FINANCIAL STATEMENTS AND MANAGEMENT REPORT 2018

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MANAGEMENT REPORT 2018

Aspo is a conglomerate that creates value by developing and internationalizing businesses in Northern Europe and growth markets. Aspo's value comes from its wholly owned independent businesses, which specialize in demanding B-to-B customers. ESL Shipping, Leipurin and Telko are strong business brands in the field of trade and logistics, and they aim at the leading position in their markets. Aspo develops its Group structure and businesses responsibly and sustainably in the long term.

Aspo's operating segments in 2018 were ESL Shipping, Leipurin, Telko and Kauko. Other operations consist of Aspo Group's administration, the financial and ICT service center, and a small number of other functions not covered by business units.

OPERATING ENVIRONMENT

General uncertainty increased in all market areas toward the end of 2018. However, industrial production increased in the main market areas of Aspo's businesses during the year. Raw material prices remained unchanged or strengthened, although the price of oil fell toward the end of the year. In Russia, the national economy and industrial production grew and inflation decelerated, while the value of the Russian ruble weakened, particularly during the second half of the year. Growth of the global economy is expected to slow down. General political risks are high and there may be rapid changes in the operating environment or in conditions for free trade.

NET SALES

Aspo Group's net sales increased from the previous year to EUR 540.9 (502.4) million. The increase in net sales was particularly attributable to ESL Shipping, which became the leading dry bulk cargo company in the Baltic Sea in 2018 as a result of the acquisition of AtoB@C and the launch of two new vessels. The impact of the acquisition on the increase in net sales was EUR 27.0 million.

Net sales grew in all market areas. The strongest growth was in Finland, 9%, and in Scandinavia, 23%, accelerated by the increase in transportation resulting from the acquisition of AtoB@C. In addition to Finland; Russia, other CIS countries and Ukraine comprise an important market area for Aspo, where net sales increased by 4% to EUR 171.9 (164.9) million in 2018. The decrease in exchange rates in eastern markets during the second half of the year slowed the net sales growth of Telko and Leipurin.

FINANCIAL PERFORMANCE

Aspo Group's operating profit amounted to EUR 20.6 (23.1) million in 2018. The operating profit included EUR -5.7 (-1.0) million in items affecting comparability. The most significant of these items, at EUR 4.8 million, was related to the impairment loss recognized on Kauko's goodwill. The operating profit adjusted by the impairment loss recognized on goodwill was the best in Aspo's history, amounting to EUR 25.4 million.

The operating profit of ESL Shipping, which grew strongly during the year, increased to EUR 15.1 (13.5) million. Leipurin's operating profit grew to EUR 3.3 (3.1) million. Telko's operating profit also improved, amounting to EUR 12.1 (10.8) million. Kauko's profitability improved, but its financial performance development, growth and internationalization outlook have been below the targeted level. In December, Aspo decided to restructure Kauko's operations. An impairment loss of EUR 4.8 million was recognized on Kauko's goodwill, lowering Kauko's operating result to EUR -4.7 (-0.2) million. The operating result of other operations decreased, mainly due to facility expenses and the use of expert services, and stood at EUR -5.2 (-4.1) million.

Earnings per share for the financial year decreased to EUR 0.42 (0.56). The impact of the impairment loss recognized on Kauko's goodwill on earnings per share was approximately EUR -0.16. Equity per share was EUR 3.75 (3.67).

More information about Group's key figures and their calculation principles is presented in the table of key figures on page 47.

FINANCIAL TARGETS

Aspo's objective is to reach an average return on equity of over 20%, gearing of up to 100% and an operating profit of 7% with the current structure by 2020.

The operating profit rate for the financial period was 3.8% (4.6), return on equity was 12.4% (17.1), and gearing was 154.4% (103.9). The operating profit rate adjusted by the impairment loss recognized on goodwill was 4.7%. The impairment loss recognized on goodwill also has a negative impact on other key figures regarding financial targets that were below the target level.

Aspo's good and diversified operational cash flow enables gearing to be temporarily higher than the target level. During 2018, Aspo carried out significant investments in new vessels and a notable acquisition. The impact of these investments on operations will already become visible during the first half of 2019.

ASPO'S BUSINESS OPERATIONS

ESL Shipping

ESL Shipping is the leading dry bulk cargo company in the Baltic Sea region. At the end of the financial year, the shipping company's fleet consisted of 49 vessels with a total capacity of 464,000 dwt. Of the vessels, 22 are wholly owned, two are minority owned, one is leased and the remaining 24 are time chartered. ESL Shipping's competitive edge is based on its ability to secure product and raw material transportation for the industries and energy production round the year, even under difficult weather conditions. The shipping company also loads and unloads large ocean liners at sea as a special service.

During 2018, the general market prices of dry bulk cargo increased slightly from the comparative period. In the long term, cargo prices are at a fairly low level. Duties or sanctions that potentially restrict international free trade have increased uncertainties over continued international growth. During the year, ESL Shipping's vessels mainly operated in contract traffic in the Baltic Sea and in Northern Europe, and also performed loading and unloading operations at sea. Transportation operations in the Baltic Sea and the North Sea are mainly based on long-term customer agreements and established customer relationships. Operations from the Canadian Arctic to Europe continued as in previous

NET SALES BY SEGMENT

	2018 MEUR	2017 MEUR	Change MEUR	Change %
ESL Shipping	**120.1**	79.3	40.8	51.5
Leipurin	**121.0**	122.3	-1.3	-1.1
Telko	**266.2**	262.2	4.0	1.5
Kauko	**33.6**	38.6	-5.0	-13.0
Other operations	**0.0**	0.0	0.0	
Total	**540.9**	502.4	38.5	7.7

NET SALES BY MARKET AREA

	2018 MEUR	2017 MEUR	Change MEUR	Change %
Finland	**175.7**	160.8	14.9	9.3
Scandinavia	**62.0**	50.6	11.4	22.5
Baltic countries	**60.6**	58.8	1.8	3.1
Russia, other CIS countries + Ukraine	**171.9**	164.9	7.0	4.2
Other countries	**70.7**	67.3	3.4	5.1
Total	**540.9**	502.4	38.5	7.7

OPERATING PROFIT BY SEGMENT

	2018 MEUR	2017 MEUR	Change MEUR	Change %
ESL Shipping	**15.1**	13.5	1.6	11.9
Leipurin	**3.3**	3.1	0.2	6.5
Telko	**12.1**	10.8	1.3	12.0
Kauko	**-4.7**	-0.2	-4.5	-2,250.0
Other operations	**-5.2**	-4.1	-1.1	-26.8
Total	**20.6**	23.1	-2.5	-10.8

Year 2018: Kauko's figures include an impairment loss of EUR 4.8 million recognized on goodwill, and ESL Shipping's figures include EUR 0.9 million in acquisition related transaction costs.

Year 2017: Leipurin's figures include a sales gain of EUR 0.4 million from the divestment of the meat industry raw material business, and EUR 0.5 million in expenses from compensation, including processing fees, related to a project delivery carried out by Leipurin in 2014. Telko's figures include EUR 0.6 million in expenses related to the discontinuation of terminal project in St. Petersburg and personnel arrangements. Kauko's figures include an impairment loss of EUR 0.3 million related to previously divested business operations.

years. Weather conditions early in the year were difficult for operations, lowering vessel speed and increasing fuel consumption. From the spring, weather conditions were mainly favorable for operations. However, the numerous storms in the late autumn caused lay days in vessel operations and also additional costs as a result of higher fuel consumption.

ESL Shipping's net sales increased significantly by 51% to EUR 120.1 (79.3) million. Net sales increased as a result of transportation volumes which were significantly higher than in the previous year, particularly towards the end of the year; the deployment of MS Viikki and MS Haaga, the world's eco-friendliest dry bulk cargo vessels, completed in August, and the acquisition of AtoB@C, which increased and diversified vessel capacity. In addition, increases in fuel prices also contributed to the increase in net sales through fuel clauses included in agreements. The impact of the acquisition of AtoB@C completed at the end of August on the increase in net sales was EUR 27.0 million.

ESL Shipping's operating profit increased by 12% to EUR 15.1 (13.5) million. The operating profit includes EUR 0.9 million in transaction costs related to the acquisition. In 2018, the operating profit rate was 12.6% (17.0).

The acquisition of Swedish shipping company AtoB@C, completed on August 31, 2018, strengthened ESL Shipping's position in the smaller vessel category and significantly diversified its operations, because it expanded the shipping company's service range and customer base from the transportation of raw materials to industrial products. AtoB@C is engaged in shipping operations with its vessels with a capacity of 4,000–5,000 tonnes. In 2017, AtoB@C posted net sales of EUR 79.3 million and an operating profit of EUR 3.2 million. In November 2018, AtoB@C acquired a 4,100 dwt dry bulk cargo vessel of ice class 1A built in 2000. The shipping company had already operated the vessel through long-term time chartering, and it also owns the vessel's sister ship. At the end of the financial year, AtoB@C wholly owned seven dry bulk cargo vessels and held 49% of two

vessels. Its other 19 vessels are time chartered.

In autumn 2018, MS Viikki and MS Haaga, the world's first ice-strengthened dry bulk cargo vessels fueled by liquefied natural gas, were deployed. The new 160-meter LNG-fueled vessels of 25,600 dwt produce more than 50% fewer carbon dioxide emissions than the previous vessel generation. This newbuilding project is part of the Bothnia Bulk project, funded partly by the EU. Its objective is to modernize the sea route between Luleå, Oxelösund and Raahe, making it more eco-friendly. On their maiden voyage, the vessels delivered raw materials from Japan to the Baltic Sea via the Northern Sea Route, which reduced emissions by more than 40% compared with the route via the Panama Canal. However, extensive and serious problems in the conventional mechanics of high-power cranes, which are subject to warranty, have significantly interfered with the efficient operation of both vessels. These have resulted in significant loss of income and additional costs for the shipping company. This problem concerns all the cranes on both vessels. Due to the delivery times of spare parts, repairs are expected to be completed only at the end of the first quarter of 2019. During this time, the vessels cannot be operated fully efficiently as planned.

The new vessels and the acquisition of AtoB@C diversified the transported loads and increased their volumes. The volume of cargo carried by ESL Shipping in 2018 amounted to 13.4 (11.4) million tons. Transportation volumes in the steel industry increased from the comparative period. In the energy industry, transportation volumes of coal decreased slightly as expected from the comparative period. Transportation volumes of biofuels increased as expected. Transportation volumes in other customer sectors increased significantly, in particular, as a result of new product groups and customers brought by the acquisition.

During the financial year, one wholly owned vessel of the larger vessel category, two wholly owned vessels of the smaller vessel category and both partly owned vessels were docked as planned, which reduced the available vessel capacity. To ensure the proper and efficient use of vessel capacity, operational and sales resources were strengthened during the autumn in the shipping company's key locations. At the end of the year, all important expiring customer agreements were renewed as targeted. In addition, new agreements were signed, and existing agreements were expanded at a highly satisfactory cargo price level.

Outlook for ESL Shipping for 2019

The shipping company's vessel capacity increased significantly as a result of the AtoB@C acquisition and the completion of its two new vessels. Due to serious warranty repairs involving the cranes of the new vessels, the financial performance of the vessels can only reach the targeted level starting from the second quarter. The increase in capacity enables the company to improve its operational efficiency and profitability, especially during the second half of the year when there is typically a shortage of vessel capacity.

Economic growth is expected to slow down in the shipping company's main market areas. In Finland, any disputes resulting from collective bargaining in the transportation sector may have an impact on the operations of customer companies and transportation chains during the spring. Actions directed at international free trade, an increase in political risks and decelerating economic growth in China may have an impact on global flows of goods. Vessel capacity in the vessel categories operated by the shipping company will increase slowly, and the availability of leased high-quality vessels may be limited, particularly in the smaller vessel category. The development of the cargo markets in 2019 will be most directly reflected in the financial performance of the shipping company's largest Supramax vessels.

The shipping company has secured most of the use of its transportation capacity in the Baltic Sea and Northern Europe through long-term agreements. The current forecasts for general transportation volumes of contractual partners are highly satisfactory in all key customer segments, although there are uncertainties in demand due to the political situation and increased economic uncertainty. General demand in the steel industry is high and transportation volumes are expected to develop very positively and improve significantly starting from the second quarter. Demand for loading and unloading operations for large ocean liners at sea, a segment important to the shipping company, is expected to remain high. Furthermore, demand for raw material and product transportation in the forest industry, an important sector for the shipping company's smaller vessel category, is expected to remain strong.

Total transportation volumes in the energy industry are expected to increase from the previous year as a result of higher demand for the transportation of bioenergy. The biofuel transportation markets in the Baltic Sea are expected to grow significantly in the near future. Transportation volumes of coal will decrease as expected.

During 2019, three larger category vessels and one smaller vessel will be docked as planned. In addition, the docking of time-chartered vessels will affect the available vessel capacity. The content of the time chartering portfolio will be reviewed if necessary, according to any change in demand.

Ice conditions in the Baltic Sea area are expected to be normal during the winter and spring. Wind conditions will have an impact on the development of pack ice, which may be reflected in the efficiency of operations.

ESL Shipping published its new financial targets in November 2018. ESL Shipping aims for net sales of more than EUR 200 million and an operating profit rate of 12–15% by 2020.

Leipurin

Leipurin is a unique provider of solutions for bakery and confectionery products and the out-of-home (foodservice) market. The solutions offered by Leipurin range, for example, from product development, recipes, raw materials, training and equipment all the way to the design of sales outlets. As part of its full-range services, Leipurin designs, delivers and maintains production lines for the baking industry, baking units and other machinery and equipment required in the food industry. Leipurin uses leading international manufacturers as its raw material and machinery supply partners. Leipurin operates in Finland, Russia, the Baltic countries, Poland, Ukraine, Kazakhstan and Belarus.

In 2018, national economies and the purchasing power of consumers developed positively in Finland and other western markets. National economies and private consumption also continued to grow in eastern markets during the year. The consumer price of food increased in Finland. In Russia, the rate of inflation was low and retail vol-

umes increased. The prices of raw materials important to Leipurin varied from one raw material group to the next, and the overall price level increased slightly from the comparative year.

The market for industrially packed bread continued to decrease in the west, whereas the market of in-store bakeries and baking units continued to increase, presenting challenges in the operations of industrial bakeries. In 2017, a change took place in Russia, as a result of which bakeries are no longer responsible for retail bread wastage; instead, any unsold bread is covered by the retail industry. This change has significantly reduced the production of packed bread and reduced net sales from the previous year. However, this change has increased the markets for in-store bakeries in Russia, where Leipurin has gained a strong market position. The trends that are important to Leipurin and affect the consumer market, i.e. the increasing popularity of out-of-home eating, snacks and the consumption of pastries, continued.

Net sales of Leipurin decreased slightly to EUR 121.0 (122.3) million. The decrease from the comparative period was mainly attributable to the divestment completed at the end of August 2017, when Leipurin sold its meat industry raw material business to MP Maustepalvelut Oy. Net sales in Russia, other CIS countries and Ukraine increased by 4% to EUR 36.3 (35.0) million.

The divestment in Finland, the decrease in sales in western markets and weakened exchange rates in eastern markets had an impact on the net sales of raw material operations, decreasing by 3% from the comparative year. However, volumes of bakery raw materials increased in Russia, other CIS countries and Ukraine. Foodservice operations in Finland grew as a result of the procurement and logistics chain operations of a new significant chain customer. Foodservice operations accounted for a small, but a growing, part of net sales.

Net sales of machine operations increased by 9%, mainly as a result of growth in Leipurin's own machine production. Sales developed well in machinery operations in Finland and in the Baltic countries. The positive development in Russia which started during the comparative year continued.

Leipurin's operating profit improved by 6% to EUR 3.3 (3.1) million. In 2018, the operating profit rate was 2.7% (2.5). The operating profit improved particularly as a result of the improved efficiency of Leipurin's own machine production, while the development was decelerated by increased resources in foodservice operations, the loss-producing test café business, and discontinuation costs from a test café and the raw material business in Poland. During the comparative year, the operating profit included a sales gain of EUR 0.4 million from the divestment of the meat industry raw material business and expenses of EUR 0.5 million in compensation, including processing fees, related to a project delivery carried out in 2014. Profitability in the eastern markets was at the comparative year's level, approximately 8% (8).

Outlook for Leipurin for 2019

The market situation is expected to remain challenging in Leipurin's key markets. The development of Leipurin's main customer categories, i.e., bakeries and foodservice chains, continues to vary from one customer to the next. For example, many bakeries in Finland announced in 2018 that their operations will discontinue. This reduces the net sales of Leipurin's operations in Finland. The market position of Leipurin is expected to remain strong in the industrial baking sector in Finland, Russia and the Baltic region. The operating profit of Leipurin is expected to increase in 2019.

In Russia, the national economy and the purchasing power of consumers are growing moderately, while international sanctions and their possible increase have added to uncertainties over the development of the Russian economy. Exchange rate changes have reduced Leipurin's price competitiveness in eastern markets. However, Leipurin will continue to develop the procurement of bakery raw materials in the area to better respond to any changes in demand. Leipurin will maintain its high profitability in the region, strengthen its market position, and look for growth particularly in the bread and pastry sectors, as well as in-store bakeries.

The foodservice market is a significant growth area for Leipurin. Leipurin will continue to invest in the foodservice market, particularly in Finland and western markets, where Leipurin is responding, for example, to the growing demand of chain customers, such as cafés and fast food restaurants. The company has further developed its operations targeted at foodservice chains, offering both procurement and logistics services to chain customers. The large logistics volumes of Leipurin, as well as its efficiency and expertise, allow the development and expansion of its operations.

In terms of machinery operations, bakeries are expected to maintain their current equipment investment level in Finland and the Baltic countries. A moderate increase in investments is expected in Russia. The expansion of the procurement network for Leipurin's own machine production and the development of manufacturing and installation lead times will continue. In machinery operations, the order book shows variation between quarters. At the end of the financial year, orders focus on the latter half of 2019, and the order book for this period is at a good level. However, the order book for the first half of the year is weak. The increase in the Leipurin's own machine production will be driven by increased industrial investments in Leipurin's home markets and elsewhere in Europe.

Telko

Telko is a leading expert and supplier of plastic raw materials and industrial chemicals. Its operations are based on representing the best international principals and on the expertise of the personnel. Telko has subsidiaries in Finland, the Baltic countries, Scandinavia, Poland, Russia, Belarus, Ukraine, Kazakhstan, Azerbaijan, China and Uzbekistan. Operations were also started in Romania.

International economic growth slowed down in Telko's market areas toward the end of the year. The price of oil fell steeply at the end of the year, which reduced the prices of raw materials sold by Telko. The prices of volume plastics decreased exceptionally throughout the second half of 2018. The price level of technical plastics has been high in the long term and increasing as a result of the upward trend. However, the prices of technical plastics started to decrease significantly towards the end of the year. The prices of industrial chemicals important to Telko have remained high in the long term but began to decrease slightly at the end of the year as a result of lower oil prices. However, the full-year average prices of plastic and chemical raw materials were at the comparative year's level despite any

decreases during the fourth quarter. Problems with the availability of products which limited growth have been eliminated, which improves Telko's growth potential.

Telko's net sales increased slightly to EUR 266.2 (262.2) million. Net sales in Russia, other CIS countries and Ukraine increased by 4% to EUR 128.5 (123.6) million. Problems with the availability of plastic raw materials and the lower value of the Russian ruble, in particular, limited Telko's sales growth. In 2018, plastic operations accounted for 55% (57) of Telko's net sales, whereas chemical operations made up 45% (43). Net sales of plastic operations amounted to EUR 147.7 (150.7) million. They decreased by 2% from the comparative year, as principals were forced to allocate their production volumes to different market areas and customers. Net sales of chemical operations grew by 6% to EUR 118.5 (111.5) million.

Telko's operating profit improved by 12% to EUR 12.1 (10.8) million. In 2018, the operating profit rate was 4.5% (4.1). The good price level of products sold by Telko and many efficiency measures carried out in 2017 improved profitability. The operating profit for the comparative year included EUR 0.6 million in costs arising from the discontinued terminal project in St. Petersburg, Russia, and Telko's personnel arrangements.

Telko expanded its operations during the year. During the third quarter, it acquired the operations of Square Oil, a distributor of lubricants. Net sales of Square Oil are approximately EUR 3 million, half of which comes from Denmark and the other half from Norway. The acquisition had no significant impact on Telko's net sales or result for 2018. At the end of the year, Telko signed an agreement on the acquisition of the business of Danish HH Plastkombi A/S, a seller and distributor of different supplies for the plastics industry. The transaction was completed at the beginning of 2019. Net sales of Danish HH Plastkombi are approximately EUR 3 million. Operations did not start in Iran, and Telko will withdraw from the market area because the prerequisites for business operations were not fulfilled as planned. During the third quarter, Telko started operations in Romania, where Telko has a warehouse that serves local customers. Operations will be transfered to a subsidiary to be established in Romania. Telko opened a subsidiary in Uzbekistan in October. Telko estimates that this rapidly emerging market of roughly 30 million people has significant long-term business potential.

Outlook for Telko for 2019

Uncertainties over international economic growth have increased. The prices of both chemicals and plastics have decreased as a result of lower oil prices. Prices of chemicals and technical plastics are expected to continue their slight decrease. Prices of volume plastics decreased throughout the second half of 2018, and they are expected to reach their lowest during the first quarter of 2019.

The integration of Square Oil, acquired in 2018, in Telko will continue. The positive impact of synergy benefits will be fully visible in Telko's results during the second half of 2019.

Telko has launched a significant strategy project to improve the efficiency of procurement. Telko's raw material purchases comprise the largest expense item, and the increased efficiency of procurement operations is expected to improve Telko's profitability. The project is expected to be completed by the end of 2019.

Telko confirmed its financial targets in November 2018. Telko estimates that its net sales will be at EUR 300–350 million and its operating profit will increase to 6–7% by 2020. Telko can reach these targets by continuing its growth in its current key market areas and by possibly expanding its operations to new geographical areas. Success in Telko's strategic growth projects is another key factor. The development of profitability is based on efficient procurement activities, technical products offering more added value, the development of logistics and more active pricing. In Russia, Telko will continue to strengthen its regional organizations. According to its strategy, Telko will increase efforts in special chemicals for a higher processing rate and the life science segment in eastern markets. R&D operations have been increased to develop the range of alternative plastic raw materials. Furthermore, Telko aims to increase fiber-based and recycled plastics and their relative proportion, particularly in western markets.

Kauko

Kauko is a specialist in demanding mobile knowledge work environments. It supplies the best IT tools, solutions for improving productivity and services for securing effective use of the needs of healthcare services, industries, logistics and the authorities. Kauko solutions combine customized applications, devices and services. Its product range also includes products that improve energy efficiency. Aspo will no longer report Kauko as a separate business segment starting from the beginning of 2019.

Kauko's net sales fell by 13% in 2018, amounting to EUR 33.6 (38.6) million. During the year, Kauko discontinued its project operations in China, with net sales of EUR 6.5 million during the comparative year, and its software operations in Finland. Net sales of energy-efficiency equipment increased, while those of mobile knowledge work decreased.

Kauko's operating result decreased to EUR -4.7 (-0.2) million. In 2018, the operating profit rate was -14.0% (-0.5). The operating result includes an impairment loss of EUR 4.8 million recognized on goodwill. Kauko's operating result adjusted for the impairment loss recognized on goodwill improved. During the comparative year, the operating result included an impairment loss of EUR 0.3 million related to commission receivables from operations previously divested.

Regardless of the increase in the operating result adjusted by the impairment loss recognized on goodwill, Kauko has been unable to develop and internationalize as targeted, even though its profitability increased during 2018 as a result of improved operational efficiency and discontinued unprofitable operations. In December 2018, Aspo decided to restructure Kauko's mobile knowledge work and administration and to divest or discontinue its energy business.

Outlook for Kauko for 2019

Net sales and the profitability of total solutions for mobile knowledge work are expected to improve further. Kauko is a provider of effectively integrated and customized total solutions, combining application, devices and other services. In the rugged computers market, sales of laptops are expected to decrease further and those of tablets to increase. Kauko expects the strategic changes in operations targeted at the healthcare sector to help to improve profitability.

Due to the reduction in the size of Kauko's operations, Kauko will be reported as

part of the Telko segment from the beginning of 2019. Kauko's administration will be merged with Telko's.

Other operations

Other operations include Aspo Group's administration, the financial and ICT service center, and a small number of other functions not covered by business units.

The operating result of other operations was EUR -5.2 (-4.1) million. Aspo and its businesses decided to move out of shared facilities at the end of 2018. This change reduced the operating result at the end of the year when Aspo was using both its new and former premises. In addition, Aspo paid rent for a higher number of vacant premises due to ended sublease agreements. From the beginning of 2019, the cost structure is lighter as a result of lower rents and Aspo no longer being responsible for vacant premises.

STRUCTURAL ARRANGEMENTS

Aspo Group acquired Swedish subsidiary Bothnia Bulk AB through an acquisition completed by ESL Shipping. Swedish AtoB@C Holding AB and AtoB@C Shipping AB were acquired under its ownership. These own Finnish subsidiary Oy AtoB@C Shipping Ab, German associated companies Auriga KG and Norma KG, and Swedish associated company Norra Skeppnings Gruppen AB.

During the financial year, Telko established its subsidiary Telko Solution LLC in Uzbekistan. Kauko closed down its Chinese representative office, which had operated in Beijing for 66 years.

