average value of its gross assets is attributable to assets that produce “passive income” or are held for the production of passive income.

Passive income for this purpose includes dividends, interest, royalties, rents, gains from commodities and securities transactions and the excess of gains over losses from the disposition of assets which produce passive income, including amounts derived by reason of the investment of funds raised in offerings of the ADSs. If a non-U.S. corporation owns at least 25% by value of the stock of another corporation, the non-U.S. corporation is treated for purposes of the PFIC tests as owning its proportionate share of the assets of the other corporation and as receiving directly its proportionate share of the other corporation’s income.

Based on the character of our gross income and the average value of our passive assets relative to the gross value of our assets for the taxable year ended December 31, 2018, we do not believe we were a PFIC for 2018. Because PFIC status is determined annually based on our income, assets and activities for the entire taxable year, it is not possible to determine whether we will be characterized as a PFIC for 2019 or any other future year until after the close of that year. While we intend to manage our business so as to avoid PFIC status to the extent consistent with our other business goals, we cannot predict whether our business plans will allow us to avoid PFIC status. In addition, because the market price of the ADSs has fluctuated and is likely to fluctuate in the future and because that market price may affect the determination of whether we are a PFIC, there can be no assurance that we will not be a PFIC for any taxable year.

If we are a PFIC for a given year, and you are a U.S. Holder, then unless you make one of the elections described below, a special tax regime will apply to both (a) any “excess distribution” by us to you for the year (defined as your ratable portion of distributions in the year which are greater than 125% of the average annual distribution received by you in the shorter of the three preceding years or your holding period for the ADSs) and (b) any gain realized on the sale or other disposition (including a pledge) of the ADSs. Under this regime, any excess distribution and realized gain will be treated as ordinary income and will be subject to tax as if (i) the excess distribution or gain had been realized ratably over your holding period, (ii) the amount deemed realized in each year had been subject to tax in each year of that holding period at the highest marginal rate for such year (other than income allocated to the current period or any taxable period before we became a PFIC, which would be subject to tax at the U.S. Holder’s regular ordinary income rate for the current year and would not be subject to the interest charge discussed below), and (iii) the interest charge applicable to underpayments of tax had been imposed on the taxes deemed to

have been payable in those years. In addition, the tax liability for amounts allocated to years prior to the year of disposition or “excess distribution” cannot be offset by any net operating losses for such years, and dividend distributions made to you will not qualify for the lower rates of taxation applicable to long-term capital gains discussed above under “Distributions with Respect to ADSs.”

Certain elections are available to U.S. Holders of shares that may serve to alleviate some of the adverse tax consequences of PFIC status described above. One such election is a qualified electing fund, or a QEF, election, under which you would be required to include in income on a current basis your pro rata share of our ordinary earnings as ordinary income and your pro rata share of our net capital gains as capital gain. However, we do not expect to provide to U.S. Holders the information needed to report income and gain pursuant to a QEF election, and we make no undertaking to provide such information in the event that we are a PFIC.

Under an alternative tax regime, you may also avoid certain adverse tax consequences relating to PFIC status discussed above by making a mark-to-market election with respect to your ADSs, provided that the ADSs are “marketable.” The ADSs will be marketable if they are regularly traded on certain U.S. stock exchanges, including the NYSE, or on certain non-U.S. stock exchanges. For these purposes, the ADSs will be considered regularly traded during any calendar year during which they are traded, other than in negligible quantities, on at least 15 days during each calendar quarter. U.S. Holders should be aware, however, that if we are determined to be a PFIC, the interest charge regime described above could be applied to indirect distributions or gains deemed to be attributable to U.S. Holders in respect of any of our subsidiaries that also may be determined to be a PFIC, and the mark-to-market election would not be effective for such subsidiaries.

If you choose to make a mark-to-market election, you would recognize as ordinary income or loss each year in which we are a PFIC an amount equal to the difference as of the close of the taxable year between the fair market value of your ADSs and your adjusted tax basis in your ADSs. Losses would be allowed only to the extent of net mark-to-market gain previously included by you under the election for prior taxable years. If the mark-to-market election were made, then the PFIC rules described above relating to excess distributions and realized gains would not apply for periods covered by the election. If you do not make a mark-to-market election for the first taxable year in which we are a PFIC during your holding period of the ADSs, you would be subject to interest charges with respect to the inclusion of ordinary income attributable to each taxable year in which we were a PFIC during your holding period before the effective date of such election.

A U.S. Holder who is a direct or “indirect” holder of stock of a PFIC must file United States Internal Revenue Service Form 8621 in respect of such PFIC for a taxable year in the circumstances described in the United States Treasury Regulations. If we are a PFIC for a given taxable year, you are encouraged to consult your tax advisor concerning the availability and consequences of making any of the elections mentioned above, as well as concerning your annual filing requirements.

Medicare Tax

A United States person that is an individual or estate, or a trust that does not fall into a special class of trusts that is exempt from such tax, is subject to a 3.8% tax on net investment income in excess of certain amounts. In the case of an individual, the tax is imposed on the lesser of (1) the United States person’s “net investment income” for the relevant taxable year and (2) the excess of the United States person’s modified adjusted gross income for the taxable year over \$250,000 (in the case of a taxpayer filing a joint return or a surviving spouse), \$125,000 (in the case of a married taxpayer filing a separate return) or \$200,000 (in any other case). In the case of an estate or trust, the tax is imposed on the lesser of (1) the entity’s “undistributed net investment income” for the taxable year and (2) the excess (if any) of the entity’s “adjusted gross income” over the dollar amount at which the highest tax bracket begins for such entity. A holder’s net investment income will include its gross dividend income and its net gains from the disposition of ADSs unless such dividends or net gains are derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). If you are a United States person that is an individual, estate or trust, you are encouraged to consult your tax advisors regarding the applicability of the Medicare tax to your income and gains in respect of your investment in the ADSs.

Information with Respect to Foreign Financial Assets

Individuals who own “specified foreign financial assets” with an aggregate value in excess of \$50,000 are required to file an information report with respect to such assets with their tax returns. “Specified foreign financial assets” include any financial accounts maintained by foreign financial institutions, as well as any of the following, but only if they are not held in accounts maintained by financial institutions: (i) stocks and securities, including ADSs, issued by non-U.S. persons, (ii) financial instruments and contracts held for investment that have non-U.S. issuers or counterparties and (iii) interests in foreign entities. U.S. holders that are individuals are encouraged to consult their tax advisors regarding the application of this reporting requirement as it relates to their ownership of ADSs.

Backup Withholding Tax and Information Reporting Requirements

United States backup withholding tax and information reporting requirements apply to certain payments to certain non-corporate holders of stock. Information reporting will apply to payments of dividends on, and to proceeds from the sale or redemption of, the ADSs made within the United States, or by a United States payor or United States middleman, to a holder of the ADSs, other than an exempt recipient, including a corporation, a payee that is not a United States person that provides an appropriate certification and certain other persons. A payor will be required to withhold backup withholding tax from any payments of dividends on, or the proceeds from the sale or redemption of, ADSs within the United States, or by a United States payor or United States middleman, to a holder, other than an exempt recipient, if such holder fails to furnish its correct taxpayer identification number or otherwise fails to comply with, or establish an exemption from, such backup withholding tax requirements. Any amounts withheld under the backup withholding rules will be allowed as a refund or credit against the beneficial owner's United States federal income tax liability, if any, provided that the required information is timely furnished to the IRS.

French Material Tax Consequences

The following is a description of the material French tax consequences of the acquisition, ownership and disposition of the ADSs by a U.S. Holder. This description is based on applicable tax laws, regulations and judicial decisions as of the date of this annual report, and, where applicable, the Convention between the United States of America and France for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital, dated of August 31, 1994, as amended from time to time (the "U.S. Treaty").

This description is based in part upon the representation of the custodian and the assumption that each obligation in the Depositary Agreement with the depositary relating to your ADRs and any related agreement will be performed in accordance with their terms.

The following is a description of the principal tax effect on U.S. Holders for the purposes of French tax if, all of the following points apply:

- the U.S. Holder owns, directly, indirectly or constructively, less than 10% of the Company capital and dividend rights;
- the U.S. Holder is entitled to the benefits of the U.S. Treaty (including under the "limitations on benefits" article of the U.S. Treaty);
- the U.S. Holder does not hold the ADSs through a permanent establishment or a fixed base in France;
- the U.S. Holder is not multi-resident;
- the U.S. Holder does not hold the ADSs through a non-U.S. based pass-through entity; and
- the U.S. Holder does not receive dividend, capital gains or other payments on the ADSs on an account located in a Non-cooperative State as defined in Article 238-0 A of the French General Tax Code and as mentioned in a list published by the French tax authorities as amended from time to time (on January 1st of each year).

A U.S. Holder to whom all the above requirements apply will be hereafter defined as a Qualifying U.S. Holder.

This description is relevant only to holders of ADSs who are Qualifying U.S. Holders.

For purposes of the U.S. Treaty Qualifying U.S. Holders of ADSs will be treated as the owners of Company's ordinary shares represented by such ADSs.

Special rules apply to U.S. expatriates, insurance companies, pass-through entities and investors in such entities, tax-exempt organizations, financial institutions, persons subject to the alternative minimum tax and securities broker-dealers, among others. Those special rules are not discussed in this annual report.

Holders of Company ADSs are encouraged to consult their own tax advisors as to the particular tax consequences to them of owning the ADS, including their eligibility for benefits under the U.S. Treaty, the application and effect of state, local, foreign and other tax laws and possible changes in tax laws or in their interpretation.

Taxation of Dividends

Dividends paid by a French company to corporate non-French holders are generally subject to a 30% withholding tax (or 21% if the holder is an individual resident of the EU, Norway, Iceland or Liechtenstein). Such 30% withholding tax rate can be increased to 75% if the dividend is paid towards Non-cooperative States or territories (as mentioned above) irrespective of the tax residence of the beneficiary of the dividends. Such withholding tax rates may, however, be reduced or eliminated by application of a tax treaty with France. For fiscal years opened as from January 1, 2020, the withholding tax rate applicable to dividends paid to corporate non-French holders will be equal to the standard corporate income tax rate (i.e., 28% in 2020, 26.5% in 2021 and 25% as from 2022).

Since January 1, 2018, dividends paid by a French company to individual non-French holders are generally subject to a 12.8% withholding tax. Such 12.8% withholding tax rate can be increased to 75% if the dividend is paid towards Non-cooperative States or territories (as mentioned above) irrespective of the tax residence of the beneficiary of the dividends. Such withholding tax rates may, however, be reduced or eliminated by application of a tax treaty with France.

Taxation of Capital Gains

A Qualifying U.S. Holder will not be subject to any French income or withholding tax on any capital gain realized upon the sale or exchange of ADSs of the Company.

Estate and Gift Taxes

Under the Convention Between the United States of America and the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Estates, Inheritance and Gifts dated November 24, 1978 (as amended from time to time), if a U.S. Holder transfers his or her shares by gift or by reason of the U.S. Holder's death, that transfer will not be subject to French gift or inheritance tax unless the U.S. Holder is domiciled in France at the time of making the gift or at the time of his or her death or if the shares are held for use in the conduct of a business or profession through a permanent establishment or a fixed base in France.

Wealth Tax

As of January 1, 2018, the French wealth tax namely the *Impôt de Solidarité sur la Fortune* ("ISF") is replaced by the *Impôt sur la Fortune Immobilière* ("IFI"). The IFI generally applies to real estate assets to the extent that their net value exceeds €1,300,000. Therefore, all other movable assets (tangible assets, shares, life insurance, cash, etc.) are excluded from the tax base, unless their underlying assets (direct or indirect) consist of real estate assets or rights. However, a general exclusion applies to real estate assets owned by companies pursuing a commercial, industrial, craft, agricultural or liberal activity when the taxpayer (together with the members of its tax household) holds directly or indirectly less than 10% of the share capital or the voting rights of the company. As a result, Qualifying U.S. Holders will not be subject to French IFI in respect of their shareholding in the Company.

F. *Dividends and Paying Agents*

Not applicable.

G. *Statement by Experts*

Not applicable.

H. *Documents on Display*

We are currently subject to the informational requirements of the Exchange Act applicable to foreign private issuers and fulfill the obligations of these requirements by filing reports with the Securities and Exchange Commission. As a foreign private issuer, we are exempt from the rules under the Exchange Act relating to the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the Securities and Exchange Commission as frequently or as promptly as United States companies whose securities are registered under the Exchange Act. However, we intend to file with the Securities and Exchange Commission, within 120 days after the end of each subsequent fiscal year, an annual report on Form 20-F containing financial

statements which will be examined and reported on, with an opinion expressed, by an independent public accounting firm. We also intend to file with the Securities and Exchange Commission reports on Form 6-K containing unaudited financial information for the first three quarters of each fiscal year, within 60 days after the end of each quarter.

The Securities and Exchange Commission maintains an Internet site that contains reports and other information regarding issuers that file electronically with the Securities and Exchange Commission. Our filings with the Securities and Exchange Commission are available to the public through this web site at <http://www.sec.gov>.

I. *Subsidiary Information*

Not applicable.

Item 11. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

We had cash and cash equivalents and short-term investments totaling \$20.5 million, \$3.3 million and \$12.1 million, at December 31, 2016, 2017 and 2018, respectively. Our cash and cash equivalents consist of cash in commercial bank accounts and investments in money market funds. Short-term investments are investments in deposits or money market funds with terms greater than 90 days but less than one year. The primary objectives of our investment activities are to preserve principal and provide liquidity without significantly increasing risk. Our cash and cash equivalents are held for working capital purposes. We do not enter into investments for trading or speculative purposes.

Our exposure to interest rate risk primarily relates to the interest income generated by excess cash invested in money market funds. Due to the short-term and highly liquid nature of our portfolio, a movement in interest rates of 100 basis points during 2018 would not have a material effect on interest income.

Foreign Currency Risk

We use the U.S. dollar as the functional currency of Sequans Communications S.A. Substantially all of our sales are denominated in U.S. dollars. Therefore, we have very limited foreign currency risk associated with our revenue. The payment terms of our significant supply chain vendors are also denominated in U.S. dollars. We incur operating expenses and hold assets and liabilities denominated in currencies other than the U.S. dollar, principally the euro. In addition, we have limited exposure to the British pound sterling, the New Israeli shekel, the Taiwan dollar, the Chinese yuan, the Swedish krona and the Japanese yen. As a result, our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates, primarily the U.S. dollar to euro exchange rate. As we grow our operations, our exposure to foreign currency risk could become more significant. If there had been a 10% increase or decrease in the exchange rate of the U.S. dollar to the euro, based on the weighted average rate of exchange in our financial statements for the year ending December 31, 2018, we estimate the impact, in absolute terms, on operating expenses and on financial liabilities for 2018, would have been \$4.4 million.

From time to time, we have entered into foreign currency hedging contracts primarily to reduce the impact of variations in the U.S. dollar to euro exchange rate on our operating expenses denominated in euros. Currently, we do not expect to enter into foreign currency exchange contracts for trading or speculative purposes.

Item 12. Description of Securities Other than Equity Securities

A. *Debt Securities*

Not applicable.

B. *Warrants and Rights*

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

The Bank of New York Mellon, as depositary, registers and delivers our ADSs. Each ADS represents one ordinary share (or a right to receive one ordinary share) deposited with the principal Paris office of Société Générale or any successor, as custodian for the depositary. Each ADS will also represent any other securities, cash or other property which may be held by the depositary in respect of the depositary facility. A copy of our Deposit Agreement among us, the depositary, owners and holders of ADSs was filed with the SEC as an exhibit to our Form F-6 filed on March 22, 2011.

Fees and Expenses

Pursuant to the terms of the deposit agreement, we will be paying all fees and expenses relating to the ADSs on behalf of the holders. However, in the future that arrangement may be changed, at our option, such that the holders will be required to pay the following fees:

Persons depositing or withdrawing ordinary shares or ADS holders must pay:

For:

\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)

- Issue of ADSs, including issues resulting from a distribution of ordinary shares or rights or other property
- Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates

\$0.05 (or less) per ADS

- Any cash distribution to ADS holders

A fee equivalent to the fee that would be payable if securities distributed to you had been ordinary shares and the shares had been deposited for issue of ADSs

- Distribution of securities distributed to holders of deposited securities which are distributed by the depositary to ADS holders

\$0.05 (or less) per ADSs per calendar year

- Depositary services

Registration or transfer fees

- Transfer and registration of ordinary shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares

Expenses of the depositary

- Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement)
- converting foreign currency to U.S. dollars

Taxes and other governmental charges the depositary or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes

- As necessary

Any charges incurred by the depositary or its agents for servicing the deposited securities

- As necessary

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing ordinary shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for

making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may generally refuse to provide for-fee services until its fees for those services are paid.

Holders of ADS are responsible for any taxes or other governmental charges payable on the holders' ADSs or on the deposited securities represented by any of ADSs. The depositary may refuse to register any transfer of the holders' ADSs or allow the holder to withdraw the deposited securities represented by the holders' ADSs until such taxes or other charges are paid. It may apply payments owed to the holder or sell deposited securities represented by the holders' ADSs to pay any taxes owed and you will remain liable for any deficiency. If the depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

Item 15. Controls and Procedures

Disclosure Controls and Procedures

Our chief executive officer and chief financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of December 31, 2018, have concluded that, as of such date, as a result of the material weakness related to controls over the accounting and presentation of complex, non-routine transactions detailed below, our disclosure controls and procedures were not effective at a reasonable level of assurance and accordingly, are not effective in ensuring that information required to be disclosed by us in reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure and is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms.

Management Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting.

Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting, as of December 31, 2018. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013 Framework).

Based on the assessment performed by our management, as of December 31, 2018, we identified a material weakness in our internal control over financial reporting.

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 our annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness in internal control over financial reporting that our management identified relates to our management's review controls and other controls over the accounting and presentation of complex, non-routine transactions that were not adequately designed and documented.

In 2018, the complex, non-routine transaction that exposed the material weakness was the amendment of convertible bonds that were issued in prior years as well as the issuance of new financial instruments with equity components and their

associated deferred tax impacts. Specifically, our management identified that our controls lacked sufficient specificity, including evaluation of all relevant accounting standards for these complex transactions.

Based on the aforementioned material weakness, our management concluded that the Company's system of internal control over financial reporting was not effective as of December 31, 2018.

The Company's independent registered public accounting firm, Ernst & Young Audit, has issued an audit report on the Company's internal control over financial reporting, which expresses an adverse opinion on the effectiveness of our internal control over financial reporting as of December 31, 2018.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Sequans Communications S.A.:

Opinion on Internal Control Over Financial Reporting

We have audited Sequans Communications S.A.'s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission 2013 framework, (the COSO criteria). In our opinion, because of the effect of the material weakness described below on the achievement of the objectives of the control criteria, Sequans Communications S.A. (the Company) has not maintained effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

A material weakness is a deficiency, or 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 on a timely basis. The following material weakness has been identified and included in management's assessment: The Company's management review controls and other controls over the accounting and presentation of complex, non-routine transactions were not adequately designed and documented. Specifically, in 2018, the complex, non-routine transaction that exposed the material weakness was the amendment of convertible bonds that were issued in prior years as well as the issuance of new financial instruments with equity components and their associated deferred tax impacts. Specifically, management's controls lacked sufficient specificity, including evaluation of all relevant accounting standards for these complex transactions.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of the Company as of December 31, 2016, 2017 and 2018, the related consolidated statements of operations, comprehensive income (loss), changes in equity (deficit) and cash flows for each of the three years in the period ended December 31, 2018, and the related notes.

This material weakness was considered in determining the nature, timing and extent of audit tests applied in our audit of the 2018 consolidated financial statements, and this report does not affect our report dated May 1, 2019.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management Annual Report on Internal Control Over Financial Reporting

Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young Audit
Paris-La Défense, France
May 1, 2019

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this annual report that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

Item 16A. Audit Committee Financial Expert

Our Board has determined that Mr. de Pesquidoux is an audit committee financial expert as defined by the Securities and Exchange Commission rules and has the requisite financial sophistication under the applicable rules and regulations of the New York Stock Exchange. Mr. de Pesquidoux is independent as such term is defined in Rule 10A-3(b)(1) under the Exchange Act and under the listing standards of the New York Stock Exchange.

