

**ADAPTABILITY
AND ORIENTATION**
ANNUAL REPORT 2019

Group Key Figures at a Glance (IFRS) – Group as a whole

€ '000 / as indicated	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018	Change in %	Oct. 1 to Dec. 31, 2019	Oct. 1 to Dec. 31, 2019	Change in %
Revenue	192,188	187,383	2.6	59,542	68,576	-13.2
EBITDA	-8,373	30,290	n. a.	-11,426	13,118	n. a.
EBITDA margin in %	-4.4	16.2	n. a.	-19.2	19.1	n. a.
Adj. EBITDA	17,169	30,290	-43.3	-11,426	13,118	n. a.
Adj. EBITDA margin in %	8.9	16.2	n. a.	-19.2	19.1	n. a.
EBIT	-119,947	14,832	n. a.	-105,845	7,144	n. a.
EBIT margin in %	-62.4	7.9	n. a.	-177.8	10.4	n. a.
Adj. EBIT ¹	-6,314	14,832	n. a.	-105,845	7,144	n. a.
Adj. EBIT margin in % ¹	-3.3	7.9	n. a.	177.8	10.4	n. a.
Consolidated net income	-123,524	3,365	n. a.	-107,678	1,405	n. a.
Earnings per share in €	-18.29	0.52	n. a.	-15.67	0.24	n. a.
Investments (CAPEX) ²	41,277	48,805	-15.4	1,078	23,889	-95.5
Operating cash flow	-10,412	-53,475	80.5	3,948	-18,118	n. a.
Free cash flow ³	-51,689	-102,280	49.5	2,870	-42,007	n. a.
€ '000 / as indicated	Dec. 31, 2019	Dec. 31, 2018	Change in %	Dec. 31, 2019	Sep. 30, 2019	Change in %
Total assets	274,056	362,293	-24.4	274,056	380,653	-28.0
Equity	52,607	177,799	-70.4	52,607	160,410	-67.2
Equity ratio in %	19.2	49.1	n. a.	19.6	42.1	n. a.
Free liquidity	18,002	48,926	-63.2	18,002	18,376	-2.0
Interest-bearing liabilities	148,974	110,636	34.7	148,974	140,098	6.3
Net debt ⁴	130,972	61,710	112.2	130,972	121,722	7.6
Employees ⁵	991	1,032	-4.0	991	1,057	-6.2

1 Adjusted for extraordinary one-time effects from valuation allowances particularly of inventories, capitalised development costs, goodwill and other assets in the Electromobility operating segment, effects from extraordinary additional expenses in the Mechanics and Electronics operating segments as well as foreign currency translation effects from refinancing totaling € 112,133 thousand.

2 CAPEX = investments in property, plant and equipment + investment in intangible assets.

3 Free cash flow = operating cash flow – investments (CAPEX).

4 Net debt = interest-bearing liabilities – available liquidity.

5 Plus 46 temporary workers (December 31, 2018: 107; September 30, 2019: 49).

Share

	Dec. 31, 2019	Dec. 31, 2018	Change in %	Dec. 31, 2019	Sep. 30, 2019	Change in %
Closing price in Xetra in €	14.50	17.48	-17.0%	14.50	12.58	15.3%
Number of shares issued	4,526,266	4,526,266	0.0%	4,526,266	4,526,266	0.0%
Market capitalization in € millions	65.6	79.1	-13.5	65.6	56.9	8.7

Market Segment Automotive

Highlights from Fiscal Year 2019

- Revenue for automotive products in 2019 exceeds the forecast of € 130 million by 7.4% and is now at € 139.6 million (prior year: € 120.5 million)
- Unadjusted EBIT at € -15.5 million (prior year: € 9.2 million); adjusted EBIT margin at -1.8% (prior year: 7.7%) – Comprehensive program to increase earnings gradually taking effect
- Operating cash flow clearly positive in the second half of 2019 – positive trend expected to continue in 2020
- Forecast for fiscal year 2020 taking into account the effects of COVID-19: revenue of € 105 to 115 million with an EBITDA margin of 8 to 12%

Key Figures Automotive at a Glance (IFRS)⁶ – paragon Automotive

€ '000 / as indicated	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018	Change in %
Revenue	139,541	120,474	15.8
EBITDA	5,186	20,022	-74.1
EBITDA margin in %	3.7	16.6	n. a.
EBIT ⁷	-15,469	9,220	n. a.
EBIT margin in % ⁸	-11.1	7.7	n. a.
Investments (CAPEX) ⁹	25,839	35,242	-26.7
Operating cash flow	454	1,348	-66.3
Free cash flow ¹⁰	-25,385	-33,894	25.1
€ '000 / as indicated	Dec. 31, 2019	Dec. 31, 2018	Change in %
Total assets	245,168	254,027	-3.5
Equity	60,411	80,018	-24.5
Equity ratio in %	24.6	31.5	n. a.
Free liquidity	12,966	20,692	-37.3
Interest-bearing liabilities	134,253	106,914	25.6
Net debt ¹¹	121,287	86,222	40.7
Employees ¹²	800	797	0.4

6 In accordance with the certification of the pro forma financial statements for Automotive after review by Baker Tilly GmbH & Co. KG and against the background of the expected discontinuation of the consolidation of the Voltabox subgroup.

7 Not adjusted for the effects of refocusing measures, currency conversions from foreign bonds, and integration and follow-up costs of company acquisitions in the amount of € 13,027 thousand.

8 EBIT margin adjusted for expenses in connection with the consolidation and integration of acquired companies, the introduction of ERP software and the acquisition of a company and ramp-up problems in a major project: -1.8%.

9 CAPEX = investments in property, plant and equipment + investment in intangible assets.

10 Free cash flow = operating cash flow – investments (CAPEX).

11 Net debt = interest-bearing liabilities – available liquidity.

12 Plus 46 temporary workers (December 31, 2018: 107; September 30, 2019: 49).

The paragon 2021 ▶

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The paragon 2021
DRIVING PERFECTION



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→ DEAR SHAREHOLDERS, CUSTOMERS, BUSINESS PARTNERS AND EMPLOYEES,



Our private and professional lives have been severely affected by a 60 to 120 nanometer virus. It has strongly influenced our everyday life, our habits and the pace of our world. It has also had an impact – at least temporarily – on the development of the paragon Group.

THE CORONAVIRUS HAS NOT AFFECTED THE NEED FOR MOBILITY. →

→ **On the contrary**, the temporary restrictions on movement have clearly demonstrated the importance of mobility for us all. We are therefore called upon more than ever to develop mobility solutions that meet the challenges of today and the future. The automotive industry has accepted this mission. Manufacturers and suppliers like paragon have made up one of the most innovative industries for decades. As a result, we have many groundbreaking ideas and innovations in the pipeline for the coming years.

But first things first: Fiscal year 2019 was another eventful year for paragon. In a difficult market environment, we achieved Group revenue of € 192 million, an increase of 3% over the prior year. The Automotive segment in particular contributed € 140 million to this Group revenue, a huge 16% increase over the prior year. In doing so, we have exceeded our own expectations for paragon's core business by more than 7% and are proud of our solid growth.

THE EARNINGS FIGURES FOR THE PAST FISCAL YEAR WERE SIGNIFICANTLY INFLUENCED BY TWO FACTORS IN PARTICULAR: →

→ **First**, a comprehensive balance sheet adjustment was made at our subsidiary Voltabox AG in the amount of around € 100 million. The Management Board of Voltabox decided to make this adjustment because the company's business prospects have deteriorated in the relevant markets, also due to the COVID-19 pandemic. In addition,

as announced, further integration and consolidation measures were taken in the Automotive segment and one-time additional costs were incurred in connection with product start-ups and the introduction of ERP software. This resulted in a negative EBIT of € 120 million and an EBIT margin of -62% for the paragon Group. Adjusted for one-time effects, the EBIT margin is therefore -70%.

We are not satisfied with this result, and have therefore already taken various measures in 2019 to increase our profitability. This included streamlining the cost structure in order to further optimize production and locations as well as introducing new systems and processes to manage the organization more effectively. We have expanded and systematized working capital management as well as complaint and supplier management. We have also decided to provide more services and manufacture more components in production ourselves in the future, which we have purchased until now. These measures will enable us to further enhance the performance, efficiency and resilience of our organization.

AT THE BEGINNING OF MARCH 2020, WE ANNOUNCED OUR INTENTION TO SELL OUR STAKE IN VOLTABOX AG. →

→ **We have accompanied Voltabox** for more than eight years up to a market-leading position. From our perspective, we have done well so far, but now Voltabox needs a new partner. With its pioneering solutions as a supplier of lithium-ion battery systems in industrial applications, Voltabox offers promising growth opportunities in attractive mass markets. In order to take

advantage of this, however, a powerful anchor shareholder with a strong international presence and corresponding market access is needed. As an automotive company with a current focus on continental Europe, paragon does not meet these requirements. In addition, the overlap between the business models of paragon and Voltabox has progressively decreased in recent years.

WE HAVE THEREFORE VIGOROUSLY PURSUED THE SALE OF OUR STAKE OF ROUGHLY 60% OF VOLTABOX AG'S SHARE CAPITAL AND EXPECT THE PROCESS TO BE COMPLETED THIS SUMMER. →

→ **We will use the proceeds from the sale** of the investment to expand our automotive business and repay liabilities. Our core business offers us a wide range of market opportunities at home and abroad, which we intend to tap with appropriate product offerings.

As a matter of course, the first half of the current fiscal year was significantly affected by the outbreak of the coronavirus pandemic and the fight against it. Immediately following the announcement by our customers that they would be shutting down production in numerous plants, we also reacted and adjusted our capacities. This resulted in a six-week production standstill.

We resumed production at all locations at the end of April. At the beginning of July, capacity utilization was already close to the prior year's level on average. The reason that paragon once again has so much to do is mainly due to the fact that we are the sole supplier to our automotive customers for more than 80 percent of our products. As a result, the revenue achieved in June 2020 was only slightly below the level reached in June 2019, with a difference of -4%.

