EXCO SOCODEC ERNST & YOUNG et Autres

This is a translation into English of the statutory auditors' report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English-speaking users.
This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Group presented in the management report and other documents provided to shareholders.
This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Mauna Kea Technologies

Year ended December 31, 2018

Statutory auditors' report on the consolidated financial statements

EXCO SOCODEC
51, avenue Françoise Giroud
21000 Dijon
S.A.R.L. au capital de € 3.200.000
400 726 048 R.C.S. Dijon

Commissaire aux Comptes
Membre de la compagnie
régionale de Dijon

ERNST & YOUNG et Autres
Tour First
TSA 14444
92037 Paris-La Défense cedex
S.A.S. à capital variable
438 476 913 R.C.S. Nanterre

Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles

Mauna Kea Technologies

Year ended December 31, 2018

Statutory auditors' report on the consolidated financial statements

To the Annual General Meeting of Mauna Kea Technologies,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meetings, we have audited the accompanying consolidated financial statements of Mauna Kea Technologies for the year ended December 31, 2018.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2018 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2018 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 or in the French Code of Ethics *(Code de déontologie)* for statutory auditors.

Justification of Assessments - Key Audit Matters

In accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Revenue Recognition

Key Audit Matter	Our response
The products and service sales of the Group are booked in accordance with the procedures described in Note 1.16 to the consolidated financial statements. The Group's sales revenue results mainly from the sale of innovative medical imaging devices for medical diagnosis, research and related services. Regarding the sale of products, revenue is recognized either at the products availability or delivery according to the order's conditions. Regarding pay-per-use, the Cellvizio is recorded in asset and the revenue is recognized when the probes are sold or when the health care practitioner performs the medical treatment, since the system remains the Group's property. We have considered revenue recognition to be a key audit matter given the importance of revenues as a financial indicator of the Group but also the importance of revenue flows close to the year-end.	We have analyzed the revenue recognition methods and controls implemented by the Group. Our work consisted in: ▶ analyzing the contractual clauses, by sampling, mainly of the most significant contracts of the financial year, in order to assess the consistency of the accounting method applied; ▶ analyzing the consignment contracts signed in the current year and examining the actual amounts invoiced from medical treatments performed; ▶ analyzing the most significant transactions of the year by obtaining the purchase orders, invoices, delivery vouchers as well as the significant transactions with new customers or in countries where the Group has a reduced activity; ▶ assessing the correct application of the separation principle of the fiscal years, by sampling of a selected significant transactions recorded before and after the year-end in order to determine whether these products were related to the right period.

Going Concern

Key Audit Matter	Our response
The financing of the Group's operations is performed mainly by capital contributions (by capital increase), debt or loan issuance.	We examined the available or forthcoming financing. Our work notably consisting in: ▶ analyzing the projected expenses for the next twelve months and assessing their consistency with the Group's activity and strategy; ▶ comparing the amount of the financing needed to the expected expenses; ▶ reconciling the available funding lines with the financing contracts.

As indicated in Note 1.1 to the consolidated financial statements, going concern assumption was adopted by the Board of Directors taking into account the cash position at December 31, 2018, sales prospects (including those resulting from signed partnerships), the receipt of the 2017 research tax credit, the granting of a repayable advance and the drawdown of Tranche C of IPF.

The valuation of the estimated financing needs for the next twelve months and the Group's capacity to find proper financing are considered as a key audit matter in order to determine if the going concern assumption can apply to the consolidated financial statements.

In addition, we:

- analyzed the projected cash flows for the next twelve months prepared by the Finance Department taking into account the financing sources and sales prospects;
- reconciled these projections in relation with the actual figures as at 31 December 2018 and to the budget approved by the Board of Directors;
- analyzed the sensitivity of each of the key assumptions implemented by management to changes in the business plan;
- reconciled the historical estimates made by management with the actual figures as of December, 31 2018;
- Interviewed management regarding its knowledge of subsequent events to December, 31 2018, which may affect the projected cash flows.

We also considered whether Note 1.1 to the consolidated financial statements contains the appropriate disclosure.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the information given in the Group's management report of the Board of Directors.

We have no matters to report as to their fair presentation and their consistency with the consolidated financial statements.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed as statutory auditors of Mauna Kea Technologies by the annual general meeting held on June 13, 2018 for EXCO SOCODEC and on May 25, 2011 for ERNST & YOUNG et Autres.

As at December 31, 2018, EXCO SOCODEC and ERNST & YOUNG et Autres were in the first year and eighth year of total uninterrupted engagement respectively.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code (*Code de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.

- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements.

- Assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.

- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L. 822-10 to L. 822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(code de déontologie)* for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Dijon and Paris-La Défense, April 16, 2019

The Statutory Auditors
French original signed by

EXCO SOCODEC	ERNST & YOUNG et Autres
Olivier Gallezot	Cédric Garcia

Mauna Kea Technologies

A Public Limited Company (*Société anonyme*) with share capital of 1,008,053.52 euros
Registered office: 9 rue d'Enghien
75010 Paris, France
431 268 028 in the Paris Trade and Companies Register

Consolidated financial statements prepared in accordance with IFRS as of December 31, 2018

STATEMENT OF FINANCIAL POSITION
(Amounts in thousands of euros)

ASSETS	Note	12/31/2018	12/31/2017
Non-current Assets			
Intangible assets	3	1 838	2 100
Property, plant, and equipment	4	1 985	1 466
Non-current financial assets	5	133	138
Total of non-current assets		**3 956**	**3 704**
Current assets			
Inventories & Work in progress	6	2 456	1 969
Trade receivables	7	1 643	2 034
Other current assets	7	3 019	2 462
Current financial assets	8	64	125
Cash and cash equivalents	9	8 623	17 453
Total of current asets		**15 806**	**24 043**
TOTAL OF ASSETS		**19 762**	**27 747**

EQUITY AND LIABILITIES	Note	12/31/2018	12/31/2017
Equity			
Issued capital	10	1 008	974
Share premium	10	91 753	87 973
Reserves		(72 072)	(61 896)
Foreign currency translation on reserve		74	(61)
Profit / (loss)		(12 785)	(10 245)
Total of equity		**7 979**	**16 744**
Non-current Liabilities			
Long-term loans and borrowings	11	6 457	6 567
Non-current provisions	12	422	283
Total of non-current liabilities		**6 879**	**6 850**
Current liabilities			
Short-term loans and borrowings	11	600	386
Trade payables	13	2 087	1 663
Other current liabilities	13	2 216	2 104
Total of current liabilities		**4 904**	**4 153**
TOTAL OF EQUITY AND LIABILITIES		**19 762**	**27 747**

COMPREHENSIVE INCOME STATEMENT
(Amounts in thousands of euros)

	Note	12/31/2018	12/31/2017
Operating Revenue			
Sales	15	6 760	6 687
Other income	15	1 141	1 144
Total of revenue		**7 901**	**7 831**
Operating Expenses			
Cost of sales		(2 058)	(2 129)
Gross margin		*70%*	*68%*
Research & Development	18	(4 653)	(4 265)
Sales & Marketing	18	(9 097)	(7 586)
Admnistrative expenses	18	(3 953)	(3 350)
Share-based payments	17	(138)	(210)
Total of expenses		**(19 899)**	**(17 541)**
Current operating profit		**(11 998)**	**(9 710)**
Financial revenue	19	116	205
Financial expenses	19	(902)	(740)
Profit before tax		**(12 785)**	**(10 245)**
Income tax expense	20		
Profit / (loss)		**(12 785)**	**(10 245)**
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Actuarial differences on defined benefit plans	12	(7)	0
Total of items that will not be reclassified to profit or loss		**(7)**	**0**
Items that will be reclassified subsequently to profit or loss			
Exchange differences on translation of foreign operations		135	(174)
Total of items that will be reclassified subsequently to profit or loss		**135**	**(174)**
Other comprehensive income for the year, net of tax		**127**	**(174)**
Comprehensive income		**(12 657)**	**(10 419)**
Weighted average number of shares outstanding (in thousands)		25 201	21 123
Basic earnings per share (EUR/share)		**(0,51)**	**(0,49)**
Weighted average number of potential shares (in thousands)	23	27 222	24 224

STATEMENT OF CHANGES IN EQUITY
(Amounts in thousands of euros)

		Issued capital	Share premium	Treasury shares	Reserves	Foreign currency translation on reserve	Profit / (loss)	Total of equity
Equity as of	**12/31/2016**	**800**	**72 382**	**(72)**	**(52 322)**	**113**	**(9 744)**	**11 157**
Allocation of the profit / (loss)					(9 744)		9 744	
Capital transactions		174	15 591					15 765
Share-based payment transactions					210			210
Treasury shares transactions				(13)	44			31
Comprehensive income as of *	12/31/2017				0	(174)	(10 245)	(10 419)
Equity as of *	**12/31/2017**	**974**	**87 973**	**(84)**	**(61 812)**	**(61)**	**(10 245)**	**16 744**
Allocation of the profit / (loss)					(10 245)		10 245	
Capital transactions		34	3 780					3 815
Share-based payment transactions (1)					138			138
Treasury shares transactions				(135)	74			(61)
Comprehensive income as of	12/31/2018				(7)	135	(12 785)	(12 657)
Equity as of	**12/31/2018**	**1 008**	**91 753**	**(219)**	**(71 853)**	**74**	**(12 785)**	**7 979**

CASH-FLOW STATEMENT
(Amounts in thousands of euros)

	Note	12/31/2018	12/31/2017
Cash flows from operating activities			
Profit / (loss)		(12 785)	(10 245)
Elimination of amortisations, depreciations and provisions		1 130	1 074
Share-based payment transaction expense and revenue	17	138	210
Other items excluded from the auto-financing capacity		643	339
Revenue and expenses related to the discounting of repayable advances	*11/19*	*67*	*68*
Revenue and expenses related to the bond	*11/19*	*71*	*70*
Net financial interest paid	*19*	*481*	*386*
Other non-cash items		*24*	*(185)*
Capital gain or loss from asset sales		(0)	15
Auto-financing capacity		**(10 874)**	**(8 607)**
Change in WCR related to business activities		(26)	(1 136)
Inventories & Work in progress		*(313)*	*(255)*
Trade receivables		*433*	*(25)*
Other current assets		*(557)*	*291*
Trade payables		*419*	*(1 176)*
Other current liabilities		*(8)*	*29*
Net cash flows from operating activities (A)		**(10 900)**	**(9 743)**
Cash flows from investing activities			
Purchase of property, plant and equipment and intangible assets	3/4	(1 254)	(727)
Proceeds from sale of property, plant and equipment and intangible assets		1	2
Change in loans and advances granted		7	(10)
Other cash flows from investing operations			
Net cash flows from investing activities (B)		**(1 246)**	**(735)**
Cash flows from financing activities			
Proceeds from exercise of share options	10	3 804	15 496
Proceeds from issue of shares	10	10	
Repurchases and resales of treasury shares			31
Net financial interests paid	19	(357)	(276)
Other cash flows from financing operations	11	(158)	3 662
Net cash flows from financing activities (C)		**3 299**	**18 913**
Net foreign exchange difference (D)		16	(35)
Change in cash (A) + (B) + (C) + (D)		**(8 830)**	**8 401**
Cash at the beginning of the period	9	17 453	9 053
Cash at the end of the period	9	8 623	17 453
Change in cash		**(8 830)**	**8 401**