Item 16B. Code of Ethics

We have adopted a Code of Ethics that applies to the Company's chief executive officer, chief financial officer and other senior financial officers, including the Company's principal accounting officer. We have posted this code on our corporate website at <http://www.sequans.com/investors/corporate-governance/>.

Item 16C. Principal Accountant Fees and Services

Ernst & Young Audit has served as our independent registered public accounting firm for 2017 and 2018. Our accountants billed the following fees to us for professional services in each of those fiscal years:

	2017	2018
	(euros in thousands)	
Audit Fees	\$ 529	\$ 484
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—
Total	<u>\$ 529</u>	<u>\$ 484</u>

“Audit Fees” are the aggregate fees billed for the audit of our annual financial statements. This category also includes services that generally the independent accountant provides, such as consents, provision of comfort letters, and assistance with and review of documents filed with the SEC. “Audit-Related Fees” are the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit and are not reported under Audit Fees. These fees include mainly accounting consultations regarding the accounting treatment of matters that occur in the regular course of business, implications of new accounting pronouncements and other accounting issues that occur from time to time. There were no “Tax Fees” or “Other Fees” billed or paid during 2017 or 2018.

Our audit committee has adopted a pre-approval policy for the engagement of our independent accountant to perform certain audit and non-audit services. Pursuant to this policy, which is designed to assure that such engagements do not impair the independence of our auditors, the audit committee pre-approves annually a catalog of specific audit and non-audit services in the categories of audit service, audit-related service and tax services that may be performed by our independent accountants.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 16F. Change in Registrant’s Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

As a foreign private issuer listed on the NYSE, we are subject to NYSE corporate governance listing standards. However, NYSE rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Currently, we rely on the NYSE Listed Company Manual with respect to our corporate governance to the extent possible under French law. The following are the significant ways in which our corporate governance practices differ from those required for U.S. companies listed on the NYSE.

- **Audit Committee**—Our audit committee is responsible for organizing for selecting our statutory auditors and making a recommendation to our board of directors regarding their chose and terms of compensation. As required by French law, the actual appointment of the statutory auditors is made by our shareholders at a general meeting of the shareholders. According to the Audit Committee Charter, our audit committee has the authority to engage advisors and determine appropriate funding for payment of compensation to an independent auditor or other advisors necessary or appropriate to aid the committee in carrying out its responsibilities.
- **Executive Sessions/Communications with Independent Directors**—French law does not require (and we do not currently provide) for our independent directors to meet regularly without management, nor does it require the independent directors to meet alone in executive session at least once a year. However, if our independent directors decide to do so, they may do so. In addition, French law does not require (and we do not currently provide) a method for interested parties to communication with our independent directors.

- ***Equity Compensation Plans***—Under French law, we must obtain shareholder approval at a general meeting of the shareholders in order to adopt an equity compensation plan. Generally, the shareholders then delegate to our board of directors the authority to decide on the specific terms of the granting of equity compensation, within the limits of the shareholders' authorization.
- ***Corporate Governance Guidelines***—We have adopted a Board Internal Charter as required by French law that sets forth certain corporate governance practices of our board under French law. This Board Internal Charter does not cover all items required by the NYSE Listed Company Manual for U.S. companies listed on the NYSE.

Item 16H. Mine Safety Disclosure

Not applicable.

PART III

Item 17. Financial Statements

See pages F-1 through F-52 of this annual report.

Item 18. Financial Statements

Not applicable.

Item 19. Exhibits

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
<u>1.1*</u>	By-laws (<i>statuts</i>) of Sequans Communications S.A. effective December 18, 2018 (English translation)
<u>2.2</u>	Form of Deposit Agreement among Sequans Communications S.A., The Bank of New York Mellon and owners and holders of American Depositary Shares (incorporated by reference to Exhibit 4.2 to Registration No. 333-173001, filed with the SEC on May 2, 2018)
<u>2.3</u>	Form of American Depositary Receipt (included in Exhibit 2.2)
<u>4.1(a)</u>	Stock Option Subscription Plans—2008-1, 2009-1, 2009-2, 2010-1, 2010-2, 2010-1-2, 2011-1, 2011-2 (incorporated by reference to Exhibit 10.1 to Registration No. 333-173001, filed with the SEC on March 22, 2011)
<u>4.1(b)</u>	Stock Option Subscription Plan—2012-1 (incorporated by reference to Exhibit 4.1(b) to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2012, filed with the SEC on March 29, 2013)
<u>4.1(c)</u>	Stock Option Subscription Plan—2013-1 (incorporated by reference to Exhibit 4.1(c) to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2013, filed with the SEC on March 31, 2014)
<u>4.1(d)</u>	Stock Option Subscription Plan—2014-1 (incorporated by reference to Exhibit 4.1(d) to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2014, filed with the SEC on April 21, 2015)
<u>4.1(e)</u>	Stock Option Subscription Plan—2015-1 (incorporated by reference to Exhibit 4.1(e) to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2015, filed with the SEC on April 29, 2016)
<u>4.1(f)</u>	Stock Option Subscription Plan—2016-1 (incorporated by reference to Exhibit 99.1 to Registration No. 333-214444, filed with the SEC on November 4, 2016)
<u>4.1(g)</u>	Stock Option Subscription Plan—2017-1 (incorporated by reference to Exhibit 99.1 to Registration No. 333-219430, filed with the SEC on July 24, 2017)
<u>4.1(h)</u>	Stock Option Subscription Plan—2018 (incorporated by reference to Exhibit 99.1 to Registration No. 333-226458, filed with the SEC on July 31, 2018)
<u>4.2(a)</u>	BSA Subscription Plans—2007-1, 2007-2, 2008-1, 2008-2, 2009-1, 2009-2, 2010-1, 2010-2, 2010-1-2, 2010-2-2, 2011-1, 2011-2 (incorporated by reference to Exhibit 10.2 to Registration No. 333-173001, filed with the SEC on March 22, 2011)
<u>4.2(b)</u>	BSA Subscription Plan—2012-2 (incorporated by reference to Exhibit 4.2(b) to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2012, filed with the SEC on March 29, 2013)
<u>4.2(c)</u>	BSA 2013-1 (Warrants) Issuance Agreement (incorporated by reference to Exhibit 4.2(c) to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2013, filed with the SEC on March 31, 2014)
<u>4.2(d)</u>	BSA Subscription Plan—2014-1 (incorporated by reference to Exhibit 4.2(d) to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2014, filed with the SEC on April 21, 2015)
<u>4.3</u>	BSA (Warrants) Issuance Agreement, dated January 11 th , 2011 (incorporated by reference to Exhibit 4.4 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2011, filed with the SEC on March 30, 2012)
<u>4.4</u>	BSA (Warrants) Issuance Agreement, dated January 11 th , 2011 (incorporated by reference to Exhibit 4.5 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2011, filed with the SEC on March 30, 2012)
<u>4.5</u>	BSA (Warrants) Issuance Agreement, dated March 8 th , 2011 (incorporated by reference to Exhibit 4.5 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2011, filed with the SEC on March 30, 2012)

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
<u>4.6</u>	BSA (Warrants) Issuance Agreement, dated June 26, 2012 (6,000 BSA) (incorporated by reference to Exhibit 4.6 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2012, filed with the SEC on March 29, 2013)
<u>4.7</u>	BSA (Warrants) Issuance Agreement, dated June 26, 2012 (25,000 BSA) (incorporated by reference to Exhibit 4.7 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2012, filed with the SEC on March 29, 2013)
<u>4.8</u>	BSA (Warrants) Issuance Agreement, dated June 25, 2013 (incorporated by reference to Exhibit 4.8 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2013, filed with the SEC on March 31, 2014)
<u>4.10</u>	Form of Letter Agreement by and between Sequans Communications S.A. and Board Nominee (incorporated by reference to Exhibit 10.7 to Registration No. 333-173001)
<u>4.11</u>	BSA (Warrants) Issuance Agreement, dated June 26, 2014 (incorporated by reference to Exhibit 4.12 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2014, filed with the SEC on April 21, 2015)
<u>4.13</u>	Convertible Note Agreement by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP, dated April 14, 2015 (incorporated by reference to Exhibit 4.1 to Sequans Communications S.A.'s Report on Form 6-K filed with the SEC on April 15, 2015)
<u>4.14</u>	Convertible Promissory Note issued by Sequans Communications S.A. to Nokomis Capital Master Fund, LP on April 14, 2015 (incorporated by reference to Exhibit 4.2 to Sequans Communications S.A.'s Report on Form 6-K filed with the SEC on April 15, 2015)
<u>4.15</u>	Loan Agreement by and between Bpifrance Financement and Sequans Communications S.A., dated September 14, 2015 (English translation) (incorporated by reference to Exhibit 4.15 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2015, filed with the SEC on April 29, 2016)
<u>4.16</u>	Interest-Free Innovation Loan Agreement by and between Bpifrance Financement and Sequans Communications S.A., dated August 17, 2015 (English translation) (incorporated by reference to Exhibit 4.16 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2015, filed with the SEC on April 29, 2016)
<u>4.17</u>	BSA (Warrants) Issuance Agreement, dated June 29, 2015 (incorporated by reference to Exhibit 4.17 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2015, filed with the SEC on April 29, 2016)
<u>4.18</u>	Convertible Note Agreement by and between Sequans Communications S.A. and the purchasers signatory thereto, dated April 27, 2016 (including the Form of Convertible Promissory Note attached thereto as Exhibit B) (incorporated by reference to Exhibit 4.18 to Sequans Communications S.A.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2015, filed with the SEC on April 29, 2016)
<u>4.18(a)</u>	Amendment No 1 to the Convertible Note Agreement dated April 14, 2015 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated June 30, 2017 (incorporated by reference to Exhibit 99.2 to the Form 6-K filed with the SEC on August 1, 2017)
<u>4.18(b)</u>	Amendment No 1 to the Convertible Note Agreement dated April 27, 2016 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated June 30, 2017 (incorporated by reference to Exhibit 99.3 to the Form 6-K filed with the SEC on August 1, 2017)
<u>4.18(c)</u>	Amendment No 1 to the Convertible Note Agreement dated April 27, 2016 by and between Sequans Communications S.A. and Manatuck Hill Scout Fund, LP dated June 30, 2017 (incorporated by reference to Exhibit 99.4 to the Form 6-K filed with the SEC on August 1, 2017)
<u>4.18(d)</u>	Amendment No 2 to the Convertible Note Agreement dated April 14, 2015 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated October 30, 2017 (incorporated by reference to Exhibit 99.2 to the Form 6-K filed with the SEC on October 31, 2017)
<u>4.18(e)</u>	Amendment No 2 to the Convertible Note Agreement dated April 27, 2016 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated October 30, 2017 (incorporated by reference to Exhibit 99.3 to the Form 6-K filed with the SEC on October 31, 2017)
<u>4.18(f)</u>	Amendment No 2 to the Convertible Note Agreement dated April 27, 2016 by and between Sequans Communications S.A. and Manatuck Hill Scout Fund, LP dated October 30, 2017 (incorporated by reference to Exhibit 99.4 to the Form 6-K filed with the SEC on October 31, 2017)

Exhibit Number	Description of Exhibit
<u>4.18(g)</u>	Amendment No 3 to the Convertible Note Agreement dated April 14, 2015 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated September 27, 2018 (incorporated by reference to Exhibit 4.1 to the Form 6-K filed with the SEC on October 30, 2018)
<u>4.18(h)</u>	Amendment No 3 to the Convertible Note Agreement dated April 27, 2016 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated September 27, 2018 (incorporated by reference to Exhibit 4.2 to the Form 6-K filed with the SEC on October 30, 2018)
<u>4.18(i)</u>	Amendment No 4 to the Convertible Note Agreement dated April 14, 2015 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated October 26, 2018 (incorporated by reference to Exhibit 4.5 to the Form 6-K filed with the SEC on October 30, 2018)
<u>4.18(j)</u>	Amendment No 4 to the Convertible Note Agreement dated April 27, 2016 by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP dated October 26, 2018 (incorporated by reference to Exhibit 4.6 to the Form 6-K filed with the SEC on October 30, 2018)
<u>4.19</u>	Warrant Agreement by and between Sequans Communications S.A. and Nokomis Capital Master Fund, LP, dated September 27, 2018 (incorporated by reference to Exhibit 4.4 to Sequans Communications S.A.'s Report on Form 6-K filed with the SEC on October 30, 2018)
<u>4.20(a)</u>	Convertible Note Agreement by and between Sequans Communications S.A. and the purchasers signatory thereto, dated September 27, 2018 (including the Form of Convertible Promissory Note attached thereto as Exhibit B) (incorporated by reference to Exhibit 4.3 to the Form 6-K filed with the SEC on October 30, 2018)
<u>4.20(b)</u>	Amendment No 1 to the Convertible Note Agreement by and between Sequans Communications S.A. and the purchasers signatory thereto, dated October 26, 2018 (including the Form of Convertible Promissory Note attached thereto as Exhibit B) (incorporated by reference to Exhibit 4.7 to the Form 6-K filed with the SEC on October 30, 2018)
<u>4.21</u>	Restricted Share Award Plan 2016-1 (incorporated by reference to Exhibit 99.2 to Registration No. 333-214444, filed with the SEC on November 4, 2016)
<u>4.22</u>	BSA (Warrants) Subscription Plan 2016-1 (incorporated by reference to Exhibit 99.3 to Registration No. 333-214444, filed with the SEC on November 4, 2016)
<u>4.23</u>	BSA (Warrants) Subscription Plan 2016-2 (incorporated by reference to Exhibit 99.4 to Registration No. 333-214444, filed with the SEC on November 4, 2016)
<u>4.24</u>	BSA (Warrants) Issuance Agreement, dated June 28, 2016 (incorporated by reference to Exhibit 99.5 to Registration No. 333-214444, filed with the SEC on November 4, 2016)
<u>4.25</u>	Restricted Share Award Plan 2016-2 (incorporated by reference to Exhibit 99.1 to Registration No. 333-215911, filed with the SEC on February 2, 2017)
<u>4.26</u>	Restricted Share Award Plan 2017-1 (incorporated by reference to Exhibit 99.2 to Registration No. 333-219430, filed with the SEC on July 24, 2017)
<u>4.27</u>	Restricted Share Award Plan 2017-2 (incorporated by reference to Exhibit 99.3 to Registration No. 333-219430, filed with the SEC on July 24, 2017)
<u>4.28</u>	Restricted Share Award Plan 2017-3 (incorporated by reference to Exhibit 99.4 to Registration No. 333-219430, filed with the SEC on July 24, 2017)
<u>4.29</u>	BSA (Warrants) Subscription Plan 2017-1 (incorporated by reference to Exhibit 99.5 to Registration No. 333-219430)
<u>4.28</u>	BSA (Warrants) Subscription Plan 2017-2 (incorporated by reference to Exhibit 99.6 to Registration No. 333-219430, filed with the SEC on July 24, 2017)
<u>4.29</u>	BSA (Warrants) Issuance Agreement, dated June 30, 2017 (incorporated by reference to Exhibit 99.5 to Registration No. 333-219430, filed with the SEC on July 24, 2017)
<u>4.32</u>	Board Observer Rights agreement dated October 30, 2017 by and among Sequans Communications S.A and Nokomis Capital Master Fund, LP (incorporated by reference to Exhibit 99.5 to the Form 6-K filed with the SEC on October 31, 2017)
<u>4.33</u>	Standstill Agreement by and among Sequans Communications S.A and Nokomis Capital Master Fund, LP (incorporated by reference to Exhibit 99.6 to the Form 6-K filed with the SEC on October 31, 2017)
<u>4.34</u>	Restricted Share Award Plan 2018-1 (incorporated by reference to Exhibit 99.2 to Registration No. 333-226458, filed with the SEC on July 31, 2018)

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
<u>4.35</u>	Restricted Share Award Plan 2018-2 (incorporated by reference to Exhibit 99.3 to Registration No. 333-226458, filed with the SEC on July 31, 2018)
<u>4.36</u>	BSA 2018-1 (Warrants) Issuance Agreement (incorporated by reference to Exhibit 99.4 to Registration No. 333-226458, filed with the SEC on July 31, 2018)
<u>4.37</u>	BSA 2018-2 (Warrants) Issuance Agreement (incorporated by reference to Exhibit 99.5 to Registration No. 333-226458, filed with the SEC on July 31, 2018)
<u>4.38</u>	BSA (Warrants) Issuance Agreement, dated June 29, 2018 (incorporated by reference to Exhibit 99.6 to Registration No. 333-226458, filed with the SEC on July 31, 2018)
<u>4.40</u>	Harbert Bond Issue Agreement by and between Sequans Communications S.A. and Harbert European Specialty Lending Company II S.à r.l. (incorporated by reference to Exhibit 4.8 to Sequans Communications S.A.'s Report on Form 6-K filed with the SEC on October 30, 2018)
<u>4.41</u>	Warrant Issue Agreement by and between Sequans Communications S.A. and Harbert European Growth Capital Fund II, SCSp (incorporated by reference to Exhibit 4.9 to Sequans Communications S.A.'s Report on Form 6-K filed with the SEC on October 30, 2018)
<u>4.42</u>	Restricted Share Award Plan 2018-4 (incorporated by reference to Exhibit 99.7 to Registration No. 333-226458 as amended, filed with the SEC on April 23, 2019)
<u>8.1*</u>	List of Subsidiaries
<u>12.1*</u>	Certificate of Chief Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002
<u>12.2*</u>	Certificate of Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002
<u>13.1*</u>	Certificate of Chief Executive Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002
<u>13.2*</u>	Certificate of Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002
<u>15.1*</u>	Consent of Ernst & Young Audit, independent registered public accounting firm

* Filed herewith.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

Sequans Communications S.A.

By: /s/ Dr. Georges Karam

Name: Dr. Georges Karam

Title: Chief Executive Officer and Chairman

Date: May 1, 2019

Sequans Communications S.A.
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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Sequans Communications S.A.:

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Sequans Communications S.A. (the Company) as of December 31, 2016, 2017 and 2018, the related consolidated statements of operations, comprehensive income (loss), changes in equity (deficit) and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2016, 2017 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated May 1, 2019 expressed an adverse opinion on the Company's internal control over financial reporting due to a material weakness.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young Audit

We have served as the Company's auditor since 2008.