FINANCING

The Group's cash and cash equivalents stood at EUR 19.3 (19.9) million. The consolidated balance sheet included a total of EUR 199.4 (136.6) million in interest-bearing liabilities. The average interest rate for interest-bearing liabilities was 1.6% (1.8) at the end of the financial year. Non-interest-bearing liabilities totaled EUR 83.7 (72.2) million.

Aspo Group's gearing was 154.4% (103.9) and its equity ratio was 29.5% (35.6). Aspo Group's capital structure was significantly affected by ESL Shipping's investment in two new dry cargo vessels and the acquisition of the shipping company AtoB@C, as well as the impairment loss recognized on Kauko's goodwill. The notable investments in future growth made during 2018 are reflected in an increase in Aspo Group's balance sheet and changes in the capital structure. The increased diversification of Aspo's businesses and the further improved ability to produce cash flows will improve the Group's capital structure starting from 2019.

The Group's cash flow from operating activities improved during the financial year to EUR 20.3 (17.4) million. The significant growth of the shipping company improved the Group's cash flow. During the financial year, the change in working capital was EUR -10.7 (-12.6) million. Cash flow from investing activities totaled EUR -55.1 (-16.6) million, mainly consisting of payments for the vessels deployed in the autumn and the acquisition of AtoB@C. The Group's free cash flow was EUR -34.8 (-0.8) million.

The amount of committed revolving credit facilities signed between Aspo and its main financing banks was EUR 40 million at the end of the financial year. Revolving credit facilities remained fully unused at the end of the financial year. EUR 17 million of Aspo's EUR 80 million commercial paper program were in use. In 2018, Aspo signed a credit agreement of EUR 30 million with a five-year loan period. During 2019, a total of approximately EUR 35 million in financing agreements will fall due. In addition, ESL Shipping has the option to acquire MS Alppila in August 2019 in accordance with the terms and conditions of a lease agreement signed in 2011.

On May 27, 2016, Aspo issued a hybrid bond of EUR 25 million. The fixed coupon rate of the bond is 6.75% per annum. The bond has no maturity, but the company may exercise an early redemption option after four years of its issuance.

Aspo has hedged its interest rate risk by means of interest rate swaps. Their fair value on December 31, 2018 was EUR -0.2 (-0.4) million.

INVESTMENTS

During 2018, Aspo Group made significant investments in future growth. The Group's investments in 2018 totaled EUR 43.2 million (18.0), consisting mainly of payments for ESL Shipping's LNG-fueled vessels and a small number of fixed assets acquired by other segments. As part of the EU-funded Bothnia Bulk project, ESL Shipping receives at most EUR 5.9 million in subsidies for energy efficiency and environmental investments made in its vessels during 2016–2019. In 2016, the amount of subsidies received was EUR 2.1 million. No subsidies were received during the financial year or the comparative period.

ESL Shipping acquired the operations of Swedish shipping company AtoB@C through a share transaction completed on August 31, 2018. As a result of the transaction, ESL Shipping strengthened its position in the smaller vessel category. The transaction significantly diversified the shipping company's operations because it expanded its service range and customer base from the transportation of raw materials to industrial products. The total acquisition cost was EUR 25.5 million. The acquisition is described in more detail in the Note 2, Acquisitions and divestments, to the consolidated financial statements.

INVESTMENTS BY SEGMENT, ACQUISITIONS EXCLUDED

	2018 MEUR	2017 MEUR	Change MEUR
ESL Shipping	**41.9**	16.8	25.1
Leipurin	**0.5**	0.5	0.0
Telko	**0.7**	0.5	0.2
Kauko	**0.0**	0.1	-0.1
Other operations	**0.1**	0.1	0.0
Total	**43.2**	18.0	25.2

PERSONNEL

At the end of the financial year, Aspo Group had 958 employees (909).

Of Aspo Group's personnel, 47% (50) work in Finland, 36% (35) in Russia, other CIS countries and Ukraine, 8% (8) in the Baltic countries, 4% (2) in Scandinavia, and 5% (5) in other countries.

Men make up 57% (57) and women 43% (43) of the personnel. Of Aspo Group's employment contracts, 98% (97) are full time. During the financial year, 132 (107) new employment contracts were signed. The costs of all employment benefits within the Group in 2018 amounted to EUR 43.2 (41.6) million. More detailed information about the personnel is presented in Aspo's Responsibility Report.

PERSONNEL

	2018	2017	2016
Average personnel during the financial year	**919**	877	871
Total salaries and fees during the financial year, MEUR	**36.7**	34.7	32.6

PERSONNEL BY SEGMENT, ON AVERAGE

ESL Shipping	2018	2017
Office staff	**39**	29
Marine personnel	**215**	201
	254	230
Leipurin		
Office staff	**257**	244
Non-office workers	**63**	61
	320	305
Telko		
Office staff	**271**	264
Non-office workers	**9**	5
	280	269
Kauko		
Office staff	**36**	42
Non-office workers	**5**	6
	41	48
Other operations		
Office staff	**24**	25
Total	**919**	877

REWARDING

Aspo Group applies a profit bonus system, which was adopted in 2013. The profit bonus system applied to Finnish personnel is linked to the personnel fund so that the bonus can be invested in the personnel fund or withdrawn in cash. The long-term goal of the funding system is that the personnel will become a significant shareholder group in the company. All persons working at Aspo Group's Finnish companies are members of the personnel fund.

Share-based incentive plan 2015–2017

In 2015, the Board of Directors of Aspo Plc approved a share-based incentive plan for about 30 persons. The scheme included three earning periods, the calendar years 2015, 2016 and 2017. The Board of Directors decided on the plan's performance criteria and required performance levels for each criterion at the beginning of each earnings period. The reward from all earnings periods was based on the Group's earnings per share (EPS).

In 2018, on the basis of the 2017 earnings period, a total of 70,525 treasury shares was granted, as well as cash equaling the value of the shares, at most, to pay taxes. In 2018, in accordance with the rules of incentive plans, a total of 4,400 treasury shares, originally granted on the basis of share-based incentive plans, was returned to Aspo due to ended contracts of employment.

Share-based incentive plans 2018–2020

The Board of Directors of Aspo Plc approved three new share-based incentive plans for the Group's key employees in April 2018. The aim of the new plans is to combine the objectives of the shareholders and key employees to increase the value of the company in the long term, to retain the key employees at the company, and to offer them competitive reward plans based on earning and accumulating the company's shares.

The share-based incentive plan 2018–2020 includes three earning periods, the calendar years 2018, 2019 and 2020. The Board of Directors of the company will determine the plan's performance criteria and required performance levels for each criterion at the beginning of each earnings period. The potential reward of the plan from the earnings period 2018 will be based on the Group's earnings per share (EPS). The share-based incentive plan is directed to approximately 15 people, including the members of the Group Executive Committee, during the earnings period 2018. The potential reward from the earnings period 2018 will be paid partly in the company's shares and partly in cash in 2019. The rewards to be paid on the basis of the share-based incentive plan 2018–2020 correspond to the value of a maximum total of 500,000 Aspo Plc shares, also including the proportion to be paid in cash.

The Executive Committee share-based incentive plan 2018–2020 includes one earning period, calendar years 2018–2020. The potential reward of the plan from the earnings period 2018–2020 will be based on the Group's operating profit (EBIT), and reward payment requires exceptional per-

formance. The potential reward from the earnings period 2018–2020 will be paid partly in company shares and partly in cash in 2021. Rewards to be paid on the basis of the earnings period 2018–2020 correspond to the value of a maximum total of 200,000 Aspo Plc shares, also including the proportion to be paid in cash.

The reward from the restricted share-based incentive plan 2018 will be based on the participant's valid employment or service and the continuation of employment during the vesting period. The reward will be paid partly in company shares and partly in cash at the end of a 12–36 month vesting period. The restricted share-based incentive plan is intended solely for individual key employees by a special resolution of the Board of Directors. Rewards to be paid on the basis of the restricted share-based incentive plan 2018 correspond to the value of a maximum total of 100,000 Aspo Plc shares, also including the proportion to be paid in cash.

More detailed information about incentive plans is presented in Note 29, Related parties, to the consolidated financial statements.

RESEARCH AND DEVELOPMENT

Aspo Group's R&D focuses, according to the nature of each segment, on developing operations, procedures and products as part of the customer-specific operations, which means that the development inputs are included in normal operational costs and are not itemized. The development and certification costs of medical computers developed by Kauko have been capitalized as product development expenditure, and they are amortized over their useful life. The amount of this expenditure is low at Aspo Group level.

CORPORATE RESPONSIBILITY

Aspo believes that socially, financially and environmentally sustainable operations comprise a prerequisite for value creation in the long term. A responsibly led, growing company can create jobs, tax revenues and wellbeing. Customers are also paying more attention to responsibility. Aspo acts like a good corporate citizen in all its operating countries. This means, for example, that Aspo always pays its taxes in the country in which it has made its profit. Aspo treats its employees and stakeholders in a just and equal manner in all countries where it operates.

Promoting good operating practices in all of its countries is important to Aspo. Aspo's businesses continued to develop their responsibility in 2018. Following their own requirements that are partly stricter than general regulations is important, particularly in less developed markets. Human rights in procurement chains play an important role in the social responsibility of Aspo's trade and logistics businesses. For this reason, Aspo launched the Supplier Code of Conduct for its goods and service suppliers and developed its auditing practices during 2018. Aspo takes climate change seriously and, through its actions, helps to alleviate its impact not only in its own operations but also more widely. For example, investments in eco-friendlier dry bulk cargo vessels help ESL Shipping's customers to reduce the adverse environmental impact of their operations and drive the entire shipping industry forward.

Aspo Group's CEO is in charge of the management of Aspo's responsibility. The CEO reports matters related to responsibility to the company's Board of Directors in accordance with the risk management policy. Aspo Group's Code of Conduct and environmental policy form a common set of rules for responsible business. Aspo's application to join the UN's Global Compact initiative was approved in December 2018, and Aspo therefore committed to adopting, supporting and implementing the ten principles related to human rights, working life principles, the environment and the prevention of corruption within its scope of influence.

Aspo publishes a report on non-financial information and its progress in the implementation of the UN Global Compact principles in its Responsibility Report (pp. 8–21).

RISKS AND RISK MANAGEMENT

Despite lower financial indicators, the economic outlook is positive in all Aspo's market areas. Economic growth and increased industrial production have decreased financial risks associated with Aspo's market areas, but general risks may increase when the economic trend reaches its peak. Increases in political risks are not expected to have any impact on Aspo's business operations in the short term. Import duties imposed by the USA and China, which limit international free trade, have not affected Aspo's operations. Aspo has no business operations that are or would be affected directly by Brexit or its implementation, but there may be an indirect impact through the principals or customers of Aspo's businesses.

Following the financial crisis, the global economy is growing simultaneously in all Aspo's market areas, decelerating towards the end of the year. In the Eurozone, development has slowed down partly due to growing political tension related to trade. In Russia, the increase in GDP and the inflation rate are at expected levels, exports have increased, and private consumption and investments have increased slowly. General cargo prices in sea transport fluctuated throughout the financial year. At the end of the financial year, prices started to increase.

Financial risks in all Aspo's businesses have decreased as a result of more stable markets. However, any unexpected changes in international politics and trade policies, combined with rapid changes in exchange rates or commodities markets, may have an impact on the demand and competitiveness of the products of Aspo's companies. Subdued demand for investment commodities, which previously limited growth in both the eastern and western markets, has turned into a moderate increase. Investments have increased in Russia, even though most of them are still targeted at the energy sector. Private consumption and export volumes have increased slowly. As there have been no structural economic changes, economic growth is expected to remain at the previous year's level in 2019.

Strategic risks

Political risks have increased globally, which may have a rapid impact on Aspo's operating environment and reduce free trade in the short and long term. The economic and political situation in Aspo's market areas may have made it more difficult to make structural changes as part of Aspo's strategy, even though some have been implemented recently. The situation may continue unchanged, but, as economic and political pressure alleviates or increases, it may change rapidly.

The Russian economy has stabilized, inflation has accelerated slightly and growth is slow. Deteriorated consumption demand in the long term has affected trade in general, but the increase in nominal wages has increased consumption, although inflation

has reduced purchasing power. In Ukraine, the economic situation has stabilized. Consumer and producer prices are at a moderate level and did not change significantly after the fluctuations early in the year during the review period. In 2018, production volumes increased from the comparative year, and imports and exports increased, albeit at a more moderate rate than in the previous year. No signs of weakening have been seen in the financial and payment markets of Russia and Ukraine, but they involve risks that are reflected, for example, in the Russian banking sector. Companies are now more willing to make investments.

Promotion of local production has increased the volume of raw materials and items produced in Russia in industrial production, despite the decrease in quality. This may further reduce the position of imported raw materials in the value chain and the margin level, but, correspondingly, an increase in import volumes may increase demand for foreign raw materials and reduce related risks for Aspo.

Economic sanctions, their increase or other obstacles arising from the economic or political situation in Russia may, in part, reduce transportation volumes originating from Russia and the demand for unloading services for large ocean liners at sea. Protectionist actions may decrease sea transportation in the Russian Arctic if Russia sets stricter regulations on internal transportation, for example, regarding the transport of energy products. In Finland and the rest of Europe, social pressures to reduce the use of fossil energy sources in energy production have increased, which will reduce future coal transportation volumes. Correspondingly, the transportation volumes of replacement energy products will increase. Due to this change, it is difficult to estimate future transportation volumes. Fluctuations in international freight indices, their extended low level and the global increase in the number of vessels, particularly in large size categories, have increased uncertainty over the long-term profitability of shipping companies. Nevertheless, there are signs of an increase in freight indices and of a decrease in the number of vessels in operations in the long term.

Strategic risks may be caused by the deterioration of the global economic situation, the political atmosphere, protectionism and the outlook and production choices of industrial customers. Decisions regarding energy production structures affected by environmental policy and other political choices cause changes in industry and energy production which may decrease the use of fossil fuels and increase the use of alternative forms of energy. The flow of goods in the Baltic Sea may change as a result of steel production, cost structures, changes in customer structure, such as centralization or other reasons. These changes may have negative consequences on operations as the need for transportation decreases, but they may also be seen as significant opportunities. As a result of low cargo prices in international shipping, competition for cargoes may also become fiercer in the Baltic Sea. Mild, ice-free winters may also increase competition. In autumn 2018, ESL Shipping received two new low-emission vessels with better fuel economy for this region and customer base. These will also be able to operate in ice conditions. The shipping company also completed an acquisition that will significantly improve its competitiveness.

Strategic risks are influenced by long-term changes in cargo prices, the building of new vessels and the removal of others from the markets, investment trends, and changes in trade structures, especially in western markets. In eastern markets, risks are increased by such factors as political instability, social structures or the lack of reaction to the difficulties encountered by business operations. Accumulation and discharge of investments may cause long-term changes in the competitive situation and customer behavior. Trade between eastern and western markets may suffer from restrictions on free trade, as a result of which there may be a decrease in the sales of goods and services.

Rapid changes in economic structures may cause risks due to changes in the customer or principal structure or technologies, and due to unused opportunities requiring a quick response. Changes in demand as a result of various megatrends may cause changes in the product and service ranges of Aspo's subsidiaries, due to which it may be difficult to replace their current products. Disruptive changes may be very rapid. Aspo's strategic risks are evened out by the distribution of business operations over four segments, its engagement in business operations in a broad geographical area, and its ability to react quickly to changing situations.

In addition to western markets, Aspo operates in areas where economic trends or the political atmosphere may turn rapidly positive or negative, which could significantly change the prevailing operating conditions.

Operational risks

Economic uncertainty in Aspo's operating environment was lower during the review period than in the previous year. However, operational risks remained unchanged. These include risks related to supply chains, goods and services, and persons. The threat of different kinds of misuse from outside the company has also increased as a result of the development of electronic media.

For a long time, the focus of Aspo's growth has been on emerging market areas, where risks decelerating growth are affected by factors such as exchange rate fluctuations and interest rates, the level of and changes in the global market prices of raw materials, industrial and commercial investments, customer liquidity, changes in legislation and import regulations, and inactivity, bias or corruption among public authorities.

Economic growth and, alternatively, any decrease in production may have an impact on demand for raw materials. Political instability makes commercial activities more difficult and, if the situation prolongs, it may also decelerate the growth of Aspo's businesses. Consumer behavior and confidence are also reflected in risks associated with B-to-B customers and their risk levels. Growth opportunities presented by emerging markets are encouraging competitors to consider starting or expanding business operations in these areas. The challenging emerging markets and their escalated situations have also caused competitors to withdraw from these markets, which has created new potential for Aspo's businesses and has increased their market shares.

Hedging against exchange rate changes is not possible in all conditions or, in particular, at all times. Changes in exchange rates may reduce profit and equity on the balance sheet as a result of translation differences. Then again, changes in exchange rates may also strengthen results and the balance sheet. As changes in credit loss risks are diversified across businesses and custom-

ers, Aspo's businesses have not been subject to any significant credit losses related to their customers, even though credit loss risks have increased, and provisions are made for them in accordance with principles of IFRS 9 standard.

The technical products or applications deployed by Aspo's businesses may break or malfunction, due to which the increase in profit based on these products or applications may slow or be delayed. Sales margins may be reduced, and financial claims related to deliveries may emerge if Aspo's products are not suited to the customers' production processes or lack the correct technical properties.

Operational risks have also increased as a result of computer-related crime, malware and the increased number of fraud attempts. If realized, these risks may mean financial losses for Aspo. Aspo has appropriate information security and internal training arrangements, but individual cases may occur due to the decentralized structure of operations. Any deviations in internal processes may result in losses, for example, in the form of taxes or official fees.

The quantity and probability of the Group's loss risks are regularly assessed. Bidding processes are arranged for general insurance policies, and the amounts insured are regularly updated. Amounts insured are sufficient in view of the scope of Aspo's operations, but insurance companies may restrict the validity of insurance policies as a result of risks increasing for various reasons, such as in war areas.

Financial risks

Aspo Group's financing and financial risk management are centralized in the parent company in accordance with the treasury policy approved by the Board of Directors.

Refinancing risk

Refinancing risk is managed by decentralizing interest-bearing liabilities with respect to the counterparty, the form of funding, and maturity.

Liquidity risk

Liquidity risk is managed by securing the Group's sufficient cash funds, with committed revolving credit facilities and other financial reserves.

Interest rate risk

The company hedges against interest rate changes by tying interest-bearing liabilities partly to floating rate loans and partly to fixed rate loans. In addition, interest rate derivatives are used for hedging against interest rate risks.

Credit risk

The Group uses terms of payment based on advance payments and bank guarantees to hedge against credit risks. Full knowledge of customers is an important part of credit risk management.

Currency risk

Within Aspo Group, the exchange rate risk is primarily controlled through customer and principal agreements at the business level, and secondarily by using currency derivatives.

A more detailed description of financial risks is presented in notes to the consolidated financial statements in Note 26.

Internal control and risk management

One of the responsibilities of Aspo's Audit Committee is to monitor the efficiency of the Group's internal control, internal audits and risk management systems. The Audit Committee monitors the risk management process and gives instructions on the necessary measures to prevent strategic risks in particular. In accordance with the internal control principles approved by the Board of Directors, risk management is part of Aspo's internal control, and its task is to ensure the implementation of the Group's strategy, the development of financial results, shareholder value, dividend payment ability, and continuity in business operations. The operational management of each business is responsible for risk management. The management is responsible for specifying sufficient measures and their implementation, and for monitoring and ensuring that the measures are implemented as part of day-to-day operational management. Aspo's CFO, who reports to the Group CEO, is in charge of risk management.

LEGAL PROCEEDINGS

On February 27, 2015, the Helsinki District Court announced its judgment in the case between ESL Shipping and the Finnish State regarding fairway dues levied during the years 2001–2004. According to the judgment, the Finnish State was required to refund to ESL Shipping approximately EUR 3.0 million in accordance with the company's claim, as well as legal expenses and interest. The State lodged an appeal against the District Court's judgment and, in its ruling issued on August 8, 2016, the Court of Appeal overruled the Helsinki District Court's judgment and dismissed ESL Shipping's legal action as time-barred. The company applied for leave to appeal from the Supreme Court, which rejected the application in February 2018. In June 2018, ESL Shipping filed, with 13 other shipping companies, an appeal regarding extraordinary appeal (for nullification) to the Supreme Court. In addition, the company lodged a complaint with the European Court of Human Rights, particularly regarding a breach of protection of property. In September, the European Court of Human Rights announced that it would not process the appeal.

ESL Shipping won legal proceedings against Indian ABG Shipyard concerning the compensation payable for repairs made to MS Alppila during the warranty period. The vessel was delivered to ESL Shipping in 2011. According to the ruling of the arbitration court, ABG Shipyard was required to refund the repair expenses and interest to ESL Shipping according to the company's claims. The impact of the ruling will be taken into account during the financial year over which the imposed payment is received.

Telko has initiated a process at the Administrative Court concerning the tax increase imposed by Finnish Customs related to batches of material that Telko imported in 2013 and 2014. Telko considers the charges imposed by Finnish Customs to be unfounded. The charges of EUR 1.7 million were recognized as expenses in 2015.

In 2018, Telko took legal action in Korea against a former principal (Korea Engineering Plastics Co. LTD) regarding unpaid commission.

In spring 2017, Kauko took legal action in civil court against two individuals who worked in leading positions in the mobile knowledge work unit that provides IT solutions for the healthcare sector due to breaches of the non-solicitation and non-compete clauses. In February 2018, the District Court decided the matter in favor of the defendants and Kauko appealed against

the judgment to the Court of Appeal. In 2018, Kauko dropped its claims against one of the defendants. The Court of Appeal issued its decision on February 8, 2019, and confirmed that the non-compete clause was valid as regards the defendant, and a contractual penalty, plus interest on arrears, was imposed on the defendant for the violation of the clause. In addition, the Court of Appeal confirmed that the clause for the non-use of trade and professional secrets and the non-solicitation clause were binding. The decision is not yet final, and it has no significant impact on Aspo Group's financial results.

BOARD AUTHORIZATIONS

Authorization of the Board of Directors to decide on the acquisition of treasury shares

The Annual Shareholders' Meeting on April 10, 2018 authorized the Board of Directors to decide on the acquisition of no more than 500,000 treasury shares using the unrestricted equity of the company, representing about 1.6% of all the shares in the company.

The authorization includes the right to accept treasury shares as a pledge. The authorization remains valid until the Annual Shareholders' Meeting in 2019, but no more than 18 months from the approval at the Shareholders' Meeting. The Board of Directors did not use the authorization during the financial year.

Authorization of the Board of Directors to decide on a share issue of treasury shares

The Annual Shareholders' Meeting on April 10, 2018 authorized the Board of Directors to decide on a share issue, through one or several instalments, to be executed by conveying treasury shares. An aggregate maximum amount of 900,000 shares may be conveyed based on the authorization. The authorization is valid until the Annual Shareholders' Meeting in 2019 but not more than 18 months from the approval at the Shareholders' Meeting. The Board of Directors did not use the authorization during the financial year.

Authorization of the Board of Directors to decide on a share issue of new shares

The Annual Shareholders' Meeting on April 10, 2018 authorized the Board of Directors to decide on a share issue of new shares against payment. The authorization includes the right of the Board of Directors to decide on all of the other terms and conditions of the conveyance and thus also includes the right to decide on a directed share issue, in deviation from the shareholders' pre-emptive right, if a compelling financial reason exists for the company to do so. The total number of new shares to be offered for subscription may not exceed 1,500,000. The authorization is valid until the Annual Shareholders' Meeting in 2019 but not more than 18 months from the approval at the Shareholders' Meeting. Aspo's Board of Directors used the authorization granted by the Annual Shareholders' Meeting of April 10, 2018, and, as part of the acquisition of AtoB@C, transferred 444,255 new shares in Aspo through a share issue directed to the seller. The subscription price of the new shares was EUR 9.96.

THE MANAGEMENT AND THE AUDITOR

Mammu Kaario, Mikael Laine, Gustav Nyberg, Salla Pöyry and Risto Salo were re-elected to the Board of Directors, and Tatu Vehmas was elected as a new member of the Board, at Aspo Plc's Annual Shareholders' Meeting on April 10, 2018. At the Board's organizing meeting held after the Annual Shareholders' Meeting, Gustav Nyberg was elected Chairman of the Board and Mammu Kaario Vice Chairman. At the meeting, the Board also decided to appoint Mammu Kaario as Chairman of the Audit Committee and Mikael Laine, Salla Pöyry and Tatu Vehmas as committee members. More information about the activities of the Board of Directors in 2018 and the Nomination Committee is presented in Aspo Plc's Corporate Governance Statement (pp. 22–32).

eMBA Aki Ojanen acted as the CEO of the company in 2018.

The authorized public accountant firm Ernst & Young Oy has been the company's auditor. Toni Halonen, APA, has acted as the auditor in charge.

EVENTS AFTER THE FINANCIAL YEAR

Patricia Nyberg (M.Sc. (Econ), MBA (IMD)), has been appointed member of the Board of Directors of Telko Ltd as of January 1, 2019. Anders Dahlblom, Managing Director of Paroc Group, has stated that he is unable to continue as a member of the Board of Directors after March 1, 2019.

Esa Rautalinko, Managing Director of Örum Group, gave up the position as member of the Board of Directors of Leipurin Plc, as of January 1, 2019.