(1) changes in WCR are presented in the notes to the current assets and liabilities and did not include foreign exchange differences summarized on line (D)

NOTES TO THE FINANCIAL STATEMENTS

Mauna Kea Technologies is a medical device design and sales company whose mission is to eliminate uncertainties in diagnosis and treatment and to improve patient care for the widest possible range of medical indications. In becoming a global player in real-time cellular diagnostics, the Company's prime objectives are to constantly improve the quality of care provided to patients and efficiency of healthcare professionals and systems. The Company's flagship product, Cellvizio, has received clearance to sell for a wide range of applications in more than 40 countries, including the United States, Europe, Japan, China, Canada, Brazil and Mexico.

Highlights of the financial year

On November 13, 2018, the Company signed an amendment to its subscription agreement dated February 3, 2017 with IPF Partners, a provider of alternative financing solutions. The amendment provides the option for the Company to subscribe two new tranches of €5 million each.

The first tranche for €5.0 million is available until April 2019, and another tranche of €5.0 million is available until September 2019. Both tranches would be subject to conditions for achieving pre-defined revenue levels. As at December 31, 2018, the Company met the necessary conditions to raise the first tranche.

The loans would bear interest at an annual rate equal to 3 month Euribor + 8.0%. The first loan tranche has a term of 5 years, with deferred principal repayment for the first 15 months. The second loan tranche has a term of 4 years, with deferred principal repayment for the first 12 months. The issuance of warrants is subject to certain restrictive financial performance conditions, included in the terms and conditions of the contract.

Note 1 : Accounting principles

1.1 Accounting principles applied by the Group

The financial statements are presented in thousands of euros. Rounding may in some cases cause insignificant variances in totals.

They were approved by the Board of Directors at its meeting of March 19, 2019. These financial statements will be definitive only after their approval by the Annual General Meeting.

The financial statements are prepared on the basis of historical cost with the exception of financial assets, which are measured at their fair value. The preparation of the financial statements according to IFRS principles requires that estimates be made and assumptions formulated which impact the amounts and information provided therein with respect to measuring the cost of share-based payments, measuring the value of the research tax credit, and measuring value in use with regard to impairment testing. These assumptions and estimates were made on the basis of information or positions at the date the financial statements were prepared and may differ from actual results. As applicable, a sensitivity analysis may be implemented if this variation is significant.

The going concern assumption was adopted by the Board of Directors taking into account the following elements:

- the cash position at 31 December 2018 of €8.6m;
- sales prospects (including those resulting from signed partnerships);
- the receipt of the 2017 research tax credit of €1.1 million in 2019;
- the granting of a repayable advance and a PERSEE grant of €0.6 million in 2019;
- the drawdown of Tranche C of IPF's €5 million debt in 2019 (see Note 11).

In this context, the Company considers that it is in a position to meet its commitments until December 31, 2019.

This financial information was prepared on the basis of the principles underlying all the standards and interpretations adopted by the European Union whose application is mandatory at December 31, 2018. The standards and interpretations in question are available on the website of the European Commission at http://ec.europa.eu/internal_market/accounting/ias/index_fr.htm.

New standards, amendments, revisions and interpretations adopted by the European Union with mandatory application for accounting periods beginning on or after January 1, 2018 and applied for the first time by the Company this financial year are:

- Amendments to IAS 40 "Transfers of investment property";
- Amendments to IFRS 2 "Share-based payments" ;
- Amendments to IFRS 4: Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts
- IFRS 9 - Financial instruments
- IFRS 15 - Revenue contracts with customers
- IFRIC 22 — Foreign Currency Transactions

IFRS 9 - Financial instruments

Principle
IFRS 9 changes the conditions for the recognition of hedging operations and the main accounting categories of financial assets and liabilities. It also modifies the recognition of the credit risk relating to financial assets by basing this on the expected losses approach rather than on losses incurred.

Assessing the impact
As the Group does not hold any financial derivative hedging instruments. The recognition of the IPF loan obtained in March 2017 was not be affected by IFRS 9 since no early repayment was expected in the short term. As of 31/12/2018, the renegotiation of the IPF debt led, under IFRS 9, to a €41k reduction in debt in exchange for financial income.
IFRS 9 also modifies the recognition of credit risk concerning financial assets based on the expected losses versus losses incurred approach.

Conclusion & Results
The Group has not identified any significant impact from the application of these new principles on opening equity at January 1, 2018. The Group did not record any significant impact in fiscal year 2018.

IFRS 15 - "Revenue from ordinary activities from contracts with customers"

This new standard deals with revenue recognition and is applicable as of January 1, 2018. It will replace the standards IAS 18 and IAS 11.
The basic principle of the IFRS 15 standard is income recognition based on the transfer of goods or services promised to a customer, in an amount that reflects the payment that the entity expects to receive in return for such goods or services. It specifies the manner in which an entity must recognize its sales based on the services it provides.

Works carried out by the Company:

Contracts relating to the sale of equipment include several components and whose main characteristics are as follows:
- delivery of the system;
- the installation and start-up of the system;
- training users;
- the warranty and maintenance of the systems;

In the 2018 financial year, the Company conducted an analysis of its key contracts.

Each contract tested was subjected to the methodology recommended by IFRS 15 in five key steps, to determine when to record income and for what amount:
1. Identify the contract(s) entered into with the customer
2. Identify the different performance obligations (PO) specified in the contract
3. Determine the transaction price (TP)
4. Distribute the TP between the different POs specified in the contract
5. Recognize sales when a PO has been fulfilled (or the extent to which it is)

The IFRS 15 analysis was conducted by involving the operational teams when necessary.

Conclusion & Results:

Following a complete analysis of normative changes in all its activities, the Group has not identified any significant impact in the application of these new principles on opening shareholders' equity as of January 1, 2018. The group did not observe any significant impact on the 2018 financial year.

IFRS 16 - Leases

This standard significantly changes the recognition and presentation in the financial statements for tenants of lease agreements. It is applicable as of January 1, 2019.

The principle of this new standard is that tenants will recognize most of their lease agreements as an asset (intangible or property, plant and equipment) against a corresponding financial debt. The lease agreement is thus presented as an asset purchased on credit, the principle of restatement of presentation of the finance lease of IAS 17 is, to a certain degree, extended to most leases.

Assessing the impact
The impact is currently being assessed. The main contracts concerned will be the two premises leases: in France for the Mauna Kea SA offices and in the United States for the Mauna Kea Inc. offices.

Transition method
The Group has not opted for the early application of this standard.

1.2 Consolidation methods

Subsidiaries are all the entities over which the Company exercises control with regard to financial and operating policy and of which it generally holds more than half of the voting rights. The subsidiaries are consolidated by the full consolidation method beginning on the date on which the Company acquires the control of them. They are deconsolidated from the date on which control cease to be exercised.

As at December 31, 2018, the group owns a single US subsidiary Mauna Kea Technologies Inc.

The intra-group transactions and balances are eliminated. The accounting methods of the subsidiaries have been aligned with those of the Company.

1.3 Net investments abroad

In accordance with IAS 21.15, foreign exchange gains and losses on long-term receivables in US dollars owed by a subsidiary to the Company are recognized in equity. Indeed, these accounts receivables are considered as net investments in currencies within consolidated foreign subsidiaries, considering the unforeseeable nature of the payment of these receivables.

1.4 Intangible assets

In accordance with IAS 38, intangible assets acquired are recognized as assets in the balance sheet at their acquisition or production cost. The subsidies received and related the capitalized expenses are recognized as a reduction of cost.

Research and development expenses

The research expenses are consistently recognized as expenses.

In accordance with IAS 38, development costs are recognized as intangible assets only if all the following criteria are met:

(a) the Company has established the technical feasibility of the asset for sale or use;
(b) the Company intends to complete the project and use it;
(c) the Company is able to use the intangible asset;
(d) the Company is able to demonstrate the likelihood of future economic benefits from the asset;
(e) the Company has the technical, financial and other resources necessary to complete the project;
(f) the Company is able to reliably measure the costs of developing the asset.

In application of this standard, the Company recognized all its R&D costs as expenses, until the first prototypes of Cellvizio were refined.
Development expenses related to finalizing new products were recognized as assets as long as they met the criteria of IAS 38. Expenses related to research and the improvements of existing products remain as expenses for the financial year.

Development costs carried as assets are amortized on a straight-line basis over seven years or five years for Cellvizio's second generation development costs, i.e. their useful life. Useful life is incorporated into the current period until the asset becomes obsolete.

No development costs were capitalized for the 2018 financial year.

Patents

Patent filing costs incurred by Mauna Kea Technologies until the patents are obtained are recognized as intangible assets in line with the criteria for capitalizing development costs stipulated by IAS 38.

They are amortized on the basis of the straight line method over the term of protection granted.

Software packages

Costs relating to the acquisition of licenses for software packages are recognized as assets on the basis of the costs incurred to acquire and implement them.

They are amortized using the straight-line method over a period of one to three years.

1.5 Property, plant, and equipment

Property, plant, and equipment is recognized at acquisition or production cost. The renovations and major improvements are capitalized, and the repair and maintenance expenses and the costs of the other renovation work are expensed as incurred. The subsidies received and related the capitalized expenses are recognized as a reduction of cost.

Property, plant, and equipment are depreciated on the basis of the straight-line method over the estimated lifetime of the property. The fixtures of property rented are depreciated over the term of their own lifetime or over the term of the rental agreement, whichever is shorter.

Cellvizios entrusted to hospitals under partnership agreements (reference centers) and Cellvizios made available under a consignment contract are recorded under capital assets.