Paris-La Défense, May 1, 2019

Report of Independent Registered Public Accounting Firm

Sequans Communications S.A.
Consolidated Statements of Operations

		Year ended December 31,		
	Note	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
(in thousands, except share and per share amounts)				
Revenue:				
Product revenue		\$ 34,581	\$ 37,353	\$ 28,938
Other revenue		10,998	10,910	11,312
Total revenue	3	45,579	48,263	40,250
Cost of revenue:				
Cost of product revenue		22,574	24,725	21,957
Cost of other revenue		3,022	2,397	2,405
Total cost of revenue	4.2	25,596	27,122	24,362
Gross profit		19,983	21,141	15,888
Operating expenses:				
Research and development	4.4	26,334	25,202	27,909
Sales and marketing		7,126	8,785	9,411
General and administrative		6,267	6,679	10,085
Total operating expenses	4.2	39,727	40,666	47,405
Operating income (loss)		(19,744)	(19,525)	(31,517)
Financial income (expense):				
Interest expense	4.1	(3,734)	(4,672)	(5,447)
Interest income	4.1	48	60	71
Other financial expense	4.1	(83)	—	(400)
Convertible debt amendments	4.1	—	(322)	(265)
Change in the fair value of convertible debt embedded derivative	4.1	(1,583)	—	—
Foreign exchange gain (loss), net	4.1	593	(1,401)	366
Profit (Loss) before income taxes		(24,503)	(25,860)	(37,192)
Income tax expense (benefit)	5	284	300	(968)
Profit (Loss)		<u>\$ (24,787)</u>	<u>\$ (26,160)</u>	<u>\$ (36,224)</u>
Attributable to:				
Shareholders of the parent		\$ (24,787)	\$ (26,160)	\$ (36,224)
Non-controlling interests		—	—	—
Basic earnings (loss) per share	6	<u>\$ (0.39)</u>	<u>\$ (0.34)</u>	<u>\$ (0.39)</u>
Diluted earnings (loss) per share	6	<u>\$ (0.39)</u>	<u>\$ (0.34)</u>	<u>\$ (0.39)</u>
Weighted average number of shares used for computing:				
Basic		63,805,442	77,668,404	93,767,005
Diluted		63,805,442	77,668,404	93,767,005

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The following notes form an integral part of the annual financial statements

Sequans Communications S.A.
Consolidated Statements of Comprehensive Income (Loss)

	Year ended December 31,		
	2016 ⁽¹⁾	2017	2018
	(in thousands)		
Profit (Loss) for the year	\$ (24,787)	\$ (26,160)	\$ (36,224)
Other comprehensive income (loss)			
<i>Other comprehensive income (loss) to be reclassified to profit or loss in subsequent years :</i>			
Net gain (loss) on cash flow hedge	(91)	195	(69)
Exchange differences on translation of foreign operations	(375)	212	(53)
Net other comprehensive income (loss) to be reclassified to profit or loss in subsequent years	(466)	407	(122)
<i>Other comprehensive income (loss) not to be reclassified to profit or loss in subsequent years :</i>			
Re-measurement gains (losses) on defined benefit plans	120	(46)	(47)
Net other comprehensive income (loss) not to be reclassified to profit or loss in subsequent years	120	(46)	(47)
Total other comprehensive income (loss)	(346)	361	(169)
Total comprehensive income (loss)	<u>\$ (25,133)</u>	<u>\$ (25,799)</u>	<u>\$ (36,393)</u>
Attributable to:			
Shareholders of the parent	\$ (25,133)	\$ (25,799)	\$ (36,393)
Non-controlling interests	—	—	—

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The following notes form an integral part of the annual financial statements

Sequans Communications S.A.
Consolidated Statements of Financial Position

		At December 31,		
	Note	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
		(in thousands)		
ASSETS				
Non-current assets:				
Property, plant and equipment	7	\$ 6,659	\$ 6,992	\$ 6,271
Intangible assets	8	7,707	9,562	12,409
Deposits and other receivables	19	332	402	394
Other non-current financial assets	19	310	353	337
Total non-current assets		15,008	17,309	19,411
Current assets:				
Inventories	9	8,693	7,376	8,243
Trade receivables	10	13,673	17,814	13,177
Contract assets	10	1,612	3,112	2,707
Prepaid expenses and other receivables		3,172	4,214	3,237
Recoverable value added tax		470	688	565
Research tax credit receivable	4.4	1,902	3,248	3,148
Deposit		345	347	—
Cash and cash equivalents	11	20,202	2,948	12,086
Total current assets		50,069	39,747	43,163
Total assets		\$ 65,077	\$ 57,056	\$ 62,574
EQUITY (DEFICIT) AND LIABILITIES				
Equity (deficit):				
Issued capital, euro 0.02 nominal value, 94,732,539 shares issued and outstanding at December 31, 2018 (80,024,707 and 75,030,078 at December 31, 2017 and 2016, respectively)	12	\$ 1,923	\$ 2,031	\$ 2,384
Share premium	12	189,029	204,952	225,470
Other capital reserves	13	28,257	33,313	39,768
Accumulated deficit		(209,553)	(235,712)	(272,036)
Other components of equity		(796)	(436)	(605)
Total equity (deficit)		8,860	4,148	(5,019)
Non-current liabilities:				
Government grant advances and loans	15	5,144	5,030	5,674
Venture debt	14	—	—	11,811
Convertible debt and accrued interest	14	16,338	17,063	19,723
Provisions	16	1,306	1,532	1,689
Deferred tax liabilities	17	22	52	691
Deferred revenue	17	1,940	1,293	808
Total non-current liabilities		24,750	24,970	40,396
Current liabilities:				
Trade payables	18	18,358	13,023	9,412
Interest-bearing financing of receivables	14	7,712	7,413	10,295
Venture debt	14	—	—	823
Government grant advances and loans	15	601	1,592	688
Other current liabilities	18	4,415	5,138	4,654
Deferred revenue	18	335	740	973
Provisions	16	46	32	352
Total current liabilities		31,467	27,938	27,197
Total equity and liabilities		\$ 65,077	\$ 57,056	\$ 62,574

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The following notes form an integral part of the annual financial statements

Sequans Communications S.A.
Consolidated Statements of Changes in Equity (Deficit)

	Attributable to the shareholders of the parent						
	Ordinary shares		Share premium	Other capital reserves	Accumulated deficit	Cumulative translation adjustments	Accumulated other comprehensive income (loss)
	Shares	Amount					
	(Note 12)	(Note 12)	(Note 12)	(Note 13)			Total equity (deficit)
(in thousands, except share and per share amounts)							
At January 1, 2016	59,166,741	\$ 1,568	\$ 165,536	\$ 16,864	\$ (184,765)	\$ (152)	\$ (299)
Loss for the year					(24,787)		(24,787)
Re-measurement gains (losses) on defined benefit plans							120
Foreign currency translation						(375)	(375)
Net loss on cash flow hedge							(91)
Total comprehensive income (loss)					(24,787)	(375)	29
Issue of shares in connection with the exercise of options and warrants	187,901	4	275				
Issue of shares in connection with the public offering of September 2016 (Note 12)	15,675,436	351	25,514				
Transaction costs			(2,296)				
Reclassification of embedded derivative of convertible debts				10,271			
Share-based payments				1,122			
At December 31, 2016	75,030,078	\$ 1,923	\$ 189,029	\$ 28,257	\$ (209,552)	\$ (527)	\$ (270)
Loss for the year					(26,160)		(26,160)
Re-measurement gains (losses) on defined benefit plans							(46)
Foreign currency translation						212	212
Net gain on cash flow hedge							195
Total comprehensive income (loss)					(26,160)	212	149
Issue of shares in connection with the exercise of options and warrants	618,871	10	956				
Issue of shares in connection with the public offering of June 2017 (Note 12)	4,312,500	96	16,291				
Transaction costs			(1,489)				
Conversion of convertible debt (Note 12)	63,258	2	165				
Convertible debt amendments (Note 14.1)				3,418			
Share-based payments				1,638			
At December 31, 2017	80,024,707	\$ 2,031	\$ 204,952	\$ 33,313	\$ (235,712)	\$ (315)	\$ (121)
Effect of adoption of new accounting standard - IFRS 15					(100)		(100)
At December 31, 2017 restated	80,024,707	\$ 2,031	\$ 204,952	\$ 33,313	\$ (235,812)	\$ (315)	\$ (121)
Loss for the year					(36,224)		(36,224)

Sequans Communications S.A.
Consolidated Statements of Changes in Equity (Deficit)

Re-measurement gains (losses) on defined benefit plans						(47)	(47)
Foreign currency translation					(53)		(53)
Net loss on cash flow hedge						(69)	(69)
Total comprehensive income (loss)				(36,224)	(53)	(116)	(36,393)
Issue of shares in connection with the exercise of options and warrants	332,832	—	30				30
Issue of shares in connection with the public offering of January 2018 (Note 12)	14,375,000	353	22,648				23,001
Transaction costs			(2,160)				(2,160)
Issuance of convertible debt				1,346			1,346
Convertible debt amendments (Note 14.1)				4,296			4,296
Warrants attached with the venture debt (Note 14.2)				819			819
Deferred tax effect of debt instruments with equity components (Note 17)				(1,818)			(1,818)
Share-based payments				1,812			1,812
At December 31, 2018	94,732,539	\$ 2,384	\$ 225,470	\$ 39,768	\$ (272,036)	\$ (368)	\$ (5,019)

The following notes form an integral part of the annual financial statements

Sequans Communications S.A.
Consolidated Statements of Cash Flow

	Note	Year ended December 31,		
		2016 ⁽¹⁾	2017 ⁽²⁾	2018
		(in thousands)		
Operating activities:				
Profit (Loss) before income taxes		\$ (24,503)	\$ (25,860)	\$ (37,192)
Non-cash adjustment to reconcile income (loss) before tax to net cash used in operating activities:				
Amortization and impairment of property, plant and equipment	7	3,080	2,760	3,060
Amortization and impairment of intangible assets	8	2,215	2,815	3,103
Share-based payment expense	4.3	1,122	1,638	1,812
Increase (Decrease) in provisions		(240)	165	431
Interest expense, net		3,686	4,612	5,376
Convertible debt amendments	14.1	—	322	265
Change in fair value of convertible debt embedded derivative	14.1	1,583	—	—
Other financial expenses		83	—	400
Foreign exchange loss (gain)		(18)	561	(497)
Loss on disposal of property, plant and equipment		2	—	13
Bad debt expense		40	183	1,782
Working capital adjustments:				
Decrease (Increase) in trade receivables and other receivables		665	(7,267)	4,003
Decrease (Increase) in inventories		(4,628)	1,317	(867)
Decrease (Increase) in research tax credit receivable		963	(1,087)	559
Increase (Decrease) in trade payables and other liabilities		2,354	(5,939)	(3,899)
Increase (Decrease) in deferred revenue		(737)	(242)	(252)
Decrease in government grant advances		(1,030)	(2,271)	(857)
Income tax paid		(226)	(333)	(78)
Net cash flow used in operating activities		\$ (15,589)	\$ (28,626)	\$ (22,838)
Investing activities:				
Purchase of intangible assets and property, plant and equipment	7-8	\$ (5,368)	\$ (4,232)	\$ (5,373)
Capitalized development expenditures		(22)	(2,190)	(3,835)
Sale (Purchase) of financial assets		24	(113)	24
Decrease (Increase) of short-term deposit		48	(2)	347
Interest received		48	60	71
Net cash flow used in investments activities		\$ (5,270)	\$ (6,477)	\$ (8,766)
Financing activities:				
Public equity offering proceeds, net of transaction costs paid		\$ 23,569	\$ 14,898	\$ 20,841
Proceeds from issue of warrants and exercise of stock options/warrants, net of transaction costs		279	966	30
Proceeds (repayment of) from interest-bearing receivables financing	14.3	1,240	(299)	2,882
Proceeds from interest-bearing research project financing	15.2	1,021	2,716	1,574
Proceeds from issuance of venture debt, net of transaction cost		—	—	13,595
Proceeds from convertible debt, net of transaction cost	14.1	6,932	—	4,388
Repayment of government loans	15.3	—	(116)	(589)
Repayment of convertible debt and accrued expenses		—	—	(1,186)
Repayment of borrowings and finance lease liabilities		(12)	—	—
Interest paid		(251)	(327)	(791)
Net cash flows from financing activities		\$ 32,778	\$ 17,838	\$ 40,744
Net increase (decrease) in cash and cash equivalents		11,919	(17,265)	9,140
Net foreign exchange difference		(5)	11	(2)
Cash and cash equivalent at January 1		8,288	20,202	2,948
Cash and cash equivalents at period end	11	\$ 20,202	\$ 2,948	\$ 12,086

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The following notes form an integral part of the annual financial statements

Sequans Communications S.A.
Notes to the Consolidated Financial Statements

1. Corporate information

Sequans Communications S.A. (“Sequans”) is organized as a limited liability company (“*société anonyme*”) incorporated and domiciled in the Republic of France, with its principal place of business at 15-55 boulevard Charles de Gaulle, 92700 Colombes, France. Sequans, together with its subsidiaries (the “Company”), is a fabless designer, developer and supplier of 4G semiconductor solutions for wireless broadband applications. The Company’s semiconductor solutions incorporate baseband processor and radio frequency transceiver integrated circuits along with its proprietary signal processing techniques, algorithms and software stacks.

2. Summary of significant accounting and reporting policies

2.1. Basis of preparation

The Consolidated Financial Statements are presented in U.S. dollars.

These Consolidated Financial Statements for the year ended December 31, 2018 have been prepared on a going concern assumption. The Company’s internal cash forecast is built from sales forecasts by products and by customer and assumes a stable operating cost structure. Taking into account forecasted operating cash flow, government funding of research programs and proceeds from expected financing activities (from institutional or strategic investors, or from the capital markets), management believes that Company’s existing cash and cash equivalents plus cash generated from these activities will be sufficient at least for the 12 months following December 31, 2018. As disclosed in Note 22, “Events after the reporting date”, the Company raised net proceeds of \$8.4 million from a strategic investor in February 2019, and on April 30, 2019, Nokomis Capital, L.L.C. issued a firm commitment to purchase a new convertible note for \$3 million and Dr. Georges Karam issued a commitment to loan up to \$700,000, if the Company needs additional liquidity. Should these net proceeds and other existing sources of financing not be sufficient to fund operating activities, the Company expects to be able to obtain additional funding through one or more possible licenses, business partnerships or other similar arrangements, equity offerings, debt financing, or a combination of the above. The Company cannot guarantee if or when any such transactions will occur or whether they will be on satisfactory terms. The Company’s failure to raise financing as and when needed could have a negative impact on its financial condition and its ability to pursue its business strategies. If adequate funds are not available, the Company may be required to reduce its current level of expenses and investments.

Statement of compliance

The Consolidated Financial Statements of the Company have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standard Board (“IASB”) and whose application is mandatory for the year ended December 31, 2018. Comparative figures are presented for December 31, 2016 and 2017.

The accounting policies are consistent with those of the same period of the previous financial year, except for the changes disclosed in Note 2.2 to the Consolidated Financial Statements.

The Consolidated Financial Statements of the Company for the years ended December 31, 2016, 2017 and 2018 have been authorized for issue in accordance with a resolution of the board of directors on April 23, 2019.

Basis of consolidation

The Consolidated Financial Statements comprise the financial statements of Sequans Communications S.A., which is the ultimate parent of the group, and its subsidiaries and for the years ended December 31, 2018, 2017 and 2016:

<u>Name</u>	<i>Country of incorporation</i>	<i>Year of incorporation</i>	<i>% equity interest</i>
Sequans Communications Ltd.	United Kingdom	2005	100
Sequans Communications Inc.	United States	2008	100
Sequans Communications Ltd. Pte.	Singapore	2008	100
Sequans Communications Israel (2009) Ltd.	Israel	2010	100

The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. All intra-group balances, transactions, income and expenses and profits and losses resulting from intra-group transactions are eliminated in full. The subsidiaries have been fully consolidated from their date of incorporation.

2.2. Changes in accounting policy and disclosures

New and amended standards and interpretations

The accounting policies used in 2018 are consistent with those of the previous financial year, except for the following new and amended IFRS and IFRIC interpretations effective as of January 1, 2018:

- *IFRS 15 Revenue from Contracts with Customers*

IFRS 15 was issued in May 2014 and establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The principles in IFRS 15 provide a more structured approach to measuring and recognizing revenue. The new revenue standard is applicable to all entities and supersedes IAS 11 *Construction Contracts*, IAS 18 *Revenue* and related interpretations. The Company applies the five-step approach in determining the amount and timing of revenue to be recognized: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when the performance obligation is satisfied. The standard also includes additional disclosure requirements, which we have included within the footnotes.

The Company adopted IFRS 15 using the modified retrospective method applying the guidance to all open contracts at January 1, 2018. The analysis was based on the identification of revenue streams presented in financial statements : product revenues (direct sales or through a distributor) and other revenues (sales of licenses, maintenance or services). The effect of adopting IFRS 15 was limited to a change in the accounting for one contract where the timing of revenue recognition was determined to be point in time under IFRS 15 rather than over time based on the pattern of transfer of control to the customer.

The Company recognized the cumulative effect adjustment of \$0.1 million to increase accumulated deficit and reduce contract assets.

The comparative financial information has not been restated and continues to be presented under the accounting standards in effect for the respective periods except that we have reclassified prior years' contract assets out of trade receivables to conform to 2018 presentation.

- *IFRS 9 - Financial Instruments: Classification and Measurement*

In July 2014, the IASB issued IFRS 9 (Financial Instruments). IFRS 9 introduces a new classification and measurement model of financial assets and liabilities and sets new hedge accounting requirements. It also provides a new expected loss model for impairment of financial assets (versus the incurred losses historical approach), which is in particular applicable to trade receivables. The Company has performed an analysis on historical uncollectible amounts and determined that these were largely a result of account-specific factors and not a result of actual or expected general default conditions or indicators. The Company performed this analysis using internal historical information on the nature of the impairment and expectations around the collectibility of aged receivables currently held, considering both account-specific and macroeconomic factors.

- *Amendments to IFRS2: Classification and measurement of share-based payment transactions*

The amendments clarify how to account for certain types of share-based payment transactions. The amendments provide requirements on the accounting for the effects of vesting and non-vesting conditions on the measurement of cash-settled share-based payments, share-based transactions with a net settlement feature for withholding tax obligations, and a modification to the terms and conditions of a share-based payment that changes the classification of the transaction from cash-settled to equity settled.

- *Annual Improvements to IFRS (2014-2016)*

Sequans Communications S.A.
Notes to the Consolidated Financial Statements—(Continued)

These include improvements to IAS 28: Investments in associates and joint ventures.

- *IFRIC 22 Foreign Currency Transactions and Advance Considerations*

IFRIC Interpretation 22 addresses the exchange rate to use in transactions that involve advance considerations paid or received in a foreign currency.

Except for IFRS 15, and IFRS 9 for disclosure purposes, the adoption of these new standard and interpretations had no impact on the Company's financial statements.

Standards issued but not yet effective

Standards and interpretations issued but not yet effective up to the date of issue of the Company's Consolidated Financial Statements are listed below. The Company intends to adopt these standards when they become effective:

- *IFRS 16 - Leases*

In January 2016, the IASB issued IFRS 16 (Leases), which aligns the accounting treatment of operating leases of lessees with that already applied to finance leases (i.e. recognition in the balance sheet of a liability for future lease payments, and of an asset for the Sequans Communications S.A. associated rights of use). Application of IFRS 16 will also require a change in the presentation of lease expenses both in the income statement (i.e. depreciation and interest expense) and in the statement of cash flows (the amount allocated to repayment of the liability will be reported as a cash outflow from financing activities). IFRS 16 is applicable for annual reporting periods beginning on or after January 1, 2019. The Company is currently assessing the impacts of IFRS 16 and intends to apply the modified retrospective application approach. Under the modified retrospective application approach, the Company will recognize a lease liability at January 1, 2019 for leases previously classified as operating leases applying IAS 17 and IFRIC 4 and will measure lease liabilities at the present value of the remaining lease payments, discounted using the Company's incremental borrowing rate at the date of initial application. The Company will also recognize a right-of-use asset at January 1, 2019. The Company intends to elect the practical expedient not to reassess whether contracts are or contain leases.

Due to the adoption of IFRS 16, the Company's operating profit will improve, while interest expense will increase due to the change in the accounting for expenses of leases that were classified as operating leases under IAS 17.

- *IFRIC 23 Uncertainty over Income Tax Treatments*

This Interpretation clarifies how to apply the recognition and measurement requirements in IAS 12 when there is uncertainty over income tax treatments. The interpretation will be effective from annual periods commencing on or after January 1, 2019. The Company is currently assessing the impact of this interpretation.

- *Amendments to IFRS 9: Prepayments with negative compensation features*

The amendments clarify how to classify particular pre-payable financial assets and how to account for financial liabilities following a modification. These amendments will be effective for annual periods commencing on or after January 1, 2019. The Company is currently assessing the impact of these amendments.

- *Amendments to IAS 28: Investments in associates and joint ventures* which will be effective from annual periods commencing on or after January 1, 2019 are not expected to have a significant impact on the Company's financial statements.

- *Annual Improvements to IFRS (2015-2017), including amendments to IFRS 3 : Business Combinations, amendments to IAS 12 : Income Taxes, and amendments to IAS 23 : Borrowing Costs*, are applicable from annual periods commencing on or after January 1, 2019. The Company is currently assessing the impact of these improvements.

2.3. Summary of significant accounting policies

Functional currencies and translation of financial statements denominated in currencies other than the U.S. dollar

The Consolidated Financial Statements are presented in U.S. dollars, which is also the functional currency of Sequans Communications S.A. The Company uses the U.S. dollar as its functional currency due to the high percentage of revenues, cost of revenue, capital expenditures and operating costs, other than those related to headcount and overhead, which are denominated in U.S. dollars. Each subsidiary determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency.

As at the reporting date, the assets and liabilities of each subsidiary are translated into the presentation currency of the Company (the U.S. dollar) at the rate of exchange in effect at the Statement of Financial Position date and their Statement of Operations are translated at the weighted average exchange rate for the reporting period. The exchange differences arising on the translation are taken directly to a separate component of equity (“Cumulative translation adjustments”).