OUTLOOK FOR 2019

Growth of the global economy is expected to slow down. The economies in Russia and in eastern markets will continue their moderate growth, while political risks and international sanctions imposed on Russia have maintained a high level of risks in the market area, meaning that future development is difficult to predict. Threats of increasing obstacles to international free trade have remained unchanged, and negative development may also be rapid, which may have an impact on the operating prerequisites of Aspo's principals, customer companies or Aspo's businesses. Exchange rates are expected to continue to fluctuate heavily. Economic growth in the EU and in Finland, in particular, remains at a high level, although the export volumes growth of the Finnish export industry has slowed down. Industrial production is expected to slow down in the main market areas of Aspo's businesses in Northern Europe. Economic conditions will remain favorable in Aspo's businesses, although there is always the risk of rapid economic changes.

Prices of the industrial raw materials and oil that are important to Aspo are expected to remain at their current low level. Dry bulk freight rates in sea transportation that are important to ESL Shipping are expected to remain at their current level.

GUIDANCE FOR 2019

Aspo's operating profit will be EUR 28–33 (20.6) million in 2019.

SHARES AND SHAREHOLDERS

SHARE CAPITAL

Aspo Plc's share capital on December 31, 2018 was EUR 17,691,729.57, and the total number of shares was 31,419,779, of which the company held 304,361 shares: that is, 1.0% of the share capital. During the financial year, the number of Aspo Plc's registered shares increased by 444,255 shares. In August 2018, Aspo's Board of Directors decided on a directed share issue relating to the implementation of the acquisition of AtoB@C.

SHARES

Aspo Plc has one share series. Each share entitles the shareholder to one vote at the shareholders' meeting. Aspo's share is quoted on Nasdaq Helsinki Ltd's Mid Cap segment under industrial products and services.

DIVIDEND

Aspo Plc's Annual Shareholders' Meeting held on April 10, 2018 decided that EUR 0.43 per share be paid in dividends as proposed by the Board of Directors.

The dividend was paid in two installments. The payment date for the first installment of EUR 0.21 per share was April 19, 2018. The payment date for the second installment of EUR 0.22 per share was November 5, 2018.

Aspo revised its dividend policy in November 2018. According to its new dividend policy, Aspo's goal is to annually increase the amount of dividends. Previously, Aspo's goal was to pay, on average, at least half the profit for the period in dividends.

SHARE TRADING AND SHARE PRICE DEVELOPMENT

During 2018, a total of 1,809,464 Aspo Plc shares was traded at EUR 17.2 million, meaning that 5.8% of all shares changed owners. During the financial year, the share reached a high of EUR 10.80 and a low of EUR 7.90. The average price was EUR 9.51 and the closing price at year-end was EUR 7.96.

At the end of the financial year, the market value of shares, less treasury shares, was EUR 247.7 million.

MAJOR SHAREHOLDERS ON DECEMBER 31, 2018

	Number of shares	% of shares and voting rights
Havsudden Oy Ab	3,142,941	10.00
Vehmas Tatu	2,306,676	7.34
Varma Mutual Pension Isurance Company	1,438,412	4.58
Vehmas Tapio	1,375,827	4.38
Ilmarinen Mutual Pension Insurance Co	1,000,676	3.18
Robinson Joanna	754,259	2.40
Nyberg Gustav	731,667	2.33
Investment fund Nordea Small Cap	721,040	2.29
Mandatum Life Unit-Linked	541,552	1.64
Procurator-Holding Oy	470,969	1.50
Ten major shareholders, total	**12,484,019**	**39.64**
Nominee registrations	810,676	2.78
Other shares	17,820,723	56.72
Total shares outstanding	**31,115,418**	**99.03**
Treasury shares	304,361	0.97
Shares total	**31,419,779**	**100.00**

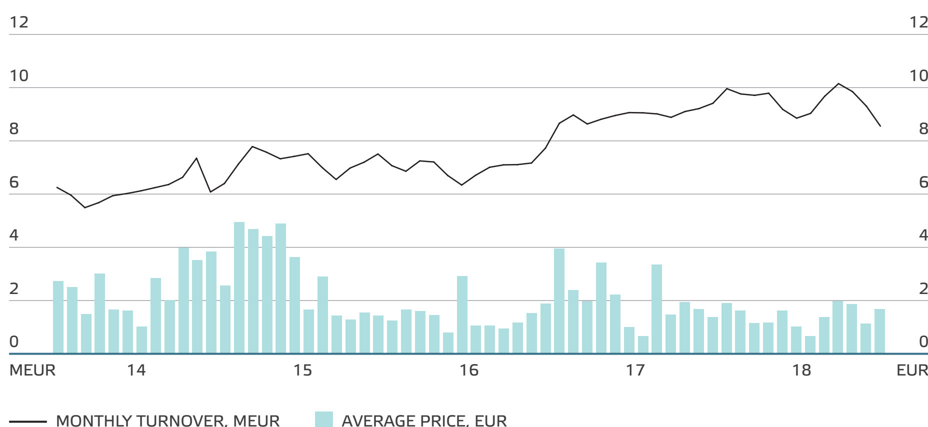
DISTRIBUTION OF SHARE OWNERSHIP ON DECEMBER 31, 2018 BY NUMBER OF SHARES

Number of shares	Number of owners	Share of owners %	Total shares	% of shares
1–100	1,787	18.81	101,067	0.32
101–500	3,598	37.87	1,000,229	3.18
501–1,000	1,602	16.86	1,227,835	3.91
1,001–5,000	1,998	21.03	4,315,784	13.74
5,001–10,000	297	3.13	2,114,228	6.73
10,001–50,000	169	1.78	3,487,821	11.10
50,001–100,000	18	0.19	1,308,183	4.16
100,001–500,000	24	0.25	5,874,118	18.70
500,001–	9	0.10	11,986,050	38.15
Total in joint accounts			4,464	0.01
Total	**9,502**	**100.00**	**31,419,779**	**100.00**

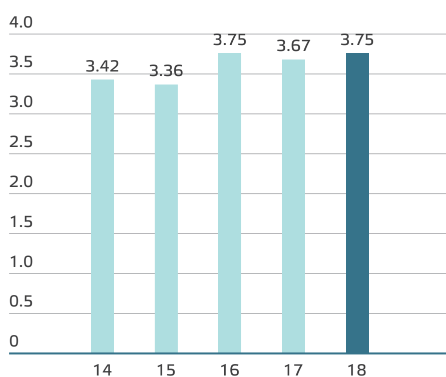
DISTRIBUTION OF SHARE OWNERSHIP ON DECEMBER 31, 2018 BY OWNER GROUPS

	Ownership %	Shares %
Households	94.6	59.3
Companies	3.9	17.1
Financial and insurance institutions	0.3	9.3
Non-profit organizations	0.8	4.6
Public organizations	0.1	8.0
Non-domestic	0.3	1.7
Total	**100.0**	**100.0**

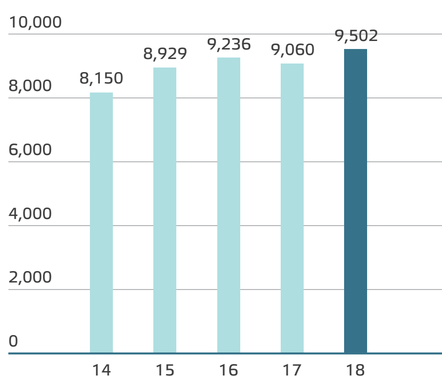
SHARE TRADING AND AVERAGE PRICES



EQUITY/SHARE
EUR



NUMBER OF SHAREHOLDERS



SHARE OWNERSHIP

Aspo's shares are included in the book-entry system maintained by Euroclear Finland Ltd.

At the end of 2018, Aspo had 9,502 shareholders. Of all shares, 97.4% were held directly, and 2.6% were held via nominee registrations. A total of 1.6% of the company's shares was held by foreign entities.

On December 31, 2018, the ten largest shareholders owned a total of 39.6% of the company's shares and voting rights.

A monthly updated list of Aspo's major shareholders is available at www.aspo.com.

read more
www.aspo.com

SHARE OWNERSHIP BY THE MEMBERS OF THE BOARD AND THE GROUP EXECUTIVE COMMITTEE

On December 31, 2018, the total number of shares owned by the members of Aspo Plc's Board of Directors with entities under their control was 6,838,985 shares, which represents 21.8% of the company's shares and voting rights.

On December 31, 2018, Aspo Plc's CEO and the other members of the Group Executive Committee held a total of 236,299 shares, which represents 0.8% of the company's shares and voting rights.

KEY FIGURES FOR THE GROUP

In addition to IFRS key figures, the Aspo reports other commonly used alternative key figures, which are mainly derived from the statement of comprehensive income and balance sheet. According to the management, these key figures clarify the picture drawn by the statement of comprehensive income and balance sheet of Aspo's financial performance and financial position.

	2018	2017	2016	2015	2014
Net sales, MEUR	**540.9**	502.4	457.4	445.8	482.9
Operating profit, MEUR	**20.6**	23.1	20.4	20.6	23.4
Share of net sales, %	**3.8**	4.6	4.5	4.6	4.8
Profit before taxes, MEUR	**16.4**	21.1	17.3	21.3	19.0
Share of net sales, %	**3.0**	4.2	3.8	4.8	3.9
Profit for the period, MEUR	**14.2**	19.4	15.9	19.8	18.4
Share of net sales, %	**2.6**	3.9	3.5	4.4	3.8
Return on investment (ROI), %	**7.2**	9.9	8.7	11.2	9.9
Return on equity (ROE), %	**12.4**	17.1	14.6	19.1	17.8
Equity ratio, %	**29.5**	35.6	37.4	33.8	35.2
Gearing, %	**154.4**	103.9	89.8	101.4	101.0
Gross investments in tangible and intangible assets, MEUR	**43.2**	18.0	6.9	15.1	18.7
Share of net sales, %	**8.0**	3.6	1.5	3.4	3.9
Personnel, Dec. 31	**958**	909	895	857	879
Average number of personnel	**919**	877	871	862	882
Share-specific indicators					
Earnings/share (EPS), EUR	**0.42**	0.56	0.49	0.61	0.57
Diluted earnings/share, EUR	**0.42**	0.56	0.49	0.61	0.57
Equity/share, EUR	**3.75**	3.67	3.75	3.36	3.42
Nominal dividend/share, EUR (2018 proposed by Board of Directors)	**0.44**	0.43	0.42	0.41	0.40
Dividend/earnings, %	**106.7**	76.3	85.4	67.1	70.3
Effective dividend yield, %	**5.5**	4.3	5.1	5.5	7.0
Price/earnings ratio (P/E)	**19.1**	17.7	16.6	12.3	10.0
Diluted price/earnings ratio (P/E)	**19.1**	17.7	16.6	12.3	10.0
Share price development					
average price, EUR	**9.51**	8.91	6.95	7.23	6.20
lowest price, EUR	**7.90**	8.20	6.00	5.92	5.21
highest price, EUR	**10.80**	10.00	8.21	8.16	7.52
Closing price on the last day of trading, EUR	**7.96**	10.00	8.18	7.50	5.69
Market value of shares, Dec. 31, MEUR	**250.1**	309.8	253.4	232.3	176.3
excluding treasury shares, MEUR *	**247.7**	306.1	250.1	228.7	173.0
Development of share turnover, 1,000	**1,809**	2,851	2,491	4,886	4,872
Development of share turnover, %	**5.8**	9.2	8.0	15.8	15.7
Total share trading, EUR 1,000	**17,202**	25,405	17,326	35,340	30,222
Registered share capital, number of shares, Dec 31, 1,000	**31,420**	30,976	30,976	30,976	30,976
outstanding, Dec. 31	**31,115**	30,605	30,579	30,496	30,402
outstanding, average	**30,809**	30,599	30,564	30,479	30,312
diluted number of shares, average	**30,809**	30,599	30,564	30,479	30,312

* Shares in Aspo Plc owned by Aspo Management Oy were included in treasury shares between 2010 and 2014. Aspo Management Oy was merged with Aspo Plc in 2015.

CALCULATION PRINCIPLES OF KEY FIGURES

Key figure		Definition
Return on investment, % (ROI)	=	(Profit before taxes + Interest and other financial expenses) x 100 / Balance sheet total – Interest-free liabilities (average)
Return on equity, % (ROE)	=	(Profit before taxes – Taxes) x 100 / Equity + Non-controlling interest (average)
Equity ratio, %	=	(Equity + Non-controlling interest) x 100 / Balance sheet total – Advances received
Gearing, %	=	(Interest-bearing liabilities – Cash and cash equivalents) x 100 / Equity + Non-controlling interest
Average number of personnel	=	Average number of personnel at the end of each month
Earnings per share (EPS), EUR*	=	Profit before taxes – Income taxes – Non-controlling interest / Adjusted average number of shares during the financial year
Equity per share, EUR	=	Equity / Adjusted number of shares on balance sheet date
Adjusted dividend per share, EUR	=	Dividend per share paid for the financial year / Share issue multiplier
Dividend/earnings, %*	=	Adjusted dividend per share x 100 / Earnings per share
Effective dividend yield, %	=	Adjusted dividend per share x 100 / Average share price on closing day weighted with trading volume
Share issue adjusted repayment of capital/share, EUR	=	Repayment of capital per share paid for the financial year / Share issue multiplier
Repayment of capital/earnings, %	=	Share issue adjusted repayment of capital per share x 100 / Earnings per share
Effective repayment of capital yield, %	=	Share issue adjusted repayment of capital per share x 100 / Average share price on closing day weighted with trading volume
Price/earnings ratio (P/E)*	=	Adjusted average share price on closing day / Earnings per share
Market value of shares, EUR	=	Number of shares outside the Group x Average share price on closing day weighted with trading volume
Free cash flow	=	Net cash from operating activities + Net cash from investing activities

The impact of treasury shares has been eliminated in the calculation of key figures.

* When calculating the earnings per share, interest of the hybrid bond, adjusted for tax effect, has been considered as a profit-reducing item.

DIVIDEND PROPOSAL OF THE BOARD OF DIRECTORS

On December 31, 2018, the parent company's distributable funds totaled EUR 42,191,625.81, with the profit for the financial year totaling EUR 16,639,823.45.

The company's registered number of shares on December 31, 2018 was 31,419,779, of which the company held directly 304,361.

The Board of Directors proposes to the Annual Shareholders' Meeting that the company's distributable funds be distributed as follows:

• EUR 0.44 per share be distributed in dividends in two installments for 31,115,418 shares*	EUR 13,690,783.92
• to be retained in shareholders' equity	EUR 28,500,841.89
	EUR 42,191,625.81

*number of shares giving rights to dividends on the signing date

The dividend will be paid in two installments. The first installment of EUR 0.22 per share will be paid to shareholders who are registered in the shareholders' register maintained by Euroclear Finland Ltd on the record date of April 11, 2019. The Board of Directors proposes that the dividend be paid on April 18, 2019. The second installment of EUR 0.22 per share will be paid in November 2019 to shareholders who are registered in the shareholders' register maintained by Euroclear Finland Ltd on the record date. At its meeting to be held on October 29, 2019, the Board of Directors will decide on the record and payment dates of the second installment, in accordance with the rules of the Finnish book-entry securities system. According to the current system, the dividend record date would be October 31, 2019 and the payment date would be November 7, 2019.

No dividend will be paid for Aspo Plc's treasury shares.

The company's financial position has not changed substantially since the end of the financial year. The company's liquidity is good and, in the Board of Directors' view, is not endangered by the proposed distribution of profit.

Before the Board of Directors implements the decision made at the Annual Shareholders' Meeting, it must assess, as required in the Finnish Limited Liability Companies Act, whether the company's liquidity and/or financial position has changed after the decision was made at the Annual Shareholders' Meeting so that the prerequisites for the distribution of dividends stipulated in the Limited Liability Companies Act are no longer fulfilled. The fulfillment of the prerequisites stipulated in the Limited Liability Companies Act is a requirement for the implementation of the decision made at the Annual Shareholders' Meeting.

Helsinki February 27, 2019

Gustav Nyberg Mammu Kaario

Mikael Laine Salla Pöyry

Risto Salo Tatu Vehmas

Aki Ojanen
CEO

Aspo Plc has issued a Corporate Governance Statement 2018. In addition, Aspo's Resposibility report of non-financial information required by the Finnish Accounting Act is published at the same time with this Management Report 2018. Both documents have been publlished on the company's website www.aspo.com.

FINANCIAL STATEMENTS 2018

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

1,000 EUR	Notes	Jan 1–Dec 31, 2018	Jan 1–Dec 31, 2017
Net sales	1	**540,935**	502,360
Other operating income	3	**4,110**	2,037
Share of profits accounted for using the equity method	16	**-131**	
Materials and services	6	**-382,182**	-370,554
Employee benefit expenses	4	**-43,247**	-41,554
Depreciation, amortization and impairment losses	5	**-16,484**	-11,869
Other operating expenses	7	**-82,446**	-57,284
Operating profit		**20,555**	23,136
Financial income	8	**933**	1,991
Financial expenses	8	**-5,053**	-4,073
Total financial income and expenses		**-4,120**	-2,082
Profit before taxes		**16,435**	21,054
Income taxes	9	**-2,251**	-1,646
Profit for the period		**14,184**	19,408
Other comprehensive income			
Items that may be reclassified to profit or loss in subsequent periods:			
Translation differences		**-1,939**	-3,070
Cash flow hedges		**2,572**	-3,697
Income tax on other comprehensive income	9	**-125**	192
Other comprehensive income for the period, net of taxes		**508**	-6,575
Total comprehensive income		**14,692**	12,833
Profit for the period attributable to			
Parent company shareholders		**14,184**	19,408
Total comprehensive income attributable to			
Parent company shareholders		**14,692**	12,833
Earnings per share attributable to parent company shareholders, EUR	10		
Earnings per share		**0.42**	0.56
Diluted earnings per share		**0.42**	0.56

The notes presented on pages 54–93 form an integral part of the consolidated financial statements.

CONSOLIDATED BALANCE SHEET

ASSETS

1,000 EUR	Notes	Dec 31, 2018	Dec 31, 2017
Non-current assets			
Intangible assets	11	**8,887**	7,994
Goodwill	12	**43,011**	42,013
Tangible assets	13	**175,053**	119,918
Investments accounted for using the equity method	16	**1,512**	
Other non-current financial assets	14	**170**	170
Receivables	15	**250**	525
Deferred tax assets	17	**2,391**	3,267
Total non-current assets		**231,274**	173,887
Current assets			
Inventories	18	**71,295**	60,921
Accounts receivable and other receivables	19	**77,496**	66,033
Current tax assets		**323**	331
Cash and cash equivalents	20	**19,333**	19,923
Total current assets		**168,447**	147,208
Total assets		**399,721**	321,095

EQUITY AND LIABILITIES

1,000 EUR	Notes	Dec 31, 2018	Dec 31, 2017
Equity attributable to parent company shareholders			
Share capital	21	**17,692**	17,692
Share premium	21	**4,351**	4,351
Invested unrestricted equity reserve	21	**16,482**	12,061
Fair value reserve	21	**-122**	-2,569
Other reserves	21	**25,000**	25,000
Translation differences		**-23,616**	-21,681
Retained earnings		**76,862**	77,413
Total equity		**116,649**	112,267
Non-current liabilities			
Deferred tax liabilities	17	**7,158**	3,300
Loans and overdraft facilities	22	**170,921**	109,517
Other liabilities	23	**266**	522
Total non-current liabilities		**178,345**	113,339
Current liabilities			
Provisions	25	**385**	1,216
Loans and overdraft facilities	22	**28,526**	27,102
Accounts payable and other liabilities	23	**75,338**	66,817
Current tax liabilities		**478**	354
Total current liabilities		**104,727**	95,489
Total liabilities		**283,072**	208,828
Total equity and liabilities		**399,721**	321,095

The notes presented on pages 54–93 form an integral part of the consolidated financial statements.

CONSOLIDATED CASH FLOW STATEMENT

1,000 EUR	Jan 1–Dec 31, 2018	Jan 1–Dec 31, 2017
Cash flows from operating activities		
Operating profit	**20,555**	23,136
Adjustments to operating profit:		
Depreciation, amortization and impairment losses	**16,484**	11,869
Gains and losses on sale of tangible assets	**-25**	285
Gains and losses on sale of business operations	**24**	-352
Share of profits accounted for using the equity method	**131**	
Employee benefits	**70**	718
Change in provisions	**-822**	699
Unrealized foreign exchange gains and losses on operating activities	**-14**	350
Change in working capital:		
Inventories	**-10,645**	-6,330
Current receivables	**-4,530**	-8,808
Non-interest-bearing current liabilities	**4,438**	2,495
Interest paid	**-3,655**	-5,062
Interest received	**525**	1,024
Income taxes paid	**-2,263**	-2,590
Net cash from operating activities	**20,273**	17,434
Cash flows from investing activities		
Investments in tangible and intangible assets	**-43,054**	-3,961
Advance payments on vessels		-13,692
Proceeds from sale of tangible assets	**392**	293
Proceeds from sale of other non-current financial assets		198
Acquisitions, net of cash	**-12,528**	
Dividends received	**1**	2
Proceeds from sale of business operations	**104**	600
Net cash from investing activities	**-55,085**	-16,560
Cash flows from financing activities		
Proceeds from current loans	**17,289**	3,641
Proceeds from non-current loans	**58,018**	15,600
Repayments of non-current loans	**-25,391**	-7,827
Hybrid instrument, interests	**-1,687**	-1,687
Dividends distributed	**-13,287**	-12,854
Net cash from financing activities	**34,942**	-3,127
Change in cash and cash equivalents	**130**	-2,253
Cash and cash equivalents Jan. 1	**19,923**	22,627
Translation differences	**-720**	-451
Cash and cash equivalents at year-end	**19,333**	19,923

The notes presented on pages 54–93 form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

1,000 EUR	Notes	Share capital	Share premium	Invested unrestricted equity reserve	Fair value reserve	Other reserves	Translation differences	Treasury shares	Retained earnings	Total
Equity January 1, 2018	21	**17,692**	**4,351**	**12,061**	**-2,569**	**25,000**	**-21,681**	**-2,169**	**79,582**	**112,267**
Impact of IFRS 2 amendment									566	566
Adjusted equity January 1, 2018		**17,692**	**4,351**	**12,061**	**-2,569**	**25,000**	**-21,681**	**-2,169**	**80,148**	**112,833**
Comprehensive income										
Profit for the period									14,184	14,184
Other comprehensive income, net of taxes										
Cash flow hedges					2,447					2,447
Translation differences				-4			-1,935			-1,939
Total comprehensive income				**-4**	**2,447**		**-1,935**		**14,184**	**14,692**
Transactions with owners										
Dividend payment									-13,287	-13,287
Share issue				4,425						4,425
Hybrid instrument, interests									-1,687	-1,687
Share-based incentive plan								431	-758	-327
Total transactions with owners				**4,425**				**431**	**-15,732**	**-10,876**
Equity December 31, 2018		**17,692**	**4,351**	**16,482**	**-122**	**25,000**	**-23,616**	**-1,738**	**78,600**	**116,649**
Equity January 1, 2017	21	**17,692**	**4,351**	**12,054**	**936**	**25,000**	**-18,604**	**-2,341**	**75,439**	**114,527**
Comprehensive income										
Profit for the period									19,408	19,408
Other comprehensive income, net of taxes										
Cash flow hedges					-3,505					-3,505
Translation differences				7			-3,077			-3,070
Total comprehensive income				**7**	**-3,505**		**-3,077**		**19,408**	**12,833**
Transactions with owners										
Dividend payment									-12,854	-12,854
Hybrid instrument, interests									-2,700	-2,700
Share-based incentive plan								172	289	461
Total transactions with owners								**172**	**-15,265**	**-15,093**
Equity December 31, 2017		**17,692**	**4,351**	**12,061**	**-2,569**	**25,000**	**-21,681**	**-2,169**	**79,582**	**112,267**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

BASIC INFORMATION

Aspo Plc is a Finnish public corporation domiciled in Helsinki. Aspo Plc's shares are listed on Nasdaq Helsinki Ltd.

Aspo is a conglomerate that focuses on sectors requiring extensive specialist knowledge. The Group's operations are organized into independent segments – ESL Shipping, Leipurin, Telko, and Kauko. Other operations include Aspo Group's administration, the financial and ICT service center, and a small number of other operations not covered by the business units.

The Group's parent company is Aspo Plc. The parent company is domiciled in Helsinki and its registered address is Mikonkatu 13 A, FI-00100 Helsinki, Finland.

A copy of the consolidated financial statements is available in Aspo Plc's head office at Mikonkatu 13 A, FI-00100 Helsinki, Finland.

Aspo Plc's Board of Directors has approved the consolidated financial statements for issue at its meeting on February 14, 2019. Pursuant to the Finnish Companies Act, shareholders may either adopt or reject the consolidated financial statements at the Annual Shareholders' Meeting held after the issue, or may also decide to modify them.

ACCOUNTING PRINCIPLES

Basis of accounting

Aspo Plc's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) approved in the EU, applying the standards and interpretations valid on December 31, 2018. The notes to the consolidated financial statements also comply with complementary Finnish Accounting Standards and Company legislation.

All figures in the consolidated financial statements are presented in EUR thousands and are based on the original cost of transactions, unless otherwise stated in the Accounting Principles.