EVEN THOUGH THE CORONAVIRUS PANDEMIC AND THE MEASURES TAKEN TO COMBAT IT ARE HAVING A SIGNIFICANT IMPACT ON THE ECONOMIC SITUATION IN THE AUTOMOTIVE INDUSTRY, AND THUS ON PARAGON, IN THE CURRENT FISCAL YEAR, WE ARE OPTIMISTIC FOR THE FUTURE. →

→ **Mobility remains a "supertrend"** that we can best serve with our diverse and innovative products and with our market position. It is nearly irrelevant for us and our product range which type of drive will prevail in the future. In this respect, we are not affected by the far-reaching structural changes currently taking place in the automotive industry as a result of increasing e-mobility.

With our decades of focus on automotive electronics and kinematics, we see numerous opportunities for ourselves in this growing field.

We are using the 2020 fiscal year, which is actually a transitional year for almost all companies due to the coronavirus pandemic, to continue the measures we started in 2019 to increase profitability and equip our Sensors, Interior, Digital Assistance and Kinematics units for the future. In the current year, we expect revenue in the Automotive segment of € 105 to 115 million and an EBITDA margin between 8 and 12%. Our order backlog for the automotive business over the next 60 months totals roughly € 808 million.

OUR EMPLOYEES HAVE SHOWN EXTRAORDINARY COMMITMENT, PASSION AND RESILIENCE IN THE PAST FISCAL YEAR, BUT ESPECIALLY IN RECENT MONTHS. →

→ **They have adapted to new circumstances** in a very short time and have demonstrated great flexibility, creativity and perseverance. We have immense respect for them for this and thank them very much. We are also grateful to our customers and business partners, who have shown a great deal of understanding, solidarity and loyalty in these extraordinary times. Our sincere thanks also go to our shareholders for their consistency, their confidence and their trust in us. ◀



Klaus Dieter Frers

→ Chairman of the Board



Dr. Matthias Schöllmann

→ Managing Director
of Automotive



KLAUS DIETER FRERS,
CHAIRMAN OF THE BOARD

→ INTERVIEW WITH THE MANAGEMENT



Mr. Frers, Dr. Schöllmann, how do you see the paragon Group's position at present?

Frers → paragon has developed steadily in recent years. We are market leaders in each of our product fields, either in Europe or even the world. I think we can say that we are shaping the market with our products for the automotive sector. The sale of our stake in Voltabox will significantly strengthen this positioning in the future. On the one hand, we will then be able to focus exclusively on the automotive sector again, and on the other hand, we will be able to use the proceeds from the sale of the investment to implement our numerous product and growth ideas and reduce our debt at the same time.

Schöllmann → In my opinion, there is no other automotive supplier whose entire product portfolio is as visionary. This is also reflected in our growing international presence. In the recent past, demand for our products has risen especially outside Germany, particularly in France and Italy. The task now is to expand our market shares in the USA and China.

Is expanding markets even conceivable in light of the coronavirus crisis?

Frers → Although the coronavirus crisis has affected us, just as it has many other companies in our industry, it has not affected our growth plans. On the contrary, we took the opportunity to organize the Group more effectively and to make it more resilient against external developments. With regard to our product portfolio, we are on a clear course of expansion.

Schöllmann → 2020 is certainly a year of transition, but it is also a year to get our ducks in a row. Starting in 2021, we want to take advantage of the many prospects that are opening up for us. To this end, we have already set the appropriate course and are currently working consistently to prepare for the future.

What are your concrete plans?

Frers → The decision to sell the stake in Voltabox is unleashing many creative forces, and it also represents a return to our roots. When I founded paragon in 1988, I always wanted to create something exemplary. That's why I chose the Old English term "paragon" as the company name, which conveys that meaning. We want to take the next logical step in 2021, and we have combined the planned activities this will involve under the title of "The paragon 2021."

What does “The paragon 2021” represent?

Frers → Firstly, “The paragon 2021” is meant substantively. All related activities should be exemplary and reflect the mission statement of our company. It is therefore not so much a multi-year strategic program as it is a positioning goal that we want to have achieved by the end of 2021.

Schöllmann → Our aim is to further enhance our market presence, highlight our skill sets more clearly and clarify our product offerings. In the future, we want to draw more attention to a core skill that has made paragon successful for roughly 20 years: active product development. We do not develop most of our products at the request of our customers, but rather anticipate megatrends at an early stage and implement them in the development and design of our products. We always have the end user in mind as well as the most efficient, highly automated and easily scalable production. This enables us to make our solutions available to different platforms or automotive manufacturers at attractive rates with only minor changes. The mobility supertrend, which reflects megatrends like urbanization, digitalization, CO2 reduction and increased comfort requirements, opens up a wealth of opportunities for our products.

How will “The paragon 2021” affect paragon’s product range?

Schöllmann → Which products we have in our portfolio is not clear to many outsiders because we are organized into the Sensors, Interior, Digital Assistance and Kinematics units – by the way, this is to remain so in the future. However, we will present our product range to the public differently in the future. For this purpose, we have defined five product fields under the label of “Driving Perfection”: Feel & Relax, Breathe & Protect, Listen & Act, Move & Support and See & Assist. This presentation is also intended to show that there are many overlaps between the units and that it is easy to combine skill sets from our units to develop new products. It also shows how much potential still lies ahead in our product fields.





DR. MATTHIAS SCHÖLLMANN,
MANAGING DIRECTOR OF AUTOMOTIVE

What are your expectations for the current and upcoming fiscal years?

Frers → We are entering the coming years with a great deal of optimism. In the Automotive segment, we exceeded our planned revenue growth in 2019 and bucked the trend once again. We have a very robust customer base, an efficient organization and an extremely promising product portfolio. We see many prospects for new products as well as good opportunities to position ourselves even more prominently, especially abroad. In this respect, we've put the company in forward gear – and we're stepping on the gas. ◀

The paragon 2021 ▶

→ DRIVING PERFECTION

With its innovative and technologically cutting-edge products, the paragon Group has been shaping key markets in the automotive industry for over 30 years. Having started with contract manufacturing of electronic components, paragon today offers a comprehensive portfolio of products that are used in millions of vehicles from automotive manufacturers around the world. Statistically speaking, one out of every seven new vehicles produced worldwide contains at least one paragon product.

→ “With the new arrangement of our products into fields of activity, we want to make it easier for our business partners and friends to recognize the diversity of our products, their interdependence and their future potential. At the same time, “Driving Perfection” makes our goal clear: “With our products, we ensure a perfect driving experience.”

Klaus Dieter Frers



→ “We will continue to be organized into the Sensors, Interior, Digital Assistance and Kinematics units and strengthen them in their corporate responsibility. However, our new depiction of the fields of activity shows how closely our units work together. More and more often, our products are created by bringing together the different skill sets that we have within the paragon Group as a whole.”

Dr. Matthias Schöllmann



Under the mission and goal of “Driving Perfection,” paragon classifies its products under the following fields of activity:

Breathe & Protect



- Air quality sensors
- Electrostatic filters
- Vital data sensors
- Child presence detection

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Listen & Act



- Road-Noise-Cancellation
- Interior and exterior microphones
- Seatbelt microphones
- Speaker systems
- Perfect speaker
- Headrest speakers
- Exterior sound for electric vehicles

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See & Assist



- Cockpit instruments
- Controls
- Digital assistance
- EDWIN product family
- Ecosystem for artificial intelligence

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Move & Support



- Front and rear spoilers
- Movable exterior parts
- Wind deflectors
- Interior actuators

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Feel & Relax



- Smart surfaces / hidden technology
- Seat status sensors
- Electric seat adjustments
- Consoles and holders
- Folding tables

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The selected pairs of terms each consist of an activity by the driver or vehicle occupants (Feel, Breathe, Listen, Move and See) and an effect generated by the product (Relax, Protect, Act, Support and Assist).

—
Breathe & Protect
—



- Air quality sensors
- Electrostatic filters
- Vital data sensors
- Child presence detection

→ ARRIVE SAFE AND SOUND

Fine dust, pollen, viruses: There are many particles in the air that can affect our health and well-being. With Dustdetect and Dustprotect, paragon has developed pioneering solutions that ensure the highest air quality in the vehicle interior. Ralf Mönkemöller, the head of development of the Sensors unit, is convinced that within roughly ten years, solutions of this kind will be standard in every vehicle.

Mr. Mönkemöller, sensors and filters for vehicle interiors are currently becoming more and more important. Why is that?

Mönkemöller → Health is becoming increasingly important in our society. This naturally includes protection against undesirable particles in the air, be it fine or ultra-fine dust, fungi, microorganisms and pollen. We can also improve the air quality considerably by filtering even the smallest particles and even viruses from the vehicle's interior air.

THE **DUSTDETECT** SENSOR MEASURES THE PARTICULATE MATTER CONCENTRATION INSIDE AND OUTSIDE THE VEHICLE.



What technology do you use for this?

→ The particulate matter concentration is determined with our Dustdetect product. Dustdetect was launched in the market in 2015 and is already being used in many types of vehicles in Germany and abroad. It detects fine dust particles inside and outside the vehicle and transmits exact values to the vehicle so that, for example, the recirculation damper can be closed. It also provides information on air quality to vehicle occupants. With Dustprotect, we have developed a high-voltage plasma particulate filter that also filters ultra-fine dust particles out of the car's interior air. Dustprotect does not replace the existing filter systems in the vehicle, but increases their performance many times over and is also effective against viruses.

How much demand do you anticipate for such a solution?

→ We are convinced that Dustprotect opens up huge market potential for us. The importance of air quality inside the vehicle has increased considerably in recent years – and will continue to grow in the years to come. The coronavirus pandemic is currently providing an additional boost. I expect that in 10 years' time, high-performance particulate filters like these will be standard equipment in every car. With our decades of experience in sensor technology and ionization, we are technologically far ahead of the competition. The feedback we receive from the vehicle manufacturers during their tests is extremely positive.