Foreign currency transactions

Foreign currency transactions are initially recognized by Sequans Communications S.A. and each of its subsidiaries at their respective functional currency rates prevailing at the date of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange in effect at the reporting date. All differences are taken to the Consolidated Statement of Operations within financial income or expense. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the initial transactions.

The table below sets forth, for the periods and dates indicated, the average and closing exchange rate for the U.S. dollar (USD) to the euro (EUR), the U.K. pound sterling (GBP), the Singapore dollar (SGD) and the New Israeli shekel (NIS):

	USD/EUR	USD/GBP	USD/SGD	USD/NIS
December 31, 2016				
Average rate	1.1066	1.3555	0.7244	0.2605
Closing rate	1.0541	1.2312	0.6919	0.2604
December 31, 2017				
Average rate	1.1293	1.2885	0.7244	0.2780
Closing rate	1.1993	1.3518	0.7484	0.2880
December 31, 2018				
Average rate	1.1815	1.3356	0.7416	0.2782
Closing rate	1.1450	1.2800	0.7344	0.2665

Earnings (loss) per share

Basic earnings (loss) per share amounts are computed using the weighted average number of shares outstanding during each period.

Diluted earnings per share include the effects of dilutive options and warrants as if they had been exercised, unless the effect would be anti-dilutive.

Revenue recognition

The Company’s total revenue consists of product revenue and other revenue.

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Company when revenue can be reliably measured and when the costs incurred or to be incurred in respect of the transaction can be measured reliably. Revenue is measured at the fair value of the consideration to which the entity is entitled, excluding sales taxes or duties.

The Company applies a five-step approach in determining the amount and timing of revenue to be recognized: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when the performance obligation is satisfied.

Sequans Communications S.A.
Notes to the Consolidated Financial Statements—(Continued)

When a contract includes multiple promised goods and services, the Company evaluates each component to determine whether they represent separate performance obligations and determines the appropriate allocation of the contract consideration to each identified performance obligation based on estimated relative stand-alone selling prices.

Product revenue

Substantially all of the Company's product revenue is derived from the sale of semiconductor solutions for 4G wireless broadband applications.

Revenue from the sale of products is recognized at a point in time when the Company satisfies its performance obligation to the buyer, whether direct end customer, end customer's manufacturing partner or distributor. This occurs when there is no continuing managerial involvement to the degree usually associated with ownership nor effective control over the sale of products is retained, which is based on the specified Incoterms, but usually occurs on shipment of the goods. The Company is the principal in all product sales regardless of customer type. Products are not sold with a right of return but are covered by warranty. This is an assurance-type warranty. The Company does not accrue for a warranty obligation as the Company has not historically incurred and does not expect material costs. Although the products sold have embedded software, the Company believes that software is incidental to the products it sells.

Other revenue

Other revenue consists of the sale of licenses to use the Company's technology solutions and fees for the associated annual software maintenance and support services, as well as the sale of technical support and development services. Development services include advanced technology development services for technology partners and product development and integration services for customers, and wireless operators.

Revenue from the sale of licenses is recognized at a point in time when the Company satisfies its performance obligation which occurs when the software has been delivered to the customer (assuming no other significant obligations exist), as licenses provide the right to use the software as it exists when made available to the customer.

Revenue from the sale of software maintenance and support services is recognized over time, over the period of the maintenance (generally one year). When the first year of maintenance is included in the software license price, an amount generally equal to the negotiated rate for one year of maintenance is deducted from the value of the license and recognized as revenue over time, over the period of maintenance as described above. The difference between license and maintenance services invoiced and the amount recognized in revenue is recorded as deferred revenue.

Revenue from technical support and development services is generally recognized over time using the percentage-of-completion method. For each service contract, the Company determines whether the pattern of transfer of control meets one of the criteria for revenue recognition over time: (a) the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs (b) the Company's performance creates or enhances an asset (for example, work in progress) that the customer controls as the asset is created or enhanced or (c) the Company's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date. Generally, the support and development contracts meet one or more of these criteria, based on the facts and circumstances both within the contract and the nature of the services provided. Typically, the customers consume the services as they are provided through ongoing technical support or through an iterative development process. Certain contracts also include terms which allow the customer to have control over the asset as it is created or provide Sequans the right to payment for all work performed to date.

Due to revenue recognition over time, contract assets are created for services provided that Sequans does not yet have the right to invoice.

When a contract does not meet one of the criteria above, revenue is recognized at a point in time, when there is evidence of transfer of control, which typically occurs upon achievement of certain or all contract milestones. Percentage-of-completion is calculated based on the input method using estimated costs as a measure of performance completed.

The costs associated with these arrangements are recognized as incurred. Revenue from development contracts where no related incremental costs were identified amounted to \$831,000 for the year ended December 31, 2018 (\$1,321,000 in 2017 and \$3,684,000 in 2016).

Contract assets

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. As described above, when the Company performs by transferring goods or services before the customer pays consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional. Where the Company has the right to payment, these are included in unbilled revenue until billing occurs and classified as trade receivables.

Although not required under the modified retrospective approach, we have reclassified prior year amounts to conform with the IFRS 15 presentation: we have reclassified \$3.1 million and \$1.6 million of contract assets out of trade receivables for the years ended 2017 and 2016 respectively.

There are no other differences between the amounts recognized in the current year on the financial statements and amounts that would have been recognized under previous revenue recognition standards.

We have elected to use the practical expedient not to adjust the promised amount of consideration for the effects of a significant financing component when the period between when we transfer the promised good or service to our customers and when we expect the customers to pay for that good or service is one year or less.

We have elected to use the practical expedient not to disclose information about our remaining performance obligations for contracts that have an original expected duration of one year or less.

We do not have any costs that meet the criteria for costs to obtain a contract or cost to fulfill a contract.

As of December 31, 2018, the transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) was \$936,000 for which \$919,000 is expected to be recognized in the next year and \$17,000 in the year after.

Contract liabilities

Deferred revenue represents the Company's contract liabilities. Revenue recognized in the current period from amounts included in deferred revenue at the beginning of the year was \$740,000, \$497,000 and \$1,221,000 for 2018, 2017 and 2016, respectively (See Note 17 Other non-current liabilities and Note 18 trade payables and other current liabilities).

Cost of revenue

Cost of product revenue includes all direct and indirect costs incurred with the sale of products, including shipping and handling. Cost of other revenue includes incremental costs incurred to support the obligations covered by development services contracts (mainly employees and subcontractors costs). Research and development costs associated with product development (including normal customer support which generates product improvement) are recorded in research and development expenses.

Research and development costs

Research costs are expensed as incurred. Development costs are recognized as an intangible asset if the Company can demonstrate:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- its intention to complete the asset and use or sell it;
- its ability to use or sell the asset;
- how the asset will generate future economic benefits;
- the availability of adequate resources to complete the development and to use or sell the asset; and
- the ability to measure reliably the expenditure during development.

The asset is tested for impairment annually.

Development costs that meet the criteria for capitalization have been recorded as intangible assets. (See Note 8 to the Consolidated Financial Statements). Beginning in 2015, certain development costs incurred at the end of the product development cycle when the criteria for capitalization are met, became material as the Company began making its product available on more operator networks which require significant testing and qualification work in order to finalize the product for

sale on that network. Beginning in 2017, the Company capitalized costs related to the development of the chipsets for LTE Category M, and in 2018 the Company also capitalized costs for the development of the Monarch and Monarch 2.

Research and development costs associated with product development (including normal customer support which generates product improvements) are recorded in operating expense. In some cases, the Company has negotiated agreements with customers and partners whereby the Company provides certain development services beyond its normal practices or planned product roadmap. Amounts received from these agreements are recorded in other revenue. Incremental costs incurred by the Company as a result of the commitments in the agreements are recorded in cost of other revenue. Other research and development costs related to the projects covered by the agreements, but which would have been incurred by the Company without the existence of such agreements are recorded in research and development expense.

Government grants, loans and research tax credits

The Company operates in certain jurisdictions which offer government grants or other incentives based on the qualifying research expense incurred or to be incurred in that jurisdiction. These incentives are recognized as the qualifying research expense is incurred if there is reasonable assurance that all related conditions will be complied with and the grant will be received. When the grant relates to an expense item, it is recognized as a reduction of the related expense over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate. Any cash received in advance of the expenses being incurred is recorded as a liability.

Some long-term research projects are also financed through low-interest forgivable loans. The present value of forgivable loans is calculated based on expected future payments discounted using interest rate applied for standard loans with the same maturity. The difference between present value and amount received is accounted for as a grant.

Where loans or similar assistance provided by governments or related institutions are interest-free, the present value is calculated based on expected future payments discounted using the interest rate applied for standard loans with same maturity. The difference between present value and amount received is accounted for as a grant.

The Company also benefits from research incentives in the form of tax credits which are detailed in Note 4.4 to the Consolidated Financial Statements. When the incentive is available only as a reduction of taxes owed, such incentive is accounted for as a reduction of tax expense; otherwise, it is accounted for as a government grant with the benefit recorded as a reduction of research and development costs, whether capitalized or expensed.

Financial income and expense

Financial income and expense include:

- interest expense related to venture debt, accounts receivable financing, the debt component of convertible debt and government loans, and a supplier payable with extended payment terms;
- other expenses paid to financial institutions for financing operations;
- foreign exchange gains and losses
- changes in fair value of financial assets and liabilities
- impact of convertible debt amendments; and
- impact of convertible debt reimbursement.

The Company reflects foreign exchange gains and losses related to hedges (through derivatives) of euro-based operating expenses in operating expenses.

Taxation

Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date.

Deferred income tax

Deferred income tax is provided using the liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognized for all taxable temporary differences, except with respect to taxable temporary differences associated with investments in subsidiaries where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognized for all deductible temporary differences, carry forwards of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and the carry forwards of unused tax credits and unused tax losses can be utilized.

Deferred tax is computed based on the temporary difference that exists between the tax and accounting basis for non-monetary items.

The carrying amount of deferred income tax assets is reviewed at the reporting date and adjusted to the extent that it is probable that sufficient future taxable profit will be available to allow all or part of the deferred income tax asset to be utilized.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the statement of financial position date.

Deferred income tax relating to items recognized directly in equity is recognized in equity.

Deferred income tax assets and deferred income tax liabilities are offset if a legally enforceable right of offset exists.

Value added tax

Revenue, expenses and assets are recognized net of the amount of value added tax except:

- where the value added tax incurred on a purchase of assets or services is not recoverable from the tax authorities, in which case the value added tax is recognized as part of the cost of acquisition of the asset or as part of the expense item as applicable; and
- receivables and payables that are stated with the amount of value added tax included.

Value added tax recoverable consists of value added tax paid by the Company to vendors and suppliers located in the European Union and recoverable from the tax authorities. Value added tax recoverable is collected on a quarterly basis.

Inventories

Inventories consist primarily of the cost of semiconductors, including wafer fabrication, assembly, testing and packaging; components; and modules purchased from subcontractors. Inventories are valued at the lower of cost (determined using the weighted average cost method) or net realizable value (estimated market value less estimated cost of completion and the estimated costs necessary to make the sale).

The Company writes down the carrying value of its inventories for estimated amounts related to the lower of cost or net realizable value, obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated net realizable value. The estimated net realizable value of the inventory is based on historical usage and assumptions about future demand, future product purchase commitments, estimated manufacturing yield levels and market conditions on a product-by-product basis. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realizable value because of changed economic circumstances, the amount of the write-down is reversed (i.e. the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realizable value.

Financial assets

Financial assets are classified, at initial recognition, as (1) measured at amortized cost, (2) fair value through other comprehensive income (OCI), or (3) fair value through profit or loss. The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and Sequans' business model for managing them. With the

Sequans Communications S.A.
Notes to the Consolidated Financial Statements—(Continued)

exception of trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient, the Company initially measures a financial asset at its fair value.

Receivables

The Company has not adjusted the transaction price for any revenue contracts for a significant financing component and as such, trade receivables are measured at the transaction price determined under IFRS 15. Impairment losses on trade accounts receivable are estimated using the expected loss method, in order to take into account the risk of payment default throughout the lifetime of the receivables. Based on an analysis of historical credit losses, the Company has not applied any expected credit losses to its outstanding receivables as of the reporting date beyond specific provisions for doubtful accounts. The Company records an allowance for any specific account it considers as doubtful based on the particular circumstances of the account. The carrying amount of the receivable is thus reduced through the use of an allowance account, and the amount of the charge is recognized on the line “General and administrative expenses” in the Consolidated Statement of Operations. Subsequent recoveries, if any, of amounts previously provided for are credited against the same line in the Consolidated Statement of Operations. When a trade accounts receivable is uncollectible, it is written-off against the allowance account for trade accounts receivable.

Short-term investments

Short-term investments are financial instruments with an initial maturity of greater than 90 days, but less than one year, and are reported as current financial assets.

Deposits

Deposits are reported as non-current financial assets (loans and receivables) when their initial maturity is more than twelve months.

Cash and cash equivalents

Cash and cash equivalents in the Consolidated Statements of Financial Position includes cash at banks, term deposits and money market funds, which correspond to highly liquid investments readily convertible to known amounts of cash and subject to an insignificant risk of change in value.

Property, plant and equipment

Property, plant and equipment is stated at cost less accumulated depreciation and any accumulated impairment loss. Depreciation is computed using the straight-line method over the estimated useful lives of each component. The useful lives most commonly used are the following:

Machinery and equipment	3 to 5 years
Building and leasehold improvements	Lesser of 6 years or the life of the lease
Computer equipment	3 years
Furniture and office equipment	5 years

Impairment tests are performed whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If any indication exists, the Company estimates the asset’s recoverable amount, which is the higher of the fair value less cost to sell and the value in use. Where the carrying amount exceeds that recoverable amount, the asset is considered impaired and it is written down to its recoverable amount.

Depreciation expense is recorded in cost of revenue or operating expenses, based on the function of the underlying assets.

Intangible assets

Intangible assets, primarily purchased licenses for development or production technology and tools, as well as standard-related patent licenses and development costs meeting the criteria for capitalization, are stated at cost less accumulated amortization and any accumulated impairment loss. Amortization is computed using the straight-line method over the estimated useful life of each component. Acquired licenses are amortized over their contractual life or five years in the case of perpetual licenses. Capitalized development costs are generally amortized over periods ranging from 3 to 5 years, representing the expected life of the related technology.

Sequans Communications S.A.
Notes to the Consolidated Financial Statements—(Continued)

Useful lives are reviewed on a regular basis and changes in estimates, when relevant, are accounted for on a prospective basis. The amortization expense is recorded in cost of revenue or operating expenses, based on the function of the underlying assets.

Impairment tests are performed whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If any indication exists, the Company estimates the asset's recoverable amount, which is the higher of the fair value less cost to sell and the value in use. Where the carrying amount exceeds that recoverable amount, the asset is considered impaired and it is written down to its recoverable amount.

Costs of Equity Transactions

Incremental costs directly attributable to the equity transaction are recorded as a deduction from equity.

Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event for which it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Company expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in operating income (loss) net of any reimbursement.

Provisions include the provision for pensions and post-employment benefits. Pension funds in favor of employees are maintained in France, the United Kingdom, Singapore, the United States and Israel, and they comply with the respective legislation in each country and are financially independent of the Company. The pension funds are generally financed by employer and employee contributions and are accounted for as defined contribution plans with the employer contributions recognized as expense as incurred. There are no actuarial liabilities in connection with these plans.

French law also requires payment of a lump sum retirement indemnity to employees based on years of service and annual compensation at retirement. Benefits do not vest prior to retirement. This defined benefit plan is self-funded by the Company. It is calculated as the present value of estimated future benefits to be paid, applying the projected unit credit method whereby each period of service is seen as giving rise to an additional unit of benefit entitlement, each unit being measured separately to build up the final obligation. Following the application of IAS 19 revised, actuarial gains and losses are recognized in equity. The actualization rate is based on iBoxx Corporates AA.

Share-based payment transactions

Employees (including senior executives and members of the board of directors) and certain service providers of the Company receive remuneration in the form of share-based payment transactions, whereby they render services as consideration for equity instruments ("equity-settled transactions").

The cost of equity-settled transactions is measured by reference to the fair value at the date on which they are granted. The exercise price is based on closing market price on the date of grant.

The cost of equity-settled transactions is recognized, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the beneficiary becomes fully entitled to the award (the "vesting date"). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Company's best estimate of the number of equity instruments that will ultimately vest which includes assumptions on the number of awards to be forfeited due to the employees' failing to fulfill the service condition, and forfeitures following the non-completion of performance conditions. The Consolidated Statement of Operations charge or credit for a period represents the movement in cumulative expense recognized as at the beginning and end of that period.

Financial liabilities

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

Non derivative financial liabilities are subsequently measured at amortized cost whereas derivative liabilities not designated as hedging instruments are recognized at fair value through profit or loss.

Convertible debt

The Company evaluates at initial recognition of a convertible debt the different components and features of the hybrid instruments and determines whether these elements are equity instruments or embedded derivatives which require bifurcation. In subsequent periods, the liability component is accounted for using the effective interest method, based on the expected maturity of the debt. The equity component is not remeasured, while embedded derivatives unless closely related to the host instruments are recorded at fair value through the Consolidated Statement of Operations.

As described in Note 14.1 to the Consolidated Financial Statements, the Company issued debt with an option to convert into shares of the Company in 2015 and 2016. This option component has been accounted for as an embedded derivative and recorded as a financial liability:

- On the date of issue, the fair value of the embedded derivative is estimated based on a Black-Scholes valuation model. The debt component equals the present value of future contractual cash flows for a similar instrument with the same conditions (maturity, cash flows) excluding any option or any obligation for conversion or redemption in shares.
- Subsequently, the debt component is accounted for based on amortized cost, using the effective interest rate calculated at the date of issue and the embedded derivative is accounted as a financial liability, with changes in fair value recognized in the statement of operations until the date when the conversion rate is fixed. At this date, the fair value of the derivative - if not exercised - is reclassified in equity.

Costs incurred related to the convertible debt are deducted from the liability component and from the embedded derivative, proportionally. The part related to the embedded derivative has been recognized in the Consolidated Statements of Operations in "Other financial expenses".

On October 30, 2017, the convertibles notes were amended to extend the term of the notes and reduce the conversion rate for one convertible debt agreement (see Note 14.1). The change in fair value of the conversion options before and after the amendment has been recorded in Other Capital Reserves in shareholders' equity. The debt components on October 30, 2017 were re-measured based on the extended term of the notes using the effective interest rate calculated at the date of issue of each convertible note. The impact of the term extension and reduction of the conversion rate has been recorded in the Consolidated Statements of Operations in "Convertible debt amendments".

On September 27, 2018, the terms of the note issued on April 15, 2015 were amended to extend by two years the maturity of the note to April 14, 2021, and reduce the conversion rate. It was considered to be the equivalent of the extinguishment of the existing debt and issuance of new debt ("derecognition" method of accounting). Therefore, the fair value of the debt just prior to amendment was estimated in order to record a loss on extinguishment in the Consolidated Statement of Operations in "Convertible debt amendments". The amended debt was recorded at its fair value assuming a market rate of interest, with the estimated value of the conversion option in equity as the conversion rate is fixed

On September 27, 2018, the Company issued debt with an option to convert into shares of the Company. The option component has been accounted for in equity at its fair value at the date of issuance and is not remeasured. The debt component portion has been recorded as a financial liability and is subsequently measured at amortized cost, using the effective interest rate calculated at the date of issue.

Venture debt

As described in Note 14.2 to the Consolidated Financial Statements, the Company entered into a bond issuance agreement on October 26, 2018, with warrants attached. The issuance proceeds were allocated between the venture debt component and the equity component (the warrants). The value of the warrants was recorded in Other Capital Reserves in shareholders' equity.

Short-term debt secured by accounts receivables

As described in Note 14.3 to the Consolidated Financial Statements, the Company has a factoring agreement with a French financial institution. The Company transfers to the finance company all invoices issued to qualifying customers, and the customers are instructed to settle the invoices directly with the finance company. Because there is recourse to the Company for amounts that are overdue, the Company retains all receivables on its Consolidated Statement of Financial Position until they are paid and any amounts drawn on the line of credit are reflected in short-term debt. The Company pays a commission on the face

value of the accounts receivable submitted, which is recorded in General and Administration expense, and pays interest on any draw-down of the resulting line of credit.