As of January 1, 2018 Aspo Group has applied the following new and amended standards and interpretations:

IFRS 15 Revenue from Contracts with Customers, Effective date of IFRS 15, and Clarifications to IFRS 15. Standard was effective starting on January 1, 2018. The standard includes a five-step model to recognize revenue from customer contracts. IFRS 15 offers a comprehensive framework to determine whether revenue can be recognized, how much can be recognized and when. According to IFRS 15, an entity must recognize revenue in an amount that reflects the consideration to which the entity expects to be entitled in exchange for the goods or services in question. IFRS 15 superseded all the previously valid guidelines on revenue recognition principles, e.g. IAS 18 Revenue, IAS 11 Construction contracts, and the related IFRIC interpretations.

According to the new IFRS 15 standard, an entity must recognize revenue once it has satisfied its performance obligation by transferring the promised goods or services to the customer. The Group's sales agreements mainly concern the sale of products to customers, and the Group has identified one performance obligation in the agreements. The transaction price is mainly fixed, while in some cases the consideration may be variable. Revenue is recognized once the products have been delivered to the customer at a specific point in time. More information about the revenue recognition principles is available under Recognition of revenue from contracts with customers.

Aspo adopted the new standard by using the fully retrospective method and practical expedients allowed by the standard.

The adoption of the standard did not have significant impact on revenue recognition compared to the Group's earlier revenue recognition principles. Since the effect of applying the standard's revenue recognition principles was minor, the 2017 comparative information has not been adjusted.

IFRS 9 standard, Financial Instruments and Amendments to IFRS 9, were adopted starting on January 1, 2018. The new standard replaced the earlier IAS 39 standard Financial instruments: Recognition and Measurement. IFRS 9 changed the classification and measurement of financial assets, and introduced a new model of expected credit losses for evaluating financial assets. The classification and measurement of financial liabilities is largely in line with earlier IAS 39 requirements. The new standard still includes three types of hedge accounting. However, the standard allows for more risk positions than before to be included in the hedge accounting, and the hedge accounting principles are harmonized with risk management.

IFRS 9 changed the classification and measurement of certain Aspo's financial assets. More information about these is available under Financial assets and liabilities. When measuring accounts receivable, Aspo applies the simplified segment-specific model to the determination of expected credit losses as allowed by the standard. The impact of the changes resulting from the standard on the opening balance sheet was immaterial compared to the previous provision practice and, therefore, the figures on the opening balance sheet have not been adjusted. Regarding hedge accounting, the Group will continue its previously determined hedging principles.

Amendments to IFRS 2 – Classification and Measurement of Share-based Payment Transactions. The amendment applied from January 1, 2018 onwards to share-based incentive plans that include net payment features for meeting payroll tax and other tax obligations. According to the amendments made to IFRS 2, these share-based incentive plans will no longer be divided into two items, one settled in cash and the other settled by using equity. Instead, they are classified as a single equity-settled item. Aspo has adopted the amendment, and the opening balance of January 1, 2018 has been adjusted for the impact of changes in accounting principles. Due to the change, the Group has re-classified the part of share-based incentive plans to be settled in cash, totaling EUR 0.6 million, from interest-free liabilities to a part of the equity-settled item.

IFRIC 22 Foreign Currency Transactions and Advance Consideration. The interpretation specified that the date of conversion of the advance on the asset item, expense or income related to the foreign currency is the date on which the entity originally records an advance payment or deferred income on the advance transaction. If the transaction is comprised of several advance transactions, the settlement date is determined separately for each individual transaction. The interpretation is consistent with the Group's previous accounting principles.

Principles of consolidation

The consolidated financial statements include the parent company Aspo Plc and all

its subsidiaries. The term "subsidiary" refers to a company in which the Group exercises control. The Group's associated companies include companies in which the Group owns 20%–50% of the voting rights and at least a 20% holding, or in which the Group otherwise holds significant influence. Associated companies are consolidated using the equity method. If the Group's share of losses in an associated company exceeds the carrying amount, losses in excess of the carrying amount will not be consolidated unless the Group undertakes to fulfill the obligations of the associated company. Unrealized profits between the Group and associated companies are eliminated in accordance with the Group's ownership. In 2018 three associated companies were acquired to the Group.

Subsidiaries acquired during the financial year have been consolidated from the time Aspo gained control over them. Divested operations are included up to the time Aspo loses control. Acquired subsidiaries are consolidated using the acquisition method. Consideration and the acquired company's assets and liabilities are measured at fair value at the time of acquisition. Acquisition-related costs are entered as expenses. Any contingent consideration is recognized at fair value upon acquisition and is classified either as a liability or equity. The contingent consideration classified as a liability is measured at fair value at the reporting date, and the resulting gain or loss is entered in profit or loss. The contingent consideration classified as equity is not remeasured. The cost of goodwill is the amount by which the subsidiary acquisition cost exceeds the net fair value of the acquired identifiable assets, liabilities and contingent liabilities.

Intra-Group transactions, receivables and liabilities and intra-Group profit distribution have been eliminated when preparing the consolidated financial statements.

Distribution of the financial year's profit between the parent company's shareholders and non-controlling shareholders is presented in the face of the statement of comprehensive income. The potential interest attributable to the non-controlling shareholders is presented as a separate item under the consolidated equity. The Group had no non-controlling shareholders in 2017 and 2018.

Items denominated in foreign currencies

Transactions denominated in foreign currencies are recorded at the exchange rates at the transaction dates. Receivables and liabilities denominated in foreign currencies and outstanding at the end of the financial year are translated using the exchange rates at the reporting date. The gains and losses arisen from foreign currency denominated transactions and the translation of monetary items are recognized in profit or loss.

Foreign exchange gains and losses related to business operations are included in the corresponding items above the operating profit. Foreign exchange gains and losses arisen from loans denominated in foreign currencies are included in financial income and expenses.

Aspo has classified the internal non-current loans within Telko segment to Telko's Belarusian, Ukrainian and Kazakhstani subsidiaries as net investments in foreign operations under IAS 21 standard. Any unrealized foreign exchange gains and losses related to these net investments will be recognized in other comprehensive income.

Subsidiaries abroad

Results and financial position of the Group's units are measured in the primary currency of the unit's economic environment ("functional currency"). The consolidated financial statements are presented in euro, the parent company's functional and presentation currency. In the consolidated financial statements, the income statements of subsidiaries abroad are translated into euro using the average rate of the financial year. Balance sheet items are translated into euro using the exchange rates at the reporting date. Translation differences are presented as a separate item under equity. When an interest in a subsidiary is divested in its entirety or partially such that control is lost, the accumulated translation differences are reclassified to the statement of comprehensive income as part of the sales gain or loss.

Segment reporting

Aspo's operating segments are ESL Shipping, Leipurin, Telko and Kauko. The operating segments are reported in a manner that is uniform with internal reporting to the chief operating decision maker of the company. The Board of Directors has been identified as the chief operating decision maker. It is responsible for the allocation of resources to the operating segments and the assessment of their results. Inter-segment transactions are carried out at market prices.

Tangible assets

Tangible assets are recognized at cost net of cumulative depreciation less possible impairment losses. For new constructions of vessels, financial expenses arising during construction are capitalized as part of the cost and depreciated over the useful life of the asset item.

Depreciation is calculated on a straight-line basis over the estimated useful life as follows:

- Buildings and structures 15–40 years
- Vessels 17–30 years
- Pushers 18 years
- Dockings 2–3 years
- Machinery and equipment 3–10 years
- Piping 5–20 years
- Refurbishment costs from premises 5–10 years
- Other tangible assets 3–40 years

Land is not depreciated.

A previously recognized impairment loss on tangible assets is reversed if the estimates used in the determination of the recoverable amount change. Carrying amount increased due to the reversal of an impairment loss may not exceed the carrying amount that would have been defined for the asset item if no impairment loss had been recognized in previous years. Gains and losses arising from the removal from use and disposal of tangible assets are included in other operating income and expenses.

Goodwill and other intangible assets

Acquired subsidiaries are consolidated using the acquisition method. Goodwill arising on a business combination is recognized at the acquisition date at an amount representing the excess of the consideration transferred in the acquisition over the fair value of the identifiable assets acquired and liabilities assumed. Goodwill is not amortized, but is tested at least annually using the testing based on the value in use (see Goodwill impairment test, Note 12).

No amortization is recognized for intangible assets with indefinite useful lives, but they are tested annually for impairment. The useful lives of the Leipurin and Telko segments' brands are estimated to be indefinite. The strong image and history of the brands support the management's view that the brands will affect cash flow generation over an indefinable period.

Other intangible assets are measured at cost and amortized on a straight-line basis over their useful lives. The amortization periods for other intangible assets are:

- Software and associated licenses 3–5 years
- Principal relationships and technology acquired through business combinations 10 years
- Customer relationships acquired through business combinations 15 years

The Group assesses the carrying amounts of tangible and intangible assets annually, or more often if there is any indication of potential impairment. If such indication exists, the recoverable amount of the asset in question is determined. Impairment is assessed at the level of cash-generating units.

The recoverable amount is the fair value less costs to sell, or the value in use, if higher. The cash-flow-based value in use is determined by calculating the discounted present value of predicted cash flows. The discount rate of the calculations is based on the average cost of capital (WACC), which reflects the market's view of the time value of money and the risks involved in Aspo's business operations.

An impairment loss is recognized in the statement of comprehensive income if the carrying amount of the asset is higher than its recoverable amount. Where an impairment loss is recognized for an asset item subject to depreciation, the asset item's useful life is re-estimated. An impairment loss recognized for assets other than goodwill is reversed if the estimates used in the determination of the recoverable amount change to a substantial extent. Carrying amount increased due to the reversal of an impairment loss may not exceed the carrying amount that would have been determined for the asset item if no impairment loss had been recognized in previous years. An impairment loss recognized from goodwill is not reversed under any circumstances.

Research and development costs

As a rule, research and development costs are recognized as expenses at the time of their occurrence. Development costs arising from the design of new products are capitalized in the balance sheet as intangible assets from the date when the product is technically and commercially feasible and expected to generate financial benefits in the future. Capitalized development expenditure will be amortized over their useful life. Other development costs are recognized as expenses upon their realization. Any development costs recognized earlier as expenses will not be capitalized during later periods. In 2017, the development and certification costs of medical computers developed by Kauko were capitalized as product development expenditure. The Group has estimated that the useful life of these assets is three years. The amount of these costs is low at an Aspo Group level.

Aspo Group's R&D focuses, according to the nature of each segment, on developing operations, procedures and products as part of customer-specific operations, which means that development inputs are included in normal operational costs and are not itemized.

Inventories

Inventories are measured at cost or net realizable value, if lower. The cost is determined using the FIFO (first-in, first-out) principle. The cost of finished goods and work in progress includes raw material purchase costs, direct manufacturing wages, other direct manufacturing costs, and a share of manufacturing overheads (based on normal operating capacity), borrowing costs excluded. Net realizable value is the actual sales price in the ordinary course of business, less the product's costs of completion and sale.

Leasing agreements – Group as lessee

Leasing agreements where the Group assumes an essential part of the risks and benefits inherent in ownership are classified as financial leasing agreements. Assets acquired through financial leasing agreement are recognized in the balance sheet at an amount equaling the fair value of the leased asset at the start of the agreement or at the present value of minimum lease payments, if lower. Lease payments are divided into financial expenses and loan repayment. Corresponding leasing liabilities, less financial expenses, are included in interest-bearing liabilities. The interest of finance is recognized in profit or loss over the leasing period so that the interest rate for the remaining liability is the same for each financial year. Assets leased under financial leasing agreements are depreciated either over their useful lives or over the term of the leasing agreement, if shorter. Financial leasing agreements include leasing agreements of machinery and equipment and IT software.

Leasing agreements in which the material part of risks and benefits inherent in ownership remain with the lessor are classified as operating leases, the leasing payments of which are recognized in profit or loss as expenses over the leasing period.

Employee benefits

Statutory pension cover is provided for by taking out insurance with pension insurance companies. In Aspo's foreign units, the pension cover is arranged in accordance with local legislation and social security regulations. The Group only has defined contribution pension schemes, with any associated payments being entered in the statement of comprehensive income over the financial year to which each specific charge applies to.

Share-based payments

The Group has share-based incentive plans for the management, where part of the reward is settled in shares and the rest in cash. These plans include net payment features for meeting payroll tax and other tax obligations. Therefore, the amendment to IFRS 2 Classification and Measurement of Share-based Payment Transactions adopted in 2018 is applied to them.

Note 29 shows more information on the share-based arrangements. Assigned shares are measured at fair value at the time of assignment and recognized in the statement of comprehensive income as costs over the validity of the incentive plan. The effects of other than market-based con-

ditions (e.g. profitability and profit growth target) are not included in the fair value but taken into account in the amount of shares to which a right is assumed to be generated by the end of the vesting period. Having recognized a share-based payment expense, the other side of the entry is to equity for the proportion to be settled in shares. As of year 2018 also share-based payments to be paid in cash are classified as settled by equity and recognized against equity measured at fair value at the time of assignment. Previously items settled in cash were recognized in non-interest-bearing liabilities and were remeasured at each reporting date. Equity of the opening balance January 1, 2018 was adjusted by the impact of the change in the accounting principle, EUR 0.6 million.

Share capital

Ordinary shares are presented as the share capital. Transaction costs directly resulting from the issuance of new shares are recognized, after adjusting their potential tax effects, as a reduction of achieved payments under equity.

When the company purchases treasury shares, the consideration paid for the shares and the acquisition related costs are recognized as a reduction in equity. When the shares are sold, the consideration, less direct transaction costs and the possible effect of income taxes, is recognized as an increase in equity.

Provisions

A provision is recognized in the balance sheet if the Group has, as a result of a past event, a present legal or constructive obligation that will probably have to be settled, and the amount of the obligation can be reliably estimated. Warranty provisions include the cost of product repair or replacement if the warranty period is still effective at the reporting date. Warranty and maintenance obligations usually extend over 1–2 years. Warranty provisions are determined on the basis of historical experience.

The amount recognized in provisions is the present value of the costs that are expected to occur when settling the obligation.

Income taxes

The Group's income taxes include taxes based on the Group companies' profits for the financial year, adjustment of taxes from previous financial years and changes in deferred taxes. Income taxes are recognized in accordance with the tax rate valid in each country. Deferred tax assets and liabilities are calculated from the temporary differences between accounting and taxation in accordance with the tax rate in force at the reporting date or at the estimated tax payment date. Elements resulting in temporary differences include provisions, depreciation differences and tax losses. Deferred tax assets are recognized from tax losses and other temporary differences to the extent that it is likely that they may be utilized in the future. The share of profits or losses of associated companies presented in the statement of comprehensive income is calculated from entity's profit or loss, and it includes the impact of taxes.

ESL Shipping Ltd was included in tonnage taxation retrospectively from January 1, 2011. In tonnage taxation, shipping operations shifted from taxation of business profit to tonnage-based taxation.

Recognition of revenue from contracts with customers

Aspo's operating segments are ESL Shipping, Leipurin, Telko and Kauko. Aspo's revenue from contracts with customers mainly consists of the following income flows:

- Sales of raw materials in the plastics and chemical industries
- Sales of raw materials and machines in the bakery and other food industries
- Sales of ship transportation services mainly in the energy and metal industries
- Sales of tools and applications for mobile knowledge work and sales of equipment and applications that increase energy efficiency

The majority of Aspo's net sales comes from the sale of goods recognized upon delivery at a point in time once significant risks and benefits associated with ownership have been passed on to the buyer in accordance with the delivery clauses. Apart from ESL Shipping, only a small part of the net sales of the operating segments comprises services sold to customers, income from which is recognized at a point in time once the service has been rendered, or over time if the customer simultaneously receives benefits when the service is being rendered. The majority of other services offered by the segments are regarded as part of customer service because they are related, for example, to the development and design of product concepts and customized solutions. ESL Shipping's income is recognized once its services have been rendered. The revenue recognition date is based on transportation agreements or other agreements. At the end of each reporting period, revenue from ESL Shipping's undelivered or otherwise incomplete services is recognized on the basis of the number of days completed by the reporting date as a percentage of the estimated total duration of the service.

Revenue and expenses from construction contracts produced in accordance with individual orders are recognized as on the basis of the completion method when the outcome of the project can be assessed reliably. The completion stage is determined as the proportion of realized planning, production and installation hours accumulated by the time of review from the project's total estimated planning, production and installation hours. Costs associated with a project and not recognized as revenue yet, are included in the balance sheet inventories as incomplete construction contracts. When it is likely that a project generates losses, the losses will be recognized as expenses immediately. Aspo Group's construction contracts are related to Leipurin's own machine production, which comprises only a small part of the Group's net sales.

According to the IFRS 15 standard, an entity must recognize revenue once it has satisfied its performance obligation by transferring the promised goods or services to the customer. The Group's sales agreements mainly concern the sale of products to customers, and they include one performance obligation. The transaction price is mainly fixed. Income is recognized once products have been delivered to the customer at a specific point in time.

Transaction prices do not include any significant financial component. Primarily, accounts receivable fall due within 0–60 days after the invoicing date. Advance payments received from customers are also

used, typically in projects with a long production period, where installments are tied to the progress of the project.

Some contracts with customers include discounts that are tied, for example, to product volumes purchased annually by the customer in question. With regard to these, the likely amount of a realized discount is estimated on the basis of historical information, and these estimates are used to adjust revenue to be recognized. These accruals are recorded on a monthly basis, and the estimates are updated when more information about the situation is obtained. The amount of these discounts is not significant within Aspo Group. The adoption of IFRS 15 did not change the previously applied practice.

Products sold by Aspo involve warranty obligations, due to the replacement or repair of any defective products during the warranty period. These warranty obligations do not differ from normal statutory obligations or any obligations followed in accordance with sector-specific market practices. These obligations are assessed regularly as the likely amount based on historical experience and recognized in operational expenses.

Aspo had no significant incremental costs included in obtaining contracts with customers that should be capitalized in the balance sheet. The nature of any incremental costs is that their amortisation period would be less than one year.

Aspo specifies revenue from contracts with customers according to market areas, product groups and the timing of revenue recognition.

Subsidies

Government subsidies granted to compensate for expenses incurred are recognized in the statement of comprehensive income in the periods in which the expenses related to the object of the subsidy are expensed. Subsidies received are presented as net deductions from generated expenses. Subsidies related to the acquisition of tangible assets have been recognized as adjustments to their cost. Subsidies are entered as income during the period of use of the asset item in the form of smaller depreciation.

Financial assets

As a result of the adoption of IFRS 9, Aspo has redefined the classification of its financial assets in certain respects on the basis of its business model. Aspo classifies financial assets recognized at fair value through other comprehensive income, at fair value through profit or loss, and at amortized cost. Previously, the classification was made in loans and other receivables, available-for-sale financial assets, and financial assets recognized at fair value through profit or loss.

Financial assets recognized at fair value through other comprehensive income include any derivatives in hedge accounting. They are recognized at fair value on the settlement date and measured later at fair value on the closing date of each financial year.

Financial assets recognized at fair value through profit or loss include any derivatives outside hedge accounting, and other non-current financial assets. They are recognized at fair value on the settlement date and measured later at fair value on the closing date of each financial year. Other non-current financial assets include equity investments. They are measured at fair value using quoted market prices and rates or the imputed present value. Changes in fair value are recognized in financial items in the consolidated statement of comprehensive income. Purchases and sales of other non-current financial assets are recognized on the settlement date at fair value. If no reliable market value is available, other non-current financial assets are measured at cost less possible impairment losses.

Loan receivables are recognized on the settlement date and are initially measured at fair value. Following the initial recognition, loan receivables are measured at amortized cost using the effective interest rate method. Their cash flows consist of the payment of capital and interest, and it is planned to hold them until the date of maturity. Transaction costs are included in the original acquisition cost. Credit loss risks associated with loan receivables are assessed on a customer-specific basis and, if required, the expected credit loss is considered when measuring receivables over each 12-month period or when the credit loss risk increases throughout the contractual period. The amount of the Group's loan receivables is not significant.

Accounts receivable and other receivables are measured at amortized cost. When measuring accounts receivable, Aspo applies the simplified segment-specific model to determine expected credit losses, as permitted by IFRS 9. The Group estimates expected credit losses using an experience-based matrix which takes into account the age structure of receivables, each segment's credit loss history from previous years, the market area and the customer base.

Cash and cash equivalents are measured at amortized cost. They include cash funds, bank deposits and other highly liquid investments of no more than three months. Overdraft facilities used are presented under current or non-current liabilities.

Financial assets are derecognized when the Group has lost the contractual right to cash flows, or when it has materially moved risks and revenue outside the Group.

Financial liabilities

The Group's financial liabilities recognized at fair value through other comprehensive income include derivatives in hedge accounting. They are recognized on the settlement date and measured at fair value at the end of the reporting period.

Group's financial liabilities recognized at fair value through profit or loss include derivatives, to which hedge accounting is not applied. They are recognized on the settlement date and measured at fair value at the end of the reporting period.

Financial liabilities measured at amortized cost are recognized on the settlement date and measured at amortized cost, less transaction costs. Interest expenses are recognized in the statement of comprehensive income over the contractual term of the loan using the effective interest method. Financial liabilities are classified as current when they fall payable within twelve months of the end of the reporting period.

The adoption of IFRS 9 did not change the classification of financial liabilities.

Derivatives

Derivatives are initially recognized at fair value on the day the Group becomes a contractual counterparty and are subsequently measured at fair value.

The Group has applied hedge accounting to the hedging of predicted foreign currency denominated cash flows arising from the acquisition of tangible assets. The change in the fair value of the effective portion of hedging has been recognized in other comprehensive income and has been presented in the hedging reserve that is included in the fair value reserve under equity. Profits and losses recognized under equity has been reclassified to the cost of the asset in question during the financial period when the hedged item has been capitalized.

Hedge accounting is also applied to interest rate swaps to hedge the future interest rate cash flows as fixed. The change in the fair value of the effective portion of hedging has been recognized in other comprehensive income and presented in the hedging reserve included in the fair value reserve under equity. Interest rates of the interest rate swap realized during the financial year are recognized in financial items. Hedge accounting is not applied to other derivatives.

When applying hedge accounting, the relation between the hedging instruments and hedged items is documented at the start of hedging, as well as the risk management targets and strategies used as guidelines when launching different hedging actions. At the start of hedging and continuously after this action, the Group prepares an estimate whether the derivatives used in hedging effectively abolish the changes in fair values or cash flows of the hedged objects. The gain or loss relating to an inefficient portion is immediately recognized in the statement of comprehensive income as financial items. When the hedging instrument expires or is sold or when hedging does not meet the criteria of hedge accounting, the accumulated gains and losses retained in equity at that time remain in equity and are reclassified to the statement of comprehensive income only after the forecast transaction affects profit or loss. If the forecast transaction is no longer expected to occur, the accumulated gain or loss retained under equity is immediately reclassified to the statement of comprehensive income as financial items.

Changes in the fair value of derivatives, to which the hedge accounting is not applied, associated with financial items are recognized in financial income and expenses. Changes in the fair value of other derivatives are recognized in other operating income and expenses.

Fair value of derivatives is determined on the basis of quoted market prices and rates, the discounting of cash flows and option valuation models. The fair value of currency forwards is calculated by discounting the predicted cash flows from the agreements in accordance with interest rates of the currencies sold, translating the discounted cash flows at the exchange rates at the reporting date, and calculating the difference between the discounted values. Fair values of currency options are determined using commonly adopted option valuation models. The fair value of interest rate swaps is calculated by discounting the predicted cash flows from the agreements by using the market prices valid upon valuation.

Fair value hierarchy

Preparing the consolidated financial statements requires the measurement of fair values, for both financial and non-financial assets and liabilities. Group classifies the fair value measurement hierarchy as follows:

Level 1: The fair values of financial instruments are based on quoted prices on active markets. A market may be considered active when quoted prices are available on a regular basis and the prices represent the instrument's actual value in liquid trading.

Level 2: The financial instruments are not traded on active and liquid markets. The value of the financial instrument can be determined on verifiable market information and possibly partially on the basis of derived determination of value. If the factors influencing the instrument's fair value are nevertheless available and verifiable, the instrument belongs to level 2.

Level 3: The valuation of the financial instrument is not based on verifiable market information. Nor are other factors that affect the instrument's fair value available or verifiable.

Management judgment and use of estimates

When preparing the consolidated financial statements in accordance with IFRS, the Group management must use judgments including the recognition of transactions, selection and application of relevant IFRS standard or accounting principle, determination of the appropriate financial statement presentation, and estimates and assumptions the recognition of items is based on. This judgment affects the amounts and presentation of assets and liabilities in the balance sheet at the time of preparation, the reporting of contingent assets and liabilities, and the amounts and presentation of income and expenses during the financial year.

Estimates are used, for instance, to determine the carrying amounts of goodwill and brands and their expected yields, the useful lives of tangible and intangible assets, as well as the recoverable amounts of inventories and assets and liabilities. The estimates are based on the information compiled from the business units related to the respective markets and development of the businesses and their impact on the Group's net sales and cost level; the experience of the management; and other justifiable assumptions that constitute the best current assessments of the management. Due to changes in the factors that form the basis for estimates, it is possible that final figures may, sometimes significantly, deviate from the assessments used in the consolidated financial statements.

According to the Group management, goodwill and brand impairment testing and recognition of deferred tax assets involve the most significant estimates and assumptions. Other judgment used includes the selection of accounting principles related to recognition of the income from construction contracts, interest rate swaps and leasing agreements. This selection didn't have a material impact on the Group's financial statements.