Depreciation and amortization periods are as follows:

Fixtures and fittings .... 7 years;
Research and development tools .... 2 to 5 years;
Production tools .... 3 to 7 years;
Cellvizio granted to reference centers, lent or consigned .... 5 years;
Research equipment and technical facilities...7 years;
Office equipment and furniture .... 5 years;
Computer equipment .... 3 years.

1.6 Recoverable amount of non-current property, plant and equipment and intangible assets

Intangible assets and property, plant, and equipment are tested for impairment if the recovery of their book value is uncertain. With respect to intangible assets in progress, even in the absence of indicators of impairment, an impairment test is conducted annually.

An impairment loss is recognized to the extent that the carrying amount exceeds the recoverable value of the asset. The recoverable value of an asset corresponds to its fair value minus the costs of sale or its value in use, if the latter is higher. With respect to the Company's intangible assets, there are no market data that allow the net fair value of the costs of sale to be determined other than by an estimation of future cash flows. Consequently, the recoverable amount is essentially equal to the value in use.

The value in use is determined each year, in accordance with IAS 36: it corresponds to the discounted value of estimated future cash flows expected from the continued use of the assets and their disposal at the end of the intended use by the business. It does not take into account the impact of the financial structure, tax effects, or restructuring efforts not undertaken.

The recoverable amount must be estimated for each individual asset. If this is not possible, IAS 36 requires a company to determine the recoverable amount of the cash-generating unit (CGU) to which the asset belongs. Only one cash-generating unit has been defined at Group level. It is therefore at Group level that this impairment test was performed.

This value is based on the discounted cash flow method over a period of 5 years and using a terminal value calculated on the basis of an updated standard flow with a growth of 2%.

The future cash flows over the period 2019 to 2023 are based on the following assumptions:
- an average sales growth rate broken down by geographic area and by distribution model (pay-per-use, direct sales of systems, sales to distributors);
- a constant margin rate taking into account the cost of products sold depending on the type and generation of the products;
- a constant distribution of expenses by type (R & D, Sales & Marketing and General Expenses);
- investments (including systems made available through the pay-per-use program in the United States).

1.7 Financial assets

The Company's financial assets include loans and receivables, and the cash and cash equivalents.

The measurement and recognition of financial assets and liabilities are defined by IFRS 9 - Financial Instruments.

Loans and receivables

This category includes trade receivables, the other loans and receivables, and deposits and guarantees, which are classified under non-current financial assets on the balance sheet.

These instruments are initially recognized at their fair value and then at amortized cost using the effective interest rate (EIR) method. Short-term receivables without a nominal interest rate are measured at the amount of the original invoice unless the application of an implicit interest rate has a material impact. For variable-rate loans and receivables, a periodic reestimation of cash flow variations, in order to translate changes in market interest rates, modifies the effective interest rate and consequently the valuation of the loan or receivable.

The Company analyzes each of its trade receivables past due to determine whether an impairment loss should be recognized.
Loans and receivables are monitored for any objective indication of impairment. A financial asset is impaired if its book value is greater than its recoverable amount as estimated during impairment tests. The impairment is recognized in the income statement.

Assets at fair value through profit or loss

Assets considered to be held for sale include assets that the Company intends to resell in the near future in order to realize a capital gain and that are part of a portfolio of financial instruments managed together customarily sold in the short term.

1.8 Inventories and work in progress

The inventories are valued at their cost or at their net realizable value (NRV), if the latter is lower. In the latter case, a corresponding impairment loss is recognized in profit or loss.

Inventories of raw materials are valued according to the weighted average cost method.
Inventories of semi-finished and finished products are valued at the standard cost taking into account the cost of materials used, labor costs and a share of overheads.

The demonstration equipment intended for sale in the short term is recognized in inventories.

1.9 Cash and cash equivalents

Cash equivalents are held to meet short-term cash commitments rather than for investment or other purposes. They are readily convertible, into a known amount of cash, and are subject to a negligible risk of change in value. The cash and cash equivalents are constituted by liquid assets that are available immediately, long-term investments that can be liquidated immediately, and short-term investment securities. They are evaluated on the basis of the IFRS 9 according to the categories they belong to.

The short-term investment securities are readily convertible into a known amount of cash and are subject to a negligible risk of change in value. They are measured at fair value, and changes in value are recorded in the financial gains or losses

1.10 Issued capital

Costs of share capital transactions that are directly attributable to the issue of new shares or options are recognized in equity as a deduction from the proceeds of the issue, net of tax.

1.11 Liquidity contract

Following its listing on the NYSE Euronext Paris regulated market, the Company signed a liquidity contract with a specialized institution in order to limit the intraday volatility of the Mauna Kea Technologies stock.

The portion of the contract that is invested in own shares of the Company by this service provider is posted to the accounts as a deduction from the consolidated shareholders' equity of the Company at the end of each financial year. The balance of "liquidity" is recorded as current financial assets.

1.12 Share-based payments

Since its formation, the Company has established several plans for compensation paid in equity instruments in the form of BSPCEs (special stock warrants with tax benefits) granted to employees and/or executives, stock warrants granted to non-employee members of the Board of Directors or the Supervisory Board, stock options granted to employees of the subsidiary Mauna Kea Technologies Inc., and bonus preferred shares awarded to employees and/or executives.

In accordance with IFRS 2, the cost of transactions settled in equity instruments is recorded as an expense with a counterpart increase in equity over the vesting period.

The Company has applied IFRS 2 to all equity instruments granted since 2002 to employees, members of the Board of Directors or the Supervisory Board, natural persons, or entities.

The fair value of stock options or performance shares granted to employees is determined using the Black-Scholes option valuation model. The same applies to options granted to other natural persons who provide similar services, the market value of the latter not being ascertainable.

The determination of the fair value of the converted instruments includes the vesting conditions described in Note 17: Share-based payments. The other factors taken into consideration are also presented in Note 17: Share-based payments.

1.13 Measurement and recognition of financial liabilities

Financial liabilities at the amortized cost

Borrowings and other financial liabilities are valuated initially at their fair value and then at amortized cost using the EIR method.

Transaction costs that are directly attributable to the acquisition or issue of a financial liability are deducted from that financial liability. These expenses are then amortized actuarially over the lifetime of the liability, on the basis of the EIR.

The EIR is the rate at which expected future cash outflows are equal to the net present carrying amount of the financial liability from which their amortized cost is deducted.

Liabilities at fair value through profit and loss

The liabilities at fair value through profit and loss are measured at their fair value.
The only liabilities identified relate to repayable advances and the IPF bond.

In accordance with the provisions of IFRS 9 and the clarifications made in autumn 2017 by the IFRS Interpretation Committee on the treatment of debt changes deemed not to be derecognizable, the Group immediately restates in the income statement the effect of changes in contractual borrowing conditions. The effective interest rate is thus maintained on the residual maturity of the debt.

1.14 Conditional advances

The Company receives a certain number of forms of assistance, in the form of subsidies or conditional advances. The details concerning this assistance are provided in Note 11: Borrowings and financial debts.

A conditional non-repayable loan is treated as a public subsidy if there is reasonable assurance that the Company will fulfill the conditions under which the loan need not be repaid. If the contrary is the case, it is classified under debts.

The unpaid interest benefit resulting from an interest-free repayable loan is considered a subsidy. It is calculated by applying a discount rate equal to the contractual rate, if known, or to 10-year OAT yields (French Treasury bonds).

1.15 Provisions

Provisions for risks and expenses

Provisions for risks and liabilities correspond to obligations resulting from lawsuits and miscellaneous risks, the due dates and amounts of which are uncertain, with which the Company may be faced during its business activities.

A provision is recognized when the Company has a legal or implicit obligation to a third party resulting from a past event which is likely or certain to cause an outflow of resources to that third party, without the expectation of at least equal compensation from it, and for which the future outflows of liquid assets can be estimated reliably.

An amount recognized as a provision is the best estimate of the expenditure necessary to settle the obligation, which is discounted if necessary on the closing date.

Retirement pension and post-employment benefits

The employees of the Company receive the retirement benefits stipulated by law in France:

- retirement benefits paid by the Company to employees upon their retirement (defined benefit plans);
- payment of pension benefits by Social Security agencies and financed by contributions made by employers and employees (defined contribution plans).

For the defined benefit plans, the costs of the retirement benefits are estimated by using the projected credit unit method. According to this method, the cost of the retirement pensions is recognized in the income statement in such a manner as to distribute it uniformly over the term of the services of the employees. The retirement benefits commitments are valuated at the current value of the future payments estimated using the market rate based on the long-term obligations of the first-category companies with a term that corresponds to that estimated for the plan.
The Company relies on actuaries qualified to conduct an annual review of the valuation of these plans.

In accordance with IAS 19 "Defined Benefit Plans: Employee Contributions", service costs and net interest are recorded under operating profit (loss) and other remeasurements are recorded under other comprehensive income.

The Company's payments for the defined contribution plans are recognized as expenses on the income statement of the period with which they are associated.

Provisions for risk related to the legal guarantee

The Group recorded a provision related to repair costs as part of the legal warranty granted when selling a system. This provision covered the costs incurred in connection with the return of a system for repair.

1.16 Revenue from ordinary activities

Sales primarily comprise the sale of innovative medical imaging devices for medical diagnostics, research and related services. Until December 31, 2017, the group has applied IAS 18 – Revenue from ordinary activities. As from 1 January 2018, IFRS 15 - Revenue from Contracts with Customers - replaces IAS 18.

Revenue from ordinary activities is measured as the fair value of the consideration received or receivable for the sale of goods in the ordinary course of the Company's business. Revenue from ordinary activities is presented net of value-added tax, product returns, rebates and discounts, and intragroup sales.

Revenue is recorded when the transfer of goods or services promised to a customer is completed for the amount that reflects the payment that the entity expects to receive as consideration for those goods or services. Revenue from the sale of products is recognized when they are either made available or delivered to the customer depending on the terms and conditions of the order. In the case of a consignment contract, Cellvizio remains an asset of the Company and the revenue is recognized under sales of consumables or services performed by healthcare professionals.

1.17 Other income

Subsidies

Since it was created, and because of its innovative nature, the Company has received financial assistance or subsidies from the French government or local public authorities intended to fund its operations or recruit specific personnel.

Subsidies are recorded when there is a reasonable assurance that:
- the Company will comply with the conditions attached to the subsidies; and
- the subsidies will be received.