Will air quality sensors also soon be standard equipment in every vehicle?

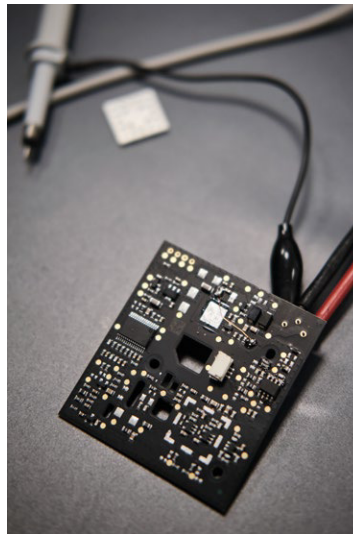
→ Yes, we think so. This is because a large proportion of fine dust is produced by dust on the road and ground whirling up and from tire and brake wear. This will not change because of increasing e-mobility. And as awareness of air pollution and the illnesses it causes increases, it is very likely that air quality sensors will soon be standard equipment. As a matter of course, we see great growth opportunities in this for us. ◀



THE **DUSTPROTECT** HIGH-VOLTAGE PLASMA PARTICULATE FILTER PROVIDES UNPOLLUTED AIR IN THE VEHICLE AND ALSO HELPS AGAINST VIRUSES.

THE MAIN ADVANTAGES OF THE **DUSTPROTECT** ARE THE HIGHLY EFFECTIVE FILTERING, A STABLE AND HIGH DEPOSITION RATE OVER A LONGER PERIOD OF TIME AND A LOW INSTALLATION SPACE REQUIREMENT.





SARAH RISTAU DRIVES PRODUCT INNOVATIONS AND ADVANCEMENTS IN THE SENSORS BUSINESS UNIT.

→ WORKING ON PIONEERING SOLUTIONS

Sarah Ristau → has been part of the paragon family since 2011. She started with the company as a development engineer. Now, she works as technical project manager and had a key role in the development of the new Dustprotect particle filter. When talking to her, her enthusiasm for the topic immediately becomes clear. For her, having a holistic approach to her activities is of particular importance. “That was ultimately the reason why I chose to build a career at paragon. We don’t just make products according to the specifications of the manufacturer – we approach every step along the innovation process from the perspective of end users,” she explains. In the Sensors business unit, Ristau, who focused on biotechnological topics during her studies, mostly deals with new and further developments of solutions to improve air quality in cars.

“WE DEVELOP PRODUCTS THAT CREATE REAL VALUE FOR CUSTOMERS.”

→ **Development work** is of great importance in the paragon Group – which can be felt across the entire company. The innovation pipeline is well filled. “What’s most exciting to me is that we in the Sensors business unit have an outstanding reputation and are therefore involved in cutting-edge developments. Furthermore, our product portfolios continue to grow and overlap with increasing intensity, which means that our innovation and development work is

becoming more and more interdisciplinary,” emphasizes Sarah Ristau.

Challenging tasks, prominent customers and the highest quality standards: paragon relies on efficient knowledge management and agile teams in order to constantly expand its position in the area of air quality management in cars. “The intensified exchange between colleagues from different product groups is giving way to completely new ideas, perspectives and ultimately groundbreaking products,” says Ristau.

“I BELIEVE THAT PARAGON SETS ITSELF APART FROM THE COMPETITION THROUGH ITS FAMILIAR CHARACTER, WHICH REMAINS STRONG IN THE FACE OF EVER-CHANGING STRUCTURES. I AM HAPPY TO BE ABLE TO CONTRIBUTE TOWARD THIS DEVELOPMENT.”

→ **paragon’s particular approach** to development work enables freedom. “We want to achieve something together. To ensure that our innovation approach works we need structure on the one hand and leeway to promote and implement our own ideas on the other,” says Ristau. Making sure that both exist and are sufficient at paragon is something that both Ristau and the head of the unit, Ralf Mönkemöller, are passionate about – because such structures also determine to a great extent the cohesion and commitment within the team. ◀

→ TOP QUALITY SPEAKING AND LISTENING

THE **"PERFECT SPEAKER"** FROM PARAGON DELIVERS THE SAME PERFORMANCE AS COMPARABLE PRODUCTS – AND TAKES UP ONLY HALF THE SPACE.



No (co)driver wants to go without communication and entertainment in the vehicle anymore. New technologies are now making it possible to have unique experiences and maximum comfort while driving. Dr. Dirk Olszewski, the head of the Electroacoustics specialist unit and the head of development in the Acoustics specialist unit, outlines the latest trends.

Listen & Act



- Road-Noise-Cancellation
- Interior and exterior microphones
- Seatbelt microphones
- Speaker systems
- Perfect speaker
- Headrest speakers
- Exterior sound for electric vehicles

Dr. Olszewski, at the IAA 2019, paragon presented the “perfect speaker.”
What does that mean?

→ The “perfect speaker” is a speaker that is about half the size and weight of a conventional speaker, but has the same performance. As a result, it saves a lot of space and helps to reduce the weight of the vehicle. In addition to many other advantages associated with this, it also has a positive effect on the CO2 emissions of vehicles with combustion engines and the range of electric vehicles. The response we are currently receiving to this new development is enormous.

How is that technically possible?

→ Speakers have a usability limit and a load limit. The usability limit is reached sooner than the mechanical load limit. The “perfect speaker” has a built-in algorithm which, in conjunction with special hardware, determines the movement of the speaker cone at all times. Because the algorithm can counteract this movement, it prevents distortions and thereby brings the usability limit much closer to the load limit, so the same speaker produces greater output. Or vice versa, the speaker volume can be reduced by up to 50 percent without reducing its performance.

Does this mean that in the future, it will be possible to install powerful speakers in places where space is at a premium?

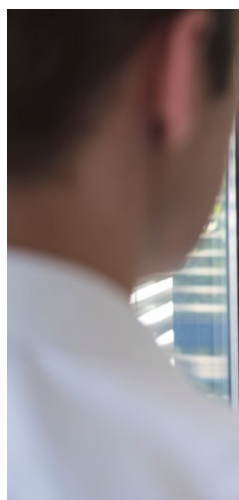
- [For instance, this is highly relevant for communication in the passenger compartment.](#) It will become increasingly important in the future to intelligently link acoustic reproduction, microphones, signal processing and even active-noise cancellation i.e. the active elimination of undesired background noise through the use of loudspeakers emitting counterwaves. Here the “Perfect Loudspeaker” makes a significant contribution.

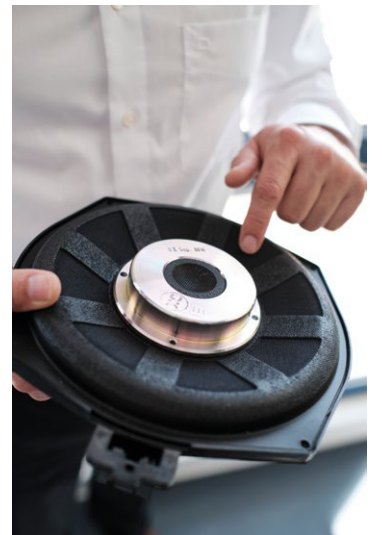
Can a high performance of road noise cancellation be achieved in this way?

- Absolutely. With road noise cancellation, the challenge is always ensuring that the counter-noise signal arrives at the ear at the same time as the noise and matches the signal shape of the noise as closely as possible, but inverted. [The closer the speaker is to the driver's ear, the greater the effect.](#) In this area, we are particularly concerned with reducing road noise. At moderate speeds, the driver's perception of sound in the interior is predominantly of road noise – and this is increasingly seen as a nuisance, especially in electric vehicles.

What features does paragon offer for creating exterior sound for electric vehicles?

- We have already been mass-producing exterior speakers for some time, and they are in great demand due to their high quality. [Starting in fall 2020, we will even have to expand the production for one customer in order to meet the high demand.](#) But we also offer the complete range of systems, starting with a generator that produces the exterior sound and ending with a software tool that allows our customers to design their own sounds and thereby convey their brand values. ◀





IN-CAR COMMUNICATION ENABLES PROBLEM FREE CONVERSATION IN THE VEHICLE – EVEN AT HIGH SPEEDS AND IN CABRIOS.



THE DEMAND FOR **HIGH-PERFORMANCE AUDIO SYSTEMS** IN CARS WILL CONTINUE TO INCREASE IN THE FUTURE. WITH ITS PRODUCTS AND SOLUTION CONCEPTS, PARAGON PROVIDES THE RIGHT ANSWERS.



See & Assist



- Cockpit instruments
- Controls
- Digital assistance
- EDWIN product family
- Ecosystem for artificial intelligence

→ INTELLIGENT
SUPPORT AND
ADVICE

There is enormous potential in artificial intelligence (AI). paragon has been using AI-based systems for the automotive sector – and far beyond – since the acquisition of semvox technology and the integration of the team led by Dr. Norbert Pflieger.

→ **When a spin-off** of the German Research Center for Artificial Intelligence (DFKI) became independent in 2008, concrete applications for AI were still in their infancy, especially in the automotive sector. A decade later, millions of vehicles are equipped with technology created by semvox, which has been housed within the paragon Group since 2018. Today, this technology ensures that its users receive intelligent support for a wide variety of tasks.

“VOICE CONTROLS AND VIRTUAL VOICE ASSISTANTS ARE NO LONGER UNUSUAL IN OUR DAILY LIFE OR OUR VEHICLES,” SAYS DR. NORBERT PFLEGER, MANAGING DIRECTOR OF PARAGON SEMVOX.

→ **“They are becoming more powerful** from year to year, and can handle more and more commands and concrete tasks. We have set technological standards in this market and now we are already working on the next generation: intelligent companions.”

Pflieger employs this term to describe technology that supports its users proactively, individually, multimodally and in a task-oriented way.

