

Vaisala Corporation Financial Statement Release January–December 2018

Fourth-quarter orders received and net sales increased. Full-year operating result 11% of net sales. Order book in Weather and Environment Business area decreased.

The share issue without payment approved by Vaisala's Annual General Meeting on April 10, 2018 doubled the number of series K and A shares. All share related figures in this report have been adjusted to reflect the increased number of shares.

Fourth quarter 2018 highlights

- Orders received EUR 99.1 (83.5) million, increase 19%
- Order book at the end of the period EUR 120.6 (124.8) million, decrease 3%
- Net sales EUR 108.3 (102.3) million, increase 6%
- Gross margin 54.3 (52.5) %
- Operating result (EBIT) EUR 13.9 (18.5) million, 12.9 (18.1) % of net sales
- Earnings per share EUR 0.32 (0.33)
- Cash flow from operating activities EUR 29.4 (23.0) million
- Acquisitions of Leosphere and K-Patents

January–December 2018 highlights

- Orders received EUR 334.2 (346.3) million, decrease 4%
- Net sales EUR 348.8 (332.6) million, increase 5%
- Gross margin 53.1 (52.3) %
- Operating result (EBIT) EUR 38.9 (40.9) million, 11.1 (12.3) % of net sales
- Earnings per share EUR 0.82 (0.76)
- Cash flow from operating activities EUR 48.3 (49.2) million
- Cash and cash equivalents at the end of the period EUR 72.7 (91.3) million, decrease 20 %
- The Board of Directors proposes to the Annual General Meeting that dividend of EUR 0.58 per outstanding share be paid out of distributable earnings.

Business outlook for 2019

Vaisala estimates its full-year 2019 net sales to be in the range of EUR 380–400 million and its operating result (EBIT) to be in the range of EUR 25–35 million including EUR 10–12 million acquisition related amortization and one-off expenses related to a lease contract.

Vaisala's President and CEO Kjell Forsén comments on the fourth quarter and full year 2018

“Vaisala performed well in 2018 and moved forward in multiple growth investment activities. We closed two strategic acquisitions, one in each business area, to expand our technology and product portfolio. Our R&D investments increased by 15% and we completed several significant product and software launches. We proceeded well with regional expansion and further development of Vaisala Production System. The integration of Vionice was fully completed and the integration project of Leosphere started according to

plan. All this strengthens foundation for future growth. Our challenge in entering 2019 is low order book in Weather and Environment Business Area due to lack of large orders during 2018.

Vaisala’s solid performance continued during the fourth quarter. Orders received picked up in Weather and Environment Business Area. Leosphere’s wind lidar business performed according to expectations during its first quarter as part of Vaisala, and pulled Weather and Environment Business Area’s net sales to 4% growth. Industrial Measurements Business Area’s orders received and net sales reached all-time high levels. Instrument deliveries in Americas and APAC were strong.

Gross margin was strong during the fourth quarter following Weather and Environment Business Area’s profitability improvement both in project and service businesses. Industrial Measurements Business Area continued to deliver good gross margin in product business. Despite excellent gross profit increase, Vaisala’s fourth quarter operating result fell short from previous year. This was due to increased operating expenses, including over three million euros of amortization of intangible assets related to Leosphere acquisition.

At the end of the year, we announced acquisition of Finnish K-Patents. This acquisition was an important step for the growth of Industrial Measurements Business Area, and broadened our product offering to liquid measurement solutions for industrial customers. I warmly welcome all K-Patents employees to Vaisala.

I want to thank all Vaisala employees for hard work and commitment in 2018. Special thanks for those who showed flexibility with Leosphere and K-Patents acquisitions on top of their daily responsibilities.”

Key Figures

	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Orders received, EUR million	99.1	83.5	334.2	346.3
Order book, EUR million	120.6	124.8	120.6	124.8
Net sales, EUR million	108.3	102.3	348.8	332.6
Gross profit, EUR million	58.8	53.7	185.0	174.0
Gross margin, %	54.3	52.5	53.1	52.3
Operating expenses, EUR million	46.4	35.5	148.3	133.3
Operating result, EUR million	13.9	18.5	38.9	40.9
Operating result, %	12.9	18.1	11.1	12.3
Result before taxes, EUR million	14.0	18.1	37.5	38.1
Result for the period, EUR million	11.4	11.8	29.5	27.2
Earnings per share, EUR	0.32	0.33	0.82	0.76
Return on equity, %			16.0	15.0
Capital expenditure, EUR million	4.2	1.9	14.5	8.5
Depreciation, amortization and impairment, EUR million	5.7	2.2	12.1	9.7
Cash flow from operating activities, EUR million	29.4	23.0	48.3	49.2
Cash and cash equivalents, EUR million			72.7	91.3
Interest-bearing liabilities, EUR million			40.5	-
Gearing, %			-17.6	-49.2

Fourth quarter 2018

Orders received

EUR million	10-12/2018	10-12/2017	Change, %	Change, % comparable rate
Weather and Environment	67.9	55.4	23	22
Industrial Measurements	31.2	28.1	11	10
Total	99.1	83.5	19	18

In the fourth quarter 2018, Vaisala's orders received increased by 19% compared to previous year and were EUR 99.1 (83.5) million. Increase came mainly from wind lidars, weather project orders from Asia Pacific and Middle East, and Industrial Measurement Business Area's record high quarterly orders received. At comparable exchange rates, increase would have been 18% compared to previous year. Excluding Leosphere acquisition, orders received would have increased by 10%.

In the fourth quarter 2018, Weather and Environment Business Area's orders received increased by 23% compared to previous year and were EUR 67.9 (55.4) million. Increase came mainly from wind lidars and weather project orders from Asia Pacific and Middle East. At comparable exchange rates, increase would have been 22% compared to previous year. Excluding Leosphere, orders received would have increased by 10%.

In the fourth quarter 2018, Industrial Measurements Business Area's orders received increased by 11% compared to previous year and were on all-time high level at EUR 31.2 (28.1) million. The increase came from all regions and was strongest in APAC and Americas. At comparable exchange rates, increase would have been 10% compared to previous year.

Order book

EUR million	Dec 31, 2018	Dec 31, 2017	Change, %
Weather and Environment	104.9	114.1	-8
Industrial Measurements	15.7	10.7	46
Total	120.6	124.8	-3

At the end of 2018, Vaisala's order book was EUR 120.6 (124.8) million and decreased by 3% compared to previous year. Order book decreased mainly due to low order intake during the first three quarters and high deliveries in Weather and Environment Business Area. Excluding acquired Leosphere and K-Patents, order book would have decreased by 9%. EUR 91.0 (99.5) million of the order book is scheduled to be delivered in 2019. If the current revenue recognition standard had been used in previous year, the December 31, 2017 order book would have been EUR 1.4 million lower than reported. Hence, Vaisala's December 31, 2018 order book would have decreased by 2% compared to previous year.

At the end of 2018, Weather and Environment Business Area's order book was EUR 104.9 (114.1) million and decreased by 8% compared to previous year. Order book decreased mainly due to low order intake during the first three quarters and high deliveries and the decrease was most significant in Americas. Excluding Leosphere, order book would have decreased by 12%. EUR 76.8 (89.8) million of the order book is scheduled to be delivered in 2019. If the current revenue recognition standard had been used in previous

year, the December 31, 2017 order book would have been EUR 1.4 million lower than reported. Hence, December 31, 2018 order book would have decreased by 7% compared to previous year.

At the end of December 2018, Industrial Measurements Business Area's order book was EUR 15.7 (10.7) million and increased by 46% compared to previous year. Order book increased in all regions and mainly in industrial instruments. Excluding K-Patents, order book would have increased by 28%. EUR 14.3 (9.7) million of the order book is scheduled to be delivered in 2019.

Net sales by business area

EUR million	10-12/2018	10-12/2017	Change, %	Change, % comparable rates
Weather and Environment	77.6	74.4	4	4
Products	46.4	31.9	45	
Projects	19.1	32.7	-41	
Services	12.1	9.8	24	
Industrial Measurements	30.7	27.9	10	9
Products	27.8	25.0	11	
Services	2.9	2.9	-2	
Total	108.3	102.3	6	5

Net sales by geographical area

EUR million	10-12/2018	10-12/2017	Change, %
EMEA	32.4	36.3	-11
Americas	40.2	36.3	11
APAC	35.8	29.8	20
Total	108.3	102.3	6

In the fourth quarter 2018, Vaisala's net sales increased by 6% compared to previous year and totaled EUR 108.3 (102.3) million. Increase came from Leosphere and Industrial Measurement Business Area. At comparable exchange rates, increase would have been 5% compared to previous year. Excluding Leosphere, net sales would have decreased by 4%. If the current revenue recognition standard had been used in previous year, the fourth quarter 2017 net sales would have been EUR 9.1 million lower than reported. Hence, Vaisala's fourth quarter 2018 net sales would have increased by 16% compared to previous year.

Net sales in EMEA decreased by 11% compared to previous year and were EUR 32.4 (36.3) million due to lower project deliveries in Weather and Environment Business Area. In Americas, net sales were EUR 40.2 (36.3) million and increased by 11%. Increase came mainly from sounding products and industrial instruments. In APAC, net sales were EUR 35.8 (29.8) million and increased by 20%. Increase came mainly from Leospheres' wind lidars and industrial instruments.

In the fourth quarter 2018, Weather and Environment Business Area's net sales increased by 4% compared to previous year and were EUR 77.6 (74.4) million. Increase came from Leosphere and its performance was according to expectations. At comparable exchange rates, increase would have been the same 4% compared to previous year. Excluding Leosphere, net sales would have decreased by 9%. If the current revenue recognition standard had been used in previous year, the fourth quarter 2017 net sales would have been

EUR 9.1 million lower than reported. Hence, fourth quarter 2018 net sales would have increased by 19% compared to previous year.