A public subsidy to be received as compensation for either costs or losses already incurred, or as immediate financial support without associated future costs, is recorded under "Other income" for the year in which the loan is granted. Otherwise, it is recorded under "Other income" for the year in which the corresponding charges or expenses are recorded.

Research Tax Credit

Research tax credits are granted to companies by the French government in order to encourage them to conduct technical and scientific research. Companies that prove that they have expenditures that meet the required criteria (research expenditures located in France or, since January 1, 2005, within the European Community or in another State that is a party to the Agreement on the European Economic Area that has concluded a tax treaty with France that contains an administrative assistance clause) receive a tax credit that can be used for the payment of the corporate tax due for the financial year in which the expenditures were made and the next three financial years, or, as applicable, be reimbursed for the excess portion.

The part of the tax credit used to finance research costs is recognized under "Other income" for the year in which the costs are incurred. The part used to finance eligible development costs is deducted from costs recorded under assets.

1.18 Other operating income and expenses

This concerns unusual income or expenses of a significant amount and limited in number and frequency that the Company presents as a separate item on its income statement in order to facilitate understanding of its recurring operational performance and provide useful information for a forward-looking analysis of results.

1.19 Cost of sales

Cost of sales is made up of raw material consumption, labor costs, depreciation and amortization, inventory allowances, and overheads relating to production.

1.20 Leases

The Group does not have any finance leases pursuant to the IAS 17 standard.
The IFRS 16 analysis related to leases is in progress as of December 31, 2018. The Group has not applied this standard early.

Leases under which the lessor retains a significant portion of the risks and benefits are classified as operating leases. Payments made under operating leases, net of any incentives, are recognized as expenses on the income statement on a straight-line basis over the duration of the lease.

1.21 Taxes

Income tax

The deferred income taxes are recognized on the basis of the broad conception and on the basis of the liability method, for all the temporary differences between the value for tax purposes and the stated book value of the assets and liabilities that appear within the financial statements. The primary temporary differences are related to the tax losses that can be carried forward or backward. The tax rates stipulated by law at the closing date are used to determine deferred taxes.

Deferred tax assets are only recognized to the extent that probable future profits will be sufficient to absorb the losses carried forward. In view of its stage of development, the Company does not recognize net deferred tax assets.

1.22 Segment information

The Company has not at this date identified separate operating segments. It conducts its business in a single operating segment: endomicroscopy.

1.23 Other comprehensive income

The revenue and expense items for the period recognized directly in equity are presented, as applicable, under the rubric "Other comprehensive income". These are principally:
 EUR/USD exchange rate differences relating to the subsidiary Mauna Kea Technologies, Inc;
 changes in pension plan provisions arising from changes in actuarial assumptions.

1.24 Significant accounting estimates and judgments

Estimates and judgments made by management when applying the accounting policies described above are based on historical information and other factors, notably the anticipation of future events judged to be reasonable in light of circumstances. These estimates and judgments are primarily the following:

Valuation of stock warrants, stock options and preferred stock

The fair value of stock warrants and stock options granted to employees or service providers is measured on the basis of actuarial models. These models rest on certain calculation assumptions such as the expected volatility of the security.

Valuation of the Research Tax Credit

Income relating to the research tax credit is measured on the basis of methods detailed in Note 1.17 "Other income - Research Tax Credits".

Valuation of the long-term intangible assets

The value in use of intangible assets is measured on the basis of assumed sales growth and a discount rate that reflect the best estimates of management.

1.25 Subsequent events

The balance sheet and the income statement of the Company are adjusted to reflect the subsequent events that alter the amounts related to the situations that exist as of the closing date. Adjustments are made until the date on which the financial statements are approved by the Board of Directors.

Events subsequent to the closing date that did not result in adjustments are presented in Note 25 "Subsequent events".

Note 2: Company and scope

Founded in May 2000, Mauna Kea Technologies SA ("the Company") develops and markets medical devices, particularly optical instruments for medical imaging.

As part of its development in the United States, the Company created Mauna Kea Technologies Inc. on January 3, 2005

	12/31/2018		12/31/2017		Consolidation method
Entities	**% of interests**	**% of control**	**% of interests**	**% of control**	
Mauna Kea Technologies SA (1)	100%	100%	100%	100%	Full consolidation
Mauna Kea Technologies Inc	100%	100%	100%	100%	Full consolidation

(1) Parent company

No change in scope took place during the period.

Note 3: Intangible assets

The changes in intangible assets break down as follows:

INTANGIBLE ASSETS
(Montants en milliers d'euros)

	12/31/2016	Increase	Decrease	Reclassification	12/31/2017
Development costs	3 623				3 623
Patents, licenses and trademarks	1 559	29		86	1 674
Software packages	566	99			664
Patents, licenses and trademarks in progress	575	57		(86)	546
Total gross of intangible assets	**6 324**	**185**			**6 508**
Amort. / dép. of development costs	(2 688)	(448)			(3 135)
Amort. / dép. of patents, licenses and trademarks	(671)	(118)			(789)
Amort. / dép. of software packages	(400)	(84)			(483)
Total amort. / dép. of intangible assets	**(3 759)**	**(650)**			**(4 408)**
Total net of intangible assets	**2 565**	**(465)**			**2 100**

INTANGIBLE ASSETS
(Amounts in thousands of euros)

	12/31/2017	Increase	Decrease	Reclassification	12/31/2018
Development costs	3 623				3 623
Patents, licenses and trademarks	1 674	17		4	1 695
Software packages	664	38		210	913
Patents, licenses and trademarks in progress	546	46		(4)	588
Total gross of intangible assets	**6 508**	**101**		**210**	**6 819**
Amort. / dép. of development costs	(3 135)	(377)			(3 512)
Amort. / dép. of patents, licenses and trademarks	(789)	(122)			(912)
Amort. / dép. of software packages	(483)	(74)			(558)
Total amort. / dép. of intangible assets	**(4 408)**	**(573)**			**(4 981)**
Total net of intangible assets	**2 100**	**(472)**		**210**	**1 838**

No development costs were activated during the year.

The item reclassification of intangible assets represents mainly the capitalization of PLM (Product Life Management) for €207 thousand.

Amortization related to development costs concerns the second generation of Cellvizio and amounted to €377 thousand in 2018 compared to €448 thousand in 2017. These will be fully amortized as of December 31, 2019.

Patents in progress are subject to an annual impairment test as part of the impairment test at the CGU level.

The company tests the effects of a change in the cost of equity assumptions: the variation of +1 and -1 point respectively varies the valuation of the CGU by -8% and + 9%.

The company tests the effects of a change in the assumptions of the growth rate to infinity: the variation of +0.5 point and -0.5 point respectively varies the valuation of the CGU by +5% and -5%.

The company tests the effects of a change in the assumptions of the rate of achievement of the turnover: The sensitivity to -10 points and +10 points varies respectively the valuation of the CGU of -4% and + 4%.

In view of these results and summing up all the impacts of negative assumptions, the company did not recognize any impairment.

Note 4: Property, plant, and equipment

The changes in property, plant and equipment break down as follows:

PROPRETY, PLANT AND EQUIPMENT
(Amounts in thousands of euros)

	12/31/2016	Increase	Decrease / Scrappring	Exchange differences	Reclassements	12/31/2017
Industrial equipment	1 436	260	(69)	(29)	463	2 061
Fixture in buildings	51					51
Other tangible assets	1 348	282	(11)	(18)		1 601
Total gross of property, plant and equipment	**2 835**	**542**	**(80)**	**(46)**	**463**	**3 713**
Amort. / dép. of industrial equipment	(1 107)	(125)	49	21	(162)	(1 325)
Amort. / dép. of fixture in buildings	(44)	(5)				(49)
Dep other tang assets	(785)	(111)	2	14	7	(873)
Total amort. / dép. of property, plant and equipment	**(1 937)**	**(242)**	**51**	**35**	**(154)**	**(2 248)**
Total net of property, plant and equipment	**898**	**300**	**(29)**	**(12)**	**309**	**1 466**

PROPRETY, PLANT AND EQUIPMENT
(Amounts in thousands of euros)

	12/31/2017	Increase	Decrease / Scrappring	Exchange differences	Reclass.	12/31/2018
Industrial equipment	2 061	880		10	162	3 113
Fixture in buildings	51					51
Other tangible assets	1 601	273	(1)	8	(382)	1 500
Total gross of property, plant and equipment	**3 713**	**1 153**	**(1)**	**18**	**(220)**	**4 664**
Amort. / dép. of industrial equipment	(1 325)	(298)		(9)		(1 631)
Amort. / dép. of fixture in buildings	(49)	(1)				(50)
Dep other tang assets	(873)	(128)		(6)	9	(998)
Total amort. / dép. of property, plant and equipment	**(2 248)**	**(427)**		**(15)**	**9**	**(2 680)**
Total net of property, plant and equipment	**1 466**	**727**	**(1)**	**4**	**(210)**	**1 985**

Over the 2018 financial year, the Company reported an increase of €880 thousand representing mainly the systems made available in the United States with the "pay per use" business model.

All the systems produced by the company are first recorded in inventory and then reclassified as fixed assets if the latter are recorded as consignment (in the United States) or disposal (in France). This reclassification has been made following a management analysis based on the final destination of the systems. They are amortized over their remaining life.

Note 5: Non-current financial assets

Non-current financial assets only comprised security deposits paid under operating leases.

Note 6: Inventories and work in progress

The inventories and work in progress break down as follows:

INVENTORIES & WORK IN PROGRESS
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Inventories of raw materials	1 041	610
Inventories & work in progress of finished goods	1 552	1 465
Total gross of inventories & work in progress	**2 592**	**2 075**
Dep. of inventories of raw materials	(53)	(54)
Dep. of inventories & work in progress of finished goods	(83)	(52)
Total dep. of inventories & work in progress	**(136)**	**(106)**
Total net of inventories & work in progress	**2 456**	**1 969**

At the end of each period, inventories and work in progress of finished goods include certain assets related to goods that no longer appear in our catalogue. These assets are held by the Company for use by the after-sales customer service. They are impaired by 80%.

The portion of the after-sales inventory in the gross value represented 6.5% at December 31, 2018 and 6.4% at December 31, 2017.

Note 7: Trade receivables and other current assets

7.1 Trade receivables

TRADE RECEIVABLES
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Trade receivables	3 168	3 215
Dep. of trade receivables	(1 525)	(1 181)
Total net of trade receivables	**1 643**	**2 034**

The decrease of the trade receivable in net value can be explained by an additional provision of €344 thousand.