Goodwill and brand impairment testing

The Group tests the carrying amounts of goodwill and brands annually or more often if there is any indication of potential impairment. Goodwill is allocated to the Group's cash-generating units identified on the basis in which the management monitors goodwill in the internal management reporting. The unit's recoverable amount is calculated on the basis of value-in-use calculations. The cash-flow-based value in use is determined by calculating the discounted pres-

ent value of predicted cash flows. The cash flows include, among others projections of future sales, profitability and maintenance capital expenditures. The discount rate of the calculations is determined through the weighted average cost of capital (WACC) that depicts the overall costs of equity and liabilities, taking into account the particular risks related to asset items and location of operations. The weighted average cost of capital reflects the Group's average non-current financial structure. Different estimates and assumptions could significantly affect the amounts of goodwill and brands reported in the consolidated financial statements. An impairment loss is immediately recognized in profit or loss if the asset's carrying amount is higher than its recoverable amount. An impairment loss recognized for goodwill is not reversed under any circumstances. Goodwill, brands and their impairment testing are discussed in more detail in Note 12.

Deferred tax assets

At the end of each financial year, the Group estimates if it is sufficiently probable that deffered tax assets will be available in the future. The estimates are based on management projections on future results. The amount of deferred tax assets in the consolidated financial statements would be impacted if, for example, future taxable income deviated from the management projections or related tax legislation changed.

Adoption of new or amended IFRS standards and interpretations

The Group will adopt the following standards, amendments and interpretations in 2019:

IFRS 16 Leases standard will become effective as of 1 January 2019. Under IFRS 16, all leases will be recognized in the lessee's balance sheet as the classification between operating and finance leases according to IAS 17 will no longer be valid. In accordance with the new standard, all assets related to lease agreement (right-of-use assets) and future lease payment obligations (lease liabilities) are recognized in the balance sheet. The only exceptions are the short-term leases and leases for which the underlying asset is of low value, the accounting treatment of which is explained below. The accounting treatment for lessors remains largely in line with IAS 17.

Aspo Group acts mainly as a lessee. The Group has customary business-related leases, such as contracts related to office and warehouse premises, as well as transportation vehicles and cars. Part of the office technology is also leased. The Group's leases are classified as finance leases or operating leases in accordance with IAS 17 until 31 December 2018 as follows: Leases of property, plant and equipment that substantially transfer the risks and rewards of ownership to Aspo are classified as finance leases. Assets and liabilities related to these contracts are recognized in the consolidated balance sheet. Leases that do not meet the conditions described above are treated as operating leases, and lease payments made based on these contracts are recognized in equal installments in profit or loss over the lease term. The above classification of leases will be removed with the adoption of IFRS 16.

Aspo has implemented a new IT-system to produce accounting information required in IFRS 16 standard.

Transition

Aspo has chosen a simplified method of transition to IFRS 16. Aspo recognizes in the opening balance sheet of January 1, 2019 the right-of-use assets which consist of the lease liabilities and prepayments related to these leases at the time of transition.

The liabilities and assets of contracts previously classified as finance leases under IAS 17 will be included at the time of transition on January 1, 2019 in the lease liabilities and right-of-use-assets in accordance with IFRS 16. Financial leases that are subject to exemptions as short-term or low value right-of-use-assets are derecognized and the difference is recognized in equity. The difference recognized in equity is not material. Finance leases not covered by exemptions are accounted for in accordance with IFRS 16 as of the date of transition.

Aspo applies the following practical expedients in adoption of IFRS 16:

- Leases with lease term less than 12 months remaining at the date of transition on January 1, 2019 are accounted for as short-term leases and not recognized in the balance sheet. The election shall be made by class of underlying asset and is applied to all other classes except cars, which are recognized in the balance sheet even if their remaining lease term would be less than 12 months at the time of transition.
- The lease liability and the right-of-use-asset are not recognized in the balance sheet in respect of leases relating to low value assets. Aspo uses a threshold of EUR 5,000 for low value assets.
- The leasing expenses of the two above-mentioned practical expedients are recognized in other operating expenses as equal payments over the lease term.
- Lease agreements with reasonably similar characteristics are subject to one predetermined discount rate. The criteria used to determine the discount rate are the class of underlying asset, the geographic location, the currency, the maturity of the risk-free interest rate and the lessee's credit risk premium.
- In case of leases that the lease term includes extension options or termination options, current knowledge is used in determination of the lease term.
- The initial direct costs are not included into the right-of-use asset at the time of transition in January 1, 2019.

Management judgements

Aspo complies with IFRS 16 guidance for determining the lease term. In case of lease agreements where the lease term is defined valid until further notice, the expected lease term is based on management judgement. The financial impact of the sanctions included in the leases, such as those related to the early termination of the contract, has also been taken into account in determining the expected lease term.

For the contracts with lease term defined valid until further notice the most significant impact relates to vessels leased. If the vessel is leased for approximately a year, the lease term used to calculate the lease liability is 13 months (ongoing month + the next 12 months). As a significant part of the fleet is leased, it is likely that at the end

of the lease term the same or similar vessel will be leased again. In case this does not apply, the agreement will be treated as a fixed term lease contract. The procedure has been designed to give investors a better understanding of the obligations associated with the lease liability and the significance of the right-of-use asset in the balance sheet.

According to the standard guidance, the option to extend or terminate the lease is taken into account in determining the lease term. The period covered by an option to extend the lease is included into the lease term if it is reasonably certain that the option will be exercised and, and correspondingly, if it is reasonably certain that the option to terminate the lease is not exercised the remaining period is included in the lease term.

When the agreement includes a lease component and a non-lease component, Aspo separates the non-lease components; such as maintenance, services, or crew, based on either the stand-alone prices given in the lease agreement or by using estimates.

Impact of the adoption of IFRS 16

In 2017, Aspo launched a project to prepare for the adoption of the IFRS 16 standard and it has been a major project for Aspo in 2018. The project has included collection of lease contract information from Group companies, implementing new IT-system and training related to the standard. The project will continue in 2019 with regard to implementation of the processes defined in the project and documentation of complementary information.

The adoption of the standard will have a significant impact on the balance sheet of Aspo Group and key figures derived from it, as the Group's interest-bearing debt and non-current assets will increase significantly. At the time of transition, January 1, 2019, the amount of the right-of-use assets recognized in the Group's opening balance sheet is EUR 38.5 million, the amount of prepaid lease payments is EUR 0.9 million, and the amount of lease liabilities EUR 37.6 million. Right-of-use assets are presented in the balance sheet as one item and lease liabilities are classified as non-current and current liabilities.

The impact of the leases in force at the time of transition January 1, 2019 in the income statement for 2019 is presented below (in millions of euros):

Increase in depreciations	13.0
Decrease in other operating expenses (leasing expenses)	13.8
Increase in operating profit	0.8
Increase in financial expenses	0.7
Profit before taxes, change	0.1

An accurate calculation of the impact was made of the contracts valid at the time of transition, covering more than 95% of the lease liability at the beginning of the 2019 financial year. The rest 5% has been calculated using estimates.

IFRIC 23 Uncertainty over Income Tax Treatments (effective for financial periods starting on or after January 1, 2019). The interpretation clarifies the accounting treatment in a situation where the taxation related accounting treatment of the entity is not yet approved by the tax authority. The revision is not expected to have any major impact on the Group's financial statements.

Annual improvements made to IFRSs 2015–2017*. Through the Annual Improvements procedure, small and less urgent changes to the standards are collected into one set and are implemented once a year. The effects of these changes vary from one standard to another.

* Not yet endorsed for use by the EU.

1. Net Sales and Segment Information

Aspo's operating segments are ESL Shipping, Leipurin, Telko, and Kauko. From the beginning of 2019 Kauko will be reported as part of the Telko segment.

ESL Shipping handles sea transportation of energy sector and industrial raw materials, and offers related services.

Leipurin serves the bakery and other food industry as well as out of home market by providing raw materials, production machinery, production lines including design and maintenance as well as baking related expertise.

Telko acquires and supplies plastic raw materials and chemicals to industry. Its extensive customer service also covers technical support and the development of production processes.

Kauko is the expert in demanding working environment providing total solutions, services and equipment for mobile knowledge work as well as in energy efficiency equipment.

Other operations include Aspo Group's administration, the financial and ICT service center, and a small number of other operations not covered by business units.

The segment structure corresponds with the Group's organizational structure and internal reporting, where measurement principles of assets and liabilities are in accordance with IFRS. The assessment of each segment's profitability is based on the segment's operating profit and net sales to external customers. The Board of Directors is responsible for assessing the segments and making resourcing decisions.

The segment's assets and liabilities are items that the segment uses in its business operations or that can be reasonably allocated to the segment. Items not allocated to segments consist of items associated with income taxes and centralized financing in the statement of comprehensive income and balance sheet. Investments consist of increases in tangible assets and intangible assets that will be used in more than one financial year. Transactions between segments are based on fair market prices. There is no considerable inter-segment net sales.

NET SALES BY GEOGRAPHICAL AREA

1,000 EUR	2018	2017
ESL Shipping		
Finland	**48,285**	29,104
Scandinavia	**28,730**	15,818
Baltic countries	**6,267**	5,514
Russia, other CIS countries + Ukraine	**7,150**	6,204
Other countries	**29,643**	22,651
Total	**120,075**	79,291
Leipurin		
Finland	**45,485**	48,117
Scandinavia	**269**	847
Baltic countries	**33,491**	32,047
Russia, other CIS countries + Ukraine	**36,309**	35,039
Other countries	**5,475**	6,182
Total	**121,029**	122,232
Telko		
Finland	**50,647**	52,454
Scandinavia	**32,809**	33,912
Baltic countries	**20,523**	20,674
Russia, other CIS countries + Ukraine	**128,462**	123,609
Other countries	**33,754**	31,577
Total	**266,195**	262,226
Kauko		
Finland	**31,250**	31,102
Scandinavia	**252**	66
Baltic countries	**311**	512
Russia, other CIS countries + Ukraine		
Other countries	**1,823**	6,931
Total	**33,636**	38,611
Total		
Finland	**175,667**	160,777
Scandinavia	**62,060**	50,643
Baltic countries	**60,592**	58,747
Russia, other CIS countries + Ukraine	**171,921**	164,852
Other countries	**70,695**	67,341
Total	**540,935**	502,360

NET SALES

Aspo Group's net sales in 2018 increased by 8% from the previous year. Net sales increased particularly as a result of the acquisition of AtoB@C by ESL Shipping and the deployment of two new vessels. The impact of the acquisition on the increase in net sales was EUR 27.0 million.

Net sales grew in all market areas. The strongest growth was in Finland, 9%, and Scandinavia, 23%, accelerated by the increase in transportation resulting from the acquisition of AtoB@C. In 2018, Finland accounted for 33% (32) and the market area of Russia, other CIS countries and Ukraine for 32% (33) of net sales.

The majority of the Group's net sales, 76% in 2018, is recognized as income at a point in time in conjunction with the delivery of goods or services. Transactions recognized as income over time mainly include ESL Shipping's sea transportation and related services of EUR 120.0 (79.3) million and Leipurin's construction contracts in machinery operations of EUR 8.3 (7.6) million.

Of Leipurin's net sales, raw material operations accounted for 83% (84) and machinery operations for 17% (16). Of Telko's net sales, plastics operations accounted for 55% (57) and chemical operations for 45% (43). Of Kauko's net sales, mobile knowledge work accounted for 47% (46) and energy-efficiency equipment for 48% (38).

NET SALES BY TIMING OF RECOGNITION

1,000 EUR	2018	2017
ESL Shipping		
Over time	**120,075**	79,291
Total	**120,075**	79,291
Leipurin		
At a point in time	**112,748**	114,629
Over time	**8,281**	7,603
Total	**121,029**	122,232
Telko		
At a point in time	**265,463**	261,316
Over time	**732**	910
Total	**266,195**	262,226
Kauko		
At a point in time	**33,422**	38,411
Over time	**214**	200
Total	**33,636**	38,611
Total		
At a point in time	**411,633**	414,356
Over time	**129,302**	88,004
Total	**540,935**	502,360

NET SALES BY PRODUCT CATEGORY

1,000 EUR	2018	2017
ESL Shipping	**120,075**	79,291
Raw materials	**100,355**	103,223
Machinery	**20,674**	19,009
Leipurin	**121,029**	122,232
Plastics	**147,737**	150,690
Chemicals	**118,458**	111,536
Telko	**266,195**	262,226
Mobile knowledge work	**15,646**	17,630
Energy-efficiency equipment	**16,260**	14,485
Other	**1,730**	6,496
Kauko	**33,636**	38,611
Total	**540,935**	502,360

CONTRACT ASSETS AND CONTRACT LIABILITIES

Contract assets include the amount recognized as income from construction contracts produced in accordance with individual orders which are not yet delivered to customers. Revenue from construction contracts is recognized on the basis of the stage of completion, and the amounts show annual variation depending on project completion schedules. Some of the construction contracts outstanding on the closing date are expected to be delivered to customers during the first quarter of 2019 but majority will be delivered during the final quarter. The duration of projects is usually less than one year.

Contract liabilities comprise advance payments received from construction contracts and other advance payments received, the products or services related to which have not been delivered or rendered.

CONTRACT ASSETS

1,000 EUR	2018	2017	Jan 1, 2017
The cumulative revenue of non-delivered construction contracts	**430**	1,215	887
Total	**430**	1,215	887

CONTRACT LIABILITIES

1,000 EUR	2018	2017	Jan 1, 2017
Advances received, construction contracts		2,410	377
Advances received, others	**4,722**	3,479	3,267
Total	**4,722**	5,889	3,644

The Group monitors its net sales in accordance with the following geographical division: Finland, Scandinavia, the Baltic countries, Russia, other CIS countries and Ukraine, and other countries. Net sales of the geographical regions are presented as per customer location and their assets as per location

INFORMATION RELATED TO GEOGRAPHICAL REGIONS

	Net sales		Non-current assets*	
1,000 EUR	2018	2017	2018	2017
Finland	**175,667**	160,777	**175,455**	144,984
Scandinavia	**62,060**	50,643	**20,954**	4
Baltic countries	**60,592**	58,747	**388**	471
Russia, other CIS countries + Ukraine	**171,921**	164,852	**1,176**	964
Other countries	**70,695**	67,341	**30,909**	24,197
Total	**540,935**	502,360	**228,882**	170,620

* Non-current assets other than financial assets and assets related to taxes.

OPERATING SEGMENTS

2018

1,000 EUR	ESL Shipping	Leipurin	Telko	Kauko	Unallocated items	Group total
Sales to external customers	120,075	121,029	266,195	33,636		540,935
Inter-segment sales			30	92		
Net sales	120,075	121,029	266,225	33,728		540,935
Operating profit	15,114	3,267	12,087	-4,700	-5,213	20,555
Net financial expenses						-4,120
Profit before taxes						16,435
Income taxes						-2,251
Profit for the period						**14,184**
Depreciation on tangible assets	9,407	296	737	31	24	10,495
Amortization on intangible assets	120	443	372	186	68	1,189
Segment's assets	206,780	58,936	92,020	17,208	24,777	**399,721**
Segment's liabilities	17,293	14,179	35,656	6,100	209,844	**283,072**
Investments	41,848	509	714	26	92	**43,189**

2017

1,000 EUR	ESL Shipping	Leipurin	Telko	Kauko	Unallocated items	Group total
Sales to external customers	79,291	122,232	262,226	38,611		502,360
Inter-segment sales			6	13		
Net sales	79,291	122,232	262,232	38,624		502,360
Operating profit	13,499	3,133	10,817	-173	-4,140	23,136
Net financial expenses						-2,082
Profit before taxes						21,054
Income taxes						-1,646
Profit for the period						**19,408**
Depreciation on tangible assets	8,697	314	805	47	22	9,885
Amortization on intangible assets	63	787	668	402	64	1,984
Segment's assets	132,893	63,463	76,395	23,568	24,776	**321,095**
Segment's liabilities	10,953	17,877	29,698	6,560	143,740	**208,828**
Investments	16,811	477	539	123	42	**17,992**

2. Acquisitions and Divestments

ACQUISITIONS IN 2018 AND 2017

Acquisition of the shipping company AtoB@C

ESL Shipping acquired the operations of AtoB@C, a Swedish shipping company, by acquiring all shares in its key companies AtoB@ Shipping AB and AtoB@C Holding AB through a transaction completed on August 31, 2018. The consideration was EUR 25.5 million. Part of the consideration was paid by transfering 444,255 new shares in Aspo Plc to the seller at the rate prevailing on the acquisition date. The acquired companies own and charter dry bulk carriers. On the acquisition date, there were six own and 22 chartered vessels. The transaction included two holdings of 49% in German limited partnerships, both of which own one vessel as well as 100% holding in a Finnish subsidiary and 40% holding in a Swedish company.

Through the acquisition, ESL Shipping strengthened its position in the smaller vessel category. The shipping company's operations diversified significantly as it expanded its service range and customer base from the transportation of raw materials to industrial products. The cargo carried by AtoB@C includes forest industry raw materials and products, steel industry products, fertilizers, recycled materials, biofuels and minerals.

The fair values of the asset items acquired and liabilities assumed in the acquisition on the transaction date are presented in the following table. The fair values of receivables correspond the gross contractual amounts of receivables. Aspo Plc's shares were transferred as part of the consideration. The goodwill of EUR 5.5 million arising from the acquisition is based on a higher operational competitiveness and synergies related to sourcing and more comprehensive organization. The goodwill is not deductible in taxation.

The acquired companies have been consolidated in Aspo Group's figures starting from September 1, 2018. Net sales of the

ACQUISITION OF THE SHIPPING COMPANY ATOB@C

1,000 EUR	
Consideration	
Paid in cash	19,127
Unpaid consideration	2,000
Paid in shares of Aspo Plc	4,425
Total consideration	**25,552**

Recognized amounts of identifiable assets acquired and liabilities assumed	**Fair value**
Intangible assets (customer relationships)	1,874
Tangible assets	23,100
Investments accounted for using the equity method	1,643
Inventories	1,308
Accounts receivable and other receivables	7,890
Cash and cash equivalents	6,909
Total assets	**42,724**
Loans and overdraft facilities	12,826
Accounts payable and other liabilities	5,531
Deferred tax liabilities	4,345
Total liabilities	**22,702**
Net assets acquired	**20,022**
Goodwill	**5,530**
Total	**25,552**
Transaction costs related to the acquisition	879

Expenses have been recognized in other operating expenses in the ESL Shipping segment.

acquired companies in the Group's ownership amounted to EUR 27.0 million and profit for the period was EUR 0.1 million. If the acquired companies were consolidated in Aspo Group's figures starting from January 1, 2018, net sales in the consolidated statement of comprehensive income would have increased by EUR 49.6 million and the operating profit by approximately EUR 1 million.

Other acquisitions

On August 10, 2018 Telko completed the acquisition of the business of Square Oil, a Danish distribution company for lubricants. Square Oil is a specialist in BP Castrol's industrial lubricants, and it operates in Denmark and Norway. Square Oil's annual net sales are approximately EUR 3 million. The acquisition increased Telko's goodwill by EUR 0.3 million.

No new businesses were acquired in the financial year 2017.

DIVESTMENTS IN 2018 AND 2017

No businesses were divested during the financial year 2018.

In 2017, Leipurin divested its meat industry raw materials business to MP Maustepalvelut Oy. The divestment had an impact of approximately EUR 4 million annually on the net sales of Leipurin. The gain on the sale was 0.4 million. Goodwill allocated to the divested business amounted to EUR 0.6 million.

In addition, Kauko Ltd divested its shares in the joint venture Roll Systems Oy to the joint venturer. The operations of the joint venture were part of the Industrial operations divested in 2015. The divestment had a minor impact on the Group's result.

3. Other Operating Income

1,000 EUR	2018	2017
Gains on sale of tangible assets	**119**	185
Rents and related remunerations	**301**	817
Compensations for delays and discontinuations of agreements	**2,608**	
Gains on sale of business operations		352
Leasing agreement related compensation	**88**	232
Other income	**994**	451
Total	**4,110**	2,037

4. Employee Benefits and Personnel Information

At the end of the financial year, the number of employees of Aspo Group was 958 (909), while the average during the financial year was 919 (877). The average number of office staff was 627 (604) and that of non-office workers 292 (273).

EMPLOYEE BENEFIT EXPENSES

1,000 EUR	2018	2017
Wages and salaries	**35,946**	33,722
Pension expenses, defined contribution plans	**4,482**	5,244
Share-based payments	**742**	928
Other employee benefit expenses	**2,077**	1,660
Total*	**43,247**	41,554
*Expenses are decreased by the government subsidy for merchant vessels from the Ministry of Transport and Communications, according to which ESL Shipping receives withholding taxes and social security expenses related to marine personnel's pays as refunds	**4,792**	4,661

Information regarding the employee benefits of key management personnel is presented in the Related parties section.

PERSONNEL BY SEGMENT AT YEAR-END

	2018	2017
ESL Shipping	**276**	235
Leipurin	**323**	315
Telko	**301**	288
Kauko	**33**	46
Other operations	**25**	25
Total	**958**	909

PERSONNEL BY SEGMENT, ON AVERAGE DURING THE FINANCIAL YEAR

	2018	2017
ESL Shipping	**254**	230
Leipurin	**320**	305
Telko	**280**	269
Kauko	**41**	48
Other operations	**24**	25
Total	**919**	877

PERSONNEL BY GEOGRAPHICAL AREA AT YEAR-END

	2018	2017
Finland	**452**	436
Scandinavia	**40**	20
Baltic countries	**81**	75
Russia, other CIS countries + Ukraine	**340**	327
Other countries	**45**	51
Total	**958**	909

5. Depreciation, Amortization and Impairment Losses

1,000 EUR	2018	2017
Depreciation and amortization		
Intangible assets	**1,189**	1,984
Buildings	**330**	310
Vessels	**9,394**	8,685
Machinery and equipment	**739**	860
Other tangible assets	**32**	30
Total	**11,684**	11,869
Impairment losses		
Goodwill	**4,800**	
Total	**4,800**	
Total depreciation, amortization and impairment losses	**16,484**	11,869

6. Materials and Services

1,000 EUR	2018	2017
Purchases during the period		
ESL Shipping	**28,889**	13,197
Leipurin	**90,072**	94,836
Telko	**240,132**	225,998
Kauko	**26,927**	34,003
Total	**386,020**	368,034
Change in inventories	**-11,652**	-5,219
Outsourced services		
Leipurin	**3,933**	4,003
Telko	**3,389**	3,228
Kauko	**492**	508
Total	**7,814**	7,739
Total materials and services	**382,182**	370,554

7. Other Operating Expenses

1,000 EUR	2018	2017
Rents	**7,365**	7,742
ESL Shipping	**55,599**	30,158
Leipurin	**6,895**	6,814
Telko	**7,789**	8,109
Kauko	**1,884**	2,187
Other operations	**2,914**	2,274
Total	**82,446**	57,284

AUDITORS' FEES

1,000 EUR	2018	2017
Auditing	**303**	290
Tax advice	**64**	55
Other services	**124**	138
Total	**491**	483

8. Financial Income and Expenses

The items above operating profit include EUR -0.2 million (-0.9) in exchange rate differences in 2018.

1,000 EUR	2018	2017
Dividend income from other non-current financial assets	**1**	1
Interest income from loans and other receivables	**434**	1,137
Foreign exchange gains	**498**	657
Gains on sale of other non-current financial assets		196
Total financial income	**933**	1,991
Interest and other financial expenses	**-3,996**	-3,208
Foreign exchange losses	**-1,057**	-865
Total financial expenses	**-5,053**	-4,073
Total financial income and expenses	**-4,120**	-2,082

9. Income Taxes

TAXES IN THE STATEMENT OF COMPREHENSIVE INCOME

1,000 EUR	2018	2017
Taxes for the period	**-2,038**	-2,283
Change in deferred tax assets and liabilities	**-174**	636
Taxes from previous financial years	**-39**	1
Total	**-2,251**	-1,646

RECONCILIATION OF THE TAX EXPENSE IN THE STATEMENT OF COMPREHENSIVE INCOME AND TAXES CALCULATED USING THE GROUP´S PARENT COMPANY´S TAX RATE 20%

1,000 EUR	2018	2017
Profit before taxes	**16,435**	21,054
Taxes calculated using the parent company's tax rate	**-3,287**	-4,211
Impact of foreign subsidiaries' tax rates	**312**	255
Impact of tonnage taxation	**3,594**	3,128
Losses for which no deferred tax asset was recognized	**-996**	-892
Utilization of previously unrecognized tax losses	**36**	191
Allowance from deferred tax assets	**-490**	-354
Taxes from previous financial years	**-39**	1
Withholding taxes	**-128**	-272
Timing differences, tax-free and non-deductible items	**-1,253**	508
Taxes in the statement of comprehensive income	**-2,251**	-1,646
Effective tax rate	**14%**	8%

INCOME TAX ON OTHER COMPREHENSIVE INCOME

1,000 EUR	2018	2017
Cash flow hedges	**-125**	192

10. Earnings per Share

Earnings per share is calculated by dividing the profit or loss attributable to the parent company's shareholders by the weighted average number of outstanding shares during the financial year. When calculating the earnings per share, interest of the hybrid bond, adjusted for tax effect, has been considered as a profit-reducing item. When calculating the diluted earnings per share in previous years, the average number of shares was adjusted with the dilutive effect of the equity-based convertible capital loan and the shareholding plan for Aspo Management Oy. At the end of 2018 and 2017, there were no diluting components.