In the fourth quarter 2018, Industrial Measurements Business Area's net sales increased by 10% compared to previous year and were on all-time high level at EUR 30.7 (27.9) million. Increase came from instrument deliveries in Americas and APAC. Continuous monitoring system deliveries increased, whereas power transmission deliveries decreased slightly. At comparable exchange rates, net sales would have increased by EUR 9% compared to previous year.

Gross margin and operating result

	10-12/2018	10-12/2017
Gross margin, %	54.3	52.5
Weather and Environment	51.1	49.2
Industrial Measurements	62.5	61.2
Operating result, EUR million	13.9	18.5
Weather and Environment	10.5	14.0
Industrial Measurements	5.6	4.4
Other	-2.1	0.1
Operating result, %	12.9	18.1
Weather and Environment	13.5	18.8
Industrial Measurements	18.1	15.7

In the fourth quarter 2018, Vaisala's operating result decreased and was EUR 13.9 (18.5) million, 12.9 (18.1) % of net sales. Gross margin increased to 54.3 (52.5) %. This was a result of gross margin improvement in Weather and Environment Business Area and increased net sales in Industrial Measurements Business Area. Operating expenses increased by 30% compared to previous year and totaled EUR 46.4 (35.5) million. Increase in operating expenses came from R&D, sales and marketing expenses according to plan as well as Leosphere's operating expenses. Operating expenses included EUR 3.1 million of amortization of intangible assets related to Leosphere acquisition. In addition, operating result was decreased by EUR 2.1 million including mainly transaction costs related to Leosphere acquisition and restructuring costs. Operating result was increased by EUR 1.5 million reversal of earn-outs related to Envitems and Vionice acquisitions and renegotiation of Leosphere's contractual liabilities.

In the fourth quarter 2018, Weather and Environment Business Area's operating result decreased and was EUR 10.5 (14.0) million, 13.5 (18.8) % of net sales. Gross margin increased to 51.1 (49.2) %. This was a result of more favorable sales mix and improved profitability in project business. Operating expenses increased by 36% compared to previous year and totaled EUR 30.7 (22.6) million. Excluding Leosphere, increase in operating expenses came mainly from R&D expenses according to plan. Leosphere's operating expenses were EUR 5.5 million of which EUR 3.1 million was amortization of intangible assets related to acquisition. In addition, operating result was increased by EUR 1.5 million reversal of earn-outs related to Envitems and Vionice acquisitions and renegotiation of Leosphere's contractual liabilities.

In the fourth quarter 2018, Industrial Measurements Business Area's operating result increased mainly due to increased net sales and was EUR 5.6 (4.4) million, 18.1 (15.7) % of net sales. Gross margin was 62.5 (61.2) % and increased due to improved profitability in service business and high share of product sales. Operating

expenses increased by 7% compared to previous year and totaled EUR 13.6 (12.7) million. Increase came mainly from R&D as well as sales and marketing expenses according to plan.

In the fourth quarter 2018, financial income and expenses were EUR -0.0 (-0.5) million. This was mainly a result of USD currency hedging.

In the fourth quarter 2018, result before taxes was EUR 14.0 (18.1) million. Income taxes were EUR 2.6 (6.3) million. High income taxes in comparison period were partly caused by EUR 1.3 million decrease in deferred tax asset as a result of the decrease in the US corporate tax rate from the beginning of 2018. Result for the period was EUR 11.4 (11.8) million and earnings per share EUR 0.32 (0.33).

January–December 2018**Orders received**

EUR million	1-12/2018	1-12/2017	Change, %	Change, % comparable rate
Weather and Environment	215.2	233.0	-8	-6
Industrial Measurements	119.0	113.3	5	9
Total	334.2	346.3	-4	-1

In January–December 2018, Vaisala’s orders received decreased by 4% compared to previous year and were EUR 334.2 (346.3) million. Orders received increased in all regions in Industrial Measurements Business Area. In Weather and Environment Business Area, orders received decreased due to lack of large orders throughout the year. At comparable exchange rates, orders received would have decreased by 1% compared to previous year. Excluding Leosphere acquisition, orders received would have decreased by 6%. The negative exchange rate effect was mainly caused by USD exchange rate depreciation against EUR, particularly during the first half of the year.

In January–December 2018, Weather and Environment Business Area’s orders received decreased by 8% compared to previous year and were EUR 215.2 (233.0) million. Orders received decreased mainly due to lack of large project orders throughout the year. At comparable exchange rates, orders received would have decreased by 6% compared to previous year. Excluding Leosphere, orders received would have decreased by 11%, and the decrease came from all regions. The negative exchange rate effect was mainly caused by USD exchange rate depreciation against EUR, particularly during the first half of the year.

In January–December 2018, Industrial Measurements Business Area’s orders received increased by 5% compared to previous year and were EUR 119.0 (113.3) million. Increase came from all regions and mainly from instrument orders from APAC. At comparable exchange rates, orders received would have increased by 9% compared to previous year. The negative exchange rate effect was mainly caused by USD exchange rate depreciation against EUR, particularly during the first half of the year.

Order book

EUR million	Dec 31, 2018	Dec 31, 2017	Change, %
Weather and Environment	104.9	114.1	-8
Industrial Measurements	15.7	10.7	46
Total	120.6	124.8	-3

At the end of 2018, Vaisala’s order book was EUR 120.6 (124.8) million and decreased by 3% compared to previous year. Order book decreased mainly due to low order intake during the first three quarters and high deliveries in Weather and Environment Business Area. Excluding acquired Leosphere and K-Patents, order book would have decreased by 9%. EUR 91.0 (99.5) million of the order book is scheduled to be delivered in 2019. If the current revenue recognition standard had been used in previous year, the December 31, 2017 order book would have been EUR 1.4 million lower than reported. Hence, Vaisala’s December 31, 2018 order book would have decreased by 2% compared to previous year.

At the end of 2018, Weather and Environment Business Area’s order book was EUR 104.9 (114.1) million and decreased by 8% compared to previous year. Order book decreased mainly due to low order intake

during the first three quarters and high deliveries and the decrease was most significant in Americas. Excluding Leosphere, order book would have decreased by 12%. EUR 76.8 (89.8) million of the order book is scheduled to be delivered in 2019. If the current revenue recognition standard had been used in previous year, the December 31, 2017 order book would have been EUR 1.4 million lower than reported. Hence, December 31, 2018 order book would have decreased by 7% compared to previous year.

At the end of December 2018, Industrial Measurements Business Area's order book was EUR 15.7 (10.7) million and increased by 46% compared to previous year. Order book increased in all regions and mainly in industrial instruments. Excluding K-Patents, order book would have increased by 28%. EUR 14.3 (9.7) million of the order book is scheduled to be delivered in 2019.

Net sales by business area

EUR million	1-12/2018	1-12/2017	Change, %	Change, % comparable rates
Weather and Environment	232.3	222.2	5	6
Products	125.4	112.0	12	
Projects	70.0	76.4	-8	
Services	36.9	33.8	9	
Industrial Measurements	116.4	110.3	6	9
Products	105.1	98.7	6	
Services	11.4	11.6	-2	
Total	348.8	332.6	5	7

Net sales by geographical area

EUR million	1-12/2018	1-12/2017	Change, %
EMEA	102.3	107.7	-5
Americas	136.8	127.3	7
APAC	109.6	97.5	12
Total	348.8	332.6	5

In January–December 2018, Vaisala's net sales increased by 5% compared to previous year and totaled EUR 348.8 (332.6) million. Operations outside Finland accounted for 98 (97) % of net sales. Net sales increased in Americas and APAC and in both business areas. At comparable exchange rates, net sales would have increased by 7% compared to previous year. The negative exchange rate effect was mainly caused by USD exchange rate depreciation against EUR. Excluding Leosphere, net sales would have increased by 2%. If the current revenue recognition standard had been used in previous year, the January–December 2017 net sales would have been EUR 4.3 million lower than reported. Hence, Vaisala's January–December 2018 net sales would have increased by 6% compared to previous year.

Net sales in EMEA were EUR 102.3 (107.7) million and decreased by 5%. Net sales decreased in Weather and Environment Business Area's project business. In the Americas, net sales increased by 7% to EUR 136.8 (127.3) million following growth in meteorology business. In APAC, net sales increased by 12% to EUR 109.6 (97.5) million. Increase came mainly from Weather and Environment Business Area's project business and wind lidar deliveries, as well as instrument deliveries of Industrial Measurements Business Area.

In January–December 2018, Weather and Environment Business Area’s net sales increased by 5% compared to previous year and were EUR 232.3 (222.2) million. Strong order book at the beginning of the year and wind lidar deliveries increased net sales. China net sales decreased significantly. At comparable exchange rates, net sales would have increased by 6% compared to previous year. The negative exchange rate effect was mainly caused by USD depreciation against EUR. Excluding Leosphere, net sales would have been at previous year’s level. If the current revenue recognition standard had been used in previous year, January–December 2017 net sales would have been EUR 4.3 million lower than reported. Hence, January–December 2018 net sales would have increased by 7% compared to previous year.

In January–December 2018, Industrial Measurements Business Area’s net sales increased by 6% compared to previous year and totaled EUR 116.4 (110.3) million. Net sales increased in all regions and mainly in instrument deliveries in APAC. At comparable exchange rates, net sales would have increased by 9% compared to previous year. The negative exchange rate effect was mainly caused by USD depreciation against EUR.