Trade receivables past due and not impaired amounted to €856 thousand at December 31, 2018, as compared with €961 thousand at December 31, 2017.

The allowance for doubtful receivables represents 48% of receivables in gross value compared to 37% in 2017. The increase of such provision is attributable mainly to the depreciation of some receivables with an age of more than one year.

The analysis of receivables as of December 31, 2018 break down as follows:

DATE OF PAYMENT FOR TRADE RECEIVABLES
(Amounts in thousands of euros)

	Gross amount	Less than a year	Over a year
Trade receivables	3 168	1 697	1 471
Dep. of trade receivables	(1 525)	(345)	(1 181)
Total net of trade receivables	**1 643**	**1 353**	**290**

7.2 Other current assets

The other current assets break down as follows:

OTHER CURRENT ASSETS
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Personnel and related accounts	9	0
Research Tax Credit	2 186	1 917
Other tax receivables	309	257
Other receivables	193	176
Prepaid expenses	323	112
Total gross of other current assets	**3 019**	**2 462**
Dep. of other current asets		
Total net of other current assets	**3 019**	**2 462**

Other tax receivables are related to deductible VAT and a requested VAT reimbursement totalling €214 thousand compared to €219 thousand at December 31, 2017.

Other receivables mainly included advances to suppliers amounting to €122 thousand compared to €94 thousand at December 31, 2017.

Prepaid expenses in 2018 mostly corresponded to insurance, service subscriptions, computer maintenance, conference reservation costs and rent for the 1st quarter 2019.

The changes in the Research Tax Credit were as follows:

CHANGES IN THE RESEARCH TAX CREDIT RECEIVABLE
(Amounts in thousands of euros)

	12/31/2016	Operating revenue	Payment received	Capitalised portion	12/31/2017
Research Tax Credit	2 029	1 096	(1 208)		1 917

	12/31/2017	Operating revenue	Payment received	Capitalised portion	12/31/2018
Research Tax Credit	1 917	1 097	(828)		2 186

The Company had requested the reimbursement of the research tax credit for 2016 under the regime for EU SMEs in accordance with the legislation in force. This repayment was made in February 2018 in full.

The company also claimed the research tax credit for financial year 2017. The reimbursement request is still under consideration at the Ministry of Higher Education, Research, and Innovation.

Note 8: Current financial assets

Current financial assets correspond to the cash balance of the securities account opened under the Company's liquidity contract held with Gilbert Dupont, which stood at €64 thousand at December 31, 2018 versus €125 thousand at December 31, 2017.

Note 9: Cash and cash equivalents

Cash and cash equivalents break down as follows:

CASH AND CASH EQUIVALENTS
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Short-term bank deposits	8 623	17 454
Total of cash and cash equivalents	**8 623**	**17 453**

Note 10: Share capital

10.1 Issued capital

The share capital is set at one million seven thousand nine hundred and ninety-three euros and fifty-two cents (€1,008,053.52). It is divided into 25,201,338 ordinary shares, fully subscribed and paid up, each with a par value of €0.04.

This figure does not include "Stock Warrants" (BSAs), founders' warrants (BSPCEs) or stock options granted to certain investors and natural persons, who may or may not be employees of the Company and free performance share units (PSUs).

The table below shows the history of the Company's share capital since December 31, 2017:

Type of transaction	Issued Capital (K Eur)	Share Premium (K Eur)	Number of shares comprising the issue capital (in thousand)
At December, 31 2017	974	87 973	24 347
Exercise BSA Plan of December,1st 2017	34	3 746	850
Exercise SO	0	10	4
Others	0	25	0
Total	1 008	91 753	25 201

The Company also opened, in December 2017, an equity financing facility with Kepler Cheuvreux covering a maximum number of 2,250,000 shares available for subscription over a maximum period of 24 months.

At December 31, 2018, 2,050,000 shares were purchased via the financing lines with Kepler, of which 850,000 shares in 2018. Out of the 2,250,000 BSAs subscribed as of December 1, 2017, 91% were used at the closing of the fiscal year.

10.2 Share purchase warrants, stock options and preferred stock

Since its formation, the Company issued "Stock Warrants" (BSA), stock warrants for its employees ("BSPCE" and others) as well as stock options (SO) and free performance shares (PS), the changes since December 31, 2017 are represented below.

In 2018, the Company issued a new free preference share plan, the terms of which have been approved by the shareholders at the General Meeting of October 5, 2018, and new stock options and stock warrants plans.

Type	Date of granting	Exercise price	Outstanding as of 12.31.17	Granted	Exercised	Cancelled	Outstanding as of 12.31.18	Potential number of shares
Options granted before january 1, 2018			3 491 426		854 000 *	1 487 442	1 149 984	2 275 813
SO	28/02/2018	3.12 €		300 000		70 000	230 000	230 000
SO	24/07/2018	2.54 €		80 000			80 000	80 000
SO	19/09/2018	2.86 €		40 000			40 000	40 000
SO	12/11/2018	2.59 €		600 000			600 000	600 000
SO	28/11/2018	2.52 €		35 000			35 000	35 000
BSA	28/02/2018	3.12 €		55 000			55 000	55 000
BSA	22/03/2018	2.92 €		50 000		50 000	0	0
BSA	12/11/2018	2.76 €		40 000			40 000	40 000
AP	10/10/2018			5 700			5 700	570 000
AP	12/11/2018			1 375			1 375	137 500
			3 491 426	1 207 075	854 000	1 607 442	2 237 059	4 063 313

* Of which 850,000 warrants exercised as part of PACEO financing set up in December 2017

Following the consolidation of shares (four old shares for a new one) on May 25, 2011, four stock warrants, BSPCEs or stock options granted before that date are needed to subscribe for one new share. For warrants and options granted after that date, the ratio is one to one.

Starting from July 2014, the Company could no longer issue any new BSPCE plans, because it had exceeded the threshold of €150 million in market capitalization more than three years ago.

The terms and conditions for exercising preferred shares are described in the minutes of the Combined General Meeting of October 5, 2018 in resolutions 14 and 15 (https://www.maunakeatech.com/uploads/media/media_pdf/0001/03/PV%20AGM%205%20octobre%202018%20Rev.pdf).

10.3 Company's buyback of its own shares

The Combined General Meeting of October 5, 2018 authorized the Board of Directors, for a period of thirty-eight months from the date of the meeting, to implement a share buyback program, on one or more occasions, in accordance with Article L.225-209 et seq. of the French Commercial Code and the General Regulation of the AMF under the terms and conditions described below:

Objectives of the share buyback program:
- to ensure the liquidity of the Company's shares under the terms of a liquidity contract to be concluded with an investment services provider, in accordance with a Code of Conduct recognized by the AMF;
- to meet the obligations related to stock options, free share awards, or employee savings plans, or other awards of shares to the employees and executives of the Company or the companies associated with it;
- to tender shares upon the exercise of rights attached to securities giving access to the share capital;
- to purchase shares to hold for subsequent exchange or use as consideration in potential acquisitions; or
- to cancel some or all of the shares of thereby bought back.

Maximum purchase price: €30 per share excluding fees and commissions, with a total limit of €5,000,000.

Maximum number of shares that may be purchased: 10% of the total number of shares as of the share buyback date. When shares are purchased for market-making purposes and to ensure the liquidity of the Company's share, the number of shares included in the calculation of the 10% ceiling above is equal to the number of shares purchased, less the number resold during the term of the authorization.

It is specified that the number of shares acquired by the Company to be retained and subsequently delivered in payment or in an exchange for the purpose of any merger, de-merger, or capital contribution may not exceed 5% of its share capital.

Summary of the shares purchased and sold over the year:

	2018				
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Securities purchased	378 387	288 385	222 908	195 498	1 085 178
Price	3,69	2,90	0,79	2,55	
Total amount (in K€)	1 395	836	177	499	2 908
Securities sold	368 340	270 072	237 573	188 521	1 064 506
Price	3,69	2,91	0,71	2,57	
Total amount (in K€)	1 360	785	170	485	2 799

At December 31, 2018, the Company held 38,819 Mauna Kea Technologies shares acquired at an average price of €2.08 and valued at €2.01, i.e. an unrealized capital loss of €3 thousand.

Note 11: Borrowings and financial debts

11.1 Loans from BPI (formerly OSEO)

On May 31, 2010, Mauna Kea Technologies obtained a repayable innovation loan in the amount of €3,416 thousand from OSEO as part of the PERSEE project. The PERSEE project aims to develop, validate and then market a device capable of improving diagnostic and preoperative assessment techniques for cancer patients. The first payments of the loan were as follows:

- first payment of €454 thousand on May 31, 2010;
- second payment of €1,138 thousand on December 21, 2011;
- third payment of €685 thousand on May 29, 2013;
- fourth payment of €626 thousand on December 22, 2016.

The loan maturity was renegotiated in late 2016: the end of Key Stage 4 was put back to 2018. The Company is currently negotiating an extension of key Stage 4. The agreement with OSEO stipulates one final payment of €512 thousand which should be made in 2019 once Key Stage 4 is reached.

Based on the initial contract, the Company must repay OSEO a total of €3,996 thousand, including 2.45% interest, once cumulative sales of €2,500 thousand are reached. This amount will be updated according to the amounts actually received.

Article 2.13 of the Framework agreement governing the PERSEE project (OSEO/BPI), provides for two types of advance repayments:
1/ Immediate repayment in case of judicial liquidation, cessation of activities, dissolution or voluntary liquidation;
2/ A repayment by right and at the sole initiative of Oseo in case of:
- failure by the Company to comply with any of its contractual obligations,
- irregular situation regarding its tax and social obligations,
- inaccurate or untrue statements.

11.2 COFACE loans

The Company received interest-free repayable loans from COFACE for its development activities in the USA and Canada, as follows:

- first payment of €212 thousand on February 29, 2008;
- second payment of €652 thousand on December 23, 2008;
- third payment of €560 thousand on January 26, 2010;
- fourth payment of €280 thousand on December 27, 2010.

Repayments are determined and made on the basis of sales projections in the USA and Canada from the use of products and services generated by the project up to the following limits:

- 14% of sales related to services provided;
- 7% of sales related to goods sold.

In the event that sales are inadequate for the expected repayments, no additional repayments are made to COFACE.

From 2011 to 2017, the Company made repayments to COFACE amounting in all to €1,240 thousand. In June 2017, based on the most recent sales forecasts, the Company repaid €254 thousand of the €408 thousand outstanding from the loan granted for marketing and business development in the United States. The €154 thousand balance was repaid in full in 2018.