1,000 EUR	2018	2017
Undiluted		
Profit for the period attributable to parent company shareholders	**14,184**	19,408
Interest of the hybrid bond (adjusted by tax effect)	**-1,350**	-2,160
Average number of shares during period (1,000)	**30,809**	30,599
Earnings per share, EUR	**0.42**	0.56
Diluted		
Diluted earnings per share, EUR	**0.42**	0.56

11. Intangible Assets

Intangible rights mainly consist of corporate brands described in Note 12. Intangible assets also include software and associated licenses, as well as principal and customer relationships and new technology acquired in business combinations.

2018

1,000 EUR	Intangible rights	Other intangible assets	Advance payments of intangible assets	Total
Acquisition cost, Jan. 1	7,886	16,300	118	24,304
Translation differences	-4	72		68
Increases, business combinations		1,874		1,874
Increases	28	139	42	209
Decreases	-1	-856		-857
Transfers between classes			-118	-118
Acquisition cost, Dec. 31	**7,909**	**17,529**	**42**	**25,480**
Accumulated amortization, Jan. 1	-2,241	-14,069		-16,310
Translation differences	3	47		50
Accumulated amortization of decreases	1	855		856
Amortization for the period	-76	-1,113		-1,189
Accumulated amortization, Dec. 31	**-2,313**	**-14,280**		**-16,593**
Carrying amount, Dec. 31	**5,596**	**3,249**	**42**	**8,887**

2017

1,000 EUR	Intangible rights	Other intangible assets	Advance payments of intangible assets	Total
Acquisition cost, Jan. 1	9,343	17,291	6	26,640
Translation differences	2	45		47
Increases	59	374	118	551
Decreases	-1,518	-1,410	-6	-2,934
Acquisition cost, Dec. 31	**7,886**	**16,300**	**118**	**24,304**
Accumulated amortization, Jan. 1	-3,686	-13,518		-17,204
Translation differences	-3	-47		-50
Accumulated amortization of decreases	1,518	1,410		2,928
Amortization for the period	-70	-1,914		-1,984
Accumulated amortization, Dec. 31	**-2,241**	**-14,069**		**-16,310**
Carrying amount, Dec. 31	**5,645**	**2,231**	**118**	**7,994**

INTANGIBLE ASSETS LEASED UNDER FINANCIAL LEASES ARE INCLUDED IN INTANGIBLE ASSETS AS FOLLOWS

Other intangible assets

1,000 EUR	2018	2017
Acquisition cost, Jan. 1	**3,580**	4,614
Increases	**140**	307
Transfers between classes	**118**	
Decreases	**-855**	-1,341
Acquisition cost, Dec. 31	**2,983**	3,580
Accumulated amortization, Jan. 1	**-2,034**	-2,527
Accumulated amortization of decreases	**855**	1,341
Amortization for the period	**-673**	-848
Accumulated amortization, Dec. 31	**-1,852**	-2,034
Carrying amount, Dec. 31	**1,131**	1,546

12. Goodwill

Goodwill is allocated to the Group's cash-generating units by business unit, depending on the level of goodwill monitoring in internal reporting. Every unit represents each of Aspo's operating segments. Goodwill is allocated to the segments as follows: ESL Shipping EUR 6.3 million (0.8), Leipurin EUR 26.7 million (26.7), Telko EUR 5.3 million (5.0), and Kauko EUR 4.7 million (9.5). During the 2018 financial year, an impairment loss of EUR 4.8 million was recognized on Kauko's goodwill in accordance with the strategic decision made by Aspo's Board of Directors in December to restructure Kauko's energy operations either by divesting or discontinuing the operations.

The useful lives of brands included in Leipurin and Telko segments have been estimated to be indefinite. The strong image and history of these brands support the management's view that these brands will affect cash flow generation over an indefinable period. The brands have been tested for impairment. According to test results, there is no need for impairment.

IMPAIRMENT TESTING

Future cash flows in impairment calculations have been defined on the basis of value in use. Cash flow estimates are based on three-year financial plans approved by the Board of Directors. In testing, cash flow estimates are prepared for five years, after which the cash flow is assumed to grow steadily. The terminal value has been calculated by using a growth assumption of 1% (1). The recoverable amount indicated by tests clearly exceeds the book value of goodwill in all segments, apart from Kauko. The proportion of the terminal value ranged from 53% to 76% of the recoverable amount and was the highest in the Kauko segment regarding the remaining operations. The goodwill of ESL Shipping before the acquisition of AtoB@C and the goodwill of other operations are not significant compared to the recoverable amount. The goodwill generated in conjunction with the acquisition of AtoB@C in August 2018 was not yet tested in 2018. In addition to the impairment loss recognized on Kauko's goodwill, impairment tests showed no impairment in other segments.

Future cash flows used in Kauko's impairment calculation have been defined on the basis of the value in use. The discount rate (WACC) used in the calculations was 10.3% (9.1) after taxes. On the basis of testing results, an impairment loss of EUR 4.8 million was recognized on goodwill.

When estimating net sales, the assumption is that current operations can be maintained, and net sales will grow in a controlled manner at the rate estimated in financial plans. The sales margin is estimated to follow net sales growth. It is estimated that costs will increase slowly as a result of continuous cost management. Fixed costs are expected to grow as much as the rate of inflation at the most.

The discount rate is determined for each segment through the weighted average cost of capital (WACC) that depicts the overall costs of equity and liabilities, taking into account the particular risks related to the asset items and location of operations. The post-tax discount rate (WACC) used in the calculations was 10.3–13.4%.

GOODWILL

1,000 EUR	2018	2017
Acquisition cost, Jan. 1	**43,360**	43,990
Business combinations	**5,839**	
Decreases		-598
Translation differences	**-41**	-32
Acquisition cost, Dec. 31	**49,158**	43,360
Accumulated impairment losses, Jan. 1	**-1,347**	-1,347
Impairment loss for the financial year	**-4,800**	
Accumulated impairment losses, Dec. 31	**-6,147**	-1,347
Carrying amount, Dec. 31	**43,011**	42,013

ALLOCATION OF GOODWILL

1,000 EUR	2018	2017
ESL Shipping	**6,319**	790
Leipurin	**26,683**	26,683
Telko	**5,269**	5,000
Kauko	**4,704**	9,504
Other operations	**36**	36
Total	**43,011**	42,013

BRANDS

1,000 EUR	2018	2017
Leipurin	**3,148**	3,148
Telko	**2,155**	2,155
Total	**5,303**	5,303

FACTORS INFLUENCING IMPAIRMENT TESTING AND SENSITIVITY ANALYSIS
Slow economic growth, changes in exchange rates and heavy fluctuation in the operating environment make it more difficult to evaluate the assumptions used in impairment testing. There are no indications of impairment in the business operations' goodwill, apart from Kauko, but the results of impairment testing will depend on the realization of estimated future cash flows. The management believes the assumptions to be appropriate and that tested operations have a sustainable basis. A substantial negative change in future cash flows, a significant increase in interest rates or a high tying-up rate of capital may result in an impairment loss of goodwill. It is the management's view that the estimates of future cash flows and the tying-up rate of capital used in the testing are likely.

Kauko's goodwill was lowered to correspond to the future cash flows of remaining operations. Any significant unfavorable change in any factor would therefore increase impairment losses.

Each segment has undergone a sensitivity analysis in which the values used as basic assumptions in the testing were lowered one at a time other factors remaining the same. As a result of this, the value of segment´s future cash flows has decreased and the recoverable amount is lower. The changes and their effects were:

- WACC was raised by 20%, effect 17–21% (18–19).
- operating profit was cut down by 10%, effect 7–14% (9–12).

The sensitivity analysis shows that there is no need for impairment

13. Tangible Assets

2018

1,000 EUR	Land	Buildings	Machinery and equipment	Vessels	Other tangible assets	Work in progress and advance payments	Total
Acquisition cost, Jan. 1	54	6,335	7,109	187,461	728	24,264	225,951
Translation differences		-13	-225			-5	-243
Increases, business combinations				30,076			30,076
Increases		10	1,122	41,821	23	7	42,983
Decreases			-558	-635		-97	-1,290
Transfers between classes				24,161		-24,161	0
Acquisition cost, Dec. 31	**54**	**6,332**	**7,448**	**282,884**	**751**	**8**	**297,477**
Accumulated depreciation, Jan. 1		-3,125	-5,498	-97,091	-319		-106,033
Accumulated depreciation, business combinations				-6,976			-6,976
Translation differences		2	154				156
Accumulated depreciation of decreases			507	417			924
Depreciation for the period		-330	-739	-9,395	-31		-10,495
Accumulated depreciation, Dec. 31		**-3,453**	**-5,576**	**-113,045**	**-350**		**-122,424**
Carrying amount, Dec. 31	**54**	**2,879**	**1,872**	**169,839**	**401**	**8**	**175,053**

2017

1,000 EUR	Land	Buildings	Machinery and equipment	Vessels	Other tangible assets	Work in progress and advance payments	Total
Acquisition cost, Jan. 1	54	5,500	9,166	242,389	729	11,039	268,877
Translation differences		-5	-201			-20	-226
Increases		136	702	2,914		13,715	17,467
Decreases		-227	-1,628	-57,842		-470	-60,167
Transfers between classes		931	-930		-1		0
Acquisition cost, Dec. 31	**54**	**6,335**	**7,109**	**187,461**	**728**	**24,264**	**225,951**
Accumulated depreciation, Jan. 1		-2,756	-6,558	-145,954	-289		-155,557
Translation differences		-1	110				109
Accumulated depreciation of decreases		227	1,525	57,548			59,300
Accumulated depreciation of transfers		-285	285				0
Depreciation for the period		-310	-860	-8,685	-30		-9,885
Accumulated depreciation, Dec. 31		**-3,125**	**-5,498**	**-97,091**	**-319**		**-106,033**
Carrying amount, Dec. 31	**54**	**3,210**	**1,611**	**90,370**	**409**	**24,264**	**119,918**

In 2017 tangible assets included advance payments for ESL Shipping's upcoming LNG-fueled vessels. The EU supports energy-efficiency and environmental investments in ships. ESL Shipping receives subsidy of at most EUR 5.9 million in 2016–2019, of which EUR 2.1 million was paid in 2016. This reduces the acquisition cost of the vessels. To obtain the subsidy, it is required that the activities listed in the agreement are carried out and that the arising costs are documented in an approved manner.

TANGIBLE ASSETS LEASED UNDER FINANCIAL LEASES ARE INCLUDED IN TANGIBLE ASSETS AS FOLLOWS

Machinery and equipment

1,000 EUR	2018	2017
Acquisition cost, Jan. 1	**308**	441
Increases		52
Decreases	**-237**	-185
Acquisition cost, Dec. 31	**71**	308
Accumulated depreciation, Jan. 1	**-238**	-333
Accumulated depreciation of decreases	**237**	185
Depreciation for the period	**-27**	-90
Accumulated depreciation, Dec. 31	**-28**	-238
Carrying amount, Dec. 31	**43**	70

14. Other Long-term Financial Assets

Other long-term financial assets are unlisted shares. Because their fair value cannot be reliably determined, they have been recognized at their acquisition cost less possible impairment losses.

UNLISTED SHARES

1,000 EUR	2018	2017
Acquisition cost, Jan. 1	170	172
Decreases		-2
Acquisition cost, Dec. 31	**170**	**170**
Carrying amount, Dec. 31	**170**	**170**

15. Non-current Receivables

1,000 EUR	2018	2017
Derivative contracts		4
Loan receivables	**149**	171
Deferred receivables	**101**	350
Total	**250**	525

16. Investments Accounted for Using the Equity Method

In conjunction with the acquisition of AtoB@C, Aspo Group obtained three associated companies. Of these, German limited partnership companies Auriga KG and Norma KG are domiciled in Leer. Both of these companies own one dry bulk cargo vessel. Aspo Group holds 49% of these companies. Their income consists of profit from leased vessels, and their combined balance sheet total on the acquisition date was EUR 7.1 million. The fair value of these associated companies determined in conjunction with the acquisition was EUR 0.9 million higher than the carrying amount. The difference between the fair value and carrying amount is based on the value of the vessels owned by the companies, and it will be amortized during useful life.

The third associated company obtained in conjunction with the acquisition is Swedish Norra Skeppnings Gruppen AB, domiciled in Stockholm. It offers brokerage and logistics services for sea transportation and is engaged in raw material trading on biofuels. Aspo Group holds 40% of the company. The company's balance sheet total on the acquisition date was EUR 0.4 million.

INVESTMENTS IN ASSOCIATED COMPANIES

1,000 EUR	2018
Balance Jan. 1	
Investments in associated companies	1,643
Share of associated companies' profits for the the financial year	-131
Carrying amount Dec. 31	**1,512**

17. Deferred Taxes

Deferred tax liability on the transition to tonnage taxation is relieved through annual state subsidies during the validity of the Tonnage Tax Act if the preconditions for such relief are met. The amount of tax relief was EUR 0.6 million in 2018, and EUR 4.8 million in 2011–2017.

The balance sheet includes deferred tax assets of EUR 1.9 million (2.5) from Finnish companies with a negative result for the financial years 2012 or 2013. These deferred tax assets are recognized on the basis of the management's profit forecast indicating that the realization of the deferred tax assets in question is probable. No deferred tax assets were recognized on the taxable losses of EUR 26.7 million incurred by Finnish companies in other years. The utilization period of these taxable losses is 10 years.

The Group had EUR 2.5 million (2.5) in unused taxable losses in subsidiaries abroad, on which no deferred tax assets have been recognized because the Group is unlikely to accumulate taxable income against which the losses could be utilized before these losses expire. The loss expiry period varies from one country to another. Some losses expire in 2019, while some losses do not have any expiry period set out within the scope of the current legislation. A deferred tax liability of EUR 1.7 million (1.5) has not been recognized from the retained earnings of subsidiaries abroad because they are permanently invested in the countries in question.

DEFERRED TAX ASSETS

1,000 EUR	2018	2017
Derivatives	**26**	160
Employee benefits	**3**	30
Losses available for utilization against future taxable income	**2,111**	2,728
Other temporary differences	**251**	349
Total	**2,391**	3,267

DEFERRED TAX LIABILITIES

1,000 EUR	2018	2017
Depreciation in excess of plan	**3,026**	231
Deferred tax liability due to tonnage taxation	**1,235**	1,853
Tangible and intangible assets	**2,844**	1,185
Other temporary differences	**53**	31
Total	**7,158**	3,300

CHANGES IN DEFERRED TAX ASSETS

1,000 EUR	2018	2017
Deferred tax assets, Jan. 1	**3,267**	3,432
Items recognized in the statement of comprehensive income		
Unutilized tax losses	**-617**	-297
Employee benefits	**-27**	19
Other temporary differences	**-107**	-12
Items recognized in other comprehensive income	**-125**	125
Deferred tax assets, Dec. 31	**2,391**	3,267

CHANGES IN DEFERRED TAX LIABILITIES

1,000 EUR	2018	2017
Deferred tax liabilities, Jan. 1	**3,300**	4,243
Items recognized in the statement of comprehensive income		
Depreciation in excess of plan	**242**	-1
Deferred tax liability due to tonnage taxation	**-618**	-617
Tangible and intangible assets	**-133**	-211
Other temporary differences	**22**	-47
Business combinations	**4,345**	
Items recognized in other comprehensive income		-67
Deferred tax liabilities, Dec. 31	**7,158**	3,300

18. Inventories

An expense of EUR 0.4 million (0.3) was recognized during the financial year for a write-down of inventories to net realizable value.

1,000 EUR	2018	2017
Materials and supplies	**4,038**	1,615
Finished goods	**64,129**	56,304
Other inventories	**3,128**	3,002
Total	**71,295**	60,921

19. Accounts Receivable and Other Receivables

Accounts receivable do not involve significant credit loss risks. A total of EUR 0.5 million (0.9) was recognized as impairment loss from accounts receivable.

When measuring accounts receivable, Aspo applies the simplified segment-specific model to the determination of expected credit losses as allowed by the IFRS 9 standard. The Group evaluates expected credit losses using an experience-based matrix which takes into account the age structure of receivables, each segment's credit loss history from previous years, the market area and the customer base.

ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES

1,000 EUR	2018	2017
Accounts receivable	**64,797**	54,294
Accounts receivable on construction contracts, non-delivered	**430**	1,215
Refund from the Ministry of Transport and Communications	**2,535**	2,357
Advance payments	**2,013**	2,168
VAT receivable	**1,055**	640
Loan receivables	**50**	21
Other deferred receivables	**6,616**	5,338
Total	**77,496**	66,033

AGEING ANALYSIS OF ACCOUNTS RECEIVABLE

2018 1,000 EUR	Accounts receivable	Provision for credit losses	Carrying amount
Not matured	49,089	-37	**49,052**
Matured 1–30 days ago	11,591	-70	**11,521**
Matured 31–60 days ago	2,459	-98	**2,361**
Matured 61–90 days ago	650	-10	**640**
Matured more than 90 days ago	2,848	-1,625	**1,223**
Total	66,637	-1,840	**64,797**

2017 1,000 EUR	Accounts receivable	Provision for credit losses	Carrying amount
Not matured	41,837	-35	41,802
Matured 1–30 days ago	8,434	-35	8,399
Matured 31–60 days ago	1,815	-17	1,798
Matured 61–90 days ago	1,202	-10	1,192
Matured more than 90 days ago	2,695	-1,592	1,103
Total	55,983	-1,689	54,294

20. Cash and Cash Equivalents

1,000 EUR	2018	2017
Bank accounts and deposits	**19,333**	19,923

21. Equity

On December 31, 2018, Aspo Plc's number of shares was 31,419,779 and the share capital was EUR 17.7 million. During the financial year, the number of Aspo Plc's registered shares increased by 444,255 shares. In August 2018, Aspo's Board of Directors decided on directed share issue against payment relating to the implementation of the acquisition of AtoB@C.

On May 27, 2016, Aspo issued a EUR 25 million hybrid bond. The coupon rate of the bond is 6.75% per annum. The bond has no maturity but the company may exercise an early redemption option after four years from the issuing date. An interest payment obligation is set up if the Annual Shareholders' Meeting decides to distribute dividends. If no dividend is distributed, the company can decide upon the payment of interest separately. A hybrid bond is an instrument which is subordinated to the company's other debt obligations. In the consolidated financial statements, the loan has been classified as equity, and interest paid is presented in equity according to its nature. The hybrid bond does not confer to its holders the rights of a shareholder and does not dilute the holdings of the shareholders.

Equity consists of the share capital, share premium, fair value reserve, translation differences, invested unrestricted equity reserve, other reserves, and retained earnings. Share subscriptions based on the convertible capital loan that were issued during the validity of the old Companies Act (29.9.1978/734) were recognized in the share premium. The invested unrestricted equity reserve includes other equity-type investments and share subscription price to the extent that it is not recognized in the share capital in accordance with a separate resolution. The fair value reserve includes accumulated changes in the fair value of derivative instruments under hedge accounting. Other reserves include hybrid instruments.

DIVIDENDS

After the reporting date, the Board of Directors has proposed that a dividend of EUR 0.44 per share be distributed for 2018, and that the dividend be paid in two installments, EUR 0.22 per share in April and EUR 0.22 per share in November. A dividend of EUR 0.43 was distributed for 2017 in two intstallments: EUR 0.21 per share in April and EUR 0.22 per share in November.

EQUITY
2018

1,000 EUR	in 1,000s	Share capital	Share premium	Invested unrestricted equity reserve	Hybrid instrument	Treasury shares	Total
January 1, 2018	30,605	17,692	4,351	12,061	25,000	-2,169	56,935
Share-based incentive plan	66					431	431
Share issue	444			4,425			4,425
Translation differences				-4			-4
December 31, 2018	**31,115**	**17,692**	**4,351**	**16,482**	**25,000**	**-1,738**	**61,787**
Treasury shares held by the Group	304						
Total number of shares	**31,420**						

2017

1,000 EUR	in 1,000s	Share capital	Share premium	Invested unrestricted equity reserve	Hybrid instrument	Treasury shares	Total
January 1, 2017	30,579	17,692	4,351	12,054	25,000	-2,341	56,756
Share-based incentive plan	26					172	172
Translation differences				7			7
December 31, 2017	**30,605**	**17,692**	**4,351**	**12,061**	**25,000**	**-2,169**	**56,935**
Treasury shares held by the Group	370						
Total number of shares	**30,976**						

Shares have no nominal value.

FAIR VALUE RESERVE

1,000 EUR	2018	2017
Cash flow hedges	**-122**	-2,569

22. Loans

In 2015, Aspo Plc issued a EUR 11 million unsecured private placement bond. The bond pays fixed interest rate and matures on September 29, 2022.

NON-CURRENT LOANS AND OVERDRAFT FACILITIES

1,000 EUR	2018	2017
Loans	**152,826**	89,747
Pension loans	**4,286**	5,714
Bond	**10,945**	10,934
Financial leasing liabilities	**700**	977
Overdraft facilities in use	**2,164**	2,145
Total	**170,921**	109,517

CURRENT LOANS AND OVERDRAFT FACILITIES

1,000 EUR	2018	2017
Loans	**23,206**	23,309
Pension loans	**1,429**	1,429
Financial leasing liabilities	**503**	680
Overdraft facilities in use	**3,388**	1,684
Total	**28,526**	27,102

MATURING OF FINANCIAL LEASING LIABILITIES

1,000 EUR	2018	2017
Financial leasing liabilities – total amount of minimum lease payments		
Within one year	**522**	707
After one year and within five years	**715**	1,000
Total	**1,237**	1,707
Financial leasing liabilities – present value of minimum lease payments		
Within one year	**503**	680
After one year and within five years	**700**	977
Total	**1,203**	1,657
Future financial expenses	**34**	50

23. Accounts Payable and Other Liabilities

OTHER NON-CURRENT LIABILITIES

1,000 EUR	2018	2017
Derivative contracts	**66**	122
Other non-interest-bearing liabilities	**200**	400
Total	**266**	522

ACCOUNTS PAYABLE AND OTHER LIABILITIES

1,000 EUR	2018	2017
Accounts payable	**45,520**	37,161
Advances received, construction contracts		2,410
Advances received, others	**4,722**	3,479
Salaries and social security contributions	**7,419**	6,854
Employer contributions	**1,286**	1,238
Accrued interest	**1,566**	1,640
Derivative contracts	**128**	1,939
VAT liability	**4,096**	3,844
Share-based incentive plan		566
Other current liabilities	**200**	200
Other current deferred liabilities	**10,401**	7,486
Total	**75,338**	66,817

24. Pension Obligations

The Group has provided for statutory pension cover by taking out insurance with pension insurance companies. In foreign units, the pension cover is arranged in accordance with local legislation and social security regulations. The Group's pension schemes are treated as defined contribution plans in the consolidated financial statements.

PENSION EXPENSES IN THE STATEMENT OF COMPREHENSIVE INCOME

1,000 EUR	2018	2017
Defined contribution plans	**4,482**	5,244

25. Provisions

The recognized provisions are based on best estimates on the reporting date. Warranty provisions are mainly associated with the Group's product warranties, rental provisions to onerous sublease contracts of office premises, contract payments to compensations of old project deliveries, and pension provisions to direct pension liabilities granted by the Group. Tax provisions were based on any increased expenses arising from ongoing tax inquires.

1,000 EUR	Warranties and maintenance services	Rental agreements	Compensations for deliveries	Pension commitments	Tax charges	Total
December 31, 2017	405	296	489	5	21	1,216
Increase in provisions	40					40
Decrease in provisions	-65	-296	-489		-21	-871
December 31, 2018	**380**	**0**	**0**	**5**	**0**	**385**

26. Financial Risks and Financial Risk Management

26.1 FINANCIAL RISK MANAGEMENT PRINCIPLES AND ORGANIZATION

The function of Aspo Group's financial risk management is to protect the operating margin and cash flows, and effectively manage fund-raising and liquidity. The Group aims to develop the predictability of the results, future cash flows, and capital structure, and continuously adapt its operations to changes in the operating environment.

Financial risk management is based on the treasury policy approved by the Board of Directors, which defines the main principles for financial risk management in Aspo Group. The treasury policy defines general risk management objectives, the relationship between the Group's parent company and business units, the division of responsibility, and risk management-related reporting requirements.

The treasury policy also defines the operating principles related to the management of currency risks, interest rate risks, and liquidity and refinancing risks.

Together with the Group Treasurer, Aspo's CEO is responsible for the implementation of financial risk management in accordance with the treasury policy approved by the Board of Directors. The business units are responsible for recognizing their own financial risks and managing them together with the parent company in accordance with the Group's treasury policy and more detailed instructions provided by the parent company.