Gross margin and operating result

	1-12/2018	1-12/2017
Gross margin, %	53.1	52.3
Weather and Environment	48.6	47.3
Industrial Measurements	62.1	62.4
Operating result, EUR million	38.9	40.9
Weather and Environment	17.7	18.2
Industrial Measurements	23.9	22.8
Other	-2.7	-0.2
Operating result, %	11.1	12.3
Weather and Environment	7.6	8.2
Industrial Measurements	20.5	20.7

In January–December 2018, Vaisala’s operating result decreased and was EUR 38.9 (40.9) million, 11.1 (12.3) % of net sales. Gross margin was 53.1 (52.3) %. Operating expenses increased by 11% compared to previous year and totaled EUR 148.3 (133.3) million. Increase in operating expenses came from R&D expenses according to plan and Leosphere’s operating expenses. Operating expenses included EUR 3.1 million of amortization of intangible assets related to Leosphere acquisition. In addition, operating result was decreased by EUR 2.7 million including EUR 1.6 million of transaction costs related to Leosphere acquisition and restructuring costs. Operating result was increased by EUR 1.5 million reversal of earn-outs related to Envitems and Vionice acquisitions and renegotiation of Leosphere’s contractual liabilities.

In January–December 2018, Weather and Environment Business Area’s operating result decreased and was EUR 17.7 (18.2) million, 7.6 (8.2) % of net sales. Gross margin improved both in service and project businesses and was 48.6 (47.3) %. Operating expenses increased by 11% compared to previous year and totaled EUR 96.7 (87.3) million. Excluding Leosphere, increase in operating expenses came from R&D as well as sales and marketing expenses according to plan. Leosphere’s operating expenses were EUR 5.5 million of which EUR 3.1 million was amortization of intangible assets related to acquisition. In addition, operating result was increased by EUR 1.5 million reversal of earn-outs related to Envitems and Vionice acquisitions and renegotiation of Leosphere’s contractual liabilities.

In January–December 2018, Industrial Measurements Business Area's operating result increased and totaled EUR 23.9 (22.8) million, 20.5 (20.7) % of net sales. Increase came mainly from higher net sales. Gross margin was 62.1 (62.4) %. Operating expenses increased by 5% compared to previous year and totaled EUR 48.5 (46.0) million. Increase came mainly from R&D expenses according to plan.

In January–December 2018, financial income and expenses were EUR -1.5 (-2.8) million. This was mainly a result of USD currency hedging.

In January–December 2018, result before taxes was EUR 37.5 (38.1) million. Income taxes were EUR 8.0 (10.9) million and effective tax rate 21 (29) %. High tax rate in comparison period was partly caused by the decrease in deferred tax asset as a result of the decrease in the US corporate tax rate from the beginning of 2018. Result for the period was EUR 29.5 (27.2) million and earnings per share EUR 0.82 (0.76).

Statement of financial position, cash flow, and financing

Vaisala's financial position remained strong in 2018. Cash and cash equivalents decreased to EUR 72.7 (91.3) million mainly due to payment of EUR 17.8 million additional dividend and payments related to acquisitions. Statement of financial position totaled to EUR 334.3 (273.8) million. As a result of Leosphere and K-Patents acquisitions, total assets increased by EUR 98.8 million. Total liabilities increased by EUR 28.0 million as a result of Leosphere and K-Patents acquisitions and by EUR 40.0 million as a result of utilization of revolving credit facility.

In January–December 2018, Vaisala's cash flow from operating activities decreased to EUR 48.3 (49.2) million. Dividend payment amounted to EUR 37.6 (17.8) million.

On October 5, 2018 Vaisala signed a EUR 50 million unsecured revolving credit facility with one of its core banks. The committed credit facility agreement matures 5 years from the signing date and it has no financial covenants. The facility will be used for working capital needs, for financing of acquisitions and for general corporate purposes. On December 31, 2018, Vaisala had interest bearing liabilities totaling EUR 40.5 million, of which EUR 40.0 million related to utilized revolving credit facility.

Capital expenditure and acquisitions

In January–December 2018, capital expenditure in intangible and tangible assets totaled EUR 14.5 (8.5) million. Capital expenditure was mainly related to investments in machinery and equipment to develop and maintain Vaisala's production and service operations as well as to building projects in Vantaa, Finland and Louisville, Colorado US.

Depreciation, amortization and impairment were EUR 12.1 (9.7) million. This included EUR 3.1 million of amortization related to identified intangible assets from Leosphere acquisition.

In October, Vaisala announced that it acquires all the shares in Leosphere SAS, a French company specialized in developing, manufacturing and servicing turnkey wind lidar (light detection and ranging) instruments for wind energy, aviation, meteorology, and air quality customer segments for a purchase price (cash and debt free) of EUR 38 million. Leosphere's share of Vaisala's 2018 net sales was EUR 9.9 million. Vaisala has reported Leosphere's financial results as part of Weather and Environment Business Area as from October 11, 2018.

In December, Vaisala announced acquisition of Finnish K-Patents Group, a pioneer in in-line liquid measurements for industrial applications. This acquisition was closed on December 31, 2018. It broadened Vaisala’s product offering to liquid measurements and strengthened its position in the industrial measurement market. The transaction included K-Patents Oy and its subsidiaries in the US and China as well as Janesko Oy, K-Patents’ research and development organization. Purchase price (cash and debt free) was EUR 12.5 million. K-Patents Group’s net sales in 2017 amounted to EUR 11.4 million and it employs 62 people in Finland, the US and China. Vaisala reports K-Patents’ financial results as a part of Industrial Measurements Business Area as from January 1, 2019.

In April, Vaisala announced plans to invest in an office building close to 3,000 m² in Louisville, Colorado US during the next two years. Following this project, Vaisala will exit the leased office building in the area. This building and refurbishing project is estimated to cost around EUR 12 million.

Research and development

R&D expenditure by business area

EUR million	1-12/2018	1-12/2017	Change, %
Weather and Environment	30.5	27.0	13
Industrial Measurements	14.9	12.6	19
Total	45.4	39.6	15

R&D expenditure continued to increase according to plan in both business areas as well as due to R&D expenditure in Leosphere.

R&D expenditure % of net sales

	1-12/2018	1-12/2017
Weather and Environment	13.1	12.1
Industrial Measurements	12.8	11.4
Total	13.0	11.9

Key product and software launches

In 2018, Vaisala launched several new advanced products and software to enhance growth as well as to replace existing products.

Weather and Environment Business Area introduced the seventh generation of visibility and present weather sensors. Vaisala Forward Scatter utilizes innovative technology setting a new standard in precipitation identification, quantification and visibility determination accuracy. Forward Scatter can function stand-alone, interoperate as an integral part of Vaisala systems, and additionally work with different third-party systems. The main customers for these new products are meteorological institutes and airports.

In addition, Weather and Environment Business Area launched a new automatic sounding system. This new system is designed to work reliably even in the harshest of conditions also in the remotest of locations. The system allows fully automated sounding operations with low operating costs, remote flexible operation as well as easy installation. It is designed for one-month automation at a time, more than doubling the automation time compared to previous systems.

Weather and Environment Business Area continued to enhance Network Manager, a scalable and automated system for remote monitoring and managing multiple weather observation sites. This latest version provides device and maintenance data management capabilities to inform maintenance personnel about observation site infrastructure, configurations, maintenance history, and planned maintenance activities.

Weather and Environment Business Area also introduced new version of IRIS Focus, weather radar software. This new version has a number of significant enhancements to the radar display product such as easy browsing of historical data, on-demand composite images from multiple radars, image export, and configurable weather alerts.

Industrial Measurements Business Area launched new viewLinc monitoring system, which is often used for monitoring high-value assets and processes in applications such as museums, semi-conductor manufacturing, warehouses, bio-pharmaceutical storage and distribution, and data centers. This monitoring system consists of software and wireless data loggers, which are connected by Vaisala’s proprietary long-range wireless technology VaiNet. Unlike most Wi-Fi data loggers, the VaiNet data loggers’ wireless signal is unimpeded by concrete walls and metal structures and can communicate well over 100 meters indoors. In late 2018, this viewLinc monitoring system won the Quality Innovation Award by Laatukskus Excellence Finland.

Industrial Measurements Business Area also launched two enhanced transmitter models. These new transmitters are designed for demanding ventilation applications in building automation systems and for light industrial applications, where accurate and stable control of relative humidity and temperature are required.

In addition, Industrial Measurements introduced an upgraded probe for vaporized hydrogen peroxide measurement with even better performance, and a new measurement probe for environmentally friendly hydrogen peroxide bio-decontamination processes. Both probe models use Vaisala’s proprietary PEROXCAP® sensor for measuring hydrogen peroxide bringing all the benefits of its world leading accuracy, repeatability, and stability into play.

More details concerning the new products and software can be found at www.vaisala.com.

Personnel

The average number of personnel employed in Vaisala during January–December 2018 was 1,678 (1,592). At the end of 2018, the number of employees was 1,816 (1,608). Acquisitions of Leosphere and K-Patents increased the number of employees by 188 people. 73 (70) % of employees were located in EMEA, 19 (22) % in the Americas and 8 (9) % in APAC. 61 (63) % of employees were based in Finland.

Number of employees by geographical are

	Dec 31, 2018	Dec 31, 2017	Change
Finland	1,102	1,018	84
EMEA (excluding Finland)	225	102	123
Americas	339	348	-9
APAC	150	140	10
Total	1,816	1,608	208

Number of employees by function

	Dec 31, 2018	Dec 31, 2017	Change
Sales and marketing	459	392	67
R&D	399	321	78
Operations	423	410	13
Services	347	322	25
Administration	188	163	25
Total	1,816	1,608	208

In addition to the headcount increase following the acquisitions, number of employees increased in R&D in particular.

In January–December 2018, personnel expenses totaled EUR 133.6 (129.9) million.

The Employee Experience project started in Vaisala in 2018. The purpose of this project was to explore and understand what factors impact most employee experience and to plan development actions. In addition to several project workshops, input was collected from all employees through Pulse Survey. Response rate was 70%. Colleagues and team spirit at work as well as meaningfulness of work in particular were regarded as strengths in Vaisala. More focus was wished for opportunity for learning and career development.