CHANGES IN REPAYABLE ADVANCES

(Amounts in thousands of euros)

	12/31/2016	Receipt	Repayment	Others	12/31/2017
OSEO Funding	2 635			65	2 699
COFACE	404		(254)	4	154
Total repayable advances	**3 038**		**(254)**	**68**	**2 853**

	12/31/2017	Receipt	Repayment	Others	12/31/2018
OSEO Funding	2 699			67	2 766
COFACE	154		(154)		(0)
Total repayable advances	**2 853**		**(154)**	**67**	**2 766**

11.3 Short-term loans and borrowings

SHORT-TERM LOANS AND BORROWINGS

(Amounts in thousands of euros)

	12/31/2016	Receipt	Repayment	Capitalized interests	Reclassification	Others	12/31/2017
COFACE	404		(254)			4	154
Bond					232		232
Total of short-term loans and borrowings	404		(254)		232	4	386

SHORT-TERM LOANS AND BORROWINGS

(Amounts in thousands of euros)

	12/31/2017	Receipt	Repayment	Capitalized interests	Reclassification	Others	12/31/2018
COFACE	154		(154)				
Bond	232				368		600
Total of short-term loans and borrowings	386		(154)		368		600

Short-term debt corresponds to the repayment of the IPF loan, the first maturity of which is scheduled for the end of the first half of 2019.

11.4 Long-term loans and borrowings

The Company has contracted non-dilutive funding of €7 million with IPF Partners, a fund specialized in alternative financing for European growth companies in the healthcare sector.

This financing was comprised of two tranches of loans: the first tranche of €4 million was issued in February 2017; the second for the remaining €3 million was available in the next 12 months, subject to previously established closing conditions. Second tranche has not been issued.

This debt consists of 4,000,000 secured bonds with a total value of €4.0 million. The interest on the bonds will bear interest at an annual rate equal to the three-month EURIBOR +8.5%. The first tranche of bonds has a 5.5 years maturity, with interest only payments for the first 24 months.

In November 2018, the Company signed the amendment to the existing contract, which includes two additional tranches of debt, including a first tranche of €5.0 million available until the end of April 2019, and another tranche of €5.0 million available until September 2019, both tranches being subject to conditions for achieving predefined revenue levels. As at December 31, 2018, the company met the conditions necessary to raise the first tranche.

At 31/12/2018, the renegotiation of the IPF bond issue led, under IFRS 9, to a €41k reduction in debt in exchange for financial income.

The loans would bear interest at an annual rate equal to 3 month Euribor + 8.0%. The first loan tranche has a term of 5 years, with deferred principal repayment for the first 15 months. The second loan tranche has a term of 4 years, with deferred principal repayment for the first 12 months. The issuance of bonds is subject to certain restrictive financial performance conditions, included in the terms and conditions of the contract.

Long-term loans and borrowings break down as follows:

LONG-TERM LOANS AND BORROWINGS
(Amounts in thousands of euros)

	12/31/2016	Receipt	Repayment	Capitalized interests	Reclassification	Others	12/31/2017
Deposits and guarantees received		16					16
Shareholders' accounts	5						5
Repayable advances OSEO Funding	2 635					64	2 699
Bonds issues		3 900		110	(232)	70	3 848
Total of long-term loans and borrowings	**2 645**	**3 916**		**110**	**(232)**	**134**	**6 567**

	12/31/2017	Receipt	Repayment	Capitalized interests	Reclassification	Others	12/31/2018
Deposits and guarantees received	16		(4)				11
Shareholders' accounts	5						5
Repayable advances OSEO Funding	2 699					67	2 766
Bonds issues	3 848			124	(368)	71	3 675
Total of long-term loans and borrowings	**6 567**		**(4)**	**124**	**(368)**	**138**	**6 457**

"Other" changes involve the discounting of long-term conditional advances as well as borrowing arrangement costs.

11.5 Cash flow hedges

The Group has no financial derivative instruments.

11.6 Maturities of financial liabilities

The maturities of financial liabilities as of December 31, 2018 break down as follows:

REPAYMENT TERMS OF FINANCIAL LIABILITIES
(Amounts in thousands of euros)

	Gross amount	Less than one year	One to three years	Three to five years
Long-term loans and borrwings	6 457		16	6 440
Short-term loans and borrowings	600	600		
Trade payables	2 087	2 087		
Other current liabilities	2 195	2 195		
Total of financial liabilities	**11 339**	**4 883**	**16**	**6 440**

The maturities of long-term loans and borrowings relating to repayable advances are determined on the basis of estimates of expected repayments at December 31, 2018.

Note 12: Non-current provisions

Non-current provisions break down as follows:

NON-CURRENT PROVISIONS
(Amounts in thousands of euros)

	12/31/2016	Allowance	Unused reversals	Used reversals	Others	12/31/2017
Pension plan provision	155	37	(9)		(0)	183
Provisions for personnel disputes	91		(63)			28
Provision for software update	15					15
Others provisions for expenses		58				58
Total of non-current provisions	**261**	**95**	**(72)**		**(0)**	**283**

NON-CURRENT PROVISIONS
(Amounts in thousands of euros)

	12/31/2017	Allowance	Unused reversals	Used reversals	Others	12/31/2018
Pension plan provision	183	16	(26)		7	180
Provisions for personnel disputes	28	57				85
Provision for software update	15					15
Others provisions for expenses	58	84				142
Total of non-current provisions	**283**	**158**	**(26)**		**7**	**422**

12.1 Retirement commitments

For estimated retirement commitments, the following assumptions were used for all categories of employees (employees, ETAM [Employees, Technicians, and Supervisors], and managers):

PENSION PLAN PROVISION

	12/31/2018	12/31/2017
% social security expenses	48%	48%
Salary increases	2%	2%
Discount rate	1,97%	1,70%

- retirement age: 65;
- terms of retirement: voluntary retirement;
- mortality table: INSEE 2015;
- collective agreement: metal industries;
- turnover: high and digressive based on age.

The Company does not finance its pension plan provision. No retirements took place over the last two financial years.

The discount rate comes from iBoxx Corporate AA10+ references adjusted for the term of the Company's plan estimated at 23 years.

12.2 Provisions for labor disputes

At December 31, 2018, the Company recognized an additional €57 thousand provision concerning a labor-related dispute dating back to 2014. No new labor-related dispute has been identified.

12.3 Other provision for risks and expenses

Provisions for updating software packages were recognized to cover the costs of updating Cellvizio products from version 1.0 to version 1.5.
The provision for electronic equipment waste is no longer relevant and was reversed in full. The Company directly subcontracts a service provider for the recycling of this waste.

"Other provisions for expenses" corresponds to the provision for the risk of repair of systems sold under the legal one-year guarantee granted on the sale of a Cellvizio.

Note 13: Trade payables and other current liabilities

No discounts were made on trade payables and other current liabilities because they matured within one year at the end of each financial year in question.

13.1 Trade payables

Trade payables break down as follows:

TRADE PAYABLES
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Trade payables	2 087	1 663

The €424 thousand increase in trade payables is due mainly to the lag in the posting of 2019 expenses over 2018.

13.2 Other current liabilities

Other current liabilities break down as follows:

OTHER CURRENT LIABILITIES
(Amounts in thousands of euros)

	12/31/2018	12/31/2015
Taxes payable	107	106
Staff and social security payable	1 554	1 438
Deferred revenue	555	560
Total of other current liabilities	**2 216**	**2 104**

Tax liabilities mainly concern payroll taxes, sales tax and value added tax.

Payroll-related liabilities represent provisions for paid leave, provisions for bonuses and commissions and social security contributions.

Deferred revenues mainly comprise the deferred portion of training and equipment installation under IFRS 15.

Note 14: Financial instruments on the balance sheet

FINANCIAL INSTRUMENTS ON BALANCE SHEET AND THEIR IMPACT ON THE PROFIT (OR LOSS)

(Amounts in thousands of euros)

As of 31 December 2018	Value on the balance sheet	Fair value through profit or loss	Fair value through equity	Loans and receivables	Debt at amortised cost
Assets					
Non-current financial assets	133			133	
Trade receivables	1 643			1 643	
Other current assets (2)	3 019			3 019	
Current financial assets (1)	64			64	
Cash	8 623	8 623			
Total of assets	**13 483**	**8 622**		**4 859**	
Liabilities					
Long-term loans and borrowings	6 457				6 457
Short-term loans and borrowings	600				600
Trade payables	2 087				2 087
Other current liabilities (2)	2 216				2 216
Total of liabilities	**11 361**				**11 361**

FINANCIAL INSTRUMENTS ON BALANCE SHEET AND THEIR IMPACT ON THE PROFIT (OR LOSS)

(Amounts in thousands of euros)

As of 31 December 2017	Value on the balance sheet	Fair value through profit or loss	Fair value through equity	Loans and receivables	Debt at amortised cost
Assets					
Non-current financial assets	138			138	
Trade receivables	2 034			2 034	
Other current assets (2)	2 256			2 256	
Current financial assets (1)	125			125	
Cash	17 453	17 453			
Total of assets	**22 007**	**17 453**		**4 553**	
Liabilities					
Long-term loans and borrowings	6 799				6 799
Short-term loans and borrowings	154				154
Trade payables	1 663				1 663
Other current liabilities (2)	1 544				1 544
Total of liabilities	**10 160**				**10 160**

(1) The valuation of these financial assets at fair value through profit or loss refers to an active market (Level 1 category according to IFRS 7).

(2) Advances paid and received that are not repaid in cash, and deferred income and prepaid expenses that are not defined as financial liabilities, are not included.

Note 15: Sales and operating revenue

Sales and operating revenue consists of the following:

SALES AND OPERATING REVENUE
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Sales	6 760	6 687
Research Tax Credit and other tax credits	1 141	1 144
Total of revenue	**7 901**	**7 831**

The Group's sales comprise sales of Cellvizio® products and accessories (probes, software, and other), together with services.

The competitiveness and employment tax credit is recognized under Research Tax Credit and other tax credits.

Sales by type as of December 31, 2018 are broken down as follows:

SALES BY TYPE OF PRODUCT
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Total sales of "equipements"	2 683	3 101
Total sales of "consumables" (probes)	2 812	2 397
Total sales of "services"	1 265	1 188
Total sales by type	**6 760**	**6 687**

Sales by geographic region as of December 31, 2018 are broken down as follows:

SALES BY GEOGRAPHICAL AREA
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
EMEA (Europe, Middle-east, Africa)	1 544	1 282
including France	*335*	*499*
America	3 618	3 453
including USA	*3 263*	*3 092*
Asia	1 599	1 952
including China	*1 290*	*877*
including Japan	*62*	*331*
Total sales by geographical area	**6 760**	**6 687**

For the purposes of geographical analysis, the management of the Group allocates sales revenue according to the place of delivery, or, in the case of services, according to the location of the customer's registered office

At December 31, 2018, one distributor from the APAC region accounted for more than 17.73% of sales.