INTEREST-BEARING LIABILITIES BY CURRENCY

1,000 EUR	2018	2017
EUR	**193,561**	132,790
RUB	**2,497**	
USD		2,145
PLN	**3,389**	1,684
Total	**199,447**	136,619

ACCOUNTS RECEIVABLE BY CURRENCY

1,000 EUR	2018	2017
EUR	**45,508**	38,202
SEK	**1,164**	1,296
DKK	**1,361**	1,178
PLN	**911**	670
RUB	**4,549**	4,137
UAH	**5,611**	3,742
USD	**4,029**	4,218
Other	**1,664**	851
Total	**64,797**	54,294

ACCOUNTS PAYABLE AND ADVANCES RECEIVED BY CURRENCY

1,000 EUR	2018	2017
EUR	**38,874**	35,921
SEK	**1,148**	727
DKK	**284**	387
PLN	**305**	239
RUB	**1,386**	1,429
UAH	**589**	128
USD	**7,061**	3,784
Other	**595**	435
Total	**50,242**	43,050

26.2 MARKET RISKS

Currency risk

Aspo Group has companies in 18 countries, and the operations take place in 13 different currencies. The Group's currency risk consists of foreign currency-denominated internal and external receivables, liabilities, estimated currency flows, derivative contracts and translation risks related to results and capital. The target of Aspo Group is to decrease the uncertainty related to fluctuations in results, cash flows and balance sheet items.

At the business unit level, currency risk mainly occurs when a unit sells products and services with its domestic currency, but the costs are realized in a foreign currency.

In accordance with Aspo's strategy, an increasingly significant part of the net sales of Telko and Leipurin originates from Russia. In addition, a considerable part of Telko's net sales comes from Ukraine. Aspo's most extensive currency risks are related to the Russian ruble. If the ruble weakened against the euro, the Russian net sales and result denominated in euro of the Telko and Leipurin segments would decrease. In 2018, the Russian ruble weakened, compared to the previous year. Changes in the Russian ruble in relation to the euro slowed the increase in euro-denominated net sales in 2018.

The currency risks of ESL Shipping were mainly related to dollar-denominated investments. In 2018, the shipping company completed its investment program to build two new vessels. The total value of the investment was approximately EUR 60 million, and the related cash flows were divided between the years 2015–2018. Part of the cash flows related to the agreement were dollar-denominated, and they were hedged in their entirety by currency forward contracts. The currency forward contracts were subject to hedge accounting. All currency forward contracts related to the investment program ended as a result of the completion and receipt of the vessels.

At the reporting date, Aspo Group's currency position mainly consisted of internal and external interest-free and interest-bearing receivables and liabilities denominated in foreign currency.

Interest-bearing liabilities are mainly denominated in euro.

Most of Aspo Group's accounts receivable are denominated in euro. Ruble- and hryvnia-denominated receivables comprise the second largest item. Because a significant part of the operations of Telko and Leipurin takes place in Russia and Ukraine, ruble- and hryvnia-denominated accounts receivable make up a significant item.

Aspo Group has made investments in subsidiaries abroad. In addition, the equity of subsidiaries abroad increases through profitable business. The total equity of the Group's subsidiaries abroad at the reporting date was EUR 36.1 million (29.4). Ruble-denominated investments of EUR 14.8 million (16.2) in subsidiaries operating in Russia were the biggest investment in regard to the currency amount. Despite the significant share of equity being denominated in the Russian ruble, the Group deems that diversifying is at a sufficient level, and there is no need to hedge the translation position associated with the equities of its subsidiaries abroad. The table shows the Group's share in the subsidiaries' equity by currency.

In addition, non-current intra-Group loan receivables (included in the Telko segment) from Telko's Belarusian, Ukranian and Kazakhstani subsidiaries have been classified as non-current net investments in foreign operations. The total amount of these loan receivables is EUR 12.5 million (12.5).

INVESTMENTS IN FOREIGN SUBSIDIARIES

1,000 EUR	Equity 2018	Equity 2017
EUR	**12,898**	7,054
SEK	**-540**	-984
DKK	**5,812**	6,162
RUB	**14,836**	16,170
NOK	**18**	-100
UAH	**2,260**	175
PLN	**1,929**	1,787
BYN	**-990**	-837
CNY	**492**	430
KZT	**-474**	-433
AZN		26
IRR	**-174**	-91
UZS	**16**	
Total	**36,083**	29,359

CASH AND CASH EQUIVALENTS AND UNUTILIZED COMMITTED REVOLVING CREDIT FACILITIES

1,000 EUR	2018	2017
Cash and cash equivalents	**19,333**	19,923
Revolving credit facilities	**40,000**	40,000
Total	**59,333**	59,923

Interest rate risk

To finance its operations, Aspo Group uses both fixed-rate and floating-rate liabilities that cause an interest rate risk in Aspo Group's cash flow and profit as a result of changes in the interest rate level. In addition to fixed-rate liabilities, Aspo Group uses interest rate derivatives to decrease a possible growth in future cash flows caused by an increase in short-term market interest rates. On December 31, 2018, the Group's interest-bearing liabilities totaled EUR 199.4 million (136.6) and cash and cash equivalents stood at EUR 19.3 million (19.9). Aspo Group's credit portfolio is reviewed with regard to average interest rate, the duration of interest rate position, average loan maturity, and relation between fixed-rate and floating-rate liabilities. On the balance sheet date, the average interest rate on interest-bearing liabilities was 1.6% (1.8), the duration of interest rate position was 1.1 years (1.9), the average loan maturity was 3.5 years (3.4), and the share of fixed-rate liabilities was 30% (47). In 2018, the average maturity of interest-bearing loans lengthened and the duration of interest rate position shortened. The portion of fixed-rate loans decreased.

Sensitivity to market risks

Aspo Group is exposed to interest rate and currency risks via financial instruments, such as financial assets and liabilities including derivative contracts, in the balance sheet on the reporting date. The currency position varies during the financial year and, accordingly, the position included in the balance sheet on the reporting date does not necessarily reflect the situation during the financial year. The impact of foreign currency denominated sales and purchase transactions made during the financial year on the statement of comprehensive income is not taken into account in the sensitivity analysis unless they were hedged through derivatives.

The sensitivity analysis is used to analyze the impact of market trends on measurements. The US dollar poses a significant currency risk for Aspo Group due to vessel investments. Cash flows related to the investment were hedged by currency forwards. The fluctuation between the Russian ruble and euro is the most significant factor causing currency risks to the Group.

The sensitivity analysis regarding changes in the euro/Russian ruble exchange rate is based on the following assumptions:

- The exchange rate change of +/-30%.
- The position includes the ruble-denominated financial assets and liabilities of companies that use the euro as their functional currency and the euro-denominated financial assets and liabilities of subsidiaries operating in Russia, i.e. accounts receivable and other receivables, loans and overdraft facilities used, accounts payable and

other liabilities, as well as cash and cash equivalents on the reporting date.
- Future cash flows are not taken into account in the position.

The sensitivity calculation resulting from changes in interest rates is based on the following assumptions:
- The interest level changes by one percentage point.
- The position includes floating-rate interest-bearing financial liabilities and assets.
- The calculation is based on balance sheet values on the reporting date, and changes in capital during the year are not taken into account.

In the sensitivity analysis, the effects in the statement of comprehensive income are calculated as profit before taxes.

The equity sensitivity analysis covers the capital invested in the subsidiary with regard to the currency risk.

SENSITIVITY ANALYSIS FOR FOREIGN CURRENCY AND INTEREST RATE RISK

	2018		2017	
1,000 EUR	Statement of compre-hensive income	Equity	Statement of compre-hensive income	Equity
Currency risk				
+ 30% strengthening of euro against RUB	**1,136**	**-3,424**	197	-3,731
- 30% weakening of euro against RUB	**-612**	**6,358**	-365	6,930
Interest rate risk				
Change of +100 basic points in the market interest rates	**-1,378**		-738	
Change of -100 basic points in the market interest rates	**1,377**		734	

Market risks also have an impact on Aspo Group through items other than financial instruments. The oil price has an impact on Aspo Group's financial performance through transportation costs. The Group has hedged against this risk by means of contractual clauses. The fluctuations in raw material prices for chemicals and food also affect the Group's financial performance.

Hedge accounting

The US dollar-denominated cash flows related to the ESL Shipping's vessel investments were hedged with currency forwards. The currency forwards were subject to hedge accounting, and the effective part of changes in their fair value was recognized in the hedging reserve under the fair value reserve in Aspo Group's equity. The effective portion of the changes in fair value of currency forwards, was recognized in other comprehensive income, while the interest portion of the currency forwards was recognized in financial items of the statement of comprehensive income. Hedged transactions were realized in 2018 through final installments and the gains and losses recognized in equity were transferred to the vessel acquisition cost.

The floating interest rate of the term loan taken out by Aspo Plc in 2011 and matured in 2015 was hedged with an interest rate swap throughout the validity of the loan agreement. The said interest rate swap was subject to hedge accounting, and changes in its fair value were recognized in other comprehensive income. The hedging relation between the loan hedged and the hedging instrument was effective. The said term loan, matured in 2015, was renewed with the same amount, and hedging of the variable interest of the renewed term loan was continued with an interest swap, but hedge accounting was discontinued in connection with the renewal due to its partial ineffectiveness, and changes in fair value have since been recognized through profit or loss. The loss accumulated in equity by 2015 was EUR 0.6 million and is entered in profit or loss in accordance with the original forecast transaction, still expected to occur by 2019. The fair value of the interest rate derivative amounted to EUR -0.1 million (-0.4) on December 31, 2018. The fair value of Group's other interest rate swaps to which hedge accounting is applied was EUR -0.1 million (0.0) on December 31, 2017. The effective portion of the changes in their fair value, EUR -0.1 million, was recognized in other comprehensive income, and interest expenses for the financial year and the inefficient portion were recognized in the financial items.

26.3 LIQUIDITY AND REFINANCING RISK

The objective of Aspo Group is to ensure sufficient financing for operations in all situations and market conditions. In accordance with the treasury policy, the sources of financing are diversified among a sufficient number of counterparties and different loan instruments. The sufficient number of committed financing agreements and sufficient maturity ensure Aspo Group's current and near-future financing needs.

Aspo Group's most significant financing needs in 2018 were related to the vessel investments by ESL Shipping and the company has signed vessel finance agreements of EUR 50 million. In 2018, ESL Shipping made payments of approximately EUR 38 million related to the ship investments and acquired a Swedish shipping company AtoB@C. Of the transaction price, ESL Shipping paid approximately EUR 19 million in cash and cash equivalents.The main financing source of Telko, Leipurin and Kauko is the cash flow from their operations. Liquidity is ensured through cash and cash equivalents, the issuing of commercial papers and committed overdraft limits, as well as revolving credit facilities granted by selected cooperation banks.

The Group's cash and cash equivalents at the end of the financial year 2018 were EUR 19.3 million (19.9). At the reporting date, Aspo Plc had a EUR 80 million domestic commercial paper program of which EUR 17 million were in use. At the reporting date, Aspo Plc also had revolving credit facilities granted by selected cooperation banks in the amount of EUR 40 million which were fully unutilized. In the financial year, Aspo Plc signed a credit agreement amounting to EUR 30 million. The loan period is 5 years.

Financial covenants associated with significant financial agreements were not breached during the financial year.

MATURITY ANALYSIS
2018

1,000 EUR	Balance sheet value Dec 31,2018	Cash flow 2019	2020	2021	2022	2023–
Loans	-192,692	-40,769	-38,110	-23,173	-26,188	-72,236
Overdraft facilities	-5,552	-3,388	-2,164			
Other liabilities	-200		-200			
Financial leasing liabilities	-1,203	-522	-357	-271	-68	-19
Accounts payable and other liabilities	-75,338	-75,338				
Derivative instruments						
Interest rate swaps						
Hedge accounting applied						
Cash flows to be paid		-46	-24			
Cash flows to be received					4	
Hedge accounting not applied						
Cash flows to be paid		-128				

2017

1,000 EUR	Balance sheet value Dec 31,2017	Cash flow 2018	2019	2020	2021	2022–
Loans	-131,133	-26,940	-22,027	-35,921	-19,275	-34,672
Overdraft facilities	-3,829	-1,684	-2,145			
Other liabilities	-400		-200	-200		
Financial leasing liabilities	-1,657	-707	-467	-302	-217	-14
Accounts payable and other liabilities	-44,083	-44,083				
Derivative instruments						
Interest rate swaps						
Hedge accounting applied						
Cash flows to be paid		-54	-17			
Cash flows to be received				21	42	12
Hedge accounting not applied						
Cash flows to be paid		-260	-122			
Currency forwards						
Hedge accounting applied						
Cash flows to be paid		-26,999				
Cash flows to be received		25,320				

FINANCIAL ASSETS AND LIABILITIES 2018

1,000 EUR	Measured at fair value through other comprehensive income	Measured at fair value through profit or loss	Measured at amortized cost	Carrying amount
Non-current financial assets				
Other non-current financial assets		170		170
Non-current receivables*			149	149
Current financial assets				
Accounts receivable and other receivables*			65,902	65,902
Cash and cash equivalents			19,333	19,333
Total		**170**	**85,384**	**85,554**
Non-current financial liabilities				
Loans and overdraft facilities			170,921	170,921
Derivatives	66			66
Other non-current liabilities			200	200
Current financial liabilities				
Loans and overdraft facilities			28,526	28,526
Derivatives		128		128
Accounts payable and other liabilities*			52,668	52,668
Total	**66**	**128**	**252,315**	**252,509**

* Comprises only financial assets or financial liabilities included in the corresponding balance sheet item.

26.4 CREDIT AND COUNTERPARTY RISKS

The Group has credit risk from accounts receivables. The Telko and Leipurin segments have an international and highly diversified customer base, and no considerable customer risk concentrations exist. ESL Shipping's accounts receivable are connected to long-term customer relationships with creditworthy companies. The turnover rate of its accounts receivable is high. All segments hedge against credit risks by using, when necessary, payment terms based on advance payments and bank guarantees.

Aspo Group's aim is to have low cash and cash equivalents. The counterparty risk is managed by selecting well-known and financially solvent domestic and international banks as counterparties. Excess funds are invested in bank deposits and short-term money market instruments. The derivative contract-based counterparty risk is managed by selecting well-known and solvent domestic banks as counterparties.

26.5 CAPITAL MANAGEMENT

The objective of the Group is to achieve a capital structure, with which Aspo Group can ensure the operational framework for short- and long-term operations, and a sufficient return on equity.

The main factors affecting the capital structure are possible acquisitions and divestments, Aspo Plc's dividend policy, the vessel investments of ESL Shipping and the profitability of the subsidiaries' business operations.

The development of the Group's capital structure is mainly monitored through the equity ratio and gearing. On December 31, 2018, the equity ratio was 29.5% (35.6) and gearing was 154.4% (103.9). During the financial year 2018, Aspo Group's capital structure was especially affected by the shipping company's investment in two new dry cargo vessels and the acquisition of the shipping company AtoB@C.

FINANCIAL ASSETS AND LIABILITIES 2017

1,000 EUR	Measured at fair value through other comprehensive income	Measured at fair value through profit or loss	Measured at amortized cost	Carrying amount
Non-current financial assets				
Other non-current financial assets		170		170
Derivatives	4			4
Non-current receivables*			171	171
Current financial assets				
Accounts receivable and other receivables*			54,955	54,955
Cash and cash equivalents			19,923	19,923
Total	**4**	**170**	**75,049**	**75,223**
Non-current financial liabilities				
Loans and overdraft facilities			109,517	109,517
Derivatives		122		122
Other non-current liabilities			400	400
Current financial liabilities				
Loans and overdraft facilities			27,102	27,102
Derivatives	1,679	260		1,939
Accounts payable and other liabilities*			44,083	44,083
Total	**1,679**	**382**	**181,102**	**183,163**

* Comprises only financial assets or financial liabilities included in the corresponding balance sheet item.

As described in the Accounting Principles, the Group classifies the determining of fair values of financial assets and liabilities on different levels in the fair value hierarchy. Group's derivatives include interest rate swaps and currency forwards and they fall into level 2 in the fair value hierarchy. Other long-term financial assets fall into hierarchy level 3.

Financial assets and liabilities not measured at fair value fall into hierarchy level 2. Their fair values are not materially different from their carrying amounts. The fair values of non-current loans are based on discounted future cash flows taking into account Aspo's credit margin.

CHANGE IN CLASSIFICATION OF FINANCIAL ASSETS CLASSIFICATION IAS 39

1,000 EUR	Loans and other receivables	Available-for-sale financial assets recognized in other comprehensive income	Derivatives in hedge accounting recognized in other comprehensive income	Carrying amount
Financial assets measured at fair value				
Non-current financial assets				
Other non-current financial assets		170		170
Non-current receivables			4	4
Total		**170**	**4**	**174**
Financial assets measured at amortized cost				
Non-current financial assets				
Non-current receivables	171			171
Current financial assets				
Accounts receivable and other receivables	54,955			54,955
Cash and cash equivalents	19,923			19,923
Total	**75,049**			**75,049**

CLASSIFICATION IFRS 9

1,000 EUR	Measured at fair value through other comprehensive income	Measured at fair value through profit or loss	Measured at amortized cost	Carrying amount
Financial assets measured at fair value				
Non-current financial assets				
Other non-current financial assets		170		170
Non-current receivables	4			4
Total	**4**	**170**		**174**
Financial assets measured at amortized cost				
Non-current financial assets				
Non-current receivables			171	171
Current financial assets				
Accounts receivable and other receivables			54,955	54,955
Cash and cash equivalents			19,923	19,923
Total			**75,049**	**75,049**

27. Derivative Contracts

	2018		2017	
1,000 EUR	**Nominal value**	**Fair values, net**	**Nominal value**	**Fair values, net**
Currency derivatives				
Currency forwards			-26,999	-1,679
Interest rate derivatives				
Interest rate swaps	**28,462**	**-194**	30,385	-378
Total		**-194**		-2,057

28. Contingent Assets and Liabilities, and Other Commitments

CONTINGENT LIABILITIES

As part of their ordinary business activities, Aspo and some of its subsidiaries sign different agreements under which guarantees are offered to third parties on behalf of these subsidiaries. These agreements are primarily made in order to support or improve Group companies' creditworthiness, and through them it is easier to find sufficient financing.

HYBRID INSTRUMENT

On May 27, 2016, Aspo issued a EUR 25 million hybrid bond. The coupon rate of the bond is 6.75% per annum. The bond has no maturity but the company may exercise an early redemption option after four years from the issuing date.

ENVIRONMENTAL REMEDIATION OBLIGATION

Rauma Terminal Services Oy, a company within the Aspo Group, is obligated, with regard to land areas leased from the Town of Rauma to restore the land areas so that they are in the same condition as before the lease. The scope of the obligation covers the dismantling of the buildings built by the company, including their foundations, and leveling the dismantled area. The review also includes regular environmental responsibilities from which no costs arise according to the company's understanding. The area has long-term lease agreements, and the Town of Rauma has not expressed any intention to change the area's purpose of use. As a result, the obligation has been treated as a contingent liability in the consolidated financial statements, and no separate transactions have been entered in the statement of comprehensive income or on the balance sheet.

TAX POSITIONS

Due to local tax audits or clarification requests, Aspo has some uncertain tax positions, as the tax authority has summoned the company's claims for deductible items in tax returns. Concerning each case, Aspo has assessed whether the tax authority's interpretations are justified and, if necessary, adjusted the recognized amounts to correspond with the expected payable amounts. Although the management believes that these cases will not result in any significant additional recognitions in addition to previously recognized amounts, the final amounts may differ from the estimated amounts. If the final results differed from the results estimated by the management, the possible additional recognition at the end of the reporting period would be approximately EUR 0–1 million.

LEGAL PROCEEDINGS

On February 27, 2015, the Helsinki District Court announced its judgement in the case between ESL Shipping and the Finnish State regarding fairway dues levied during the years 2001–2004. According to the judgement, the Finnish State was required to refund to ESL Shipping approximately EUR 3.0 million in accordance with the company's claim, as well as legal expenses and interest. The State lodged an appeal against the District Court's judgement and, in its ruling issued on August 8, 2016, the Court of Appeal overruled the Helsinki District Court's judgement and dismissed ESL Shipping's legal action as time-barred. The company applied for a leave to appeal from the Supreme Court, which rejected the application in February 2018. In June 2018, ESL Shipping filed together with 13 other shipping companies, an appeal regarding extraordinary appeal (for nullification) to the Supreme Court. In addition, the company lodged a complaint with the European Court of Human Rights, particularly regarding a breach of protection of property. In September, the European Court of Human Rights announced that it will not process the appeal. No fairway dues related receivables are not recognized in the Financial Statements.

The shipping company won legal proceedings against Indian ABG Shipyard concerning the compensation payable for repairs made to MS Alppila during the warranty period. The vessel was delivered to ESL Shipping in 2011. According to the ruling of the arbitration court, ABG Shipyard was required to refund the repair expenses and interest to ESL Shipping according to the company's claims. The impact of ruling will be taken into account during the financial year over which the imposed payment is received.

Telko has initiated a process at the Administrative Court concerning the tax increase imposed by Finnish Customs related to batches of material that Telko imported in 2013 and 2014. Telko considers the charges imposed by Finnish Customs to be unfounded. The charges of EUR 1.7 million were recognized as expenses in 2015.

In 2018, Telko took legal action in Korea against a former principal (Korea Engineering Plastics Co. LTD) regarding unpaid commission.

In spring 2017, Kauko took legal action in civil court against two individuals who worked in leading positions in the mobile

COLLATERAL FOR OWN DEBT

1,000 EUR	2018	2017
Mortgages given	**155,837**	104,454
Guarantees	**31,970**	27,593
Other commitments*	**314**	36,670
Total	**188,121**	168,717

* Other commitments in 2017 were mainly related to new vessels contracts.

OPERATING LEASE RENTALS PAYABLE

1,000 EUR	2018	2017
Within one year	**31,851**	10,754
After one year and within five years	**16,173**	10,649
After five years	**26**	120
Total	**48,050**	21,523

knowledge work unit that provides IT solutions for the healthcare sector due to breaches of the non-solicitation and non-compete clauses. On February 2018, the District Court has decided the matter for the benefit of the defendants and Kauko appealed against the judgement to the Court of Appeal. In 2018, Kauko dropped its claims against one of the defendants. The Court of Appeal issued its decision on February 8, 2019, and confirmed that the non-compete clause was valid as regards the defendant, and a contractual penalty, plus interest on arrears, was imposed on the defendant for the violation of the clause. In addition, the Court of Appeal confirmed that the clause for the non-use of trade and professional secrets and the non-poaching clause were binding. The decision is not yet final, and it has no significant impact on Aspo Group's financial results.

Aspo Group's companies are parties to some legal proceedings and disputes associated with regular business operations. The financial impact of these proceedings and disputes cannot be estimated for certain but, on the basis of the information available and taking into account the existing insurance cover and provisions made, Aspo Group believes that they do not have any material adverse impact on the Group's financial position.

29. Related Parties

Information on subsidiaries and associated companies within Aspo Group's related parties is presented in the attached table. More information on associated companies within Aspo Group's related parties is presented in Note 16. The related parties also include key management personnel, i.e. members of the Board of Directors and the Group Executive Committee, and any entities under their control.

Information about the members of the Board and the Group Executive Committee is available in the Aspo's Year 2018 in Corporate Governance section.

MANAGEMENT EMPLOYEE BENEFITS

Share-based incentive plan 2015–2017

In 2015, the Board of Directors of Aspo Plc approved a share-based incentive plan for about 30 persons. The plan included three earnings periods, the calendar years 2015, 2016 and 2017. The Board of Directors decided on the plan's performance criteria and required performance levels for each criterion at the beginning of each earnings period.

The reward from the earnings period 2017 was based on the Group's earnings per share (EPS). In March 2018, on the basis of the 2017 earnings period, employees included in the plan received 70,525 treasury shares as a share-based reward, as well as cash equaling the value of the shares, at most, in order to pay taxes.

In year 2018 in accordance with the rules of incentive plans a total of 4,400 treasury shares, originally granted on the basis of share-based incentive plans during 2016 and 2017, were returned to Aspo due to ended contracts of employment.

SHARE-BASED PAYMENTS RECOGNIZED IN THE PERIOD

	2018	2017
Total expenses recognized in employee benefit expenses	**742**	928
Accrued expenses in the balance sheet related to the proportion paid in cash	**118**	566

SHARE-BASED INCENTIVE PLANS

	Grant date	Transfer date	Number of shares granted	Market value of share on grant date, EUR	Market value of share on transfer date, EUR
Share-based incentive plan 2015–2017	Feb. 11, 2015				
the share of the year 2015	Mar. 13, 2015	Mar. 18, 2016	88,970	7.72	7.25
the share of the year 2016	Mar. 11, 2016	Mar. 24, 2017	25,740	7.20	8.43
the share of the year 2017	Mar. 13, 2017	Mar. 22, 2018	70,525	8.76	9.85
Share-based incentive plan 2018–2020	Apr. 9, 2018				
the share of the year 2018	Jun. 8, 2018		7,711	8.76	
Executive committee share-based incentive plan 2018–2020	Apr. 9, 2018				
	Jun. 8, 2018			8.76	

KEY MANAGEMENT PERSONNEL COMPENSATION

1,000 EUR	2018	2017
Salaries and other short-term employee benefits	**1,869**	1,836
Post-employment benefits	**517**	552
Termination benefits	**72**	
Share-based payments	**591**	671
Total	**3,049**	3,059

Share-based incentive plans 2018–2020

The Board of Directors of Aspo Plc has approved three new share-based incentive plans for the Group key employees in April 2018. The aim of the new plans is to combine the objectives of the shareholders and the key employees in order to increase the value of the company in the long-term, to retain the key employees at the company, and to offer them competitive reward plans based on earning and accumulating the company´s shares.