In Vaisala’s annual Employee Survey, response rate was 78%. Leadership index was on very high level. Learning possibilities index increased compared to previous survey.

In Operations, wide Lean training was accomplished as a part of the development of Vaisala Production System. Over 100 employees participated in the training. Sales training programs continued. The first module of the development program for product management was conducted during the year. Vaisala’s 10th Business Learning Program ended during the spring and participants for the next program were selected during the autumn.

Share-based incentive plans

The share issue without payment approved by Vaisala’s Annual General Meeting on April 10, 2018 doubled the total number of series K and A shares. All share related figures have been adjusted to reflect the increased number of shares. Until the end of 2017, the cost of the equity-settled part of the share-based payments corresponded to the value of Vaisala’s series A share closing price on the grant date of the incentive plan, and the cash-settled part of the share-based payments was valued at the closing price of the share. As of January 1, 2018, the cost of the equity-settled part of the share-based payments as well as the cash-settled part of the share-based payments correspond to the value of Vaisala’s series A share closing price on the grant date of the incentive plan.

On December 18, 2014, the Board of Directors resolved for the Group key employees a share-based incentive plan that was based on the development of Group’s profitability in calendar year 2015. The reward payment corresponded to 74% of the maximum target. On March 12, 2018, a total of 95,092 company’s series A shares were conveyed without consideration to the 27 key employees participating in this incentive plan. The rest of the reward was paid in cash. Closing price of Vaisala’s series A share was EUR 12.08 on the effective date of the incentive plan. A total expense of EUR 3.2 million was recognized of this plan in 2015–2018.

On December 16, 2015, the Board of Directors resolved for the Group key employees a share-based incentive plan that was based on the development of Group's profitability in calendar year 2016. The reward will be paid partly in Vaisala's series A shares and partly in cash in spring 2019. The cash proportion will cover taxes and tax-related costs arising from the reward to a key employee. The maximum amount of this plan originally corresponded to 400,000 shares and the reward payment will correspond to 49% of the maximum target. No reward will be paid if a key employee's employment or service ends before the reward payment date. The expenses of this share-based incentive plan are accrued over the term of the plan from May 2016 to March 2019. Closing price of Vaisala's series A share was EUR 11.57 on the effective date of the incentive plan. On December 31, 2018, this share-based incentive plan was directed to approximately 30 persons and the maximum reward payable totals to 176,904 Vaisala's series A shares, including the cash portion.

On February 10, 2016, the Board of Directors resolved for a share-based incentive plan, in which the earning criteria was uninterrupted employment of certain Group employees for a defined number of years. This share-based incentive plan ended in March 2018, and the remaining reward, corresponding to 3,000 Vaisala's series A shares including the cash portion, was conveyed without consideration to the key employees participating in this incentive plan. The rest of the reward was paid in cash. A total expense of EUR 0.3 million was recognized of this plan in 2016–2018.

On December 15, 2016, the Board of Directors resolved for the Group key employees a share-based incentive plan that was based on the development of Group's profitability in calendar year 2017. The reward will be paid partly in Vaisala's series A shares and partly in cash in spring 2020. The cash proportion will cover taxes and tax-related costs arising from the reward to a key employee. The maximum amount of this plan originally corresponded to 400,000 shares and the reward payment will correspond to 65% of the maximum target. No reward will be paid if a key employee's employment or service ends before the reward payment date. The expenses of this share-based incentive plan are accrued over the term of the plan from April 2017 to March 2020. Closing price of Vaisala's series A share was EUR 17.90 on the effective date of the incentive plan. On December 31, 2018, this share-based incentive plan was directed to approximately 35 persons and the maximum reward payable totals to 248,300 Vaisala's series A shares, including the cash portion.

On February 7, 2018, the Board of Directors resolved for the Group key employees a share-based incentive plan that is based on the development of Group's profitability in calendar year 2018. The reward will be paid partly in Vaisala's series A shares and partly in cash in spring 2021. The cash proportion will cover taxes and tax-related costs arising from the reward to a key employee. The maximum amount of this plan originally corresponded to 320,000 shares and the reward payment will correspond to 55% of the maximum target. No reward will be paid if a key employee's employment or service ends before the reward payment date. The expenses of this share-based incentive plan are accrued over the term of the plan from April 2018 to March 2021. Closing price of Vaisala's series A share was EUR 20.89 on the effective date of the incentive plan. On December 31, 2018, this share-based incentive plan was directed to approximately 30 persons and the maximum reward payable totals to 174,510 Vaisala's series A shares, including the cash portion.

Expenses for the share-based incentive plans

EUR million	2015	2016	2017	2018
Share-based incentive plan 2015	0.5	1.1	1.6	-0.1
Share-based incentive plans 2016		0.7	1.2	0.6
Share-based incentive plan 2017			1.1	1.3
Share-based incentive plan 2018				0.6

Strategy and its implementation in 2018

Vaisala continued to drive profitable growth through implementation of strategic priorities for 2017–2021.

Weather and Environment Business Area

Weather and Environment Business Area drives profitability and growth through industry-leading products and digital solutions. Strategic priorities are: to systematically improve competitiveness by renewal of product offering; to grow through meteorological infrastructure improvement projects in developing countries; to expand digital solutions, which support decision-making in weather critical operations; as well as to build new business in environmental measurements with air quality as the spearhead.

In 2018, automation of sounding operations was taken to the next level by new autosonde solution. Vaisala has already signed several contracts with meteorological customers in various countries. Vaisala won air quality network contracts e.g. in Sydney, Helsinki, Prague, Ukraine and Marseille. Large capacity building project in Vietnam progressed according to plan while Bahamas project was running somewhat behind the schedule. Project business’ performance improved as a result of improved project management capabilities and enhanced project planning. Growth of digital solutions did not realize as expected and, thus focus was moved to profitability improvement. Achieved improvement in gross margin was significant. During the fourth quarter, Weather and Environment Business Area strengthened its position in wind remote sensing by acquiring Leosphere. In addition to renewable energy sector, Leosphere’s wind lidar technology has opportunities in aviation industry as well as in meteorology and air quality application areas. Leosphere’s net sales and profitability met expectations during the fourth quarter.

Industrial Measurements Business Area

Industrial Measurements Business Area’s strategy is to grow through product leadership. Strategic priorities are to achieve strong foothold in power transmission and life science markets, to continuously create new winning products by discovering customers’ needs, and to seek new business opportunities in industrial applications.

In 2018, the growth target was realized with net sales growth of 6% and volume growth of 9%. Investments in R&D continued and new continuous monitoring system, viewLinc, was launched during the second quarter. This new system was well received at the market and its sales proceeded well during the second half of the year. First year sales of hydrogen peroxide measurement product met expectations and product got positive feedback from customers. Entry to power transmission market has proceeded slowly. At the end of the year, Industrial Measurements Business Area expanded to liquid measurement markets by acquiring K-Patents whose product portfolio is a good fit with Industrial Measurements Business Area portfolio and operational model. In addition, K-Patents brings a ready built global distribution network, which complements Vaisala’s network.

Long-term financial targets

Vaisala's objective is profitable growth with an average annual growth of 5%, and to achieve 15% operating profit margin (EBIT). In selected growth businesses, such as digital solutions, life science and power transmission, the target is to exceed 10% annual growth.

Vaisala does not consider the long-term financial targets as market guidance for any given year.

Management Group

On December 31, 2018, Vaisala's Management Group members were

- Kjell Forsén, President and CEO, Chairman of the Management Group
- Marja Happonen, EVP, Human Resources
- Sampsa Lahtinen, EVP, Industrial Measurements Business Area
- Kaarina Muurinen, CFO
- Vesa Pylvänäinen, EVP, Operations
- Jarkko Sairanen, EVP, Weather and Environment Business Area
- Katriina Vainio, EVP, Group General Counsel

Mari Heusala, M.Sc. (Economy), (b. 1966), was appointed Executive Vice President, Human Resources. She started in her position January 7, 2019. She is a member of the Vaisala Management Group and reports to the President and CEO Kjell Forsén. Marja Happonen will retire during spring 2019.

Decisions by Vaisala Corporation's Annual General Meeting

Vaisala Corporation's Annual General Meeting was held on April 10, 2018. The meeting approved the financial statements and discharged the members of the Board of Directors and the President and CEO from liability for the financial period January 1–December 31, 2017.

Dividend

The Annual General Meeting decided a dividend of EUR 1.10 per share and an additional dividend of EUR 1.00 per share. The record date for the dividend payments was April 12, 2018 and the payment date was April 19, 2018.

After the share issue without payment on April 13, 2018, which doubled the number of series K and A shares, the dividend equals EUR 0.55 and the additional dividend equals EUR 0.50 per share.

Board of Directors

The Annual General Meeting confirmed that the number of Board members is eight. Petri Castrén, Petra Lundström, Yrjö Neuvo, Mikko Niinivaara, Kaarina Ståhlberg, Pertti Torstila, Raimo Voipio and Ville Voipio will continue as members of the Board of Directors.

The Annual General Meeting confirmed that that the annual remuneration payable to the Chairman of the Board of Directors is EUR 45,000 and each Board member EUR 35,000 per year. Approximately 40% of the annual remuneration will be paid in Vaisala Corporation's series A shares acquired from the market and the rest in cash. In addition, the Annual General Meeting confirmed that the meeting fee for the Chairman of the Audit Committee will be EUR 1,500 per attended meeting and EUR 1,000 for each member of the Audit Committee and Chairman and each member of the Remuneration and HR Committee and any other committee established by the Board of Directors for a term until the close of the Annual General Meeting in 2019. The meeting fees are paid in cash.

Auditor

The Annual General Meeting re-elected Deloitte Oy as the auditor of the company and APA Merja Itäniemi will act as the auditor with the principal responsibility. The Auditors are reimbursed according to invoice presented to the company.