Derivative financial instruments and hedge accounting

The Company uses financial instruments, including derivatives such as foreign currency forward and options contracts, to reduce the foreign exchange risk on cash flows from firm and highly probable commitments denominated in euros. The effective portion of the gain or loss on the hedging instrument is recognized directly as other comprehensive income (loss) in the cash flow hedge reserve, while any ineffective portion is immediately accounted for in financial results in the Consolidated Statement of Operations. Amounts recognized as other comprehensive income (loss) are transferred to the Consolidated Statement of Operations when the hedged transaction affects profit or loss. If the forecasted transaction is no longer expected to occur, the cumulative gain or loss previously recognized in equity is transferred to the Consolidated Statement of Operations.

All derivative financial instruments are recorded at fair value. Changes in fair value are recorded in current earnings or other comprehensive income (loss), depending on whether the derivative is designated as a hedge, its effectiveness as a hedge, and the type of hedge transaction. Any change in the fair value of the derivatives deemed ineffective as a hedge is immediately recognized in earnings.

Commitments

Commitments comprise primarily future operating lease payments and purchase commitments with its third-party manufacturers for future deliveries of equipment and components, which are described in Note 20 to the Consolidated Financial Statements.

2.4. Significant accounting judgments, estimates and assumptions

In the process of applying the Company's accounting policies, management must make judgments and estimates involving assumptions. These judgments and estimates can have a significant effect on the amounts recognized in the financial statements and the Company reviews them on an ongoing basis taking into consideration past experience and other relevant factors. The evolution of the judgments and assumptions underlying estimates could cause a material adjustment to the carrying amounts of assets and liabilities as recognized in the financial statements. The most significant management judgments and assumptions in the preparation of these financial statements are:

Revenue recognition

The Company's policy for revenue recognition, in instances where multiple deliverables are sold contemporaneously to the same counterparty, is in accordance with IFRS 15 *Revenue from contracts with customers*. The application of IFRS 15 to contracts with customers requires management to make certain judgments, the most significant of which are outlined below. These judgments are based on an analysis of the facts and circumstances surrounding the transactions on a contract-by-contract basis.

Determination of performance obligations within a contract

The Company applies judgment in determining whether a promised good or service is a performance obligation under the terms of the contract and whether multiple promised goods or services should be accounted for separately or together as a bundle.

Allocation of contract consideration to distinct performance obligations based on their stand-alone selling prices

Typically, contracts state the value of individual promised goods and services directly. However, in instances where the fair value is not observable, management applies judgment in determining the stand-alone selling price for goods and services.

Estimation of percentage-of-completion based on the input method

For service contracts that are recognized over time based on the percentage-of-completion, the Company sets up an initial budget at contract inception and tracks the progress to completion based on time and costs incurred by the employees directly working on each project. Management reviews the progress and performance of open contracts in order to determine the best estimate of estimated costs at completion on a quarterly basis and updates the revenue recognized as necessary.

Trade receivables

The Company records an allowance for any specific account it considers as doubtful based on the particular circumstances of the account. Additional allowances could be required if we receive information that the financial condition of our customers has deteriorated, resulting in an impairment of their ability to make payments, or there are indicators that amounts receivable will become uncollectible.

Inventories

As disclosed in Note 2.3 to the Consolidated Financial Statements, the Company writes down the carrying value of its inventory to the lower of cost or net realizable value. The estimated net realizable value of the inventory is based on historical usage and assumptions about future demand, future product purchase commitments, estimated manufacturing yield levels and market conditions on a product-by-product basis. Actual demand may differ from the forecast established by the Company, which may materially impact recorded inventory values and cost of revenue.

Share-based compensation

As disclosed in Note 13 to the Consolidated Financial Statements, the Company has various share-based compensation plans for employees and non-employees that may be affected, as to the expense recorded in the Consolidated Statements of Operations, by changes in valuation assumptions. Fair value of stock options is estimated by using the binomial model on the date of grant based on certain assumptions, including, among others expected volatility, the expected option term, the risk-free interest rate and the expected dividend payout rate. The fair value of the Company's shares underlying stock option grants equals the closing price on the New York Stock Exchange on the date of grant.

Fair value of financial instruments

Fair value corresponds to the quoted price for listed financial assets and liabilities. The Company determined that the fair values of cash, trade receivables and trade payables approximate their carrying amounts largely due to the short-term maturities of these instruments.

Where no active market exists, the Company establishes fair value by using a valuation technique determined to be the most appropriate in the circumstances.

Regarding compound debt instruments, the fair value of debt component was determined using a valuation model that requires judgment, including estimating the change in value of the Company at different dates and market yields applicable to the Company's straight debt (without the conversion option). The assumptions used in calculating the value of the conversion option represent the Company's best estimates based on management's judgment and subjective future expectations.

Deferred Tax Assets and Liabilities

Deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for operating losses and tax credit carryforwards. Management makes assumptions, judgments and estimates to determine our deferred tax assets and liabilities particularly as it relates to whether it is probable that deferred tax assets will be realized..

Research and Development Costs

Costs incurred internally in research and development activities are charged to expense until technological feasibility has been established for the project. Once technological feasibility is established, development costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. We have determined that technological feasibility for our software products is reached after all high-risk development issues have been resolved. Generally, this occurs when the preliminary design review has been done.

3. Segment information and Disaggregated Revenue Disclosures

The Company has one operating segment, which is the design and marketing of semiconductor components for 4G broadband wireless systems. All information required to be disclosed under IFRS 8 *Operating Segments* is shown in the Consolidated Financial Statements and these associated Notes.

Sales to external customers disclosed below are based on the geographical location of the customers. The following table sets forth the Company's total revenue by region for the periods indicated. The Company categorizes its total revenue geographically based on the location to which it invoices.

	Year ended December 31,		
	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
Asia :			
Taiwan	\$ 5,421	\$ 8,126	\$ 16,704
China (including Hong-Kong)	24,623	21,819	11,638
Rest of Asia	3,256	2,664	2,172
Total Asia	33,300	32,609	30,514
Europe, Middle East, Africa:	5,730	5,641	855
Americas:			
United States of America	6,468	7,896	7,042
Rest of Americas	81	2,117	1,839
Total Americas	6,549	10,013	8,881
Total revenue	\$ 45,579	\$ 48,263	\$ 40,250

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The Company categorizes its total revenue based on technology.

	Year ended December 31,		
	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
Broadband	\$ 30,100	\$ 27,900	\$ 11,657
IOT	8,401	11,568	19,679
Vertical	7,078	8,795	8,914
Total revenue	\$ 45,579	\$ 48,263	\$ 40,250

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

Additionally, the Company categorize its total revenue based on product and other revenue.

	Year ended December 31,		
	2016 ⁽¹⁾	2017 ⁽¹⁾	2018
Product	\$ 34,581	\$ 37,353	\$ 28,938
License	1,338	2,838	2,707
Development and other services	9,660	8,072	8,605
Total revenue	\$ 45,579	\$ 48,263	\$ 40,250

(1) In 2018, the Company adopted IFRS 15 using the modified retrospective application approach. Accordingly, prior period amounts have not been restated.

The substantial majority of the Company's non-current assets are held by the parent company, Sequans Communications S.A. and located in France. See Note 19.3 to these Consolidated Financial Statements for information about major customers.

4. Other income and expenses

4.1. Financial income and expenses

Financial income:

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Income from short-term investments and term deposits and other finance revenue	\$ 48	\$ 60	\$ 71
Foreign exchange gain	2,069	2,027	1,774
Total financial income	<u>\$ 2,117</u>	<u>\$ 2,087</u>	<u>\$ 1,845</u>

Financial expenses:

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Interest on loans	\$ 3,212	\$ 4,153	\$ 4,971
Interest on supplier payable with extended payment terms	411	213	—
Other bank fees and financial charges	111	306	476
Other financial expenses	83	—	400
Convertible debt amendments	—	322	265
Change in the fair value of convertible debt embedded derivative	1,583	—	—
Foreign exchange loss	1,476	3,428	1,408
Total financial expenses	<u>\$ 6,876</u>	<u>\$ 8,422</u>	<u>\$ 7,520</u>

For the year ended December 31, 2018, interest on loans included \$4,872,000 related to convertible debt issued in 2018, 2016 and 2015, the venture debt issued in 2018 and government loans granted in 2015 (\$4,094,000 and \$3,039,000 for the year ended December 31, 2017 and 2016, respectively). (See Note 14.1 to the Consolidated Financial Statements).

The net foreign exchange gain of \$366,000 for the year ended December 31, 2018 (2017: net foreign exchange loss of \$1,401,000; 2016: net foreign exchange gain \$593,000) arises primarily from euro-based monetary liabilities.

For the year ended December 31, 2018, net expense of \$265,000 (\$322,000 for the year ended December 31, 2017) was recognized related to the convertible debt amendments and other financial expenses of \$400,000 correspond to costs related to the early retirement of debt after the repayment (see Note 14.1 to the Consolidated Financial Statements). For the year ended December 31, 2016, expenses of \$1,583,000 were recognized related to the change in fair value of the convertible debt embedded derivative. (See Note 14.1 to the Consolidated Financial Statements). Other financial expenses of \$83,000 for the years ended December 31, 2016 correspond to costs related to the embedded derivative.

4.2. Cost of revenue and operating expenses

The tables below present the cost of revenue and operating expenses by nature of expense :

Sequans Communications S.A.
Notes to the Consolidated Financial Statements—(Continued)

	Note	Year ended December 31,		
		2016	2017	2018
		(in thousands)		
Included in cost of revenue:				
Cost of components		\$ 20,277	\$ 22,137	\$ 19,058
Depreciation and impairment	7	1,270	1,037	1,088
Amortization of intangible assets	8	157	157	158
Wages and benefits		2,374	2,233	2,368
Share-based payment expense	13	11	7	8
Assembly services, royalties and other		1,507	1,551	1,682
		\$ 25,596	\$ 27,122	\$ 24,362

	Note	Year ended December 31,		
		2016	2017	2018
(in thousands)				
Included in operating expenses (between gross profit and operating result):				
Depreciation and impairment	7	\$ 1,811	\$ 1,723	\$ 1,972
Amortization of intangible assets	8	2,057	2,658	2,945
Wages and benefits		22,615	26,044	27,616
Share-based payment expense	13	1,111	1,631	1,804
Foreign exchange gains and losses related to hedges of euro		12	99	(27)
Other, net		12,121	8,511	13,095
		\$39,727	\$ 40,666	\$ 47,405

4.3. Employee benefits expense

	Note	Year ended December 31,		
		2016	2017	2018
		(in thousands)		
Wages and salaries		\$ 18,996	\$ 21,535	\$ 22,501
Social security costs and other payroll taxes		5,805	6,584	7,286
Other benefits		100	58	125
Pension costs		88	100	72
Share-based payment expenses	13	1,122	1,638	1,812
Total employee benefits expense		\$ 26,111	\$ 29,915	\$ 31,796

The amount recognized as an expense for defined contributions plans amounts to \$1,369,000 for the year ended December 31, 2018 (\$1,077,000 and \$1,230,000 for the years ended December 31, 2016 and 2017, respectively).

4.4. Research and development expense and tax credit receivable

The research tax credit in France is deducted from corporate income taxes due; if taxes due are not sufficient to cover the full amount of the credit, the balance is received in cash three years later (one year later if the Company is below certain size criteria). Total research tax credit receivable as of December 31, 2018 is \$2,960,000, relating to tax credits receivables for 2018, which are expected to be recovered in 2019 in cash.

The Company also has research tax credits available in the United Kingdom.

Sequans Communications S.A.
Notes to the Consolidated Financial Statements—(Continued)

In the year ended December 31, 2017 and 2018, the Company capitalized costs related to the development of the chipsets for LTE Category M, the Monarch and Monarch 2. In the year ended December 31, 2016, the costs capitalized related mainly to operator certification.

The reduction of research and development expense from government grants, research tax credit and development costs capitalized was as follows:

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Research and development costs	\$ 30,022	\$ 33,318	\$ 34,969
Research tax credit	(1,962)	(3,345)	(3,027)
Government and other grants	(1,704)	(3,072)	(1,104)
Development costs capitalized (*)	(22)	(1,931)	(3,376)
Amortization of capitalized development costs	—	232	447
Total research and development expense	<u>\$ 26,334</u>	<u>\$ 25,202</u>	<u>\$ 27,909</u>

(*) Net of Research tax credit for \$459,000 and \$259,000 for the years ended December 31, 2018 and 2017, respectively.

5. Income tax

The major components of income tax expense are:

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Consolidated Statement of Operations			
Current income tax expense	\$ 272	\$ 273	\$ 210
Deferred income tax expense (benefit)	12	27	(1,178)
Income tax expense (benefit) reported in the Consolidated Statement of Operations	<u>\$ 284</u>	<u>\$ 300</u>	<u>\$ (968)</u>

A reconciliation of income taxes computed at the French statutory rate (34.43% for the years ended December 31, 2016 and 2017; and 28% in 2018) to the income tax expense (benefit) is as follows:

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Profit (loss) before income taxes	\$ (24,503)	\$ (25,860)	\$ (37,192)
At France's statutory income tax rate of 28% (34.43% in 2016 and 2017)	(8,436)	(8,904)	(10,269)
Non-deductible share-based payment expense	386	564	507
Tax credits	(676)	(1,152)	(848)
Permanent differences and other	(567)	(329)	(596)
Unrecognized benefit of tax losses carryforward	9,577	10,121	10,238
Income tax expense (income) reported in the Consolidated Statement of Operations	<u>\$ 284</u>	<u>\$ 300</u>	<u>\$ (968)</u>

Significant components of the Company's deferred tax assets and liabilities are as follows:

	Consolidated Statement of Financial Position			Consolidated Statement of Operations		
	December 31,			Year ended December 31,		
	2016	2017	2018	2016	2017	2018
	(in thousands)					
Post-employment medical benefits	\$ (237)	\$ (311)	\$ (277)	\$ 14	\$ (74)	\$ 34
Royalty accrual	(213)	(216)	(196)	17	(3)	20
Government loan	93	77	48	4	(16)	(29)
Intangible assets	126	121	74	126	(6)	(46)
Cash flow hedge	(7)	9	(1)	7	16	(10)
Remeasurement of non-monetary accounts	264	(327)	87	46	(591)	414
Convertible debts and venture debt - liability	—	981	235	—	981	(746)
Convertible debts and venture debt - equity component	—	—	1,818	—	—	—
Other provisions and accruals	(29)	(64)	(460)	(15)	(34)	(396)
From subsidiaries	22	52	35	12	30	(17)
Loss available for offsetting against future taxable income	3	(270)	(672)	(199)	(276)	(402)
Total	<u>\$ 22</u>	<u>\$ 52</u>	<u>\$ 691</u>	<u>\$ 12</u>	<u>\$ 27</u>	<u>\$ (1,178)</u>

The changes in deferred tax assets and liabilities were as follows :

	2016	2017	2018
	(in thousands)		
As of January 1st	\$ 10	\$ 22	\$ 52
Tax expense (income) during the year recognised in Profit or Loss	12	27	(1,178)
Tax expense during the year recognised in equity ⁽¹⁾	—	—	\$ 1,818
Effect of foreign exchange	—	3	(1)
As at December 31st	<u>\$ 22</u>	<u>\$ 52</u>	<u>\$ 691</u>

(1) Relates to the split accounting of the convertible debts and the venture debt issued with an equity component

As of December 31, 2018 the Company had accumulated tax losses which arose in France of \$265,873,000 that are available for offset against future taxable profits of Sequans Communications S.A within a limit of one million euro per year, plus 50% of the profit exceeding this limit. Remaining unapplied losses would continue to be carried forward indefinitely.

Deferred tax assets were recognized in 2016, 2017 and 2018 only to the extent that deferred tax liabilities existed relating to the same taxable entity, which are expected to reverse in the same period as the asset or into which a tax loss may be carried forward.

6. Earnings (loss) per share

Basic earnings (loss) per share amounts are calculated by dividing net income (loss) for the year attributable to all shareholders of the Company by the weighted average number of all shares outstanding during the year.

Diluted earnings per share amounts are calculated by dividing the net earnings attributable to equity holders of the Company by the weighted average number of shares outstanding during the year plus the weighted average number of shares that would be issued on the exercise of all the dilutive stock options and warrants, and upon vesting of restricted stock awards as well as conversion of convertible debt. Dilution is defined as a reduction of earnings per share or an increase of loss per share. As the exercise of all outstanding stock options and warrants as well as vesting as restricted stock awards and conversion of

convertible debt, would decrease loss per share, they are considered to be anti-dilutive and excluded from the calculation of loss per share.

The following reflects the income and share data used in the basic and diluted earnings (loss) per share computations:

	Year ended December 31,		
	2016	2017	2018
	(in thousands, except share and per share data)		
Profit (Loss)	\$ (24,787)	\$ (26,160)	\$ (36,224)
Weighted average number of shares outstanding for basic EPS	63,805,442	77,668,404	93,767,005
Net effect of dilutive stock options	—	—	—
Net effect of dilutive warrants	—	—	—
Net effect of vesting of restricted stock	—	—	—
Net effect of conversion of convertible notes	—	—	—
Weighted average number of shares outstanding for diluted EPS	63,805,442	77,668,404	93,767,005
Basic earnings (loss) per share	\$ (0.39)	\$ (0.34)	\$ (0.39)
Diluted earnings (loss) per share	\$ (0.39)	\$ (0.34)	\$ (0.39)

7. Property, plant and equipment

Property, plant and equipment include:

	Leasehold improvements	Plant and equipment	IT and office equipment	Total
	(in thousands)			
Cost:				
At January 1, 2016	\$ 1,299	\$ 25,167	\$ 4,365	\$ 30,831
Additions	34	2,549	78	2,661
Disposals	—	(345)	(643)	(988)
Exchange difference	(30)	(221)	(51)	(302)
At December 31, 2016	1,303	27,150	3,749	32,202
Additions	9	2,979	58	3,046
Disposals	(87)	(4,327)	(81)	(4,495)
Exchange difference	17	111	35	163
At December 31, 2017	1,242	25,913	3,761	30,916
Additions	34	2,248	80	2,362
Disposals	(30)	(70)	(203)	(303)
Reclassification	14	—	(14)	—
Exchange difference	(7)	(64)	(16)	(87)
At December 31, 2018	\$ 1,253	\$ 28,027	\$ 3,608	\$ 32,888
Depreciation and impairment:				
At January 1, 2016	578	18,966	4,171	23,715
Depreciation charge for the year	214	2,678	189	3,081
Disposals	—	(346)	(641)	(987)
Exchange difference	(9)	(140)	(117)	(266)
At December 31, 2016	783	21,158	3,602	25,543
Depreciation charge for the year	226	2,405	129	2,760
Disposals	(87)	(4,327)	(81)	(4,495)
Reclassification	275	326	(601)	—
Exchange difference	16	60	40	116
At December 31, 2017	1,213	19,622	3,089	23,924
Depreciation charge for the year	188	2,705	167	3,060
Disposals	(18)	(70)	(203)	(291)
Reclassification	(418)	—	418	—
Exchange difference	(8)	(55)	(13)	(76)
At December 31, 2018	\$ 957	\$ 22,202	\$ 3,458	\$ 26,617
Net book value:				
At January 1, 2016	\$ 721	\$ 6,201	\$ 194	\$ 7,116
At December 31, 2016	520	5,992	147	6,659
At December 31, 2017	29	6,291	672	6,992
At December 31, 2018	\$ 296	\$ 5,825	\$ 150	\$ 6,271

8. Intangible assets

Intangible assets include:

	Licenses, capitalized R&D and other intangible assets (in thousands)
Cost:	
At January 1, 2016	\$ 16,946
Additions	4,836
Disposals	(3,620)
Exchange difference	(47)
At December 31, 2016	18,115
Additions	4,641
Disposals	(64)
Exchange difference	23
At December 31, 2017	22,715
Additions	5,953
Disposals	(3,834)
Exchange difference	(13)
At December 31, 2018	\$ 24,821
Depreciation and impairment:	
At January 1, 2016	11,691
Amortization	2,215
Disposals	(3,468)
Exchange difference	(30)
At December 31, 2016	10,408
Amortization	2,815
Disposals	(64)
Exchange difference	(6)
At December 31, 2017	13,153
Amortization	3,103
Disposals	(3,834)
Exchange difference	(10)
At December 31, 2018	\$ 12,412
Net book value:	
At January 1, 2016	\$ 5,255
At December 31, 2016	7,707
At December 31, 2017	9,562
At December 31, 2018	\$ 12,409

For the years ended December 31, 2016, 2017 and 2018, the Company identified certain development costs that met the criteria for capitalization (see note 4.4), in addition to the acquisition of technology licenses.