“A GOOD ASSISTANT KNOWS WHAT I WANT BEFORE I SAY IT,” EXPLAINS PFLEGER.

→ **“This requires** that it knows who I am, what preferences I have, how I make decisions in certain situations, what my environment is like and what I need. While virtual voice assistants carry out commands, the intelligent companion

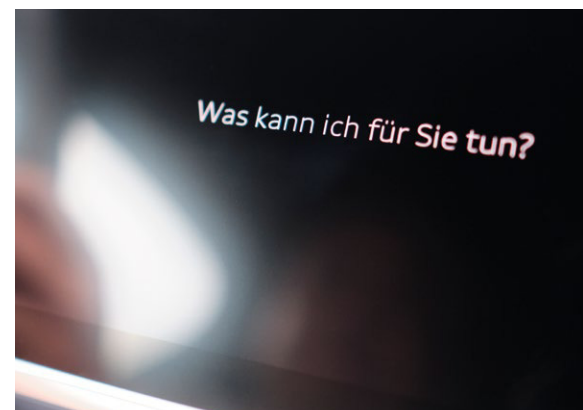
thinks ahead. It suggests various courses of action on its own initiative, drawing on a wide range of information from a wide variety of sources.”

→ **The solution developed by paragon semvox**

combines several AI technologies to correctly perceive, understand, act, learn and respond. This allows users to interact with it in multiple ways. As a result, its performance goes far beyond that of virtual voice assistants.

“In addition to the Automotive segment, many other applications are conceivable and are already being implemented,” says Pflieger. “This includes medical technology as well as numerous uses in Industry 4.0. The market potential cannot be overestimated.”

The goal that Pflieger and his 75-member team pursue: to provide a technology platform on which customers can develop their own tailor-made AI applications. Interest is high. Only recently, paragon semvox completed the largest order in the company’s history. The client: a major German premium car manufacturer. ◀





—
Move & Support
—



- Front and rear spoilers
- Movable exterior parts
- Wind deflectors
- Interior actuators

→ DYNAMIC AND
SMART DRIVES



Roman Pagé knows every single workstation in production – and virtually every necessary step. Over the past few months, he has repeatedly analyzed and optimized all work steps and processes together with those responsible for production at the Landsberg am Lech site. Many workplaces were reorganized, processes changed and production routes shortened.

AT THE LANDSBERG AM LECH SITE, **KINEMATIC PRODUCTS** ARE MANUFACTURED WITH THE HIGHEST PRECISION.



IN LANDSBERG AM LECH, BAVARIA, PARAGON HAS BUNDLED ITS KNOW-HOW IN THE BUSINESS FIELD OF KINEMATICS.



→ “Here at the Landsberg am Lech site, we are particularly committed to efficiency and perfect quality,” says Pagé, who has a dual role as the site manager and as the quality director of the paragon Group.

“ALL OF US HERE ARE VERY PROUD OF OUR OPERATIONAL PERFORMANCE, WHICH HAS BEEN CONFIRMED AGAIN AND AGAIN BY CUSTOMERS AND IN THE CONTEXT OF CERTIFICATIONS.”

→ **It is therefore no coincidence** that the center of excellence for production technology is also located here at the southernmost paragon Group site. This serves to provide inspiration for the entire Group's production systems. In addition, a department for industrial engineering is located in Landsberg am Lech, and it regularly demonstrates its capabilities in the development and design of various components and drives.

The Move & Support field encompasses products including front and rear spoilers, movable exterior parts such as wind deflectors and electric seat cushion adjustments. paragon has been successful in the market for kinematic components for many years and is the leading player on the world market. Market penetration is extremely high, especially in the area of movable drive units. “This is primarily due to our high degree of vertical integration,”

says Dr. Ulf Merschmann, member of the expanded Management. “We not only develop, qualify and produce kinematic products here, but also design and build the production equipment to a large extent in-house. We also search and qualify our suppliers ourselves. There is probably no one else in this market who has such unique expertise in the design of complex multi-link chains.”

Front and rear spoilers, which paragon produces for almost all premium German OEM manufacturers, are especially crucial in giving a vehicle its distinctive appearance. But even more important is their aerodynamic function for the vehicle. This comes down to the millimeter, and perfection is what counts. Accordingly, paragon is involved in the development of new vehicles at an early stage and works closely with vehicle manufacturers to develop the desired parts and drives. “Particularly quiet and smart drives are becoming increasingly important,” says Merschmann.

“A DEVELOPMENT FROM WHICH WE BENEFIT GREATLY, BECAUSE OUR ACOUSTICS SKILL SETS THROUGHOUT THE GROUP GIVE US AN OUTSTANDING COMPETITIVE ADVANTAGE.”

→ **Car manufacturers** attach great importance to quiet drives because spoilers and wind deflectors are firmly attached to the car body. The engine noise is therefore easily transmitted into the interior and could disturb the passengers. “To avoid this, it's not just technologically sophisticated and acoustically optimized drives that are required. We also have to be exceedingly accurate and work with extremely low tolerances,” says Pagé. “And this brings us back to the subject of quality – and the need for every single step to be carefully thought through.” ◀



THE TEAM LED BY **SITE MANAGER ROMAN PAGÉ** ATTACHES GREAT IMPORTANCE TO QUALITY AND EFFICIENCY.



→ FEEL COMPLETELY COMFORTABLE ON THE GO

When Markus Barth and his team think about new products, the meetings usually become very passionate. "Interior is the new exterior," says the head of the Interior unit with a wink. "This is because the interior of a vehicle, the controls and the available functions are increasingly dominating the customer experience and thus the purchase decision."

Feel & Relax



- Smart surfaces / hidden technology
- Seat status sensors
- Electric seat adjustments
- Consoles and holders
- Folding tables



ON SMART SURFACES, CONTROLS ONLY APPEAR WHEN NEEDED.

→ **Topics related to interiors** are full of emotion. After all, the interior creates the connection to the vehicle. In seeing, feeling, sensing and hearing, the driver identifies with the vehicle – or not. For this reason, it is important to Barth to inspire with the product categories he oversees. His goal: After the journey itself, the vehicle occupants must notice that they felt completely comfortable.

With this in mind, Barth always encourages his team to think emotionally and holistically in his product development meetings. In doing so, he relies on the numerous skill sets from the various paragon specialist units and operating segments.

“THERE ARE MANY OVERLAPS BETWEEN OUR PRODUCTS. THAT’S WHY INTERDISCIPLINARY COMMUNICATION IS SO IMPORTANT TO ME. THE FACT THAT WE HAVE SO MANY DIFFERENT SKILL SETS IN ONE COMPANY IS UNIQUE – AND A MAJOR REASON FOR OUR SUCCESS.”

→ **There is no shortage of ideas** for pioneering new products from Barth and his colleagues. In addition to the further digitalization of vehicles, advanced voice-input systems and autonomous driving, they are currently giving a great deal of attention to hidden technology. “We began conducting basic research in this area over ten years ago. Since then, we have set many standards in this market,” says Barth.

“THE GREATEST MOMENTUM IN THIS AREA CAN BE FOUND IN SMART SURFACES, I.E. SURFACES THAT TURN INTO CONTROLS AS SOON AS THEY ARE NEEDED.”

→ **Smart surfaces** are not only visually impressive, but also give a tidy impression of the vehicle interior when getting in. But more importantly, they reduce complexity. Drivers are increasingly saying that they now feel overwhelmed by the abundance of displays, touchpads and information offered.

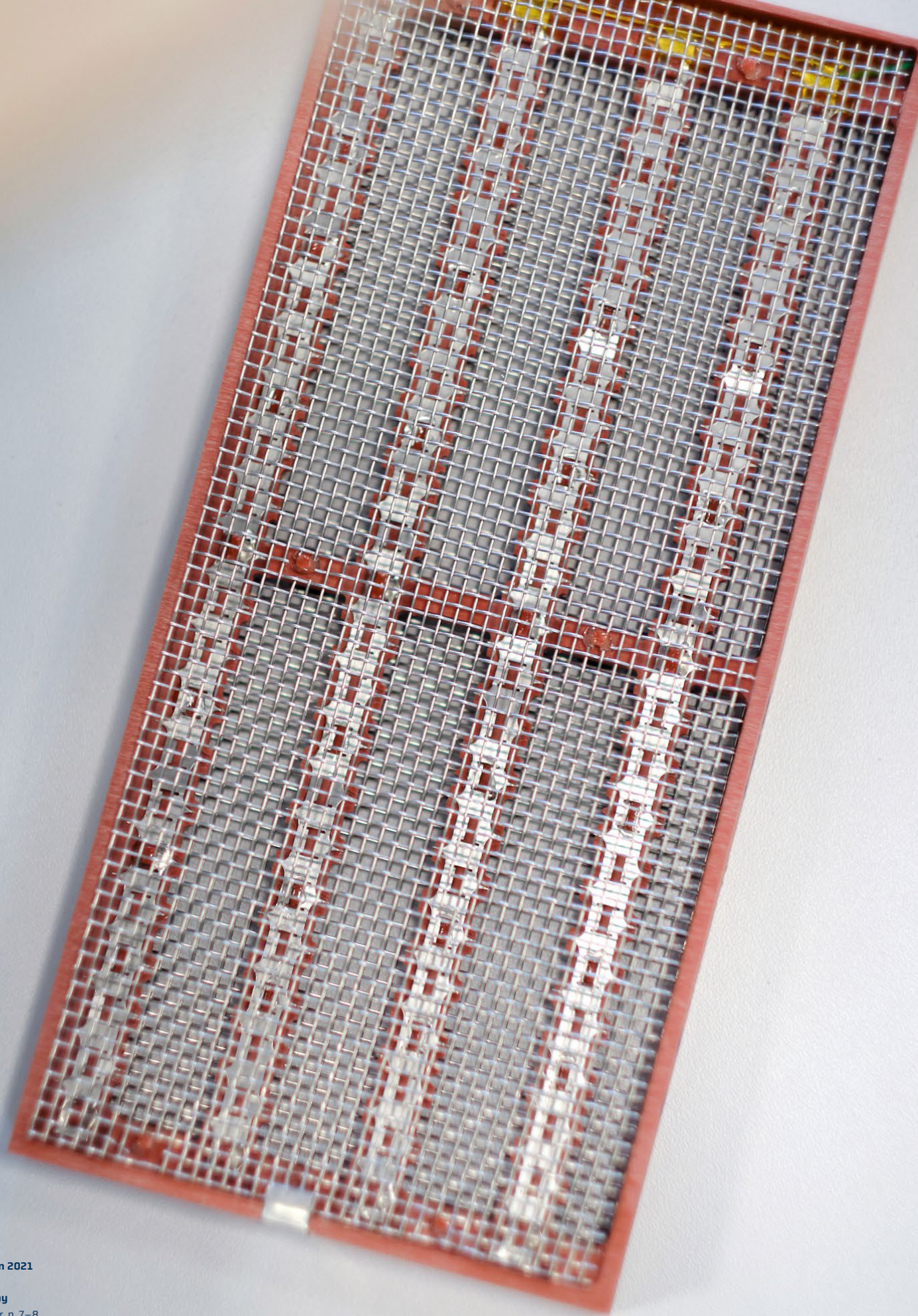


But according to Barth's motto, a vehicle must never annoy its user or cause stress.