Share issue without payment (share split) and amendment of Articles of Association

The Annual General Meeting resolved to issue new shares to the shareholders without payment in proportion to their holdings so that one (1) new share was issued for each share (split). The record date for share split was April 12, 2018. The new shares generated shareholder rights as of April 12, 2018. The new shares did not entitle their holders to the dividend payments as defined above.

The Annual General Meeting resolved to amend the § 3 of Articles of Association so that stipulations on minimum and maximum share capital were deleted.

Authorization for the directed repurchase of own A shares

The Annual General Meeting authorized the Board of Directors to resolve on the directed repurchase of a maximum of 400,000 of the company's own series A shares in one or more instalments by using company's unrestricted equity. This authorization is valid until the closing of the next Annual General Meeting, however, no longer than October 10, 2019, and it replaced the previous authorization for directed repurchase of own series A shares.

Authorization on the issuance of the company's own A shares

The Annual General Meeting authorized the Board of Directors to resolve on the issuance of a maximum of 1,046,636 company's own series A shares. The issuance of own shares may be carried out in deviation from the shareholders' pre-emptive rights (directed issue). The subscription price of the shares can instead of cash also be paid in full or in part as contribution in kind. This authorization is valid until April 10, 2023, and it replaced the previous authorization for issuance of own series A shares.

The organizing meeting of the Board of Directors

At its organizing meeting held after the Annual General Meeting the Board elected Raimo Voipio to continue as the Chairman of the Board of Directors and Yrjö Neuvo to continue as the Vice Chairman.

The composition of the Board committees was decided to be as follows:

Kaarina Ståhlberg was elected as the Chairman and Petri Castrén and Mikko Niinivaara as members of the Audit Committee. The Chairman and all members of the Audit Committee are independent both of the company and of significant shareholders.

Raimo Voipio was elected as the Chairman and Petri Castrén and Mikko Niinivaara as members of the Remuneration and HR Committee. The Chairman and all members of the Remuneration and HR Committee are independent both of the company and of significant shareholders.

Vaisala's shares and shareholders

Share capital and shares

Vaisala's share capital totaled EUR 7,660,808 on December 31, 2018. The 2018 Annual General meeting resolved to issue new shares to the shareholders without payment in proportion to their holding so that one (1) new share was issued for each share (split). The record date for the share split was April 12, 2018 and the

share split was registered into the trade register on April 12, 2018. New shares were issued on April 13, 2018. Following this share split, Vaisala has 36,436,728 shares, of which 6,778,662 are series K shares and 29,658,066 series A shares. The series K shares and series A shares are differentiated by the fact that each series K share entitles its owner to 20 votes at a General Meeting of Shareholders while each series A share entitles its owner to 1 vote. The series A shares represented 81.4% of the total number of shares and 17.9% of the total votes. The series K shares represented 18.6% of the total number of shares and 82.1% of the total votes.

Trading and share price development

In January–December 2018, a total of 3,710,610 series A shares with a value totaling EUR 74.4 million were traded on the Nasdaq Helsinki Ltd. During the year, the share price decreased by 26% while OMX Helsinki Cap index decreased by 8%. The closing price of the series A share on the Nasdaq Helsinki stock exchange was EUR 16.50. Shares registered a high of EUR 23.90 and a low of EUR 15.85. Volume-weighted average share price was EUR 20.14.

The market value of series A shares on December 31, 2018 was EUR 478.7 million, excluding company's treasury shares. Valuing the series K shares – which are not traded on the stock market – at the rate of the series A share's closing price on the last trading day of December, the total market value of all the series A and series K shares together was EUR 590.5 million, excluding company's treasury shares.

Treasury shares and their authorizations

The Annual General Meeting held on March 28, 2017, authorized the Board of Directors to decide on the issuance of a maximum of 568,344 company's own series A shares. This authorization was valid until the closing of the Annual General Meeting held on April 10, 2018.

In February 2018, the Board of Directors decided to transfer shares under this authorization. In March, a total of 49,046 company's series A shares were transferred to the 28 key employees participating on the Share-based incentive plan 2015 and Restricted share-based incentive plan 2016 under the terms and conditions of the plans.

At the end of 2018, Vaisala held a total of 646,636 company's series A shares, which represented 2.2% of all series A shares and 1.8% of all shares.

Shareholders

On December 31, 2018, Vaisala Corporation had 8,832 (7,853) registered shareholders. Ownership outside of Finland and nominee registrations represented 15.7 (15.7) % of the company's shares. Households owned 40.8 (39.9) %, private companies 13.7 (14.9) %, financial and insurance institutions 14.4 (13.6) %, non-profit organizations 11.1 (11.2) % and public sector organizations owned 4.4 (4.7) %.

Shareholding by the Board of Directors and the Management Group

On December 31, 2018, the Board of Directors held and controlled 986,848 (1,050,166) series A shares. These shares accounted for 3.3 (3.5) % of series A shares and 2.7 (2.9) % of total shares. The number of series K shares held and controlled by the Board was 551,010 (588,336). Total votes attached to the series A and K shares held and controlled by the Board were 12,007,048 (12,816,886), which accounted for 7.3 (7.8) % of the total votes of all shares.

On December 31, 2018 the President and CEO held and controlled 34,552 (22,664) series A shares. The President and CEO did not hold nor control any series K shares. Other Management Group members held and controlled 67,896 (36,664) series A shares but none series K shares.

More information about Vaisala's shares and shareholders are presented on the company's website at www.vaisala.com/investors.

Near-term risks and uncertainties

Uncertainties in international trade policies, political situation and governmental customers' budgetary constraints or changes in their sourcing criteria may reduce or delay demand for Vaisala's products and services.

Delay in developing applications for digital solutions as well as acquiring and in building related competences for sales and business operations may slow down growth in Weather and Environment Business Area. Closing of infrastructure contracts in Weather and Environment Business Area may be postponed by budgetary constraints, complex customer decision making processes, changes in scope, and financing. Disturbance in project delivery performance may reduce or postpone associated profit. Thus, Vaisala's financial performance may vary significantly over time.

Prolonged new product ramp-ups, market acceptances and regulatory certifications of new offering, such as power transformer monitoring products, supplementary air quality sensors and networks, and digital solutions, may postpone realization of Vaisala's growth plans.

Long interruption in production or test equipment or disruption in suppliers' and subcontractors' delivery capability or product quality may impact significantly Vaisala's net sales and profitability. Cyber risk and downtime of IT systems may impact operations, and delivery of digital solutions.

Vaisala's capability to successfully complete investments, acquisitions, divestments and restructurings on a timely basis and to achieve related financial and operational targets includes uncertainties and risks, which may negatively impact net sales and profitability.

Further information about risk management and risks are available on Annual Report and on the company website at www.vaisala.com/investors.

Market outlook 2019

Market for traditional weather observation solutions is expected to be flat. Demand for weather observation solutions is expected to improve in Europe and moderately in China and in Americas. In Asia-Pacific, Middle East and Africa region demand is expected to decline moderately. Demand for digital solutions is expected to improve moderately compared to previous year.

Market for industrial measurement solutions is expected to continue to grow in all regions. Demand for continuous monitoring systems is expected to develop positively. Vaisala continues channel development and market entry with power transmission products, which has turned out to be challenging even though market is expected to develop positively.

Business outlook for 2019

Vaisala estimates its full-year 2019 net sales to be in the range of EUR 380–400 million and its operating result (EBIT) to be in the range of EUR 25–35 million including EUR 10–12 million acquisition related amortization and one-off expenses related to a lease contract.

Board of Directors' proposal for distribution of earnings

The parent company's distributable earnings amount to EUR 159,556,810.95, of which the result for the period is EUR 28,738,865.09.

The Board of Directors proposes to the Annual General Meeting that dividend of EUR 0.58 per share be paid out of distributable earnings totaling approximately EUR 20.8 million and the rest to be carried forward in the shareholders' equity. No dividend will be paid for treasury shares held by the company.

There have been no significant changes in the company's financial position since the close of the financial period. According to the Board of Directors, the proposed dividend distribution does not endanger the company's financial standing.

Annual General Meeting 2019

Vaisala's Annual General Meeting will be held on Tuesday, March 26, 2019 at 6:00 p.m. at Vaisala Corporation's head office, Vanha Nurmijärventie 21, 01670 Vantaa.

Financial calendar 2019

Annual Report 2018, by the end of week 9

Annual General Meeting 2019, March 26, 2019

Interim Report January–March 2019, April 24, 2019

Half Year Financial Report 2019, July 19, 2019

Interim Report January–September 2019, October 24, 2019

Vantaa, February 12, 2019

Vaisala Corporation

Board of Directors

The forward-looking statements in this release are based on the current expectations, known factors, decisions and plans of Vaisala's management. Although the management believes that the expectations reflected in these forward-looking statements are reasonable, there is no assurance that these expectations would prove to be correct. Therefore, the results could differ materially from those implied in the forward-looking statements, due to for example changes in the economic, market and competitive environments, regulatory or other government-related changes, or shifts in exchange rates.

Financial information and changes in accounting policies

This Financial Statement Release has been prepared in accordance with IAS 34, *Interim Financial Reporting*, following the same accounting policies and principles as in the annual financial statements. All figures in the Financial Statement Release are Group figures. All presented figures have been rounded and consequently the sum of individual figures may deviate from the sum presented. The figures in this Financial Statement Release are based on Vaisala's audited 2018 financial statements.

The preparation of the financial statements in accordance with IFRS requires Vaisala's management to make estimates and assumptions that affect the valuation of the reported assets and liabilities and the recognition of income and expenses in the statement of income. Although the estimates are based on the management's best knowledge at the date of the Financial Statement Release, actual results may differ from the estimates.

New and amended IFRS standards effective for the year 2018

The following new or revised IFRSs have been adopted from January 1, 2018 in these consolidated financial statements.