Note 16: Staff costs

The Group employed 100 persons as of December 31, 2018 compared with 90 persons as of December 31, 2017.

The employee benefits expense breaks down as follows:

EMPLOYEE BENEFITS EXPENSE
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Wages and salaries, social security costs	10 345	8 874
Net pension costs	(10)	28
Share-based payment transaction expenses	138	210
Total of employee benefits expense	**10 474**	**9 113**

Staff costs increased by €1,471 thousand, mainly due to the recruitment of a sales team in the United States and the internalization of certain previously sub-contracted services.

Note 17: Share-based payments

Share-based payments concern all stock warrants (BSA/BSPCE), stock options (SO) and preferred shares (PS) awarded to employees, service providers and members of the Board of Directors.

They have been recorded as expenses since the award knowing that the terms for exercising BSPCEs and SOs are as follows for the plans awarded before 2017:
- 25% of the founders' warrants/stock options may be exercised starting on the first anniversary of their award;
- 25% of the founders' warrants/stock options may be exercised starting on the second anniversary of their award;
- 25% of the founders' warrants/stock options may be exercised starting on the third anniversary of their award;
- the remaining balance, i.e., 25% of the founders' warrants/stock options, may be exercised starting on the fourth anniversary of their award;
- no later than ten years from their issue, or seven years for stock options granted before 2011, it being specified that founders' warrants/stock options not yet exercised by the end of this ten-year period automatically become null and void.

The terms for exercising stock options are the following for plans allocated in 2017:

- 20% of the options at the end of the first year from the first anniversary date of their award; and
- 40% of the options at the end of the second year from the second anniversary date of their award;
- and 20% of the options at the end of the third and fourth years from the date of their award; and
- no later than ten (10) years from their award, it being specified that the options that have not yet been exercised at the end of this 10-year period automatically become null and void,

The terms and conditions governing the exercise of stock warrants awarded in 2011 and 2014 are as follows:
- 33.3% of the warrants may be exercised starting on the first anniversary of their award;
- 33.3% of the warrants may be exercised starting on the second anniversary of their award;
the remaining balance, i.e., 33.3% of the warrants, may be exercised starting on the third anniversary of their award;
- Warrants not yet exercised within ten years of their issue automatically become null and void.

Concerning the preferred shares, the terms and conditions for exercising preferred shares are described in the minutes of the combined general shareholders meeting on October 5, 2018 in resolutions 14 and 15 (https://www.maunakeatech.com/uploads/media/media_pdf/0001/03/PV%20AGM%205%20octobre%202018%20Rev.pdf)

The main characteristics and terms are as follows:

2018 Preference Shares definitively acquired by their beneficiaries at the Acquisition Date will be convertible into new or existing ordinary shares at the Company's choice ('Ordinary Shares'), at the request of each beneficiary affected, at any time with effect from the second anniversary of the Acquisition Date and no later than the fifth anniversary of the Acquisition Date ('Conversion Period'), unless otherwise specified in the 2018 Preference Shares allocation plan or contrary decision by the Board of Directors notified to each bearer of 2018 Preference Shares according to the following procedures:

a. in the event of Departure between the Acquisition Date (included) and the first anniversary of the Acquisition Date (excluded), each Preference Share will be convertible into twenty (20) Ordinary Shares.

b. in the event of Departure between the first anniversary of the Acquisition Date (included) and the second anniversary of the Acquisition Date (excluded), each 2018 Preference Share will be convertible into thirty-three (33) Ordinary Shares.

c. In the event of Departure between the second anniversary (included) and the third anniversary (excluded) of the Acquisition Date, the conversion ratio will be determined as follows:

(i) if Reference Price 1 is strictly less than the Bottom Price, each 2018 Preference Share will be convertible into thirty-three (33) Ordinary Shares;

(ii) if Reference Price 1 is strictly greater than the Intermediate Price, each 2018 Preference Share will be convertible into sixty-six (66) Ordinary Shares;

(iii) if Reference Price 1 is between the Bottom Price (included) and the Intermediate Price (included), the number of Ordinary Shares to which each 2018 Preference Share will be entitled is:

$$33 + 33 \times \frac{\text{Reference Price 1} - \text{Bottom Price}}{\text{Intermediate Price} - \text{Bottom Price}}$$

where:

- the term 'Bottom Price' means 1.75 times the Allocation Price;
- the term 'Allocation Price' means the average of closure prices recorded on Euronext or any other main listing location for the Mauna Kea Technologies share over the 60 trading sessions prior to the allocation date of the relevant 2018 Preference Shares ('Allocation Date');
- the term 'Intermediate Price' means 2.5 times the Allocation Price; and
- the term 'Reference Price 1' means the highest average of closure prices for the share on Euronext or any other main listing location for the Mauna Kea Technologies share over a period of 60 consecutive trading sessions, calculated at any time from the Acquisition Date and until the second anniversary of the Acquisition Date;

d. in the event of Departure following the third anniversary of the Acquisition Date, the number of Ordinary Shares to which each Preference Share will be entitled is equal to the sum:

(x) of the number of Ordinary Shares determined according to the provisions of paragraph 3.c) above as if the beneficiary's Departure occurred between the second and third anniversary of the Acquisition Date, and

(y) of the following number of Ordinary Shares:

(i) if Reference Price 2 is strictly less than the Bottom Price: zero;

(ii) if Reference Price 2 is strictly greater than the Top Price: the difference between one hundred Ordinary Shares and the number of Ordinary Shares determined in (x) (such that the sum of (x) and (y) equals 100);

(iii) if Reference Price 2 is between the Bottom Price (included) and the Top Price (included): the difference, if positive, between:

- $33 + 67 \times \frac{\text{Reference Price 2} - \text{Bottom Price}}{\text{Top Price} - \text{Bottom Price}}$; and

- the number of Ordinary Shares determined in (x).

where:

- the term 'Bottom Price' means 2.45 times the Allocation Price;
- the term 'Top Price' means 3.5 times the Allocation Price; and
- the term 'Reference Price 2' means the highest average of closure prices for the share on Euronext or any other main listing location for the Mauna Kea Technologies share over a period of 60 consecutive trading sessions, calculated at any time from the date of the first anniversary of the Acquisition Date and until the third anniversary of the Acquisition Date.

It is stipulated that this ratio will be adjusted to take account of shares to be issued to maintain the rights of bearers of securities giving access to the Company's capital and beneficiaries of 2018 Preference Shares, in accordance with the applicable legal and regulatory provisions.

The Preference Shares may be converted only during a period of five years and six months following the expiration of the Holding Period (the "Holding Period").

The detail of the share-based payments is presented in the table below:

Type	Date of granting	Exercise price	Maturity	Number of shares	Cancelled	Exercised	Outstanding at 12/31/2018	Vestible sahres equivalent as of 21/31/2018	Execicable bonds as of 12/31/2018
SO 2008	02/06/2008	1	02/06/2018	670 000	481 408	188 592	0	0	0
BCE-A	04/08/2008	1	05/08/2018	500 000	500 000	0	0	0	0
BSPCE 6	04/08/2008	1	04/08/2018	1 225 000	892 508	332 492	0	0	0
BSPCE 6	08/12/2008	1	08/12/2018	35 000	35 000	0	0	0	0
BSPCE 6	24/11/2009	1	24/11/2019	637 500	396 256	154 992	86 252	21 563	21 563
SO 2008	01/03/2010	1	01/03/2020	250 000	100 000	10 000	140 000	35 000	35 000
SO 2010	31/01/2011	1	31/01/2021	245 000	128 752	56 248	60 000	15 000	15 000
BSPCE 2010	15/02/2011	1	15/02/2021	915 000	506 752	318 248	90 000	22 500	22 500
BSPCE 2010	01/03/2011	1	01/03/2021	200 000	0	150 000	50 000	12 500	12 500
BSPCE 2011	05/12/2011	13	01/03/2021	129 500	117 000	0	12 500	12 500	12 500
BSPCE 2012	04/12/2012	10,79	04/12/2022	239 500	204 625	625	34 250	34 250	34 250
SO 2012	04/12/2012	10,79	04/12/2022	161 000	161 000	0	0	0	0
BSPCE 2013	07/05/2013	10,28	07/05/2023	63 000	36 000	0	27 000	27 000	27 000
SO 2014	12/02/2014	10,56	12/02/2024	10 000	10 000	0	0	0	0
BSPCE 2014	12/02/2014	10,56	12/02/2024	281 000	125 000	0	156 000	156 000	156 000
BSA 2014	01/09/2014	6,12	01/09/2024	160 000	60 000	0	100 000	100 000	100 000
SO 02 2016	02/02/2016	2,54	02/02/2026	96 000	72 000	10 500	13 500	13 500	6 000
SO 07 2016	26/07/2016	1,6	26/07/2026	80 000	0	10 000	70 000	70 000	40 000
BSA 07 2016	26/07/2016	1,68	26/07/2026	115 000	25 000	0	90 000	90 000	60 000
AP 07 2016	26/07/2016	*	NA	7 765	1 850	0	5 915	591 500	0
AP 11 2016	15/11/2016	*	NA	570	350	0	220	22 000	0
SO 03 2017	21/03/2017	2,92	21/03/2027	60 000	0	0	60 000	60 000	15 000
SO 07 2017	19/07/2017	2,34	19/07/2027	154 000	104 000	0	50 000	50 000	10 000
SO 02 2018	28/02/2018	3,12	28/02/2028	300 000	70 000	0	230 000	230 000	0
SO 07 2018	24/07/2018	2,54	24/07/2028	80 000	0	0	80 000	80 000	0
SO 09 2018	19/09/2018	2,86	19/09/2028	40 000	0	0	40 000	40 000	0
SO 11 2018	12/11/2018	2,59	12/11/2028	600 000	0	0	600 000	600 000	0
SO 11 2018	28/11/2018	2,52	28/11/2028	35 000	0	0	35 000	35 000	0
BSA 02 2018	28/02/2018	3,12	28/02/2028	55 000	0	0	55 000	55 000	0
BSA 03 2018	22/03/2018	2,92	22/03/2028	50 000	50 000	0	0	0	0
BSA 11 2018	12/11/2018	2,76	12/11/2028	40 000	0	0	40 000	40 000	0
AP 10 2017	17/10/2017	*	NA	2 340	1 990	0	350	35 000	0
AP 10 2018	10/10/2018	*	NA	5 700	0	0	5 700	570 000	0
AP 11 2018	12/11/2018	*	NA	1 375	0	0	1 375	137 500	0
				7 444 250	**4 079 491**	**1 231 697**	**2 133 062**	**3 155 813**	**567 313**

The other main assumptions used to determine share-based payment expenses using the Black-Scholes valuation model were as follows:

- risk-free interest rate: Government borrowing rate (GFRN index);
- dividend: none;
- turnover: 15%;
- volatility: 60% for warrants, founders' warrants and stock options granted before December 31, 2011, 35% for founders' warrants and stock options granted in 2012, 34% for founders' warrants and stock options granted in 2013, 32% and 33% for plans granted in 2014, 33% for plans granted in 2015, 29.99% for plans granted in 2016, 55% for plans granted in 2017, and 59% for plans granted in 2018.