In order to still be able to provide the expected content and variety of functions, the intelligent use of smart surfaces presents an excellent option.

For Barth, the potential applications of new kinds of sensors in the vehicle interior are virtually unlimited. The entire team also demonstrated this at last year's CES and the IAA. Met with great public interest, paragon presented a seat belt that can detect health data such as pulse and breathing rate for the first time at these trade fairs. The data collected not only serves as information for the driver, but also helps a vehicle in autonomous driving mode to recognize, for example, the condition of the person behind the wheel and whether control of the vehicle can be transferred to them.

→ **But that's not all:** “With the help of our cross-unit technologies, we can also detect seatbelt misuse or whether the belt is positioned correctly. For example, we can determine the seating position of children in the back of the vehicle and whether they are adequately secured. The solutions we have developed can identify who used a control element and trigger individualized actions accordingly. And much, much more. My job will definitely not be boring in the years to come,” says Barth, laughing as he hurries to the next meeting. ◀



The paragon 2021

Photography

Sarah Bömer, p. 7–8

Frank Eidel, p. 22–25

Marc Köppelmann, p. 4

Constantin Ranke, p. 10–21, 26–27

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Capital Market Environment

In the first weeks of 2019, the capital market was still characterized by a wait-and-see attitude. Institutional investors in particular showed little willingness to take risks during the winter months. Medium term-oriented investors declined to use the low share price at the beginning of February to enter into or conclude short positions, and rising prices in early April were not able to change this generally skeptical overall mood. Instead, the phase was used for profit-taking. According to a Bank of America Merrill Lynch survey in the first half of June, international fund managers were the most bearish they had been since the 2008 financial crisis. The mood only improved significantly at the end of the second quarter, mainly due to the G20 summit.

In the third quarter, purchasing managers' indices dropped below critical thresholds in a number of countries as the economic slowdown became increasingly pronounced. This had a corresponding effect on investor sentiment in stock markets. At the beginning of the quarter, the focus was on profit-taking and increasing risk aversion. After an intervening boost from favorable entry prices, investor sentiment deteriorated in late July following a decline in the leading indices. Private investors were particularly pessimistic and expanded their previously established short positions.

Favorable entry prices were identified mainly by institutional investors in early August, despite the negative policy signs that followed the reduction of the key interest rate by the U.S. Federal Reserve and the serious escalation of the trade war between the USA and China with the announcement of additional punitive tariffs. Global political developments ultimately resulted in nervousness in markets over the further course of August, however, and motivated traders of institutional investors in the second half of the month.

The mood among private investors lightened as the month drew to a close, even though the trade war remained the dominant subject in the markets. At the end of the quarter, however, professional investor sen-

timent as measured by the Frankfurt Sentiment Index dropped to its lowest level since 2010. This complex, bearish situation was influenced particularly by leading financial institutions' revisions of their outlooks for the near and medium-term future of the economy at the national and global levels.

Professional investors took particular advantage of the low prices at the beginning of October to buy at favorable entry prices. Private investors remained true to the trend of recent weeks and avoided risk. The subsequent rise in the DAX to a new annual high was clearly supported by the commitment of international investors. This also brightened the market sentiment of German investors. This development was mainly supported by expectations of a positive outcome for latent conflicts such as Brexit and customs disputes.

But the success of the DAX made many professional investors skeptical, and some sold or built up short positions. Supportive news at the beginning of November, such as the lowering of key interest rates by the U.S. Federal Reserve Bank, new hopes for progress in the trade conflict between the USA and China, and further significant exchange rate gains were not able to change this. In contrast, the optimism of private investors remained unbroken. The DAX Sentiment Index, which is compiled by Deutsche Börse, rose to a level of +32 points, the highest level since early 2018.

In the fourth quarter, the German share index reliably joined the rise in the international stock markets. Ultimately, it was mostly international fund managers who proved extremely positive about global growth over the coming 12 months in the latest BofA Merrill Lynch survey, which heralded a turnaround from earlier fears of recession. German institutional market participants only followed these international capital flows to a very limited extent. After the DAX rally which began on October 4 stabilized at a high level in mid-November, market sentiment became somewhat overcast again during those weeks. During this phase, private investors in particular demonstrated their great flexibility in the assessment of market developments. Though they were still strongly

optimistic in late November, they moved away from their presumed high expectations soon thereafter.

At the beginning of December, institutional investors in particular confirmed their high level of confidence with a view to the end of the year. Some of the bearish-oriented investors also closed out net short positions. On the other hand, private investors were eager to take profits and, with a reduction in the bull market, ensured that institutional investors showed more confidence at this point than they had in three months. Market participants were euphoric at the partial agreement between the USA and China in the trade dispute and the election result in Great Britain, which created clear conditions. Markets in the USA and the DAX marked new record levels and highs for the year. This served to ring in a dynamic close to the year with high share prices and support from the “window-dressing”, meaning the balance sheet optimization, of portfolios by a number of fund managers.

Share: Price Performance and Trading Volume

The price of the paragon share experienced above-average pressure in the past fiscal year and was only able to outperform the major indices at the beginning of the year thanks to a positive outlook coupled with solid figures. With an Xetra closing price of € 14.50 as of the reporting date (prior year: € 17.48), the share price fell by 17.0% over the course of the year (prior year: price loss of 77.8%). This corresponds to a decrease in the company's stock market value of around € 13.5 million (prior year: loss of € 277.0 million).

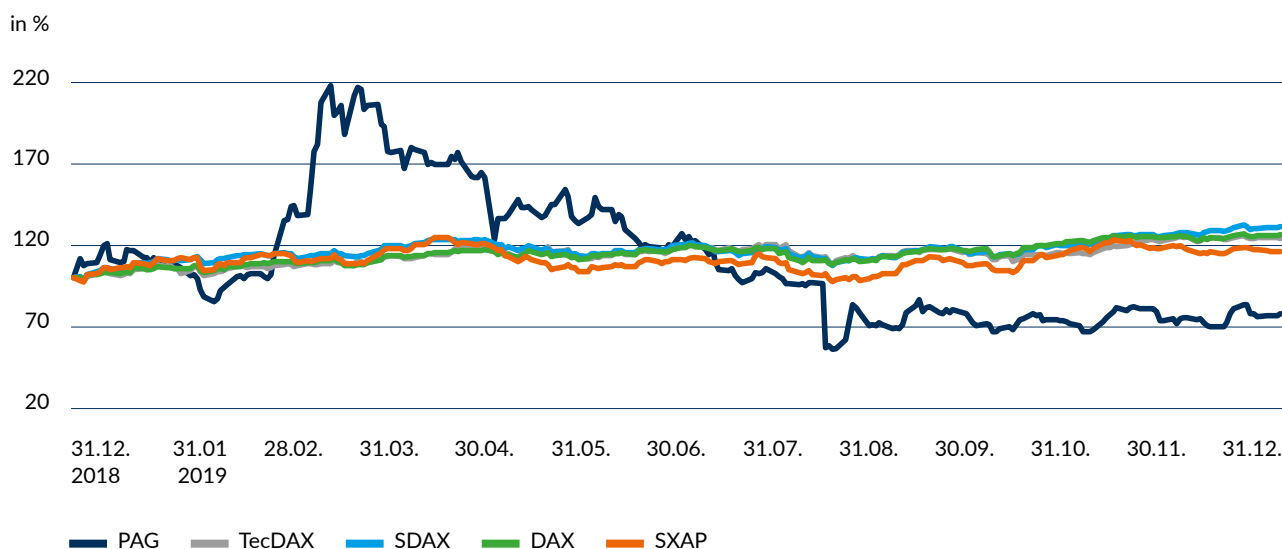
The most important German stock indices concluded the first quarter with gains (DAX 9.2%, SDAX 15.0%, TecDAX 9.0%). The STOXX Europe 600 Automobiles & Parts (SXAP) index, which lists the most important European automotive industry stocks, posted a growth of 10.3%. The paragon share achieved an increase in value of 105.9% in the same period. Starting from an initial price of € 19.50, the share was under pressure, especially at the beginning of February, and on February 11 reached the lowest price for the first quarter at € 14.88. Subsequently, the share price performed very positively

and gained significant upward momentum – especially from the beginning of March to the middle of the month with high trading volumes – to a high of € 38.10. The quarter ultimately ended at a price of € 36.00. This corresponds to a stock market value for the company of around € 162.9 million as of this reporting date and a first-quarter increase in its stock market value of roughly € 74.7 million.