Impact of application of IFRS 15 *Revenue from Contracts with Customers*

In 2018, Vaisala has applied IFRS 15 *Revenue from Contracts with Customers* (as amended in April 2016) which is effective for an annual period that begins on or after January 1, 2018. IFRS 15 *Revenue from contracts with customers* establishes a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. IFRS 15 superseded IAS 18 *Revenue*, IAS 11 *Construction Contracts* and the related interpretations. The core principle of IFRS 15 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers with an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Under IFRS 15, an entity recognizes revenue when (or as) a performance obligation is satisfied, i.e. when control of the good or service underlying the particular performance obligation is transferred to the customer. These principles are applied using the following five steps:

- 1) Identify the contract(s) with a customer
- 2) Identify the performance obligations in the contract
- 3) Determine the transaction price
- 4) Allocate the transaction price to the performance obligations in the contract
- 5) Recognize revenue

Furthermore, IFRS 15 requires extensive disclosures.

IFRS 15 affected mainly Weather and Environment Business Area's project business, while effects on product and services businesses in Weather and Environment as well as Industrial Measurements Business Areas are limited.

Project business

Net sales of Weather and Environment Business Area's project business totaled EUR 76 million during financial year 2017 and EUR 65 million during financial year 2016. The major changes in project revenue recognition takes place in the above mentioned steps two, four and five, whereas changes are limited in step one and step three.

As of January 1, 2018 Vaisala has recognized the revenue from projects based on percentage of completion method. Prior to 2018, Vaisala has rarely used percentage of completion method, and only in projects with

very long delivery times. Generally, Vaisala has recognized project revenue separately for hardware and field service in accordance with their pro rata selling prices. Adoption of over-time revenue recognition will have an impact on timing of revenue recognition in Vaisala's project business since control over assets transfers to customers over time. Consequently, recognition of project revenue and profit will be advanced.

Product and service businesses

As previously, Vaisala has continued to recognize revenue of product deliveries based on delivery terms, and revenue of services when benefits are rendered to customers. Vaisala continues to recognize revenue of such fixed-time service contracts, which are negotiated in connection with delivery projects and commence after completion of the delivery projects, as separate performance obligations with over time revenue recognition method.

Vaisala's financial reporting and transition

Under IFRS 15, January–December 2017 net sales would have been EUR 4 million lower and order book would have cumulatively been EUR 1 million lower compared to accounting principles applied in financial year 2017. This was due to earlier timing of revenue recognition. Revenue recognition principles applied in financial year 2017 also resulted in seasonality where revenue in third and especially in fourth quarter of a year were typically high. Adopting IFRS 15 results flatter revenue between quarters as the concrete project completion takes place more evenly throughout a year.

Vaisala has applied IFRS15 in accordance with the modified retrospective transitional approach with the cumulative effect of initially applying the standard recognized at the date of initial application, i.e. 1 January 2018, as an adjustment to the opening balance of retained earnings. IFRS 15 is applied retrospectively only to contracts that are not completed contracts as of January 1, 2018. Following this, Vaisala has made an adjustment of EUR 0.3 million in retained earnings as at January 1, 2018. In addition, in the statement of financial position trade and other receivables EUR 2.8 million, inventories EUR -2.6 million, trade and other payables EUR -0.2 million and income tax liabilities EUR 0.1 million were adjusted following the IFRS 15 adoption. Figures in the comparison periods have not been restated retrospectively.

IFRS 15 uses the terms 'contract asset' and 'contract liability' to describe what might more commonly be known as 'accrued revenue' and 'deferred revenue'. Vaisala has adopted the terminology used in IFRS 15 to describe such balances.

IFRS 2 (amendments) *Classification and Measurement of Share-based Payment Transactions*

The Group has adopted the amendments to IFRS 2 for the first time in the year 2018. The amendments clarify the following:

- 1) In estimating the fair value of a cash-settled share-based payment, the accounting for the effects of vesting and non-vesting conditions should follow the same approach as for equity-settled share-based payments.
- 2) Where tax law or regulation requires an entity to withhold a specified number of equity instruments equal to the monetary value of the employee's tax obligation to meet the employee's tax liability which is then remitted to the tax authority (typically in cash), i.e. the share-based payment arrangement has a 'net settlement feature', such an arrangement should be classified as equity-settled in its entirety, provided that the share-based payment would have been classified as equity-settled had it not included the net settlement feature.

- 3) A modification of a share-based payment that changes the transaction from cash-settled to equity-settled should be accounted for as follows:
 - i. the original liability is derecognized;
 - ii. the equity-settled share-based payment is recognized at the modification date fair value of the equity instrument granted to the extent that services have been rendered up to the modification date; and
 - iii. any difference between the carrying amount of the liability at the modification date and the amount recognized in equity should be recognized in profit or loss immediately

Vaisala has adjusted other reserves in equity by EUR 3.9 million and trade and other payables by EUR -3.9 million as of January 1, 2018. Figures in the comparison period have not been restated retrospectively.

Impact of initial application of IFRS 9 *Financial Instruments*

In 2018, Vaisala has applied IFRS 9 *Financial Instruments* (as revised in July 2014) and the related consequential amendments to other IFRS Standards that are effective for an annual period that begins on or after January 1, 2018. The transition provisions of IFRS 9 allow an entity not to restate comparatives. Vaisala has elected not to restate comparative information. As a result, the comparative information provided continues to be presented and accounted for in accordance with the Group's previous accounting policy. Additionally, Vaisala adopted consequential amendments to IFRS 7 *Financial Instruments*: Disclosures that were applied to the disclosures for 2018. Vaisala has applied IFRS 9 in accordance with the transition provisions set out in IFRS 9.

IFRS 9 introduced new requirements for:

- 1) The classification and measurement of financial assets and financial liabilities,
- 2) Impairment of financial assets, and
- 3) General hedge accounting.

Details of these new requirements as well as their impact on the Group's consolidated financial statements are described below.

Classification and measurement of financial assets

The date of initial application (i.e. the date on which the Group has assessed its existing financial assets and financial liabilities in terms of the requirements of IFRS 9) is January 1, 2018. Accordingly, the Group has applied the requirements of IFRS 9 to instruments that continue to be recognized as at January 1, 2018 and has not applied the requirements to instruments that have already been derecognized as at January 1, 2018. Comparative amounts have not been restated in relation to any of the instruments.

All recognized financial assets that are within the scope of IFRS 9 are required to be measured subsequently at amortized cost or fair value on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

Specifically:

- debt instruments that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the principal amount outstanding, are measured subsequently at amortised cost;
- all other debt investments and equity investments are measured subsequently at fair value through profit or loss (FVTPL).

In 2018, the Group has not designated any debt investments that meet the amortized cost or FVTOCI (fair value through other comprehensive income) criteria as measured at FVTPL.

The directors of the company reviewed and assessed the Group's existing financial assets as at January 1, 2018, based on the facts and circumstances that existed at that date and concluded that the initial application of IFRS 9 has had the following impact on the Group's financial assets as regards their classification and measurement:

- there is no change in the measurement of the Group's investments in equity instruments that are held for trading (including derivative contracts); those instruments were and continue to be measured at FVTPL;
- financial assets classified as loans and receivables under IAS 39 (including trade and other receivables, long-term receivables as well as cash and cash equivalents) that were measured at amortized cost continue to be measured at amortized cost under IFRS 9 as they are held within a business model to collect contractual cash flows and these cash flows consist solely of payments of principal and interest on the principal amount outstanding.

As a result of standard change, trade and other receivables, long term receivables as well as cash and cash equivalents previously classified as loans and receivables are classified as amortized cost. None of the reclassifications of financial assets has had any impact on the Group's financial position, profit or loss, other comprehensive income or total comprehensive income in 2018.

There were no financial assets, which Vaisala had previously designated as at FVTPL under IAS 39 that were subject to reclassification, or which Vaisala has elected to reclassify upon the application of IFRS 9. There were no financial assets, which Vaisala has elected to designate as at FVTPL at the date of initial application of IFRS 9.

Impairment of financial assets

In relation to the impairment of financial assets, IFRS 9 requires an expected credit loss model as opposed to an incurred credit loss model under IAS 39. The expected credit loss model requires the Group to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition of the financial assets. In other words, it is no longer necessary for a credit event to have occurred before credit losses are recognized.

Specifically, IFRS 9 requires the Group to recognize a loss allowance for expected credit losses on:

- 1) Debt investments measured subsequently at amortized cost or at FVTOCI;
- 2) Lease receivables;
- 3) Trade receivables and contract assets; and
- 4) Financial guarantee contracts to which the impairment requirements of IFRS 9 apply.

In particular, IFRS 9 requires the Group to measure the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses (ECL) if the credit risk on that financial instrument has increased significantly since initial recognition, or if the financial instrument is a purchased or originated credit-impaired financial asset. However, if the credit risk on a financial instrument has not increased significantly since initial recognition (except for a purchased or originated credit-impaired financial asset), the Group is required to measure the loss allowance for that financial instrument at an amount equal to

12-months ECL. IFRS 9 also requires a simplified approach for measuring the loss allowance at an amount equal to lifetime ECL for trade receivables, contract assets and lease receivables in certain circumstances. See impact of initial application of IFRS 9 on financial performance for financial details of the adjustments made as part of the initial application of the standard.

The consequential amendments to IFRS 7 have also resulted in more extensive disclosures about the Group's exposure to credit risk in the consolidated financial statements.

Classification and measurement of financial liabilities

A significant change introduced by IFRS 9 in the classification and measurement of financial liabilities relates to the accounting for changes in the fair value of a financial liability designated as at FVTPL attributable to changes in the credit risk of the issuer.