9. Inventories

	At December 31,		
	2016	2017	2018
	(in thousands)		
Components	\$ 4,686	\$ 2,964	\$ 4,242
Finished goods (at lower of cost or net realizable value)	6,975	5,035	4,502
Total inventories at cost	<u>\$ 11,661</u>	<u>\$ 7,999</u>	<u>\$ 8,744</u>
Depreciation of components (at cost)	\$ 277	\$ 30	\$ —
Depreciation of finished goods	2,691	593	501
Total depreciation	<u>\$ 2,968</u>	<u>\$ 623</u>	<u>\$ 501</u>
Components, net	<u>\$ 4,409</u>	<u>\$ 2,934</u>	<u>\$ 4,242</u>
Finished goods, net	4,284	4,442	4,001
Total net inventories	<u>\$ 8,693</u>	<u>\$ 7,376</u>	<u>\$ 8,243</u>

In the year ended December 31, 2016, there was no significant change in the provision on components and finished goods. Finished goods inventory depreciated concerned WiMAX finished goods inventory, depreciated in previous years as the anticipated demand from identified customers and projects was canceled, reduced or delayed.

In the year ended December 31, 2017, all the WiMAX inventory, fully depreciated in previous years, was physically scrapped, resulting in a provision reversal of \$2,755,000. The Company also depreciated the value of inventory for one LTE product for which units on hand were in excess of the units needed to serve the expected demand for identified customers and projects. This resulted in a provision of \$199,000. The Company further depreciated \$265,000 in 2017 related to goods damaged during production over the course of the year (recovered from a manufacturing supplier in 2018 in line with the amounts recorded under Prepaid Expenses and Other Receivables as of December 31, 2017).

In the year ended December 31, 2018, the goods damaged and depreciated in 2017 were physically scrapped resulting in a provision reversal of \$265,000. The remaining amount of \$501,000 in depreciation is related to finished goods that have been damaged or units on hand in excess of the units needed to serve the expected demand for identified customers and projects.

10. Trade receivables and contract assets

Trade receivables and contract assets are non-interest bearing and generally have 30-90 day payment terms.

	At December 31,		
	2016	2017	2018
	(in thousands)		
Trade receivables	\$ 14,427	\$ 18,754	\$ 16,758
Contract assets	1,612	3,112	2,707
Unbilled revenue	12	355	105
Unissued credit notes	(138)	(485)	(1,094)
Provisions on trade receivables	(628)	(810)	(2,592)
Net trade receivables	<u>\$ 15,285</u>	<u>\$ 20,926</u>	<u>\$ 15,884</u>

In the year ended December 31, 2018, the Company recorded unissued credit notes related to special customers programs such as rebates.

The movements in the provision for impairment of receivables were as follows:

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	December 31,		
	2016	2017	2018
	(in thousands)		
At January 1,	\$ 588	\$ 628	\$ 810
Charge for the year	40	182	1,782
At year end	<u>\$ 628</u>	<u>\$ 810</u>	<u>\$ 2,592</u>

In the year ended December 31, 2018, the Company recognized a provision for impairment of \$1,782,000 included in the Consolidated Statement of Operations in "General and administration". Trade receivables impaired are related primarily to significantly aged receivables, which the Company no longer expects to collect although still subject to enforcement.

As at year end, the aging analysis of trade receivables and contract assets that were not impaired is as follows:

	Total	Neither past due nor Impaired	Past due but not impaired			
			<30 days	30-60 days	60-120 days	>120 days
			(in thousands)			
At December 31, 2016	\$ 15,285	\$ 12,995	\$ 412	\$ 374	\$ 1,494	\$ 10
At December 31, 2017	\$ 20,926	\$ 12,746	\$ 4,771	\$ 1,036	\$ 1,673	\$ 700
At December 31, 2018	\$ 15,884	\$ 7,421	\$ 5,155	\$ 49	\$ 471	\$ 2,788

The Company does not assign credit risk rating grades to its trade receivables, but assess credit risk at the customer level.

11. Cash and cash equivalents

	At December 31,		
	2016	2017	2018
	(in thousands)		
Cash at banks	\$ 8,765	\$ 2,039	\$ 4,577
Cash equivalents	11,437	909	7,509
Cash and cash equivalents	<u>\$ 20,202</u>	<u>\$ 2,948</u>	<u>\$ 12,086</u>

Cash at banks earns no interest. Cash equivalents in money market funds are invested for short-term periods depending on the immediate cash requirements of the Company, and earn interest at market rates for short-term investments. The fair value of cash and cash equivalents is equal to book value. Most of the cash and cash equivalents is held in U.S. dollar and euros as follows:

	At December 31,		
	2016	2017	2018
	(in thousands)		
U.S. dollar denominated accounts	\$ 19,122	\$ 1,343	\$ 4,411
Euro denominated accounts	949	1,503	7,545
GBP denominated accounts	23	30	30
SGP denominated accounts	53	16	53
NIS denominated accounts	36	11	21
RMB denominated accounts	2	21	7
Other currencies denominated accounts	17	24	19
Cash and cash equivalents	<u>\$ 20,202</u>	<u>\$ 2,948</u>	<u>\$ 12,086</u>

12. Issued capital and reserves

The share capital of Sequans Communications S.A. is denominated in euros, as required by law in France. Any distributions to shareholders are denominated in euros. Amounts of capital and reserves presented in the Consolidated Statements of Financial Position in U.S. dollars have been translated using historical exchange rates.

Authorized capital, in number of shares

Authorized capital includes all shares issued as well as all potential shares which may be issued upon exercise of stock options, founders' warrants, other warrants, restricted share awards and conversion of convertible debt, or which the shareholders have otherwise authorized for specific capital increases. At December 31, 2018, authorized capital was 156,960,089 ordinary shares with a nominal of €0.02 each (98,462,155 and 139,359,831 ordinary shares at December 31, 2016 and 2017, respectively).

There is one category of authorized shares: ordinary shares.

Shares issued and fully paid

	At December 31,					
	2016		2017		2018	
	Shares	Amount	Shares	Amount	Shares	Amount
	(in thousands, except for share data)					
Ordinary shares	75,030,078	€ 1,501	80,024,707	€ 1,597	94,732,539	€ 1,895
Converted to U.S. dollars at historical exchange rates		\$ 1,923		\$ 2,031		\$ 2,384

Other capital reserves

Other capital reserves include the accumulated share-based payment expense as of period end, the counterpart of which is in retained earnings (accumulated deficit) as the expense is reflected in profit and loss, as well as the fair value of the convertible debt embedded derivatives at the time of conversion rate was fixed in 2016, the change in fair value of the conversion options at resulting from the 2017 and 2018 amendments, the value of the conversion option of the 2018 convertible, the value of warrants issued to the holder of the 2015 convertible note in connection with the September 2018 amendment, the value of warrants issued to the holder of the venture debt and the deferred tax impact related to the equity component of the convertible debts and venture debt.

Dividend rights

Dividends may be distributed from the statutory retained earnings and additional paid-in capital, subject to the requirements of French law and the by-laws of Sequans Communications S.A. There were no distributable retained earnings at December 31, 2016, 2017 or 2018. Dividend distributions by the Company, if any, will be made in euros.

Capital transactions

On January 17, 2018, the Company increased its capital in connection with a public offering by issuing 14,375,000 ordinary shares (including 1,875,000 shares from the underwriters' over-allotment option) at \$1.60 per share. The total offering amounted to \$23,000,000. Accordingly, issued capital in the Consolidated Statement of Financial Position was increased by \$352,369 recorded in share capital and \$22,647,631 in share premium. Costs directly attributable to the equity transaction amounting to approximately \$2.2 million were deducted from the share premium.

On June 16, 2017, the Company increased its capital in connection with a public offering by issuing 4,312,500 ordinary shares (including 562,500 shares from the underwriters' over-allotment option) at \$3.80 per share. The total offering amounted to \$16,387,500. Accordingly, issued capital in the Consolidated Statement of Financial Position was increased by \$96,246 recorded in share capital and \$16,291,254 in share premium. Costs directly attributable to the equity transaction amounting to approximately \$1.5 million were deducted from the share premium.

On May 9, 2017, a holder of convertible notes issued in 2016 with a principal value of \$160,000 converted the debt, plus accrued interest of \$11,594 into a total of 63,258 ordinary shares. \$1,380 was recorded in share capital in the Consolidated Statement of Financial Position and \$165,114 in share premium.

On September 16, 2016, the Company increased its capital in connection with a public offering by issuing 15,151,520 ordinary shares at \$1.65 per share. On October 7, 2016, the underwriters purchased an additional 523,916 ordinary shares at the public offering price. The total offering amounted to \$25,864,486. Accordingly, issued capital in the Consolidated Statement of Financial Position was increased by \$350,456 recorded in share capital and \$25,514,030 in share premium. Costs directly attributable to the equity transaction amounting to approximately \$2.3 million were deducted from the share premium.

In the years ended December 31, 2016, 2017 and 2018, ordinary shares were issued upon exercise of options and warrants as described in Note 13 to the Consolidated Financial Statements.

13. Share-based payment plans

The expense recognized for employee and other services received during the year ended December 31, 2018 and arising from equity-settled share-based payment transactions was \$1,812,000 (2016: \$1,122,000; 2017: \$1,638,000). Of this total, \$24,000 in 2018 (2016: \$14,000; 2017: \$14,000), related to warrants plans for consultants considered equivalent to employees.

Founders' warrants, stock options, warrants and restricted share awards give the right to acquire ordinary shares. Following completion of the initial public offering of the Company's shares, the exercise price for options and warrants is based on the closing market price on the date of grant. There is no exercise price for restricted share awards; the beneficiary receives title to the underlying ordinary shares with no cash payment at the end of the vesting period. In general, the contractual life of the founders' warrants, stock options and warrants is ten years. There are no cash settlement alternatives, and the Company has not developed a practice of cash settlement.

There have been no cancellations or modifications to any of the plans during the years ended December 31, 2016, 2017 or 2018.

General employee stock option, founders warrant plans and restricted shares awards

All employees of the French parent company and its subsidiaries are entitled to a grant of stock options or restricted shares awards. Founders' warrants were granted to residents of France prior to the Company's IPO. Founders' warrants are a specific type of option available to qualifying young companies in France and had more favorable tax treatment for both the employee and the employer compared to stock options. Otherwise, founders' warrants function in the same manner as stock options.

In general, vesting of the founders' warrants and stock options occurs over four years, with 25% vesting after the first anniversary of grant and the remaining 75% vesting monthly over the remaining 36 months. Restricted shares awards (RSA) vest over four years, with either 25% vesting after the 1-year anniversary of the grant and the remaining 75% of the grant vesting quarterly over the remaining 3 years, or with 50% vesting after the 2-year anniversary of the grant and the remaining 50% vesting quarterly over the remaining 2 years. From time to time, vesting of founders' warrants, stock options and restricted shares may be linked to employee performance with different vesting periods. Restricted shares may be sold only beginning two years after the date of grant.

All expenses related to these plans have been recorded in the Consolidated Statement of Operations in the same line items as the related employees' cash-based compensation.

Warrant plans for board members and consultants

The Company awards warrants to members of the board of directors following approval by the shareholders and to a limited number of consultants who have long-term relationships with the Company. Vesting may be either over a two-year, three-year or four-year period, or may be immediate, depending on the nature of the service contract. All expenses related to these plans have been recorded in the Consolidated Statements of Operations in the same line items as the related service provider's cash-based compensation.

Movements in the periods presented

The following table illustrates the number and weighted average exercise prices (WAEP) of, and movements in, founders' warrants, stock options and warrants during the period:

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Notes to the Consolidated Financial Statements—(Continued)

	December 31,					
	2016		2017		2018	
	Number	WAEP	Number	WAEP	Number	WAEP
Outstanding at January 1,	7,428,931	\$ 3.58	7,177,500	\$ 3.55	6,197,848	\$ 3.59
Granted during the year	643,350	\$ 2.07	230,000	\$ 3.39	250,000	\$ 1.93
Forfeited during the year	(317,880)	\$ 2.97	(336,365)	\$ 4.75	(269,082)	\$ 2.84
Exercised during the year ⁽¹⁾	(187,901)	\$ 1.53	(431,790)	\$ 2.28	(14,814)	\$ 1.85
Expired during the year	(389,000)	\$ 3.12	(441,497)	\$ 3.25	(180,500)	\$ 5.67
Outstanding at period end	7,177,500	\$ 3.55	6,197,848	\$ 3.59	5,983,452	\$ 3.50
<i>Of which, warrants for consultants equivalent to employees</i>	404,798	\$ 3.23	151,500	\$ 3.29	180,500	\$ 2.75
Exercisable at period end	5,049,015	\$ 4.28	4,900,052	\$ 3.90	5,194,187	\$ 3.62
<i>Of which, warrants for consultants equivalent to employees</i>	360,215	\$ 3.41	131,917	\$ 3.51	143,833	\$ 3.11

(1) The weighted average share estimated fair value at the dates of exercise of these options was \$2.20 in 2018, \$3.49 in 2017 and \$2.21 in 2016.

The following table illustrates the number of, and movements in, restricted shares awards (RSA) during the period:

	December 31,		
	2016	2017	2018
Outstanding at January 1,	—	634,720	1,467,166
Granted during the year	634,720	1,002,650	1,803,550
Forfeited during the year	—	(15,200)	(206,517)
Vested during the year	—	(155,004)	(318,018)
Outstanding at period end	634,720	1,467,166	2,746,181

Prior to the initial public offering in April 2011, exercise prices were denominated in euros. Since the IPO, exercise prices are denominated in U.S. dollars. Euro-denominated exercise prices have been converted to U.S. dollars at the historical exchange rate for purposes of presentation in this table.

The weighted average remaining contractual life of founders' warrants, stock options and warrants outstanding as at December 31, 2018 was 5.2 years (2017: 6.0 years; 2016: 6.7 years).

The range of exercise prices, with euro-denominated exercise prices converted to U.S. dollars at the year-end exchange rate, for founders' warrants, stock options, and warrants outstanding at December 31, 2018, 2017 and 2016 was \$1.20—\$8.50.

The weighted average fair value of founders' warrants, stock options and warrants granted during the year ended December 31, 2018 was €0.88 (2017: €1.52 ; 2016: €0.97). The weighted average fair value of the restricted shares awards granted during the year ended December 31, 2018 was €1.00 (2017: €2.15; 2016: €1.65). The fair value is measured at the grant date. The following table lists the inputs to the models used for determining the value of the grants made for the years ended December 31, 2016, 2017 and 2018:

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	December 31,		
	2016	2017	2018
Dividend yield (%)	—	—	—
Expected volatility (%)	63 - 69	63 - 64	68 - 70
Risk-free interest rate (%)	0.00 - 0.47	0.43	0.00
Assumed annual lapse rate of awards (%)	10 (5 for RSA)	10 for RSA 2 for stock options, warrants and a limited group of beneficiaries	10 for RSA 2 for stock options, warrants and a limited group of beneficiaries
Sell price multiple (applied to exercise price)	2	2	2
Weighted average share price (€)	1.76	2.30	1.08
Model used	Binomial	Binomial	Binomial

For the years ended December 31, 2018, 2017 and 2016 the expected volatility assumption has been based on the Company's volatility since its initial public offering in 2011.

Founders' warrants, stock options and warrants can be exercised during a period after the vesting date until the plan terminates. In the pricing model, the assumption was made that plan participants will exercise before the end of the exercise period if the share price reaches a certain multiple of the exercise price.

If a sell-price multiple of 3 instead of 2 had been used (no impact on the restricted shares) and if the weighted average share price used in the pricing model had been decreased by 10%, share-based payment total compensation for founders' warrants, stock options, warrants and restricted shares awards granted through December 31, 2018 would have decreased by approximately (8.63)% (2017: (8.73)%; 2016: (7.09)%).

The expected life of the options is based on historical data and is not necessarily indicative of exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility is indicative of future trends, which may also not necessarily be the actual outcome.

14. Interest-bearing loans and borrowings

	Note	At December 31,		
		2016	2017	2018
		(in thousands)		
Current				
Venture debt	14.2	—	—	823
Interest-bearing receivables financing	14.3	7,712	7,413	10,295
Total current portion		<u>\$ 7,712</u>	<u>\$ 7,413</u>	<u>\$ 11,118</u>
Non-current				
Convertible debt and accrued interest	14.1	\$ 16,338	\$ 17,063	\$ 19,723
Venture debt	14.2	—	—	11,811
Total non-current portion		<u>\$ 16,338</u>	<u>\$ 17,063</u>	<u>\$ 31,534</u>

As of December 31, 2018, the Company had no drawn or undrawn committed borrowing or overdraft facilities in place.

14.1. Convertible debt

On April 14, 2015, the Company entered into a convertible note agreement with Nokomis Capital, L.L.C., one of the Company's existing shareholders, regarding the issuance and sale of a convertible note in the principal amount of \$12 million (the "2015 note"), which note was convertible into the Company's American Depositary Shares ("ADSs"), each representing one ordinary share, nominal value €0.02 per share, at a conversion rate of 540.5405 ADSs for each \$1,000 principal amount of the 2015 note, subject to certain adjustments, which equated to an initial conversion price of \$1.85 per ADS. On October 30, 2017, the convertible note was further amended to extend the term from April 14, 2018 to April 14, 2019. On September 27, 2018, the convertible note was amended to extend the term by two years to April 14, 2021, and to decrease the conversion price from \$1.85 to \$1.70. In addition, the Company issued to Nokomis, for a total subscription price of \$1.00, warrants to acquire 1,800,000 ADSs at an exercise price of \$1.70 per ADS. Such warrants are exercisable at any time and expire April 14, 2021.

On April 27, 2016, the Company entered into a convertible note agreement with Nokomis Capital, L.L.C. and two other financial institutions (the "Holders") regarding the issuance and sale of convertible notes in the aggregate principal amount of \$7.16 million (the "2016 notes"), which are convertible into the Company's ADS. The initial conversion price of the 2016 notes was \$2.7126 per ADS. On October 30, 2017, the convertible note agreement was amended to extend the term from April 27, 2019 to April 27, 2020. In addition, the conversion price was decreased from \$2.71 to \$2.25.

On September 27, 2018, the Company entered into a convertible note agreement with Nokomis Capital, L.L.C. in the principal amount of \$4.5 million (the "2018 notes") under which the convertible note matures in April 2021 and is subordinated to certain venture debt to be issued by the Company and is convertible, at the holder's option, into the company's ADSs at a conversion rate of \$1.70 per ADS. On September 27, 2018, all of the convertible notes issued in 2015 and convertible notes with a principal amount of \$6 million issued in 2016 were amended to allow the convertible notes to be subordinated to certain venture debt to be issued by the Company.

On October 26, 2018, the Company further amended the 2015 note, the 2016 note and the 2018 note with Nokomis to clarify the terms of the subordination of these convertible notes to the Company's venture debt holder.

The 2015, 2016 and 2018 notes (together, "the Notes") are unsecured obligations of the Company. The Notes issued in 2015 and 2018 will mature on April 14, 2021 and the 2016 Notes will mature on April 27, 2020. The Notes are not redeemable prior to maturity at the option of the Company. The accreted principal amounts of the notes are convertible at any time or times on or after the issuance dates until maturity, in whole or in part, subject to certain adjustments for significant corporate events, including dilutive issuances, dividends, stock splits and other similar events. Interest accrues on the unconverted portion of the notes at the rate of 7% per year, paid in kind annually on the anniversaries of the issuance of the Notes. The notes also provide for customary events of default which, if any of them occurs, would permit or require the principal of and accrued interest on the notes to become or to be declared due and payable.

In the event of a recapitalization, reorganization, reclassification, consolidation, merger, sale of all or substantially all of the Company's assets or other transaction, which in each case results in the Company's shareholders receiving stock, securities or assets with respect to or in exchange for their ADSs or ordinary shares, the holders shall elect, at their option, either (a) to require the Company to repurchase for cash the entire accreted principal amount of the Notes or (b) to convert the Notes in their entirety.