Of the most important German share indices, the DAX and TecDAX were particularly impressive in the second quarter, with growth of 6.8% and 6.5% respectively. The SDAX also showed an increase of 2.8%. By contrast, the STOXX Europe 600 Automobiles & Parts (SXAP) recorded a decline of -3.0%. The paragon share was unable to maintain its high level from the previous quarter and suffered a price loss of -87.2%. Starting from an initial price of € 36.10, which also marked a high, the share initially performed weakly with little momentum in the further course of trading. Concurrent with subsidiary Voltabox AG's publication concerning an examination procedure by the Financial Reporting Enforcement Panel (FREP), the price of the paragon share fell to € 21.60. Although the price recovered somewhat in the days that followed, this did not trigger a sustained upward trend. From mid-June onward, the stock declined due to very low trading activity, reaching its low of € 20.35 at the end of the month before closing the second quarter at € 20.85. This corresponds to a stock market value for the company of around € 94.4 million as of this reporting date and a second-quarter decrease in the company's stock market value of around € 68.6 million.

In the third quarter, none of the most important German share indices were impressive. While the DAX only recorded a decline of -0.9%, the TecDAX and SDAX fell by -4.2% and -4.6% respectively. The STOXX Europe 600 Automobiles & Parts (SXAP) was also down by -2.4% as of the reporting date. With a performance of -55.0%, the paragon share price again suffered a particularly strong loss. This was especially noticeable in the profit warning in August. Starting from an initial price of € 22.20, which also marked a high, the share fell below the 20-euro mark at an early stage due to low trading activity. The trend intensified in August before the profit warning from paragon issued on August 12 caused the price to plunge to € 10.00 on the following day. On August 15,

Performance of paragon share

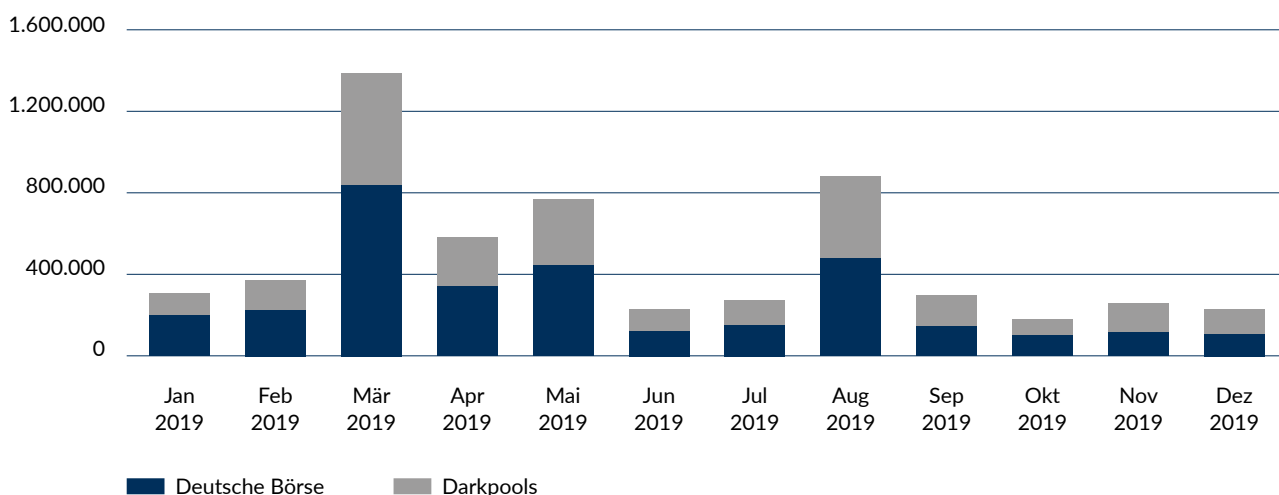


the share price hit a low of € 9.81, before rising again to over € 15.00 by mid-September as a result of increased trading activity. Nevertheless, the share price fell again to € 12.58 by month end, which corresponds to a stock market value for the company of around € 56.9 million as of this reporting date and a market value loss of around € 37.4 million in the third quarter.

Following the weak third quarter for both the paragon share and the most important German indices, perfor-

mance improved across the board in the fourth quarter (TecDAX 9.2%, SDAX 16.2% and DAX 9.3%). European automobile stocks were also stronger (SXAP 7.4%). In this environment, the paragon share increased in value by 12.0%. Starting from an initial price of € 12.40, the share reached its lowest price of € 11.64 the very next day. In the weeks that followed, the paragon share was able to maintain its level and break free in isolated cases, but, because of consistently low trading volumes, it at no point managed to manifest in a sustained upward trend

Trading volume of paragon share



until the end of November. It only rose to its high of € 14.60 in mid-December and finally ended the quarter at a closing price of € 14.50. This corresponds to a stock market value for the company of around € 65.6 million as of this reporting date and a fourth-quarter increase in its stock market value of roughly € 8.7 million.

Trading volumes varied over the course of the year. Over the year as a whole, the volume traded each month averaged around 274 thousand shares (prior year: 343 thousand shares). Deutsche Börse AG's trading platforms accounted for around 57.1% of this volume (prior year: 65.8%). Trading via dark pools (i.e., internal bank and stock exchange trading) thus increased slightly in the past fiscal year.

In the first quarter, the monthly trading volume was highest for the year at around 688 thousand shares. This was due to the above-average level of trading activity in April with around 1.4 million shares. The trading volume in the second quarter was also relatively high at around 528 thousand shares per month. At around 484 thousand shares per month, the third quarter remained well above the level of prior years, in which there was typically reduced trading activity in the summer months. The reason for the higher level was the high trading volume in August with around 887 thousand shares traded. In the fourth quarter, the monthly trading volume fell significantly to 224 thousand shares.

Corporate Bond 2017/22

The corporate bond (ISIN DE000A2GSB86; WKN A2GSB8) that was placed on June 27, 2017, with a total volume of € 50 million has an interest coupon of 4.5% p.a. (as of July 5 each year). The bond is listed on the open market (free trade) of the Frankfurt Stock Exchange in Deutsche Börse AG's Scale segment for corporate bonds. This bond matures on July 5, 2022. It closed the year trading in Frankfurt at 64.6% of the issue price. On average over the year as a whole, the bond traded at 85.4%. A company rating is not planned for this bond.

Corporate Bond 2019/24

On April 4, 2019, paragon issued a bond under the leadership of Helvetische Bank AG for CHF 35 million with a coupon of 4.00% and a fixed term of five years. The bond has been listed on the SIX Swiss Exchange under the ISIN CH0419041105 since April 23, 2019, and has been interest-bearing since that date, first payable on April 23, 2020. The smallest tradable unit is CHF 5,000. The bond closed the year trading at 68.5% of the issue price. On average over the year as a whole, the bond traded at 86.0%.

Investment in Voltabox AG

At the end of the reporting year, the company had an investment of around 60% in its subsidiary Voltabox AG, which is listed in the Prime Standard segment of the Frankfurt Stock Exchange with the symbol VBX, the ISIN DE000A2E4LE9 and the WKN A2E4LE. At that time, this investment had a stock exchange valuation of around € 91.2 million. Voltabox AG is fully consolidated in the consolidated financial statements. Minority interests are indicated separately in the Group's statement of comprehensive income.

In fiscal year 2019, the necessary adjustment of the Voltabox AG forecast as a result of significant revenue shifts against the background of full consolidation also had a direct effect on the paragon Group. Accordingly, paragon was forced to adjust the expectations of the Group as a whole in parallel with the Voltabox AG forecast adjustment and communicated this in an ad hoc announcement on August 12, 2019.

Subsequently, the Management of paragon decided to initiate a sales process for the investment in Voltabox AG. The corresponding notification was published on March 3, 2020. The options range from a partial sale to a complete sale of the subsidiary.

Financial Communications

paragon GmbH & Co. KGaA regularly and simultaneously informed all of the capital market participants about the economic situation of the company. The continuous reporting included the annual report for fiscal year 2018 (published on April 1, 2019), the interim report as of March 31, 2019 – 1st quarter (published on May 13, 2019), the interim report as of June 30, 2019 – 1st half-year (published on August 22, 2019) and the interim report as of September 30, 2019 – 9 months (published on November 13, 2019), among others. In addition to these reporting dates, paragon GmbH & Co. KGaA published financial notices, which also included the Management's assessment of further business development.

The Management's revenue and earnings forecast for fiscal year 2019 dated March 7, 2019 was outlined in the Group management report published on April 1, 2019 as an interval forecast including the key assumptions on which the forecasts are based. On August 12, 2019, the company issued a profit warning, mainly as a result of postponed projects at subsidiary Voltabox AG and the resulting delays in sales, which led to a reduction in the forecast for revenue and EBIT margin.

In the past fiscal year, the company continued to solidify its ongoing communication with institutional and private investors both at the paragon Group level and at the level of its subsidiary Voltabox AG, which is also publicly traded.

More than 250 individual meetings were held with institutional investors from Germany, the United Kingdom, France, Finland, Sweden, Denmark, Luxembourg, the Netherlands, Switzerland, Austria, Italy, Spain, Poland, the USA and Canada as well as with private investors. Over the course of the year, 6 research firms (prior year: 6) published a total of 30 studies (prior year: 31) on paragon GmbH & Co. KGaA, and 7 research firms published a total of 35 studies on the subsidiary Voltabox AG.

The company sees effective financial communication as the targeted reduction in the asymmetric flow of information between Management and shareholders on the current economic situation and specific future potential of paragon GmbH & Co. KGaA. Accordingly, the ongoing dialogue with professional capital market participants is given a high priority. Furthermore, the company aims to provide the broader public with up-to-date and relevant information via various media channels and to be available as a personal contact for private investors.

Supervisory Board Report



Prof. Dr.-Ing. Lutz Eckstein

Monitoring and Consulting in Continuous Dialogue with the Management

The Management and Supervisory Board of paragon GmbH & Co. KGaA uphold the obligation highlighted in the German Corporate Governance Code (GCGC) of ensuring the continued viability of the company and its sustained value creation (corporate interests) in conformity with the principles of the “social market economy.” There were no conflicts of interest among the Management or Supervisory Board members in fiscal year 2019. The mandates of the Supervisory Board members are listed in the notes (note (45)).