Specifically, IFRS 9 requires that the changes in the fair value of the financial liability that is attributable to changes in the credit risk of that liability be presented in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. Changes in fair value attributable to a financial liability's credit risk are not subsequently reclassified to profit or loss, but are instead transferred to retained earnings when the financial liability is derecognized. Previously, under IAS 39, the entire amount of the change in the fair value of the financial liability designated as at FVTPL was presented in profit or loss.

Including the above mentioned change, the application of IFRS 9 has had no impact on the classification and measurement of the Group's financial liabilities.

There were no financial liabilities, which Vaisala had previously designated as at FVTPL under IAS 39 that were subject to reclassification or which Vaisala has elected to reclassify upon the application of IFRS 9. There were no financial assets or financial liabilities, which Vaisala has elected to designate as at FVTPL at the date of initial application of IFRS 9.

General hedge accounting

Vaisala does not apply hedge accounting and thus the IFRS 9 hedge accounting requirements has had no impact on the results and financial position of the Group for the current year.

Impact of initial application of IFRS 9 on financial performance

The application of IFRS 9 resulted in the following adjustments:

- Vaisala applies the simplified approach to recognize lifetime expected credit losses for its trade receivables as IFRS 9 requires or allows. Management estimates that the application of the expected credit loss model of IFRS 9 results in earlier recognition of credit losses for the respective items and will increase the amount of loss allowance recognized for these items. Following this, Vaisala has made an adjustment of EUR -0.2 million in retained earnings and trade and other receivables as at January 1, 2018.

The application of IFRS 9 has had no impact on the consolidated cash flows of the Group.

In the year 2018, the Group has applied a number of amendments to IFRS Standards and Interpretations issued by the International Accounting Standards Board (IASB) that are effective for an annual period that

begins on or after January 1, 2018. Their adoption has not had any material impact on the disclosures or on the amounts reported in these financial statements.

IASB published the following new or revised standards, which the Group has not yet adopted and which may have an effect on the consolidated financial statements of the Group. The Group will adopt each standard as from the effective date, or if the effective date is other than the first day of the reporting period, from the beginning of the next reporting period after the effective date.

Application of new and revised IFRSs in issue but not yet effective

At the date of authorization of the financial statements, The Group has not applied the following new and revised IFRS Standards that have been issued but are not yet effective and had not yet been adopted by the EU:

- IFRS 16 *Leases*
- IFRS 17 *Insurance Contracts*
- Amendments to IFRS 9 *Prepayment Features with Negative Compensation*
- Amendments to IAS 28 *Long-term Interests in Associates and Joint Ventures*
- Annual Improvements to IFRS Standards 2015–2017 Cycle: Amendments to IFRS 3 *Business Combinations*, IFRS 11 *Joint Arrangements*, IAS 12 *Income Taxes* and IAS 23 *Borrowing Costs*
- Amendments to IAS 19 *Employee Benefits: Plan Amendment, Curtailment or Settlement*
- IFRS 10 *Consolidated Financial Statements* and IAS 28 (amendments): *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*
- IFRIC 23 *Uncertainty over Income Tax Treatments*
- Amendments to IFRS 3 *Definition of a Business*
- Amendments to IAS 1 and IAS 8 *Definition of Material*

The directors do not expect that the adoption of the Standards listed above will have a material impact on the financial statements of the Group in future periods, except IFRS 16 *Leases*:

IFRS 16 Leases

General impact of application of IFRS 16 Leases

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements for both lessors and lessees. IFRS 16 will supersede the current lease guidance including IAS 17 *Leases* and the related Interpretations when it becomes effective for accounting periods beginning on or after January 1, 2019. The date of initial application of IFRS 16 for the Group will be January 1, 2019.

In contrast to lessee accounting, IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17.

Impact of the new definition of a lease

The Group will make use of the practical expedient available on transition to IFRS 16 not to reassess whether a contract is or contains a lease. Accordingly, the definition of a lease in accordance with IAS 17 and IFRIC 4 will continue to apply to those leases entered or modified before January 1, 2019.

The change in definition of a lease mainly relates to the concept of control. IFRS 16 distinguishes between leases and service contracts on the basis of whether the use of an identified asset is controlled by the customer. Control is considered to exist if the customer has:

- The right to obtain substantially all of the economic benefits from the use of an identified asset; and
- The right to direct the use of that asset.

Vaisala will apply the definition of a lease and related guidance set out in IFRS 16 to all lease contracts entered into or modified on or after January 1, 2019 (whether it is a lessor or a lessee in the lease contract). In preparation for the first-time application of IFRS 16, the Group has carried out an implementation project. The project has shown that the new definition in IFRS 16 will not change significantly the scope of contracts that meet the definition of a lease for the Group.

Impact on lessee accounting

Operating leases

IFRS 16 will change how Vaisala accounts for leases previously classified as operating leases under IAS 17, which were off-balance sheet.

On initial application of IFRS 16, for all leases (except as noted below), Vaisala will:

- a) Recognize right-of-use assets and lease liabilities in the consolidated statement of financial position,
 - Vaisala will apply simplified approach when adopting IFRS16 in which right-of-use asset is initially measured at amount of the initial measurement of the lease liability less any lease payments made at or before the commencement date (at cost). Subsequently right-of-use asset is measured at cost less accumulated depreciation and impairment losses, adjusted for any remeasurement of the lease liability. The lease liability is initially measured at the present value of the future lease payments that are not paid at that date. The lease payments are discounted by incremental borrowing rate. Subsequently, the lease liability is adjusted for interest and lease payments, as well as the impact of lease modifications, amongst others.
- b) Recognize depreciation of right-of-use assets and interest on lease liabilities in the consolidated statement of profit or loss;
- c) Separate the total amount of cash paid into a principal portion (presented within financing activities) and interest (presented within operating activities) in the consolidated cash flow statement.

Lease incentives (e.g. rent-free period) will be recognized as part of the measurement of the right-of-use assets and lease liabilities whereas under IAS 17 they resulted in the recognition of a lease liability incentive, amortized as a reduction of rental expenses on a straight-line basis.

Under IFRS 16, right-of-use assets will be tested for impairment in accordance with IAS 36 Impairment of Assets. This will replace the previous requirement to recognize a provision for onerous lease contracts.

Vaisala will not apply the practical expedient as permitted by IFRS 16 not to recognize right-of-use asset and corresponding lease liability for short-term leases (lease term of 12 months or less) and leases of low-value assets. Vaisala will recognize in the balance all material right-of-use assets and lease liabilities. Right-of-use assets to be recognized in the balance sheet on the effective date consist of offices, other premises,

apartments and cars. IFRS 16 is not applied for immaterial lease arrangements and the lease expense for those arrangements is recognized on a straight-line basis in the consolidated statement of income.

Majority of Vaisala's lease arrangements are fixed-term arrangements without one-sided extension or termination options and thus lease term is defined based on the duration of the arrangement. If arrangement include such conditions, management need to estimate the likely lease term for each arrangement. Significant judgments need to be exercised when making these estimates. At the end of 2018, the number of such arrangements was limited.

As at December 31, 2018, the Group has non-cancellable operating lease commitments of EUR 16.6 million.

A preliminary assessment indicates that EUR 12 million of these arrangements relate to leases, which management estimates to be material and thus will be recognized in the balance sheet as a result of application IFRS16. Additionally, lease term of a contract related to an operating lease commitment amounting to EUR 4 million will start in the future. According to current understanding the Group will recognize a right-of-use asset of EUR 13 million and a corresponding lease liability of EUR 12 million. The impact on profit or loss, based on the arrangements valid on the effective date of IFRS 16 and based on the preliminary assessment, is to increase depreciation by EUR 4 million and to increase interest expense by EUR 0.2 million. In 2018, the amount of rent costs recognized in sales, marketing and administrative costs as well as in research and development costs were in total EUR 4.4 million, of which most will be reclassified in depreciation and interest costs in 2019 as a result of IFRS 16 implementation.

Under IAS 17, all lease payments on operating leases are presented as part of cash flows from operating activities. The impact of the changes under IFRS 16 would be to reduce the cash generated by operating activities and to increase net cash used in financing activities by the same amount.

Vaisala will apply IFRS 16 retrospectively with the cumulative effect of initial application recognized as of January 1, 2019. Comparative information is not restated.

Finance leases

The main differences between IFRS 16 and IAS 17 with respect to assets formerly held under a finance lease is the measurement of the residual value guarantees provided by the lessee to the lessor. IFRS 16 requires that the Group recognizes as part of its lease liability only the amount expected to be payable under a residual value guarantee, rather than the maximum amount guaranteed as required by IAS 17. As the Group has no finance leases as of December 31, 2018, this change will not have an impact on the amounts recognized in the consolidated financial statements.

Impact on lessor accounting

Under IFRS 16, a lessor continues to classify leases as either finance leases or operating leases and account for those two types of leases differently. However, IFRS 16 has changed and expanded the disclosures required, in particular regarding how a lessor manages the risks arising from its residual interest in leased assets.

Under IFRS 16, an intermediate lessor accounts for the head lease and the sublease as two separate contracts. The intermediate lessor is required to classify the sublease as a finance or operating lease by reference to the right-of-use asset arising from the head lease (and not by reference to the underlying asset as was the case under IAS 17). As the Group does not act as lessor as of December 31, 2018, this change will not have an impact on the amounts recognized in the consolidated financial statements.