Share-based incentive plan 2018–2020

The share-based incentive plan 2018–2020 includes three earnings periods, calendar years 2018, 2019 and 2020. The Board of Directors of the company will resolve on the plan's performance criteria and required performance levels for each criterion at the beginning of each earnings period. The potential reward of the plan from the earnings period 2018 will be based on the Group's earnings per share (EPS).

The share-based incentive plan is directed to approximately 15 people, including the members of the Group Executive Committee, during the earnings period 2018. The rewards to be paid on the basis of the share-based incentive plan 2018–2020 correspond to the value of a maximum total of 500,000 Aspo Plc shares including also the proportion to be paid in cash.

The reward from the 2018 earnings period was based on the Group's earnings per share (EPS). The share-based cost of rewards was on the balance sheet date estimated at in total of EUR 0.1 million. It will be accrued over the years 2018–2020 on the basis of the rules of the incentive plan.

On February 14, 2019, the Board of Directors decided that the reward for the 2018 earnings period will be 7,711 shares and cash corresponding at most to the value of the shares for covering taxes.

Executive Committee share-based incentive plan 2018–2020

The Executive Committee share-based incentive plan 2018–2020 includes one earnings period, calendar years 2018–2020. The potential reward of the plan from the earnings period 2018–2020 will be based on the Group's operating profit (EBIT), and the reward payment requires exceptional performance.

The potential reward from the earnings period 2018–2020 will be paid partly in the company´s shares and partly in cash in 2021. The rewards to be paid on the basis

GROUP COMPANIES

Company	Domicile	Holding %
Aspo Plc, parent company	Finland	
Aspo Palvelut Ltd	Finland	100.00
AtoBatC Holding AB	Sweden	100.00
AtoBatC Shipping AB	Sweden	100.00
Oy AtoBatC Shipping Ab	Finland	100.00
Oy Bomanship Ab	Finland	100.00
Bomanship Europe Unipessoal Lda	Portugal	100.00
Bothnia Bulk AB	Sweden	100.00
ESL Shipping Ltd	Finland	100.00
Kauko GmbH	Germany	100.00
Kauko Ltd	Finland	100.00
LeiConcept Oy	Finland	100.00
OOO Leipurien Tukku	Russia	100.00
Leipurien Tukku Oy	Finland	100.00
Leipurin Plc	Finland	100.00
FLLC Leipurin	Belarus	100.00
LLC Leipurin	Ukraine	100.00
SIA Leipurin	Latvia	100.00
TOO Leipurin	Kazakhstan	100.00
UAB Leipurin	Lithuania	100.00
Leipurin Estonia AS	Estonia	100.00
Leipurin Poland Sp. z o.o.	Poland	100.00
OOO NPK Leipurin	Russia	100.00
Rauma Terminal Services Oy	Finland	100.00
Suhi-Suomalainen Hiili Oy	Finland	100.00
Telko Ltd	Finland	100.00
FLLC Telko	Belarus	100.00
LLC Telko	Ukraine	100.00
OOO Telko	Russia	100.00
Telko UAB	Lithuania	100.00
Telko Caucasus LLC	Azerbaijan	100.00
LLC Telko Central Asia	Kazakhstan	100.00
Telko Estonia OÜ	Estonia	100.00
Telko Denmark A/S	Denmark	100.00
Telko Latvia SIA	Latvia	100.00
Telko Middle East Co.	Iran	100.00
Telko Norway AS	Norway	100.00
Telko-Poland Sp. z o.o.	Poland	100.00
Telko Shanghai Ltd.	China	100.00
Telko Solution LLC	Uzbekistan	100.00
Telko Sweden AB	Sweden	100.00
OOO Telko Terminal	Russia	100.00
Oy Troili Ab	Finland	100.00
Vulganus Oy	Finland	100.00

ASSOCIATED COMPANIES

Company	Domicile	Holding %
Auriga KG	Germany	49.00
Norma KG	Germany	49.00
Norra Skeppnings Gruppen AB	Sweden	40.00

of the earnings period 2018–2020 correspond to the value of a maximum total of 200,000 Aspo Plc shares including also the proportion to be paid in cash.

Restricted share-based incentive plan 2018

The reward from the restricted share-based incentive plan 2018 will be based on the participant's valid employment or service and the continuation of employment during the vesting period. The reward will be paid partly in the company´s shares and partly in cash after the end of a 12–36 month vesting period. The restricted share-based incentive plan is intended solely for individual key employees by a special resolution of the Board of Directors. The rewards to be paid on the basis of restricted share-based incentive plan 2018 correspond to the value of a maximum total of 100,000 Aspo Plc shares including also the proportion to be paid in cash.

OTHER BENEFITS

The CEO has a supplementary defined contribution pension plan in which the pension is determined in accordance with the accumulated insurance savings at the time of retirement. The CEO's retirement age is the lowest possible statutory retirement age less three years. The statutory pension cost recognized as expenses was EUR 89,819 and the voluntary pension cost was EUR 102,835. The period of notice applied to the CEO is six months. If notice is given by the company, severance pay corresponding to 18 months' salary will be paid in addition to the salary for the notice period.

Information on Aspo's hybrid bond subscribed by the related parties is presented in Corporate Governance section in the Aspo's Year 2018.

SALARIES AND BENEFITS OF BOARD MEMBERS AND CEO

	2018		2017	
1,000 EUR	**Salaries and remu-nerations**	**Pensions**	**Salaries and remu-nerations**	**Pensions**
Ojanen Aki,CEO		**193**		186
CEO, salaries	**381**		372	
CEO, bonuses	**151**		82	
CEO, share-based payments	**290**		85	
Nyberg Gustav, Chairman of the Board	**65**		85	32
Members of the Board of Directors:				
Kaario Mammu, Vice Chairman of the Board in 2018	**48**		34	
Laine Mikael	**36**		33	
Lencioni Roberto*	**13**		47	
Pöyry Salla	**36**		33	
Salo Risto	**33**		33	
Vehmas Tatu **	**26**			
Total	**1,079**	**193**	804	218

*Member of the Board and Vice Chairman until April 10, 2018
**Member of the Board since April 10, 2018

Pension benefits include both statutory and voluntary pension payments.

TRANSACTIONS WITH RELATED PARTIES ASSOCIATED COMPANIES

1,000 EUR	**2018**
Services sold	**1,471**
Services received	**34**
Time chartering expenses	**782**
Accounts receivable and other receivables	**427**
Accounts payable and other liabilities	**1**

30. Events After the Financial Year

There have been no material events after the end of the financial year.

PARENT COMPANY'S INCOME STATEMENT

1,000 EUR	Notes	Jan 1–Dec 31, 2018	Jan 1–Dec 31, 2017
Other operating income	1.1	**1,671**	2,380
Staff expenses	1.2	**-1,862**	-2,071
Depreciation and amortization	1.3	**-22**	-21
Other operating expenses	1.4	**-4,759**	-4,484
Operating loss		**-4,972**	-4,196
Financial income and expenses	1.5	**17,742**	15,684
Profit before appropriations and taxes		**12,770**	11,488
Appropriations	1.6	**3,870**	3,560
Profit before taxes		**16,640**	15,048
Income taxes		**0**	0
Profit for the period		**16,640**	15,048

PARENT COMPANY'S BALANCE SHEET

ASSETS

1,000 EUR	Notes	Dec 31, 2018	Dec 31, 2017
Non-current assets			
Intangible assets	2.1	**51**	10
Tangible assets	2.1	**127**	148
Investments	2.2	**83,427**	83,427
Total non-current assets		**83,605**	83,585
Current assets			
Non-current receivables	2.3	**99,475**	50,550
Current receivables	2.3	**21,398**	18,860
Cash and cash equivalents		**202**	2,976
Total current assets		**121,075**	72,386
Total assets		**204,680**	155,971

EQUITY AND LIABILITIES

1,000 EUR	Notes	Dec 31, 2018	Dec 31, 2017
Equity			
Share capital	2.4	**17,692**	17,692
Share premium	2.4	**4,351**	4,351
Invested unrestricted equity reserve	2.4	**21,305**	16,706
Retained earnings	2.4	**4,247**	2,127
Profit for the period		**16,640**	15,048
Total equity		**64,235**	55,924
Provisions	2.5	**60**	760
Liabilities			
Non-current liabilities			
Loans from Group companies	2.6	**7,089**	5,714
Bond	2.6	**11,000**	11,000
Loans from financial institutions	2.6	**70,000**	40,000
Hybrid instrument	2.6	**25,000**	25,000
Deferred liabilities	2.6		122
Total non-current liabilities		**113,089**	81,836
Current liabilities			
Loans from financial institutions	2.7	**17,000**	4,000
Liabilities to Group companies	2.7	**8,212**	11,405
Accounts payable	2.7	**203**	
Other liabilities	2.7	**37**	39
Deferred liabilities	2.7	**1,844**	2,007
Total current liabilities		**27,296**	17,451
Total liabilities		**140,385**	99,287
Total equity and liabilities		**204,680**	155,971

PARENT COMPANY'S CASH FLOW STATEMENT

1,000 EUR	Jan 1–Dec 31, 2018	Jan 1–Dec 31, 2017
Cash flows from operating activities		
Operating loss	**-4,973**	-4,196
Adjustments to operating loss	**-516**	464
Change in working capital	**62**	-460
Interest paid	**-3,484**	-3,399
Interest received	**1,255**	772
Dividends received	**20,700**	19,900
Net cash from operating activities	**13,044**	13,081
Cash flows from investing activities		
Investments in tangible and intangible assets	**-27**	-24
Proceeds from sale of investments		198
Net cash from investing activities	**-27**	174
Cash flows from financing activities		
Proceeds from non-current loans from Group companies	**1,375**	
Repayment of non-current loans from Group companies		-1,429
Proceeds from non-current loans	**30,000**	
Change in non-current receivables from Group companies	**-44,500**	-7,450
Change in current receivables	**-3,116**	849
Change in current liabilities	**9,807**	745
Group contributions received	**3,560**	2,495
Dividends distributed	**-13,287**	-12,854
Purchase of treasury shares	**-42**	
Proceeds from sale of treasury shares	**412**	134
Net cash from financing activities	**-15,791**	-17,510
Change in cash and cash equivalents	**-2,774**	-4,255
Cash and cash equivalents Jan. 1	**2,976**	7,231
Cash and cash equivalents at year-end	**202**	2,976

NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS

ACCOUNTING PRINCIPLES
Aspo Plc's financial statements have been compiled in accordance with FAS. The accounting principles have not changed from the previous year. When compiling the financial statements, the management of the company must, in accordance with valid regulations and good accounting practice, make estimates and assumptions that affect the measurement and accruing of financial statement items. The actual figures may differ from the estimates.

FOREIGN CURRENCY TRANSACTIONS
Foreign currency denominated transactions are recorded at the exchange rates valid on the transaction date. On the reporting date, the receivables and liabilities on the balance sheet are measured at the exchange rates of the reporting date. Hedging instruments for open foreign currency denominated items are measured at the rate of the reporting date, taking into account interest rates. Foreign exchange gains and losses related to business operations are recognized as net sales and operational expense adjustment items. Financing related foreign exchange gains and losses are recognized in financial income and expenses.

PENSIONS
The company's pension coverage is arranged through pension insurance.

RECEIVABLES
Receivables are measured at acquisition cost or at probable value, if lower.

NON-CURRENT ASSETS AND DEPRECIATIONS
Non-current assets are recognized in the balance sheet at acquisition cost, less depreciations. The depreciation periods for non-current assets are:

- Intangible rights 3–5 years
- Other capitalized long-term expenditure 10 years
- Buildings 15–40 years
- Machinery and equipment 3–8 years

LEASING
Leasing payments are treated as rent expenses.

PROVISIONS
Provisions in the balance sheet include items that are either based on contracts or otherwise binding obligations, but have not yet realized. Changes to provisions are included in the income statement.

INCOME TAXES
The income taxes in the income statement include taxes calculated on profit for the period based on Finnish tax legislation and adjustment of taxes from previous financial years.

DIVIDENDS
The dividend proposed by the Board of Directors to the Annual Shareholders' Meeting was not yet recognized in the financial statements. The dividends are only taken into account after the decision by the Annual Shareholders' Meeting.

MEASUREMENT OF FINANCIAL INSTRUMENTS
Fair value measurement compliant with Chapter 5, section 2a of the Accounting Act is applied to the accounting treatment of financial derivatives, and changes in their fair value were entered in the income statement. Financial derivatives were measured at the market prices of the balance sheet date.

1.1 Other Operating Income

1,000 EUR	2018	2017
Other operating income, Group	**495**	503
Rental income, Group	**793**	833
Other rental income	**293**	812
Other operating income	**90**	232
Total	**1,671**	2,380

1.2 Personnel and Board Members

The CEO's retirement age is the lowest possible statutory retirement age less three years.

STAFF EXPENSES

1,000 EUR	2018	2017
Salaries and remunerations	**1,343**	1,156
Share-based payments	**63**	446
Profit bonus paid to the personnel fund	**21**	14
Pension expenses	**417**	421
Other social security expenses	**18**	34
Total	**1,862**	2,071

MANAGEMENT SALARIES AND BENEFITS

1,000 EUR	2018	2017
CEO, salaries	**381**	372
CEO, bonuses	**151**	83
CEO, share-based payments	**290**	85
Members of the Board of Directors, remunerations	**244**	264
Total	**1,066**	804

AVERAGE NUMBER OF PERSONNEL DURING THE FINANCIAL YEAR

	2018	2017
Office staff	**5**	5

1.3 Depreciation and amortization

1,000 EUR	2018	2017
Other capitalized long-term expenditure	**1**	1
Machinery and equipment	**21**	20
Total	**22**	21

1.4 Other Operating Expenses

1,000 EUR	2018	2017
Rents	**1,777**	2,090
Other expenses	**2,982**	2,394
Total	**4,759**	4,484

AUDITOR'S FEES

1,000 EUR	2018	2017
Auditing	**37**	37
Tax advice	**32**	41
Other services	**103**	106
Total	**172**	184

1.5 Financial Income and Expenses

1,000 EUR	2018	2017
Dividend income		
From Group companies	**19,700**	18,900
Income from non-current investments	**19,700**	18,900
Other interest and financial income		
From Group companies	**1,265**	772
From others	**3**	196
Total interest and other financial income	**1,268**	968
Interest expenses and other financial expenses		
To Group companies	**-119**	-138
To others	**-3,107**	-4,046
Total interest and other financial expenses	**-3,226**	-4,184
Total financial income and expenses	**17,742**	15,684

1.6 Appropriations

1,000 EUR	2018	2017
Income		
Group contributions	**3,870**	3,560

2.1 Intangible and Tangible Assets

1,000 EUR	Intangible rights	Other capitalized long-term expenditure	Total intangibles	Land	Buildings	Machinery and equipment	Other tangible assets	Total tangibles
Acquisition cost, Jan. 1	201	11	212	1	12	164	73	250
Increases	42		42					
Acquisition cost, Dec. 31, 2018	**243**	**11**	**254**	**1**	**12**	**164**	**73**	**250**
Accumulated depreciation, Jan. 1	-201	-1	-202		-12	-90		-102
Depreciation and amortization for the period		-1	-1			-21		-21
Accumulated depreciation, Dec. 31, 2018	**-201**	**-2**	**-203**		**-12**	**-111**		**-123**
Carrying amount, Dec. 31, 2018	**42**	**9**	**51**	**1**	**0**	**53**	**73**	**127**
Carrying amount, Dec. 31, 2017	**0**	**10**	**10**	**1**	**0**	**74**	**73**	**148**

2.2 Investments

1,000 EUR	Subsidiary shares	Other shares	Total
Acquisition cost, Jan. 1	83,244	183	83,427
Acquisition cost, Dec. 31, 2018	**83,244**	**183**	**83,427**
Acquisition cost, Dec. 31, 2017	**83,244**	**183**	**83,427**

2.3 Non-current and Current Receivables

NON-CURRENT RECEIVABLES

1,000 EUR	2018	2017
Receivables from Group companies		
Loan receivables	**99,475**	50,550
Total	**99,475**	50,550

CURRENT RECEIVABLES

1,000 EUR	2018	2017
Receivables from Group companies		
Dividend receivables	**14,000**	15,000
Group contribution receivables	**3,870**	3,560
Cash pool accounts	**213**	
Loan receivables	**2,895**	
Deferred receivables	**8**	
Total	**20,986**	18,560
Other receivables	**109**	134
Deferred receivables	**303**	166
Total	**412**	300
Total current receivables	**21,398**	18,860

2.4 Equity

1,000 EUR	2018	2017
Share capital, Jan. 1	**17,692**	17,692
Share capital, Dec. 31	**17,692**	17,692
Share premium, Jan. 1	**4,351**	4,351
Share premium, Dec. 31	**4,351**	4,351
Invested unrestricted equity reserve, Jan. 1	**16,706**	16,662
Share-based payments	**174**	44
Share issue	**4,425**	
Invested unrestricted equity reserve, Dec. 31	**21,305**	16,706
Retained earnings, Jan. 1	**17,175**	14,833
Dividend payment	**-13,287**	-12,854
Share-based payments	**401**	148
Returned share-based payments	**-42**	
Retained earnings, Dec. 31	**4,247**	2,127
Profit for the period	**16,640**	15,048
Total equity	**64,235**	55,924

Distributable funds under unrestricted equity total EUR 42,191,625.81 (33,881,234.68).

2.5 Provisions

1,000 EUR	2018	2017
Share-based incentive plan	**60**	443
Onerous rental contract		296
Provision for tax charges		21
Total	**60**	760

2.6 Non-current Liabilities

On May 27, 2016, Aspo Plc issued a EUR 25 million hybrid bond. The bond has no maturity but the company may excercise an early redemption option after four years. The coupon rate of the bond is 6.75% per annum.

In 2015, Aspo Plc issued a EUR 11 million unsecured private placement bond. The bond pays fixed interest rate and matures on September 29, 2022.

1,000 EUR	2018	2017
Loans from Group companies	**7,089**	5,714
Bond	**11,000**	11,000
Hybrid instrument	**25,000**	25,000
Loans from financial institutions	**70,000**	40,000
Total non-current loans	**113,089**	81,714
Measurement of interest rate swap		122
Total deferred liabilities		122
Total non-current liabilities	**113,089**	81,836

2.7 Current Liabilities

1,000 EUR	2018	2017
Loans from financial institutions	**17,000**	4,000
Unpaid dividend	**9**	11
Accounts payable	**204**	
Other liabilities	**37**	38
Deferred liabilities*	**1,834**	1,996
Total	**19,084**	6,045
Liabilities to Group companies		
Accounts payable	**6**	
Cash pool accounts	**6,756**	9,950
Other liabilities	**1,450**	1,455
Total	**8,212**	11,405
Total current liabilities	**27,296**	17,450

* Main items		
Accrued interests	**1,302**	1,439
Accrued salaries	**476**	518

2.8 Other Notes

FUTURE LEASE PAYMENTS

1,000 EUR	2018	2017
Payable within one year	**94**	93
Payable later	**143**	164
Total	**237**	257

OTHER RENTAL LIABILITIES

1,000 EUR	2018	2017
Payable within one year	**602**	2,042
Payable later	**3,426**	760
Total	**4,028**	2,802

GUARANTEES ON BEHALF OF GROUP COMPANIES

1,000 EUR	2018	2017
Guarantees	**112,316**	72,208
Total	**112,316**	72,208

GUARANTEES ON OWN BEHALF

1,000 EUR	2018	2017
Guarantees	**95**	
Total	**95**	

DERIVATIVE CONTRACTS

1,000 EUR	2018	2017
Interest rate swap		
Nominal value	**15,000**	15,000
Fair value	**-128**	-382

Helsinki, February 27, 2019

ASPO PLC

Board of Directors **CEO**

AUDITOR'S REPORT

To the Annual General Meeting of Aspo Oyj

(Translation of the Finnish original)

REPORT ON THE AUDIT OF FINANCIAL STATEMENTS

Opinion

We have audited the financial statements of Aspo Oyj (business identity code 1547798-7) for the year ended 31 December, 2018. The financial statements comprise the consolidated balance sheet, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, statement of cash flows and notes.

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position as well as its financial performance and its cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU.
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Audit Committee.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and group companies are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 7 to the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

Key Audit Matter	How our audit addressed the Key Audit Matter
Valuation of goodwill We refer to the consolidated financial statements' accounting policies and to the note 12	
At the balance sheet date 31.12.2018, the value of goodwill amounted to EUR 43.0 million representing 11% of total assets and 37% of total equity. Annually performed impairment tests were considered as a key audit matter, because: • the estimation process is complex and includes judgmental areas • impairment test is based on assumptions in relation to market and economic conditions: • goodwill is significant relative to the financial statements. The Group's cash-generating units' recoverable amount is determined by and based on the value in use calculations, which may vary significantly when the underlying assumptions included in the calculations changes. The determination of value in use is affected by several assumptions, such as for example revenue growth, gross margin, and the discount rate applied on discounting the cash flows. Changes in the above mentioned assumptions may result in an impairment of goodwill. Valuation of goodwill was a key audit matter and a significant risk of material misstatement referred to in EU Regulation No 537/2014, point (c) of Article 10(2).	Our audit procedures, which take into account significant risk of material misstatement in valuation of goodwill, included among others: • as part of audit, valuation specialist assisted us in evaluating the assumptions and methodologies used by the Group; • assessment of management's forecasting accuracy and comparison of projections to the latest budgets approved by the Board; • assessment of appropriateness of sensitivity analyses and whether any reasonably possible change in key assumptions could cause the carrying amount to exceed its recoverable amount; • assessment of the adequacy of the notes related to sensitivity analyses for assumptions used in impairment tests presented in the note 12.
Revenue recognition We refer to the consolidated financial statements' revenue recognition accounting policies and to the note 1	
In the financial year 2018 Aspo Group's turnover amounted to EUR 540.9 million, which mainly consists of sale of goods, but also from services sold to customers. Minor part of the turnover consists of revenue recognized from customer specific long-term projects. Revenue from sale of goods is recognized when the control of the underlying products have been transferred to the customer. Revenue from services is recognized after the service has been rendered. Sales contract terms and practices vary in different markets. Turnover is Group's key performance indicator, which may be an incentive for premature revenue recognition. Revenue recognition was a key audit matter and a significant risk of material misstatement referred to in EU Regulation No 537/2014, point (c) of Article 10(2) due to risk related to correct timing of revenue recognition.	Our audit procedures, which take into account significant risk of material misstatement in revenue recognition, included among others: • assessment of the compliance of company's accounting policies over revenue recognition and comparison with applicable accounting standards; • testing of the revenue recognition including testing of internal controls when applicable. Our tests included among others external confirmations, reconciliation of sales against customer contracts and verification of acceptance of deliveries; • analytical substantive audit procedures relating to revenue recognition; • assessment of the adequacy of financial statement notes related to revenues.

Key Audit Matter	How our audit addressed the Key Audit Matter
Valuation of inventories We refer to the consolidated financial statements' accounting policies and to the note 18	
At the balance sheet date 31.12.2018, the value of inventory amounted to EUR 71.3 million representing 18% of total assets and 61% of total equity. Inventories are measured at acquisition cost or net realizable value if lower. Net realizable value is the sales price in the ordinary course of business less sales costs and the costs needed to finish the production of the goods. Impairment due to obsolescence is considered when assessing the valuation of inventories. Aspo has segment and market specific procedures to identify impairment due to obsolescence. Inventory is a key audit matter due to the size of the account balance and because inventory valuation involves management judgement.	Our audit procedures, which take into account risk related to valuation of inventories, included among others: • assessment of the compliance of company's accounting policies on inventory valuation and comparison with applicable accounting standards; • assessment of the processes and practices related to inventory valuation, and in major locations testing of the controls related to processes; • test of detail procedures related to acquisition cost of inventory: • assessment of the compliance of obsolescence provisions with the group accounting policies: • assessment of the appropriateness and correctness of management judgement included in obsolescence provisions: • assessment of the notes related to inventories.
Acquisition of AtoB@C shipping business We refer to the consolidated financial statements' accounting policies and to the note 2	
The Group acquired Swedish shipping business AtoB@C during the financial year. The acquisition date was determined to be August 31, 2018. The purchase consideration of EUR 25.6 million was paid partly in cash and partly in Aspo's shares. Assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their acquisition-date fair values. Management judgment relates especially to determining the fair value of acquired assets and liabilities, in particular determining the fair values of separately identifiable intangible assets such as customer contracts. The significant business combination was a key audit matter as it involves valuation processes and –methods, and judgments made my management.	Our audit procedures included amongst other: • Assessing the acquisition date and the consideration transferred • Assessing together with our valuation specialists the valuation processes and methodologies to identify acquired assets and liabilities and to determine the fair value of these. • Assessing the disclosures in respect of the business combination

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of Financial Statements

Our objectives are to obtain reasonable assurance on whether the financial state-

ments as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

OTHER REPORTING REQUIREMENTS

Information on our audit engagement

We were first appointed as auditors by the Annual General Meeting on 10.4.2013, and our appointment represents a total period of uninterrupted engagement of 6 years.

Other information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors and the information included in the Aspo's Year 2018 publication, but does not include the financial statements and our auditor's report thereon. We have obtained the report of the Board of Directors prior to the date of this auditor's report, and the Aspo's Year 2018 publication is expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Helsinki 5th March, 2019

Ernst & Young Oy
Authorized Public Accountant Firm

Toni Halonen
Authorized Public Accountant