The Notes contain customary ongoing covenants of the Company. In addition, the Notes provide that the Company will not grant a consensual security interest or pledge its personal property assets to a third-party lender (with certain limited exceptions) during the time that the notes are outstanding. Any amendment or waiver of the terms of the Notes requires the affirmative consent of the holders.

The 2015 and 2016 notes were accounted for as compound financial instruments with two components:

- A liability component reflecting the Company's contractual obligation to pay interest and redeem the bonds in cash; and
- An embedded derivative, which is the holder's call option whereby the Company can be required to issue a number of shares in exchange for notes, at a rate which may vary during the first twelve months after issuance of the 2015 note under certain contractual conditions and during the period beginning on April 28, 2016 and ending on May 12, 2016 for the 2016 notes, and at the fixed conversion rate for the 2018 note.

The initial fair value of the 2015 and 2016 notes was split between these two components.

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The fair value of the liability component on the issuance date represents the fair value of a similar liability that does not have an associated equity conversion feature, calculated as the net present value of contractually determined future cash flows, discounted at the rate of interest applied by the market at the time of issue to instruments of comparable credit status and providing substantially the same cash flows, on the same terms, but without the conversion option. The Company has used 24.26% and 25.69% as the market rate of interest in order to value the liability components of the 2015 and 2016 notes on issuance, respectively.

The embedded derivatives of the 2015 and 2016 notes were valued using the Black-Scholes valuation model. On April 14, 2015, the initial fair value of the embedded derivative of the 2015 note was calculated to be \$4,055,000. On April 14, 2016, when the conversion rate of the 2015 notes was fixed, the fair value of the embedded derivative was calculated to be \$8,324,000 (\$6,091,000 at December 31, 2015). The change in fair value was recorded as financial expense for \$2,233,000 in the year ended December 31, 2016 and the fair value of the embedded derivative was transferred from liabilities to Other Capital Reserves in shareholders' equity. Following the extension of the term, the change in fair value of the conversion option before and after the amendment was calculated to be \$2,120,000 and was recorded as financial expense and in Other Capital Reserves in shareholders' equity. The debt component on October 30, 2017 was remeasured to take into account the new term using the effective interest rate calculated at the date of issue. The debt was reduced by an amount of \$1,994,000 recorded in financial income. Following the amendment signed in September 27, 2018, the fair value of the debt just prior to amendment was estimated in order to record a loss on extinguishment of \$265,000 recorded as Convertible debt amendments in the Consolidated Statements of Operations. The amended debt was then recorded at its fair value assuming a market rate of interest, with the calculated value of the conversion option of \$3,788,000 recorded in Other Capital Reserves in shareholders' equity. In the amendment signed on September 27, 2018, the Company issued to Nokomis, for a total subscription price of \$1.00, warrants to acquire 1,800,000 ADSs at an exercise price of \$1.70 per ADS. Such warrants are exercisable at any time and expire April 14, 2021. The calculated value of these warrants amounted to \$749,000, of which \$523,000 was recorded as a reduction of the amount of debt.

The fair value of the embedded derivative of the 2016 notes on the issuance date of April 27, 2016 was calculated to be \$2,597,000 and was recalculated to be \$1,947,000 when the conversion rate of the 2016 Notes was fixed on May 12, 2016. The change in fair value was recorded as financial income for \$650,000 in the year ended December 31, 2016, and the value of the embedded derivative as of May 12, 2016 was transferred from liabilities to Other Capital Reserves in shareholders' equity. Following the extension of the term and the decrease of the conversion price, the change in fair value of the conversion option before and after the amendment was calculated to be \$1,298,000 and was recorded as financial expense and in Other Capital Reserves in shareholders' equity. The debt component on October 30, 2017 was remeasured to take into account the new term using the effective interest rate calculated at the date of issue. The debt was reduced by an amount of \$1,103,000 recorded in financial income.

The net impact of the October 30, 2017 amendments of the convertible notes recorded in financial expense amounted to \$322,000.

On May 9, 2017, a Holder of 2016 notes with a principal value of \$160,000 converted the debt, plus accrued interest of \$11,594 into a total of 63,258 ADS. On October 30, 2018 and in connection with entering into the venture debt issuance agreement, the Company retired convertible notes issued on April 27, 2016 and due on April 27, 2020, with a principal amount of \$1 million, by paying the principal and accrued interest due as of October 30, 2018 to the noteholder. We recognized \$400,000 in financial expense related to the early retirement of this debt after the repayment.

The 2018 note was accounted for as compound financial instruments with two components:

- A liability component reflecting the Company's contractual obligation to pay interest and redeem the bonds in cash; and
- An equity component for the value of the conversion option.

The initial fair value of the notes was split between these two components.

The fair value of the equity component of the 2018 notes on the issuance date of September 27, 2018 was calculated to be \$1,366,000 and was recorded in Other Capital Reserves in shareholders' equity, net of transaction costs. The Company has used 23.81% as the market rate of interest in order to value the liability component of the note.

All remaining convertible notes issued in 2015, 2016 and 2018 are held by one institutional investor, Nokomis Capital.

14.2. Venture debt

On October 26, 2018, the Company entered into a bond issuance agreement with Harbert European Specialty Lending Company II S.a.r.l (the “Harbert”) whereby Harbert agreed to loan to the Company €12 million (\$14.0 million using the exchange rate as of October 26, 2018), at a stated rate of interest of 9%, to be repaid monthly over 42 months (the “Bond”). The Company may redeem or repurchase the notes before the maturity date, subject to making certain contractual payments. The contract also requires the Company to pay an additional fee equal to 2.5% of the principal at the end of the term. The Bond is secured by various assets of the Company (See Note 20), including intellectual property, and is senior to all the convertible notes. Also on October 26, 2018, the Company issued to Harbert, for a total subscription price of \$1.00, warrants to acquire 816,716 ADSs at an exercise price of \$1.34 per ADS. Such warrants are exercisable at any time and expire October 26, 2028.

The amounts received from Harbert, net of transaction costs, were allocated to (i) the warrants for an amount of €712,000 (\$819,000), which was recorded in Other Capital Reserves in shareholders’ equity, and (ii) the liability component for €10.9 million (\$12.8 million).

During the first twelve months, Sequans pays only interest and then begins to reimburse the principal during the remaining 30 months until April 26, 2022.

14.3. Interest-bearing financing of receivables

In June 2014, the Company entered into a factoring agreement with a French financial institution whereby a line of credit was made available equal to 90% of the face value of accounts receivable from product sales to qualifying customers. In July 2017, the Company signed an amendment to the initial agreement to include limited financing of accounts receivable from service sales. The Company transfers to the finance company all invoices issued to qualifying customers, and the customers are instructed to settle the invoices directly with the finance company. The Company pays a commission on the face value of the accounts receivable submitted and interest at the rate of 1.60% (LIBOR 3 months +1%) on any draw-down of the resulting line of credit. In the event that the customer does not pay the invoice within 60 days of the due date, the receivable is excluded from the line of credit, and recovery becomes the Company’s responsibility. At December 31, 2018, \$10,295,000 (\$7,413,000 at December 31, 2017 and \$7,712,000 at December 31, 2016) had been drawn on the line of credit and recorded as a current borrowing.

15. Government grant advances and loans

	Note	December 31,		
		2016	2017	2018
		(in thousands)		
Current				
Government grant advances	15.1	\$ 390	\$ 93	\$ 58
Research project financing	15.2	—	899	172
Government loans	15.3	211	600	458
Total current portion		<u>\$ 601</u>	<u>\$ 1,592</u>	<u>\$ 688</u>
Non-current				
Government grant advances	15.1	\$ 197	\$ 350	\$ 86
Research project financing	15.2	3,223	2,946	4,274
Government loans	15.3	1,571	1,353	819
Accrued interest	15.2	153	381	495
Total non-current portion		<u>\$ 5,144</u>	<u>\$ 5,030</u>	<u>\$ 5,674</u>

15.1. Government grant advances

In 2016, the Company was named as a participant in one new collaborative project with funding of €121,000 (\$131,000), which is expected to be released to the Consolidated Statement of Operations over the life of the project, estimated to be between one and four years.

In 2017, the Company was named as a participant in one new collaborative project with funding of €349,000 (\$386,000) which is expected to be released to the Consolidated Statement of Operations over the life of the project, estimated to be between one and two years.

The Company did not participate in any new collaborative projects in 2018.

15.2. Research project financing

In October 2014, Bpifrance, one of the Company's shareholders and the financial agency of the French government, provided funding to the Company in the context of a long-term research project, estimated to be completed over a 3-year period. In December 2016, Bpifrance and the Company signed an amendment to extend the period from three to four years. The total funding remains unchanged and amounts to €6,967,000 (\$8,988,000) with a portion in the form of a grant (€2,957,000 or \$3,815,000) and a portion in the form of a forgivable loan (€4,010,000 or \$5,173,000). The funding will be paid in three installments: the first tranche at the contract signature date, the second and the third installments after milestones defined in the contract. The grant is recognized as a reduction of research and development expense when corresponding expense is incurred. The forgivable loan advance will be repaid, except if the project is a commercial failure, from March 31, 2019 to September 30, 2022 and bears interests at a 1.53% fixed contractual rate. The difference between the amount of grant received and the present value amounted to a reduction of \$115,000 in the debt carrying value, with such difference being amortized over the contract period. In the event of commercial success, and sales of the product developed under this program are in excess of €350 million (\$425 million) during a period of three years, then the Company shall pay for three consecutive years after the date of the termination of the refund a bonus to Bpifrance of 1% of annual revenues generated by products issued from the project (up to a maximum of €350,000,000 or \$419,755,000 over a period of ten years).

In January 2016, Bpifrance provided funding to the Company for a new long-term research project, estimated to be completed over a 27-month period. The total of the funding amounts to €2,095,000 (\$2,288,000) comprising a portion in the form of a grant (€668,000 or \$729,000) and a portion in the form of a forgivable loan (€1,427,000 or \$1,558,000). The funding will be paid in four installments: the first tranche at the contract signature date, the second, the third and the fourth installments after milestones defined in the contract. The grant is recognized as a reduction of research and development expense when corresponding expense is incurred. The forgivable loan advance will be repaid, except if the project is a commercial failure, from July 1, 2020 to July 1, 2024 and bears interests at a 1.17% fixed contractual rate. The difference between the amount of grant received and the present value of future payments discounted using interest rate applied for standard loans with similar maturity amounted to a reduction of \$30,000 in the debt carrying value, with such difference being amortized over the contract period. In the event of commercial success, and sales of the product developed under this program are in excess of €3 million (\$3.3 million), then the Company shall pay for 4 consecutive years after the date of the termination of the refund 13% of the revenues generated by the sales of the products or services (up to a maximum of €600,000, or \$655,000, over a period of 10 years).

In 2016, the Company received payments for the two foregoing projects of €342,000 (\$379,000) as grants and €594,000 (\$642,000) as forgivable loans. In 2017, the Company received payments for one project of €176,000 (\$207,000) as a grant and for the two projects €2,132,000 (\$2,509,000) as forgivable loans. In 2018, the Company received payments for one project of €421,000 (\$492,000) as a grant and €927,000 (\$1,083,000) as a forgivable loan.

The estimated market rate of interest applied in 2018, 2017 and 2016 was between 1.80% and 2.30%. Accrued interest of \$242,000 was recorded as of December 31, 2018 (\$159,000 as of December 2017 and \$83,000 as of December 31, 2016).

15.3. Government loans

In September 2015, the Company received two loans from Bpifrance for a total amount of €2,000,000 (\$2,228,000). One loan of €1,000,000 bears interest at 5.24% per year, paid quarterly; the second loan of €1,000,000 is interest-free. The interest-free loan has been revalued using the 5.24% interest rate payable on the other loan. Both loans have seven year terms with the principal being amortized on a quarterly basis beginning in June 2017.

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Notes to the Consolidated Financial Statements—(Continued)

16. Provisions

	Post- employment benefits	Other provisions	Total (in thousands)	Current	Non current
At January 1, 2016	\$ 728	\$ 985	\$ 1,713	\$ 317	\$ 1,396
Arising (released) during the year	(29)	75	46	—	—
Released (used) during the year	(11)	(269)	(280)	—	—
Released (unused) during the year	—	(127)	(127)	—	—
At December 31, 2016	688	664	1,352	46	1,306
Arising (released) during the year	216	443	659	—	—
Released (used) during the year	—	(50)	(50)	—	—
Released (unused) during the year	—	(397)	(397)	—	—
At December 31, 2017	904	660	1,564	32	1,532
Arising (released) during the year	86	590	676	—	—
Released (used) during the year	—	(32)	(32)	—	—
Released (unused) during the year	—	(167)	(167)	—	—
At December 31, 2018	<u>\$ 990</u>	<u>\$ 1,051</u>	<u>\$ 2,041</u>	<u>\$ 352</u>	<u>\$ 1,689</u>

The provision for post-employment benefits is for the lump sum retirement indemnity required to be paid to French employees if they retire as a Company employee. The comprehensive income (loss) for 2018 includes \$47,000 of actuarial loss (actuarial loss of \$46,000 in 2017 and actuarial gain of \$120,000 in 2016). One employee retired during the year ended December 31, 2016. No employee retired in 2017 or 2018.

The main assumptions used in the calculation are the following:

	2016	2017	2018
Discount rate	1.31%	1.30%	1.57%
Salary increase	Between 1.5% and 3.5%	Between 1.5% and 3.5%	Between 1.5% and 3.5%
Retirement age	60-62 years	60-62 years	60-62 years
Turnover: depending on the seniority	4.35%, nil as from 64 year old	4.35%, nil as from 64 year old	4.35%, nil as from 64 year old

At December 31, 2016, 2017 and 2018, “Other provisions” include primarily estimated royalty payments assessed on sales of modules to holders of patents which may be deemed as essential under the requirements of the LTE standard. The royalty provision is based on management’s judgment, taking into consideration the various legal decisions, articles, reports and industry discussions on the subject which were available, and is recorded in the cost of product revenue. The Company’s modules are considered as final products incorporating the full LTE function, and therefore may have royalties assessed on their sale; no royalties are accrued on the sales of chips as the full LTE functionality is not included in the chip and it is not current industry practice to license standard-essential patents at the component level. In the year ended December 31, 2017, the Company revised the estimated royalty provision and reduced provisions from 2015 and 2016 by a total of \$397,000 (provisions from 2014 and 2015 were reduced by \$127,000 in the year ended December 31, 2016).

At December 31, 2018, the Company recorded a provision for risk for \$352,000 related to the probable expected costs to be incurred by the Company related to the current class action litigation (see Note 20 to the Consolidated Financial Statements).

17. Other non-current liabilities

	At December 31,		
	2016	2017	2018
	(in thousands)		
Deferred tax liabilities	22	52	691
Deferred revenue	\$ 1,940	\$ 1,293	\$ 808

In December 2018, the Company recognized a net deferred tax liability of \$691,000 related mainly to a deferred tax liability on the equity component of the convertible debt and the venture debt issued during the year of \$1,818,000, partially offset by a deferred tax asset related to unused tax losses which could be utilized in the period into which taxable temporary differences are expected to reverse.

In December 2015, the Company entered into a contract with a customer for certain development services which resulted in the recognition of deferred revenues for \$1,940,000 to be recognized on a straight-line basis over four years beginning when the customer's product is certified by a major U.S. carrier. As revenues were expected to be recognized subsequent to December 31, 2018, these deferred revenues were presented as non-current liabilities as of December 31, 2017 and 2016. The certification occurred in September 2017 and therefore \$485,000 and \$121,000 was recognized as revenue in 2018 and 2017, respectively, \$485,000 of the deferred revenues has been classified as current as of December 31, 2017 and 2018 and the remainder as non-current as of December 31, 2017 and 2018.

18. Trade payables, other current liabilities and deferred revenue

	At December 31,		
	2016	2017	2018
	(in thousands)		
Trade payables	\$ 18,358	\$ 13,023	\$ 9,412
Other current liabilities:			
Employees and social debts	3,283	3,720	3,091
Others	1,132	1,418	1,563
Total other current liabilities	\$ 4,415	\$ 5,138	\$ 4,654
Deferred revenue	\$ 335	\$ 740	\$ 973

Terms and conditions of the above financial liabilities:

- Trade payables are non-interest bearing and are generally settled on 30-day terms.
- Other payables, primarily accrued compensation and related social charges, are non-interest bearing.

As of December 31, 2016 and 2017, trade payables included the current part of a supplier debt recorded at the discounted value calculated with an interest rate of 8.34% and amounting to \$5,061,000 and \$2,399,000, respectively. The final installment of the supplier debt was settled in January 2018.

As of December 31, 2016, 2017 and 2018, deferred revenue is related to maintenance revenue, recognized over the 12-month maintenance period. In 2017 and 2018, in addition to deferred maintenance revenue, the Company recognized deferred revenue related to development services agreements. At December 31, 2017 and 2018, deferred development services revenue totaled \$61,000 and \$148,000, respectively, which was recognized during the year ended December 31, 2018 and is expected to be recognized during the year ended December 31, 2019, respectively. There was no deferred development services revenue at December 31, 2016.

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Notes to the Consolidated Financial Statements—(Continued)

19. Information about financial instruments

19.1. Financial assets and liabilities

	Carrying amount			Fair value		
	December 31,			December 31,		
	2016	2017	2018	2016	2017	2018
(in thousands)						
Financial assets:						
Trade and other receivables						
Trade receivables	\$ 15,285	\$ 20,926	\$ 15,884	\$ 15,285	\$ 20,926	\$ 15,884
Deposits and other receivables						
Deposits	332	402	394	332	402	394
Other financial assets						
Long-term investments	310	353	337	310	353	337
Financial instruments at fair value through other comprehensive income						
Cash flow hedges	—	72	—	—	72	—
Cash, cash equivalents and short-term investments	20,547	3,295	12,086	20,547	3,295	12,086
Total financial assets	\$ 36,474	\$ 25,048	\$ 28,701	\$ 36,474	\$ 25,048	\$ 28,701
Total current	\$ 35,832	\$ 24,293	\$ 27,970	\$ 35,832	\$ 24,293	\$ 27,970
Total non-current	\$ 642	\$ 755	\$ 731	\$ 642	\$ 755	\$ 731
Financial liabilities:						
Interest-bearing loans and borrowings:						
Interest-bearing receivables financing	7,712	7,413	10,295	7,712	7,413	10,295
Convertible debt and accrued expenses	16,338	17,063	19,723	16,115	16,309	19,708
Venture debt	—	—	12,634	—	—	12,634
Government loans	1,852	2,071	1,431	1,852	2,071	1,431
Research project financing	3,306	4,004	4,688	3,306	4,004	4,688
Trade and other payables (current and non current)	18,358	13,023	9,412	18,358	13,023	9,412
Financial instruments at fair value through other comprehensive income:						
Cash flow hedges	150	—	—	150	—	—
Total financial liabilities	\$ 47,716	\$ 43,574	\$ 58,183	\$ 47,493	\$ 42,820	\$ 58,168
Total current	\$ 26,431	\$ 21,935	\$ 21,160	\$ 26,431	\$ 21,935	\$ 21,160
Total non-current	\$ 21,285	\$ 21,639	\$ 37,023	\$ 21,062	\$ 20,885	\$ 37,008

The carrying values of current financial instruments (cash and cash equivalents, short-term investments, trade receivables and trade and other payables, and interest-bearing receivables financing) approximate their fair values, due to their short-term nature.

Available for sale long-term investments are primarily related to:

- a bank guarantee secured by pledges of investments in money market funds issued in favor of the owners of leased office space to secure annual lease payments by the Company for its office space in Colombes; and
- bank credit lines used in connection with the purchase of hedging instruments and finance lease, also secured by pledged money market funds.

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Notes to the Consolidated Financial Statements—(Continued)

Government loans received from the financial agency of the French government were recorded as financial instruments in compliance with IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*.