As of 2012, the volatility applied corresponds to the average historic volatility of a panel of listed companies in the sector of industry in which the Company operates and/or has a market capitalization and traded share volume comparable with those of the Company. Listed companies whose shares were traded for less than €1 were excluded from the panel.

The exercise price, estimated life and fair value of underlying shares at the award date of the warrants were used to value each category of share-based compensation.

Share-based payment expenses during the period break down as follows:

DETAILS OF THE RESTATEMENT OF SHARE-BASED PAYMENTS
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Share-based payments (expense of the period)	138	210
	138	**210**

Note 18: External expenses

18.1 Research & Development Department

RESEARCH & DEVELOPMENT
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Purchases consumed	59	70
Employee benefits expenses	2 525	2 453
External expenses	1 417	1 134
Impôts et taxes	36	34
Net change in amortisation and depreciation	612	553
Other	3	21
Total of Research & Development	**4 653**	**4 265**

18.2 Sales & Marketing Department

SALES & MARKETING
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Purchases consumed	(24)	78
Employee benefits expenses	5 416	4 474
External expenses	2 839	2 515
Net change in amortisation and depreciation	814	502
Other	52	17
Total of Sales & Marketing	**9 097**	**7 586**

This increase is related to the increase in the salesforce in the United States.

18.3 Administrative Expenses

ADMINISTRATIVE EXPENSES
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Purchases consumed	52	46
Employee benefits expenses	1 828	1 411
External expenses	1 819	1 533
Taxes	108	81
Net change in amortisation and depreciation	136	156
Other	7	122
Total of Administrative expenses	**3 953**	**3 350**

At December 31, 2018, the increase in general and administrative expenses related to staff expenses is mainly due to the internalization of certain services previously outsourced externally, as well as the change in management team.

Note 19: Financial income and expenses

Financial income and expenses break down as follows:

FINANCIAL REVENUE AND EXPENSES
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Foreign exchange gains	112	172
Gains on cash equivalents	3	33
Other financial incomes	2	0
Total of financial revenue	**116**	**205**
Foreign exchange losses	(281)	(183)
Interest expenses	(481)	(418)
Losses on cash equivalents	(3)	0
Discounting expenses	(138)	(138)
Total of financial expenses	**(902)**	**(739)**
Total of financial revenue and expenses	**(786)**	**(534)**

Interest expenses of €481 thousand correspond to interest on the IPF loan contracted in February 2017.

Note 20: Income tax

Under current tax laws, the Group has total tax losses of €78,356 thousand that may be carried forward indefinitely in France and total tax losses of €38,369 thousand that may be carried forward for 20 years in the United States, i.e. a total of €116,725 thousand at December 31, 2018. The deferred tax asset base net of temporary passive differences was not capitalized as a precautionary measure, in accordance with the principles set out in Note 1 "Accounting principles".

The tax rate applicable to the Company is the rate in effect in France (33.33%). By convention, the deferred income tax rate used is 34.43%.

TAX PROOF
(Amounts in thousand of euros)

	12/31/2018	12/31/2017
Profit/(loss)	(12 785)	(10 245)
Income tax expense		
Profit before tax	(12 785)	(10 245)
Theoretical tax expense - 34,43%	**(4 402)**	**(3 527)**
Other non-deductible expenses and tax-exempt income	24	4
Effect of tax rate differences	(18)	(14)
Deferred tax assets not recognised	4 396	3 538
Actual income tax expense		

Note 21: Commitments

Obligations pursuant to ordinary rental agreements

The Group uses the following premises:

- head office in Paris: located at 9, rue d'Enghien (75010) on 6 floors of the building, the surface area of which is approximately 1,133 sq. meters (including the basement). The Company has six separate leases contracted with SCI Enghien 9, which is the owner thereof including two that are sub-leased;

- the premises in the United States:
A new lease was signed on December 16, 2016 with Geros LLC for the rental of offices at 24 Denby Road, ALLSTON, MA 02134. This lease takes effect on January 1, 2017 for a term of three years.

In addition, the Company has entered into leases on vehicles and office equipment.

Firm and unconditional commitments under operating leases break down as follows at December 31, 2018:

OBLIGATIONS PURSUANT TO ORDINARY RENTAL AGREEMENTS
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Portion with terms of less than 1 year	204	205
Portion with terms of between 1 and 5 years	591	674
Portion with terms of more than 5 years	16	115
Total of commitments pursuant to ordinary rental agreements	**811**	**994**

Commitments under other contracts

The Company subcontracts the manufacturing of some of the sub-assemblies necessary for the manufacturing of its products with suppliers. In order to secure its operations, it has made commitments to purchase a certain quantity of sub-assemblies from certain suppliers as described in the table below:

OBLIGATIONS PURSUANT TO OTHER AGREEMENTS
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Portion with terms of less than 1 year	1 133	2 518
Portion with terms of between 1 and 5 years	172	85
Total of supplier commitments	**1 305**	**2 603**

There were no material changes to the Company's other commitments over the year.

Note 22: Transactions with related parties

The compensation presented below, which was granted to members of the Company's general management and other related parties, was recognized under expenses during the periods presented:

RELATED PARTY TRANSACTIONS
(Amounts in thousands of euros)

	12/31/2018	12/31/2017
Wages and salaries - General direction	281	266
Share-based payments - General direction	97	0
Pension plan - General direction	2	4
Attendance Fees - Executive Officers	233	227
Share-based payments - Executive Officers	29	0

Note 23: Earnings per share

Basic earnings per share are calculated by dividing the net earnings to which Company shareholders are entitled by the weighted average number of ordinary and preferred shares outstanding during the financial year.

EARNINGS PER SHARE

	12/31/2018	12/31/2017
Profit / (loss) (in K€) *		
Weighted average number of shares outstanding (in thousands)	**(12 785)**	**(10 245)**
Earnings per share (in €)	25 201	21 123
	(0,51)	**(0,49)**
Weighted average number of potential shares (in thousands)	27 222	24 224

Instruments that grant rights to the share capital on a deferred basis (BSAs, BSPCEs or stock options) are considered antidilutive because they cause an increase in earnings per share. Thus, diluted earnings per share are identical to basic earnings per share.

Note 24: Management of financial risk

The main financial instruments used by the Group are financial assets, cash, and investment securities. The purpose of managing these instruments is to finance the Company's business activity. It is the Group's policy not to subscribe to financial instruments for speculative purposes.

The primary risks to which the Group is exposed are interest rate risk, credit risk and exchange rate risk.

Exchange rate risk

The main currency for which the Group is exposed to significant exchange rate risk is the US dollar.

The purpose of the Mauna Kea Technologies Inc. subsidiary established in the State of Massachusetts is to distribute and market the Group's products in the United States. To this end, it is fully financed by the parent company, with which it has established three agreements:

- a cash management agreement for a current account in USD;
- a distribution agreement;
- a services agreement (Management fees).

The Group's major exchange rate risk is linked to the EUR/USD parity fluctuation. In fact, the Group markets the product and services in the United States through its subsidiary Mauna Kea Technologies Inc. Its revenues and expenses - including the purchases of Cellvizio and probes to Mauna Kea Technologies SA - are expressed in US dollars, the operational currency of the subsidiary. As a result, the Group is exposed to changes in the EUR/USD exchange rate through that subsidiary.

A change in exchange rates has an impact on Group earnings and shareholders' equity in the same manner, as follows:

- a +10% change in the EUR/USD exchange rate would result in a rise in earnings **of €342 thousand** at December 31, 2018;
- a -10% change in the EUR/USD exchange rate would result in a drop in earnings of **€(418) thousand** at December 31, 2018.

Liquidity risk

See Note 1.9: Cash and cash equivalents

Interest Rate Risk

The Company's exposure to interest rate risk mainly concerns the 4,000,000 bonds contracted with IPF Partners. This debt is subject to the annual interest rate of three-month EURIBOR + 8.5%. The first tranche of bonds has a 5.5 year maturity, with interest only payments for the first 24 months.

At December 31, 2018, the Company did not hold any investment securities, whose interest rate changes have a direct impact on the rate of return for these investments and the cash flows generated.

The repayable BPI/OSEO advances at a 2.45% interest rate for an overall, non-discounted amount of €2,904 thousand are detailed in Note 11: Borrowings and financial debts. They are not subject to interest rate risk.

Credit Risk

In the Company's experience, the payment of certain public financing of research expenditures is subject to credit risk.

The Company manages its available cash in a prudent manner. Cash and cash equivalents include cash on hand only.

Credit risk related to cash, cash equivalents, and current financial instruments is insignificant in light of the quality of the co-contracting financial institutions.

With regard to its customers, the Company has no significant concentration of credit risk. The Group has established policies that insure that its customers have an appropriate credit risk history.

Fair value

The fair value of financial instruments traded on an active market is based on the market price at the balance sheet date. The market prices used for financial assets held by the Company are the purchase prices in effect on the market at the valuation date.

The nominal value, minus provisions for impairment, of other payables and receivables is assumed to approach the fair value of those items..

Note 25: Subsequent events

On February 21, 2019, the Company announced a mutual decision to terminate the development and distribution agreements with Cook Medical due to the lack of sales performance in the urology market and the lack of sales activity.

Despite the lack of sales performance in the urology market, the Company made significant progress over the past few years in product development, certification and clinical validation of our Cellvizio technology in urology.