The Supervisory Board of paragon GmbH & Co. KGaA fulfilled the consulting and monitoring obligations incumbent upon it according to law, the Articles of Association, German Corporate Governance Code and rules of procedure with great care in fiscal year 2019. Here, the Supervisory Board supervised the company’s Management on an ongoing basis and made sure of its legal and regulatory compliance, appropriateness and effectiveness. Furthermore, the Supervisory Board was available to the Management for consultation and was involved in discussions and decisions regarding issues of material importance. Thanks to the good cooperation between the Supervisory Board members, even time-sensitive decisions were resolved quickly.

In February 2020, the Management and Supervisory Board updated the company’s Declaration of Compliance according to Section 161 of the German Stock Corporation Act (AktG) and made it publicly available on the Investor Relations page of the paragon GmbH & Co. KGaA website. The deviations from the recommendations of the GCGC and additional information on corporate governance at paragon GmbH & Co. KGaA are also provided here.

The Management comprehensively informed the Supervisory Board in written and oral form in the Supervisory Board meetings on all proceedings of material importance, the Company’s general performance and its current situation. Here, it gave particular priority to the topics of strategy, planning, business development, risk situation and risk management. The Supervisory Board intensively reviewed the Management’s reports and discussed them at its meetings. In addition to the Supervisory Board meetings and conference calls involving all of the members of the Management and the Supervisory Board, the Supervisory Board Chairman and the Management discussed important matters when necessary. The Supervisory Board was fully informed about exceptional instances that were of material importance for assessing the year’s results.

Supervisory Board Meetings

In fiscal year 2019, the Supervisory Board convened at four ordinary plenary meetings and held one conference call. All Supervisory Board meetings were held with the participation of the Management. The Chief Executive Officer participated in the Supervisory Board's conference call. The entire Supervisory Board was present for every meeting.

The focus of the first ordinary meeting of the Supervisory Board in Delbrück on March 15, 2019, was the assessment and verification of the annual financial statements for fiscal year 2018 as well as the assessment and approval of the consolidated financial statements for fiscal year 2018. The Supervisory Board also dealt with the nomination of the auditor of the annual and consolidated financial statements for fiscal year 2019 and recommended BakerTilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, as the auditor of the annual and consolidated financial statements. During this meeting, the Supervisory Board also discussed the agenda of the Annual General Meeting and approved the invitation proposed by the Management. Finally, the Supervisory Board was informed about current business developments.

In a conference call on April 1, 2019, the Supervisory Board resolved to issue a corporate bond.

In its second meeting held in Hövelhof on May 14, 2019, the Supervisory Board was informed about the company's performance in the first quarter and its current prospects. Further preparations for the Annual General Meeting were also on the agenda. In addition, the Supervisory Board was informed of the successful issue of the corporate bond in Swiss francs.

At the third meeting in Delbrück on September 3, 2019, the Supervisory Board was informed by the Management about business developments in the first half of the year, and in particular about the reasons for and impacts of the forecast adjustment of August 12. The Supervisory Board was also informed about the company's current business prospects.

On September 18, 2019, the Supervisory Board and the Management of paragon GmbH and the Management

Board of Voltabox AG held a conference call to discuss the short and medium-term outlook of the paragon Group, in particular for the subsidiary Voltabox, against the background of project and revenue postponements.

In its fourth meeting in Delbrück on December 3, 2019, the Supervisory Board focused on the development of business during the first nine months of the year and the company's current prospects. It also discussed the planning for fiscal year 2019 as presented by the Management as well as the scheduling of the financial calendar for 2020.

Forming Committees

As in the past, the three-member Supervisory Board did not form any committees in fiscal year 2019 and dealt with all issues as a single body.

Audit of the Annual Financial Statements and Consolidated Financial Statements for Fiscal Year 2019

Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, was appointed by resolution of the Annual General Meeting on May 15, 2019, as auditor for the fiscal year from January 1 to December 31, 2019, and accordingly commissioned by the Supervisory Board Chairman. The Supervisory Board was provided a statement of independence from the auditor pursuant to No. 7.2.1 of the German Corporate Governance Code.

The scope of the audit included the annual financial statements of paragon GmbH & Co. KGaA prepared by the Management pursuant to the provisions of the German Commercial Code (HGB) for the fiscal year from January 1, 2019, to December 31, 2019, the consolidated financial statements prepared by the Management pursuant to Section 315a of the German Commercial Code and on the basis of the International Financial Reporting Standards (IFRS) for the fiscal year from January 1, 2019,

to December 31, 2019, and the combined management report of the paragon Group and paragon GmbH & Co. KGaA.

Upon completion of the audit, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, issued an unqualified audit certificate for the annual financial statements, the consolidated financial statements and the combined management report of the paragon Group and paragon GmbH & Co. KGaA.

The auditor also determined that the information and monitoring system established by the Management meets the statutory requirements and is suitable for recognizing developments that could endanger the continued existence of the company at an early stage.

The auditor made the documents submitted for auditing concerning the annual financial statements, the consolidated financial statements, the combined management report of the paragon Group and paragon GmbH & Co. KGaA and the report on the audit available to every member of the Supervisory Board. The audit was reported on and discussed at the Supervisory Board meeting on August 20, 2020. The auditors participated in the discussions on the annual and consolidated financial statements. They reported on the key audit results and were available to the Supervisory Board to answer

any questions and provide additional information. Based on the final outcome of its examinations, the Supervisory Board approved the annual and consolidated financial statements.

In a meeting on August 20, 2020, the Supervisory Board also followed the Management's proposal to refrain from distributing a dividend in light of the negative earnings in the separate financial statements in accordance with the HGB. The Supervisory Board did not exercise its right to inspect the company's accounts and correspondence in the past fiscal year.

The Supervisory Board expresses its gratitude and appreciation to the members of Management and all of the Group's employees for their hard work and personal commitment in 2019.

Delbrück, Germany, August 20, 2020.

For the Supervisory Board,

Prof. Dr.-Ing. Lutz Eckstein
Supervisory Board Chairman

Combined Management Report for the paragon Group and paragon GmbH & Co. KGaA

Key Facts About the Group

Business Model

According to its Articles of Association, the business purpose of paragon GmbH & Co. KGaA (hereinafter also the “company”) is the research and development of microelectronics, the manufacture and sale of electronic devices, related peripherals and modules as well as the management of patents, licenses and utility models. paragon may establish or acquire other companies, hold interests in companies, establish branches and implement any other measures for the paragon Group and paragon GmbH & Co. KGaA and carry out legal transactions that are necessary or serve to achieve or promote the company’s aims.

The business model of the paragon Group (hereinafter also simply “paragon”) is based on the independent development of product innovations at its own expense. To achieve this, a proven innovation system is used to keep the current product portfolio at a very high level of innovation. With the overall vehicle expertise that has been built up over the last three decades in the paragon Group, developments and prototypes are characterized by a deep understanding of the entire automotive manufacturing process.

The product innovation process within the paragon Group is inspired by the core idea of enhancing the driving experience for modern car users (end customers).

Based on the global megatrends of climate change, digitalization and urbanization, paragon identifies the megatrends that are of relevance for the automotive value chain: digitalization, CO₂ reduction, increased comfort and urbanization. The fields of innovation relevant for

paragon’s business model are derived from these trends: shared mobility, connectivity, e-mobility, autonomous driving, digital assistance and emission control. These are systematically covered by its Sensors, Interior, Digital Assistance, Kinematics (previously: Body Kinematics) and Electromobility (represented by Voltabox) units. This allows paragon to accurately anticipate the demands of end customers for modern features and characteristics in future models.

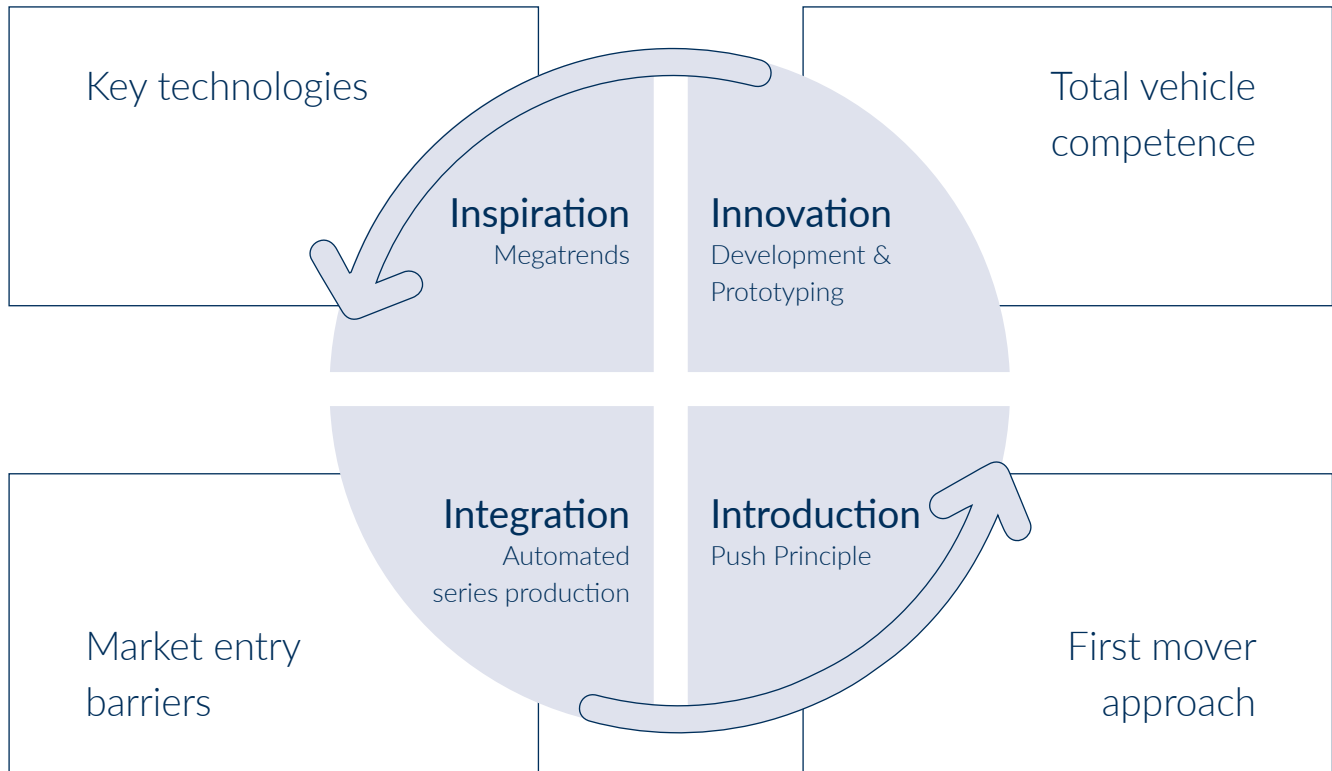
The market launch of product innovations follows the “push principle,” where specific marketing with automotive manufacturers as direct customers only begins once functional prototypes (A-samples) and the corresponding patent applications have been established. This allows paragon to maintain a time advantage over its competitors even in shorter innovation cycles. With an optimized vertical range of manufacturing, paragon has also established itself as a reliable partner for automotive manufacturers.