Consolidated Statement of Income

EUR million	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Net sales	108.3	102.3	348.8	332.6
Cost of sales	-49.5	-48.6	-163.7	-158.5
Gross profit	58.8	53.7	185.0	174.0
Sales, marketing and administrative costs	-33.1	-25.1	-102.8	-93.7
Research and development costs	-13.3	-10.4	-45.4	-39.6
Other operating income and expense	1.6	0.3	2.1	0.1
Operating result	13.9	18.5	38.9	40.9
Share of result in associated company	0.1	0.1	0.1	0.1
Financial income and expenses, net	0.0	-0.5	-1.5	-2.8
Result before taxes	14.0	18.1	37.5	38.1
Income taxes	-2.6	-6.3	-8.0	-10.9
Result for the period	11.4	11.8	29.5	27.2
Earnings per share, EUR	0.32	0.33	0.82	0.76
Diluted earnings per share, EUR	0.31	0.32	0.81	0.75

Consolidated Statement of Comprehensive Income

EUR million	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Items that will not be reclassified to profit or loss				
Actuarial profit (loss) on post-employment				
Benefits	0.2	0.0	0.2	0.0
Total	0.2	0.0	0.2	0.0
Items that may be reclassified subsequently to profit or loss				
Currency translation differences	0.2	-0.4	1.0	-3.2
Total	0.2	-0.4	1.0	-3.2
Total other comprehensive income	0.5	-0.4	1.2	-3.2
Total comprehensive income	11.9	11.4	30.7	24.1

Consolidated Statement of Financial Position

EUR million

Assets	Dec 31, 2018	Dec 31, 2017
Non-current assets		
Intangible assets	74.1	20.6
Property, plant and equipment	46.3	40.4
Investments	0.1	0.1
Investment in associated companies	1.0	0.9
Long-term receivables	2.1	0.7
Deferred tax assets	9.8	7.6
Total non-current assets	133.2	70.3
Current assets		
Inventories	32.0	28.6
Trade and other receivables	92.4	83.1
Income tax receivables	0.9	0.5
Cash and cash equivalents	72.7	91.3
Total current assets	198.0	203.5
Assets classified as held for sale	3.1	-
Total assets	334.4	273.8

Shareholders' equity and liabilities	Dec 31, 2018	Dec 31, 2017
Shareholders' equity		
Share capital	7.7	7.7
Other reserves	6.1	3.0
Cumulative translation adjustment	0.8	-0.2
Treasury shares	-9.0	-10.1
Retained earnings	177.3	185.1
Total shareholders' equity	182.9	185.4
Non-current liabilities		
Interest-bearing liabilities	0.2	-
Post-employment benefit obligations	2.7	2.5
Deferred tax liabilities	9.4	0.5
Provisions for other liabilities and charges	0.2	0.2
Other long-term liabilities	5.6	2.7
Total non-current liabilities	18.0	5.8
Current liabilities		
Interest-bearing liabilities	40.3	-
Unbilled advances received	5.7	4.6
Income tax liabilities	1.4	1.4
Provisions for other liabilities and charges	3.2	1.3
Trade and other payables	81.8	75.3
Total current liabilities	132.3	82.5
Liabilities directly associated with assets classified as held for sale	1.1	-
Total liabilities	151.5	88.4
Total shareholders' equity and liabilities	334.4	273.8

Consolidated Statement of Changes in Shareholders' Equity

EUR million	Share capital	Other reserves	Treasury shares	Translation adjustment	Retained earnings	Total
Balance at Jan 1, 2017	7.7	2.0	-9.6	2.9	175.6	178.5
Result for the period					27.2	27.2
Other comprehensive income		-0.0		-3.1	0.0	-3.2
Dividend paid					-17.8	-17.8
Return of unpaid dividends to shareholders' equity					0.1	0.1
Transfer		0.0			-0.0	-
Purchase of treasury shares			-0.8			-0.8
Share-based payments		1.0	0.3			1.4
Balance at Dec 31, 2017	7.7	3.0	-10.1	-0.2	185.1	185.4

EUR million	Share capital	Other reserves	Treasury shares	Translation adjustment	Retained earnings	Total
Balance at Dec 31, 2017	7.7	3.0	-10.1	-0.2	185.1	185.4
Adjustments to opening balance						
IFRS 2 amendment		3.9				3.9
IFRS 9 transition, net of taxes					-0.2	-0.2
IFRS 15 transition, net of taxes					0.3	0.3
Balance at Jan 1, 2018	7.7	6.8	-10.1	-0.2	185.2	189.3
Result for the period					29.5	29.5
Other comprehensive income		0.0		1.0	0.2	1.2
Dividend paid					-37.6	-37.6
Share-based payments		-0.7	1.1			0.4
Balance at Dec 31, 2018	7.7	6.1	-9.0	0.8	177.3	182.9

Consolidated Cash Flow Statement

EUR million	1-12/2018	1-12/2017
Cash flows from operating activities		
Cash receipts from customers	346.7	330.6
Cash paid to suppliers and employees	-289.3	-272.6
Financials paid, net	-0.4	-1.8
Income taxes paid, net	-8.7	-7.1
Cash flow from operating activities	48.3	49.2
Cash flows from investing activities		
Acquisitions	-51.7	-2.0
Capital expenditure	-14.5	-8.5
Divestments	0.1	0.3
Cash flow from investing activities	-66.1	-10.2
Cash flows from financing activities		
Dividends paid	-37.6	-17.9
Purchase of treasury shares	-	-0.8
Change in loan receivables	0.0	0.0
Proceeds from borrowings	40.0	-
Repayment of borrowings	-2.6	0.0
Cash flow from financing activities	-0.1	-18.6
Change in cash and cash equivalents increase (+) / decrease (-)	-17.9	20.4
Cash and cash equivalents at the beginning of period	91.3	72.4
Net increase (+) / decrease (-) in cash and cash equivalents	-17.9	20.4
Cash classified as assets held for sale	-1.1	-
Effect from changes in exchange rates	0.4	-1.5
Cash and cash equivalents at the end of period	72.7	91.3

Notes for Report

Orders Received by Business Area

EUR million	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Weather and Environment	67.9	55.4	215.2	233.0
Industrial Measurements	31.2	28.1	119.0	113.3
Total	99.1	83.5	334.2	346.3

Net Sales by Business Area

EUR million	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Weather and Environment				
Products	46.4	31.9	125.4	112.0
Projects	19.1	32.7	70.0	76.4
Services	12.1	9.8	36.9	33.8
Total	77.6	74.4	232.3	222.2
Industrial Measurements				
Products	27.8	25.0	105.1	98.7
Services	2.9	2.9	11.4	11.6
Total	30.7	27.9	116.4	110.3
Sales, Other	0.0	0.0	0.0	0.0
Total Sales	108.3	102.3	348.8	332.6

Operating Result by Business Area

EUR million	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Weather and Environment	10.5	14.0	17.7	18.2
Industrial Measurements	5.6	4.4	23.9	22.8
Other	-2.1	0.1	-2.7	-0.2
Total	13.9	18.5	38.9	40.9

Net Sales by Geographical Area

EUR million	10-12/2018	10-12/2017	1-12/2018	1-12/2017
EMEA	32.4	36.3	102.3	107.7
Americas	40.2	36.3	136.8	127.3
APAC	35.8	29.8	109.6	97.5
Total	108.3	102.3	348.8	332.6

Timing of Revenue Recognition

EUR million	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Performance obligations satisfied at a point in time	81.3	89.7	251.7	299.5
Performance obligations satisfied over time	27.0	12.6	97.1	33.1
	108.3	102.3	348.8	332.6

Personnel				
	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Average personnel	1,780	1,598	1,678	1,592
Personnel at the end of period	1,816	1,608	1,816	1,608

Financial Instruments			Dec 31, 2018	Dec 31, 2017
Nominal value of financial derivatives, EUR million			26.9	38.8
Fair values of financial derivatives, assets, EUR million			0.0	1.5
Fair values of financial derivatives, liabilities, EUR million			1.0	0.3

Financial derivatives consist solely of foreign currency forwards and they are measured based on price information derived from active markets and commonly used valuation methods (Fair value hierarchy 2). Financial contracts are executed only with counterparties that have high credit ratings.

Share Information				
	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Number of shares outstanding, thousand	35,790	35,692	35,790	35,692
Number of treasury shares, thousand	647	744	647	744
Number of shares, weighted average, diluted, thousand	36,394	36,350	36,376	36,351
Number of shares, weighted average, thousand	35,790	35,692	35,772	35,693
Number of shares traded, thousand	916	796	3,136	4,297
Share price, highest, EUR	19.90	24.45	23.90	24.45
Share price, lowest, EUR	15.85	20.26	15.85	15.94

Key Ratios				
	10-12/2018	10-12/2017	1-12/2018	1-12/2017
Earnings per share, EUR	0.32	0.33	0.82	0.76
Diluted earnings per share, EUR	0.31	0.32	0.81	0.75
Equity per share, EUR			5.11	5.20
Return on equity, %			16.0	15.0
Cash flow from operating activities per share, EUR	0.82	0.64	1.35	1.38
Solvency ratio, %			55.6	68.9
Gearing, %			-17.6	-49.2

Further information

Kaarina Muurinen, CFO
Tel. +358 40 577 5066
Vaisala Corporation

Briefing and telephone conference

Briefing for analysts, investors and media, combined with an English-language conference call will be arranged in Hotel Klaus K, Studio K, Bulevardi 2–4, Helsinki, starting at 4:00 p.m. (Finnish time).

Numbers for conference call, during which questions may be presented, are:

Finland: +358 9 8171 0310
UK: +44 33 3300 0804
Sweden: +46 8 5664 2651
US: +1 63 1913 1422

PIN: 85729515#

Audiocast

The presentation by Kjell Forsén, President and CEO, can also be followed through a live audiocast at www.vaisala.com/investors starting at 4:00 p.m. A recording will be published at the same address by 6:00 p.m.

Distribution

Nasdaq Helsinki
Key media
www.vaisala.com

Vaisala is a global leader in environmental and industrial measurement. Building on over 80 years of experience, Vaisala provides observations for a better world. We are a reliable partner for customers around the world, offering a comprehensive range of innovative observation and measurement products and services. Headquartered in Finland, Vaisala employs approximately 1,850 professionals worldwide and is listed on the Nasdaq Helsinki stock exchange. www.vaisala.com www.twitter.com/VaisalaGroup