Fair Value Hierarchy

The Company uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly
- Level 3: techniques which use inputs that have a significant effect on the recorded fair value that are not based on observable market data

As at December 31, 2016, the Company held the following financial instruments carried at fair value on the statement of financial position:

Assets measured at fair value

	<u>At December 31,</u> <u>2016</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
		(in thousands)		
Long-term investments	\$ 310	—	\$ 310	—

Liabilities measured at fair value (on a recurring basis)

	<u>At December 31,</u> <u>2016</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
		(in thousands)		
Financial instruments at fair value through other comprehensive income:				
Cash flow hedge	\$ (150)	—	\$ (150)	—

As at December 31, 2017, the Company held the following financial instruments carried at fair value on the statement of financial position:

Assets measured at fair value

	<u>At December 31,</u> <u>2017</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
		(in thousands)		
Long-term investments	\$ 353	—	\$ 353	—
Financial instruments at fair value through other comprehensive income:				
Cash flow hedge	72	—	72	—

There were no liabilities measured at fair value.

As at December 31, 2018, the Company held the following financial instruments carried at fair value on the statement of financial position:

Assets measured at fair value

	At December 31, 2018	Level 1	Level 2	Level 3
		(in thousands)		
Long-term investments	\$ 337	—	\$ 337	—

There were no liabilities measured at fair value.

19.2. Financial instruments at fair value

The Company uses financial instruments, including derivatives such as foreign currency forward and options contracts, to reduce the foreign exchange risk on cash flows from firm and highly probable commitments denominated in euros.

The following tables present fair values of derivative financial instruments at December 31, 2016 and 2017. There was no derivative financial instrument outstanding at December 31, 2018.

	At December 31, 2016			
	Notional Amount		Fair value	
	(in thousands)			
Forward contracts (buy U.S dollars, sell euros)	€	5,750	\$	(142)
Options (buy euros, sell U.S. dollars)		1,500		(8)
Total	€	7,250	\$	(150)

	At December 31, 2017			
	Notional Amount		Fair value	
	(in thousands)			
Forward contracts (buy euros, sell U.S. dollars)	€	2,250	\$	53
Options (buy euros, sell U.S. dollars)		3,000		19
Total	€	5,250	\$	72

The fair value of foreign currency related derivatives are included in the Consolidated Statement of Financial Position in “Other current financial liabilities” at December 31, 2016 and in "Prepaid and other receivables" at December 31, 2017. The earnings impact of cash flow hedges relating to forecasted operating expense transactions is reported in operating expense. Realized and unrealized gains and losses on these instruments deemed effective for hedge accounting are deferred in accumulated other comprehensive income until the underlying transaction is recognized in earnings or the instruments are designated as hedges.

During the year ended December 31, 2018, the Company recorded a loss of \$69,000 (gain of \$195,000 and loss of \$91,000 for the years ended December 31, 2017 and 2016, respectively) in other comprehensive income (loss) related to the effective portion of the change in fair value of its cash flow hedges. During the year ended December 31, 2018, the amount reclassified from other comprehensive income to Consolidated Statement of Operations was a gain of \$53,000 (losses of \$74,000 and \$44,000 during the year ended December 31, 2017 and 2016, respectively).

During the year ended December 31, 2017, the Company recognized a net loss of \$3,000 related to the ineffective position of its hedging instruments. There was no ineffective portion of hedging instruments in the years ended December 31, 2016 and 2018.

The derivatives have maturity dates of less than 12 months. Management believes counterparty risk on financial instruments is minimal since the Company deals with major banks and financial institutions.

The use of different estimations, methodologies and assumptions could have a material effect on the estimated fair value amounts. The methodologies are as follows:

- Cash, cash equivalents, short-term investments, accounts receivable, accounts payable, other receivable and accrued liabilities: due to the short-term nature of these balances, carrying amounts approximate fair value.
- Long-term investments are composed of debt-based mutual funds with traded market prices. Their fair values amounted to \$310,000, \$353,000 and \$337,000 at December 31, 2016, 2017 and 2018, respectively.

- Foreign exchange forward and option contracts: the fair values of foreign exchange forward and option contracts were calculated using the market price that the Company would pay or receive to settle the related agreements, by reference to published exchange rates.

19.3. Financial risk management objectives and policies

The Company's principal financial liabilities comprise trade payables (current and non-current), interest-bearing receivables financing, government loans, convertible debt and venture debt. The Company has various financial assets such as trade receivables and cash and cash equivalents, which arise directly from its operations, as well as from capital increases.

The main risks arising from the Company's financial instruments are foreign currency risk, credit risk, interest rate risk and cash flow liquidity risk. The Board of Directors reviews and agrees policies for managing each of these risks which are summarized below.

Foreign currency risk

The Company faces the following foreign currency exposures:

- Operating activities, when revenues or expenses are denominated in different currencies from the functional currency of the entity carrying out these transactions.
- Venture debt and government loans denominated in euros while the functional currency of the entity carrying out these transactions is the U.S. dollar.
- Non derivative monetary financial instruments that are denominated and settled in a currency different from the functional currency of the entity which holds them.

Nearly 100% of total revenues and approximately 87% of total cost of sales are denominated in U.S. dollars. However, as a result of significant headcount and related costs from operations in France, which are denominated and settled in euros (the "structural costs"), the Company has transactional currency exposures which can be affected significantly by movements in the US dollar/euro exchange rates. Approximately 64% of operating expense is denominated in euros. (See Note 19.2 regarding hedging arrangements).

If there were a 10% increase or decrease in exchange rate of the U.S. dollar to the euro, as measured using the Company's 2018 weighted average exchange rate of one euro = \$1.1852, the Company estimates the impact, in absolute terms, on operating expenses and on financial liabilities for the year ended December 31, 2018 would have been approximately \$4.4 million.

Credit risk

It is the Company's policy that all customers who wish to trade on credit terms are subject to credit verification procedures and as such are considered to have low credit risk at initial recognition. The Company has subscribed to a credit insurance policy which provides assistance in determining credit limits and collection, in addition to some coverage of uncollectible amounts. In addition, receivable balances are monitored on an ongoing basis. There is a rebuttable presumption in IFRS 9 that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due. The Company considers that credit risk has not increased significantly on its outstanding not impaired trade receivables since initial recognition. The Company considers events of default based on the specific facts and circumstances relevant to the outstanding amount.

The following table summarizes customers representing a significant portion of the Company's total revenue:

Customer	Customer Location	% of total revenues for the year ended December 31,			Trade receivables at December 31,		
		2018	2017	2016	2018	2017	2016
A	Taiwan	32%	16%	Less than 10%	\$ 5,881,000	\$ 4,060,000	\$ —
B	China	13%	Less than 10%	Less than 10%	1,858,000	911,000	—
C	Taiwan	Less than 10%	17%	29%	\$ 2,526,000	\$ 5,352,000	\$ 4,870,000
D	China	Less than 10%	Less than 10%	15%	\$ —	\$ 667,600	\$ (100,000)

With respect to credit risk arising from the other financial assets, which comprise cash and cash equivalents, the Company's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments. Nearly all cash and cash equivalents are held in France at three large and international banks.

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Vendor concentration risk

Access to foundry capacity is critical to the Company's operations as a fabless semiconductor company. The Company depends on a sole independent foundry in Taiwan to manufacture its semiconductor wafers.

Liquidity risk

The Company monitors its risk of a shortage of funds using a cash flow planning tool. This tool considers the maturity of both its financial investments and financial assets (e.g. accounts receivables, other financial assets) and projected cash flows from operations.

The following table includes our contractual obligations, including interest, for existing financial liabilities as of the following dates:

	Within 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total
(in thousands)							
At December 31, 2016							
Research project financing	\$ 1,376	\$ 631	\$ 742	\$ 425	\$ 19	\$ 30	\$ 3,223
Interest-bearing receivables financing	7,712	—	—	—	—	—	7,712
Government loans	167	376	373	370	368	198	1,852
Convertible debt and accrued interests	—	—	16,338	—	—	—	16,338
Trade payables	18,358	—	—	—	—	—	18,358
Other current liabilities	4,415	—	—	—	—	—	4,415
	<u>\$ 32,028</u>	<u>\$ 1,007</u>	<u>\$ 17,453</u>	<u>\$ 795</u>	<u>\$ 387</u>	<u>\$ 228</u>	<u>\$ 51,898</u>
At December 31, 2017							
Research project financing	\$ 899	\$ 1,246	\$ 671	\$ 291	\$ 297	\$ 441	\$ 3,845
Interest-bearing receivables financing	7,413	—	—	—	—	—	7,413
Government loans	600	398	398	398	159	—	1,953
Convertible debt and accrued interests	—	11,861	5,202	—	—	—	17,063
Trade payables	13,023	—	—	—	—	—	13,023
Other current liabilities	5,138	—	—	—	—	—	5,138
	<u>\$ 27,073</u>	<u>\$ 13,505</u>	<u>\$ 6,271</u>	<u>\$ 689</u>	<u>\$ 456</u>	<u>\$ 441</u>	<u>\$ 48,435</u>
At December 31, 2018							
Research project financing	\$ 238	\$ 973	\$ 2,043	\$ 1,687	\$ 375	\$ 73	\$ 5,389
Interest-bearing receivables financing	10,295	—	—	—	—	—	10,295
Government loans	499	487	475	234	—	—	1,695
Convertible debt and accrued interests	—	5,807	13,916	—	—	—	19,723
Venture debt	2,057	6,158	6,158	2,396	—	—	16,769
Trade payables	9,412	—	—	—	—	—	9,412
Other current liabilities	4,654	—	—	—	—	—	4,654
	<u>\$ 27,155</u>	<u>\$ 13,425</u>	<u>\$ 22,592</u>	<u>\$ 4,317</u>	<u>\$ 375</u>	<u>\$ 73</u>	<u>\$ 67,937</u>

Company's liquidity risk for the next 12 months is described in note 2.1.

Capital management

The primary objective of the Company's capital management is to continue to execute according to its business plans and budgets in order to achieve profitability and positive cash flow, and to maximize shareholder value.

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Notes to the Consolidated Financial Statements—(Continued)

19.4. Changes in liabilities arising from financing activities

(in thousands)	January 1, 2017	Cash flows	Foreign exchange movement	Non-cash interest	Non-cash impact of amendment	Other ⁽¹⁾	December 31, 2017
Government grant advances and loans	\$ 5,745	2,600	915	90	—	(2,728)	\$ 6,622
Convertible debt and accrued interest	\$ 16,338	—	—	3,987	(3,097)	(165)	\$ 17,063
Interest-bearing financing of receivables	\$ 7,712	(299)	—	—	—	—	\$ 7,413
Total	\$ 29,795	2,301	915	4,077	(3,097)	(2,893)	\$ 31,098

(in thousands)	January 1, 2018	Cash flows	Foreign exchange movement	Non-cash interest	Non-cash impact of amendment	Other ⁽¹⁾	December 31, 2018
Government grant advances and loans	\$ 6,622	985	(250)	151	—	(1,146)	\$ 6,362
Convertible debt and accrued interest	\$ 17,063	3,202	—	4,435	(3,630)	(1,347)	\$ 19,723
Venture debt	\$ —	13,595	(243)	101	—	(819)	\$ 12,634
Interest-bearing financing of receivables	\$ 7,413	2,882	—	—	—	—	\$ 10,295
Total	\$ 31,098	20,664	(493)	4,687	(3,630)	(3,312)	\$ 49,014

(1) Amounts included in Other for 2018 mainly represent the amounts recorded in equity related to the issuance of debt with an equity component and the reduction of grants as the corresponding expense is incurred.

Amounts included in Other for 2017 mainly represent the reduction of grants as the corresponding expense is incurred.

20. Commitments and contingencies

Contingencies

From time to time, the Company has been and may become involved in legal proceedings arising in the ordinary course of its business.

On August 9, 2017, a putative securities class action captioned Andrew Renner v. Sequans Communications S.A., Georges Karam, and Deborah Choate (Case 1:17-cv-04665) was filed in the U.S. District Court for the Eastern District of New York. The plaintiff alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 based on purported misrepresentations regarding Sequans' revenue recognition policy in the Company's Form 20-F annual reports filed on April 29, 2016 and March 31, 2017. The complaint seeks unspecified damages and costs and fees. On August 10, 2017, an almost identical class action complaint captioned Kevin Shillito v. Sequans Communications S.A., Georges Karam, and Deborah Choate (Case 2:17-cv-04707) was filed in the same court. On September 28, 2017, the Shillito action was consolidated with the Renner action. On October 10, 2017, candidates to be the lead plaintiff filed motions to appoint a lead plaintiff and lead counsel. On February 6, 2018, the Court appointed the lead plaintiffs and lead counsel. Lead plaintiffs filed their Consolidated Amended Complaint (the "CAC") on April 9, 2018, which did not significantly alter the allegations made in the earlier pleadings. On May 24, 2018, the Company, Mr. Karam and Ms. Choate filed a pre-motion letter requesting permission to file a motion to dismiss the CAC, a request that was granted on August 21, 2018. The motion to dismiss was fully briefed and filed (along with lead plaintiffs' opposition briefing) on November 30, 2018. On December 12, 2018, at the parties' request, the Court stayed the action pending a scheduled mediation. The mediation occurred on February 7, 2019, but did not result in a

resolution of the case. On February 12, 2019, the Court lifted the stay, and the parties await the Court's decision on the previously-filed motion to dismiss.

The Company has estimated the financial effect on the Company that will result from ultimate resolution of the proceedings and has recorded a provision for \$352,000 as of December 31, 2018. Management is not aware of any other legal proceedings that, if concluded unfavorably, would have a significant impact on the Company's financial position, operations or cash flows.

Bank guarantee

A bank guarantee was issued in favor of the owners of new leased office space in France, in order to secure six months of lease payments, for an amount of \$336,000 as of December 31, 2018 (\$352,000 as of December 31, 2017). This guarantee was secured by the pledge of certificates of deposit and mutual funds for 100% of the amount of the guarantee. The total value of investments secured to cover this bank guarantee was \$337,000 at December 31, 2018 (\$353,000 at December 31, 2017).

Pledge of assets

As security for the payment and repayment of the venture debt (see Note 14.2 to these Consolidated Financial Statements), the Company has granted to Harbert a first ranking pledge over the receivables the Company holds against its customers other than customers covered by the factoring agreement. The carrying amount was \$4.1 million as of December 31, 2018. The Company has also agreed to grant to Harbert a first ranking pledge over specified bank accounts', which had a carrying amount of \$11.9 million as of December 31, 2018 and a pledge over its IP rights. Prior to an event of default, the amounts within the pledged accounts are not restricted; however, the pledge agreement stipulates certain covenants with which the Company must comply.

Operating leases

The determination of whether an arrangement is a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is a lease if fulfillment of the arrangement is dependent on the use of a specific asset and the arrangement conveys a right to use the asset. The Company has long-term operating leases for office and equipment rental. Future minimum undiscounted lease payments under long-term operating leases are as follows:

	December 31,		
	2016	2017	2018
	(in thousands)		
Within one year	\$ 1,864	\$ 2,252	\$ 1,541
After one year but not more than five years	3,165	1,545	515
More than five years	—	—	2
Total minimum lease payments	<u>\$ 5,029</u>	<u>\$ 3,797</u>	<u>\$ 2,058</u>

The table above does not include amounts for expected renewal periods that have not been committed to as of December 31, 2018.

Total operating lease expense for the year ended December 31, 2018 was \$2,963,000 (2017: \$2,655,000; 2016: \$2,426,000).

Purchase commitments

As of December 31, 2018, the Company had \$6.0 million of non-cancelable purchase commitments with its third-party manufacturer and suppliers for future deliveries of equipment and components, principally during the first half of 2019.

21. Related party disclosures

There is no single investor who has the ability to control the Board of Directors or the vote on shareholder resolutions. There were two investors who each beneficially own 10% or more of the share capital of the Company: BPI France Participation – Fonds Large Venture, a fund managed by Bpifrance, and Nokomis Capital, L.L.C. At the annual shareholders meeting on June 30, 2017, the shareholders approved the nomination of Mailys Ferrere to the board of directors. Mrs. Ferrere is employed by BPI France Participation - Fonds Large Venture. Bpifrance provided funding to two consortiums which include the Company in the context of long-term research projects (See Note 15.2 Research project financing) and in loans (See Note 19.3 Government loans). In April 2015, the Company completed the sale of a \$12 million convertible note, in April 2016 the sale of a \$6.0 million

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convertible note and in September 2018 the sale of a \$4.5 million convertible note, to an affiliate of Nokomis Capital, L.L.C., (See Note 14.1 Convertible debt). In 2017, the Company amended the terms of the notes issued in 2015 and 2016 and as part of the agreement, Wesley Cummins, a representative of Nokomis Capital, L.L.C., became a board observer in November 2017, and on June 29, 2018, the shareholders approved Mr Cummins' nomination to the board of directors. As of December 31, 2018, the principal amount and accrued interest of the convertible notes held by an affiliate of Nokomis Capital, L.L.C amounts to \$19.7 million.

On December 11, 2014, the Board of Directors approved a consulting agreement with Alok Sharma, member of the board of directors, for services in business development and strategy. This agreement was renewed in 2016, and expired in July 2016. During the year ended December 31, 2016, Mr Sharma earned fees totaling \$108,000 under this contract. No consulting fees were paid or accrued during the years ended December 31, 2017 and 2018.

No other transactions have been entered into with these or any other related parties in 2016, 2017 and 2018, other than normal compensation (including share based payment arrangements) for and reimbursement of expenses incurred in their roles as Directors or employees of the Company.

Compensation of key management personnel

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Fixed and variable wages, social charges and benefits expensed in the year	\$ 1,896	\$ 2,376	\$ 2,348
Share-based payment expense for the year	490	1,043	1,397
Board members fees to non-executive members	188	190	199
Total compensation expense for key management personnel	<u>\$ 2,574</u>	<u>\$ 3,609</u>	<u>\$ 3,944</u>

Key management personnel comprises the chief executive officer and all executive vice presidents reporting directly to him.

The employment agreement with the chief executive officer calls for the payment of a termination indemnity of an amount equal to one year of his gross annual base remuneration and bonus in the event of his dismissal by the Board of Directors of the Company.

For the year ended December 31, 2018, we estimate that approximately \$16,000 of the amounts set aside or accrued to provide pension, retirement or similar benefits to our employees was attributable to our executive officers.

In 2016, the Company had in place a consulting agreement with a non-executive board member as described above.

Directors' interests in an employee share incentive plan

The Company granted warrants to certain members of the Board of Directors during the years ended December 31, 2016, 2017 and 2018:

- On June 28, 2016, the shareholders authorized the Board of Directors to grant to Messrs. de Pesquidoux, Maitre, Pitteloud, Sharma and Slonimsky 20,000 warrants each and to Mr Nottenburg 40,000 warrants. On June 29, 2016, the Board used this authorization to make such grants with an exercise price of \$1.86 per ordinary share.
- On June 30, 2017, the shareholders authorized the Board of Directors to grant to Messrs. de Pesquidoux, Maitre, Nottenburg, Pitteloud, Sharma and Slonimsky 30,000 warrants each. On July 3, 2017, the Board used this authorization to make such grants with an exercise price of \$3.31 per ordinary share.
- On June 29, 2018, the shareholders authorized the Board of Directors to grant to Messrs. de Pesquidoux, Maitre, Nottenburg, Pitteloud, Sharma, Slonimsky and Cummings 30,000 warrants each. On July 2, 2018, the Board used this authorization to make such grants with an exercise price of \$2.04 per ordinary share.

The board members were required to subscribe to the warrants at a price of €0.01 per warrant.

Share-based payment expense incurred in connection with these transactions amounted to \$65,000 in the year ended December 31, 2018 (2017: \$89,000; 2016: \$35,000).

22. Events after the reporting date

At its meeting of February 5, 2019, the Board of Directors granted 12,000 restricted share awards.

On February 18, 2019, a new strategic investor invested approximately \$8.4 million in support of accelerating Sequans' existing 5G product roadmap. Upon the closing of this transaction, the Company issued to the investor a total of 9,392,986 warrants. The warrants are exercisable upon 61 days' notice to Sequans at an exercise price of €0.02 per share/ADS into 9,392,986 of our ordinary shares/ADS. The warrants expire 15 years from the issuance date. The Company is currently assessing the financial impact of this transaction.

At its meeting of April 23, 2019, the Board of Directors granted 151,450 restricted share awards.

On April 30, 2019, Nokomis Capital, L.L.C. issued a firm commitment to purchase a new convertible note for \$3 million, converting at \$1.21 per ADS, on substantially similar terms as their convertible note issued in April 2015 with a maturity in April 2021. Dr. Georges Karam also issued a commitment to loan up to \$700,000, if the Company needs additional liquidity.