The level of automation in series production is constantly being increased in order to improve the cost structure over the life cycle of the individual product series. In this way, the series production of a wide range of product variations represents its own field of innovation within the company. At the end of the past fiscal year, 33 industrial robots (prior year: 31) were being used across the Group for manufacturing tasks. In addition, there are 8 freely programmable robots which have a maximum of 3 axes.

Group Structure

paragon GmbH & Co. KGaA is the parent company of the paragon Group.

Business Model



In addition to the company headquarters at 33129 Delbrück, Artegastrasse 1 (North Rhine-Westphalia, Germany), paragon GmbH & Co. KGaA and its subsidiaries operate sites in Suhl (Thuringia, Germany), Landsberg am Lech, Nuremberg and Neu-Ulm (Bavaria, Germany), St. Georgen (Baden-Württemberg, Germany), Bexbach and Limbach (Saarland, Germany), Aachen (North Rhine-Westphalia, Germany) as well as in Kunshan (China), Austin (Texas, USA) and Oroslavje (Croatia).

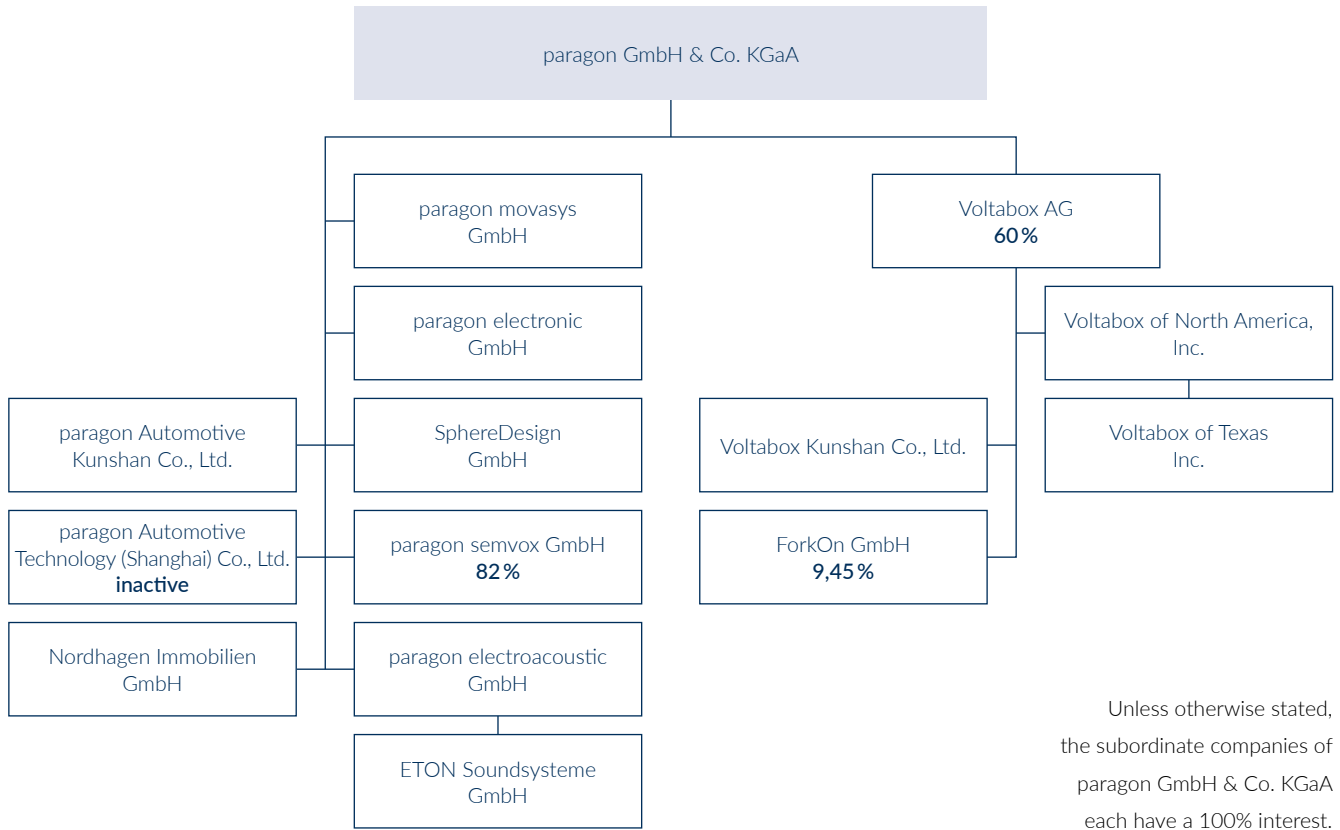
In addition to the parent company, the scope of consolidation for the paragon Group includes the domestic subsidiaries paragon movasys GmbH, paragon semvox GmbH (share: 82%), paragon electronic GmbH, Sphere Design GmbH, paragon electroacoustic GmbH, ETON Soundsysteme GmbH, Nordhagen Immobilien GmbH and Voltabox AG (share: around 60%), which is also listed on the Frankfurt Stock Exchange in the Prime Standard segment, and the foreign subsidiaries Voltabox of North

America, Inc., Voltabox of Texas, Inc. and Voltabox Kunshan Co., Ltd. The foreign subsidiaries paragon Automotive Kunshan Co., Ltd. and paragon Automotive Technology (Shanghai) Co., Ltd. are also included in the scope of consolidation for the paragon Group. Unless otherwise stated, paragon holds 100% of the shares in each company.

Corporate Strategy

Through its corporate strategy, paragon pursues the goal of sustainable and stable growth in order to safeguard the company's long-term success. This strategy is developed as part of a revolving process at management level. In the automotive sector, paragon's sustainable strategy is based on the independent development of product innovations from the relevant fields – shared mobility, connectivity, e-mobility, autonomous driving, digital

Group Structure



assistance and emission control – for the automotive industry, in order to achieve a sustained improvement in the driving experience for the company’s end customers: modern car users.

The decision by paragon’s management to initiate the process for the complete or partial sale of its stake in Voltabox AG and to thereby refocus its operating activities more strongly on its core automotive business reduces the importance of the Electromobility operating segment as a strategic activity in the paragon Group’s portfolio. Nevertheless, the e-mobility megatrend remains a high priority for paragon as an area of innovation for automotive applications. In its Electromobility operating segment, paragon has, via its Voltabox subgroup, so far pursued the strategy of entering rapidly growing submarkets for lithium-ion battery systems on the capital goods market early on. On this basis, selected consumer and mass markets will be increasingly developed in the future.

Overall, paragon’s sustainability strategy comprises the following four levels:

Constant Development of Product Innovations Based on Megatrends (Product Development)

To enter lucrative sub-markets early on – particularly in the premium segment of the automotive sector – paragon develops technological innovations by means of a tried-and-tested process. It thus identifies fields of action for the automotive industry that will be explored in future development activities.

In this context, paragon is also seeking to achieve a systematic expansion of its product portfolio and its current operating segments by means of targeted investments in technologies and production. It aims to be able to provide high-quality systems from a single source and thus to increase its share of the automotive value chain.

Gaining New Automotive Manufacturers as Customers (Market Penetration)

paragon intends to achieve a further increase in its volume of business with various premium manufacturers who are already important customers but who paragon sees as offering significant further potential. This will be supported through targeted sales activities as well as tailored acquisitions and the side effects of acquisitions.

Vehicle functions and equipment that are currently largely limited to the premium automotive segment are increasingly finding their way into volume models. In line with this general trend, paragon has already been able to make inroads into high-volume models in the mid-range and compact segments with its first few products.

Tapping Into New Sales Areas (Market Development)

For its future growth, paragon is also increasingly seeking to internationalize its business activities. Besides its home market of Germany and Europe's key automotive markets, the focus is particularly on the high-growth markets in Asia and North America.

China remains attractive for the strategic focus of paragon as its largest individual market. The Chinese automotive industry is one of the world's major growth drivers in the sector and now promotes the rapid spread of resource-conserving technologies. The Chinese automotive market therefore offers potential for further sales growth for paragon in the medium term.

Tapping Into New Sub-markets With New Product Offers (Diversification)

Another key component of paragon's growth strategy is to tap into new sub-markets with innovative product ranges.

With the acquisition of SemVox GmbH (now paragon semvox GmbH) in fiscal year 2018, paragon has also expanded its product portfolio to include solutions for digital assistance systems. It is pursuing the goal of using its superior technology to expand its range of integrative solutions and to become one of the leading system providers in this field.

Control System

Alongside a high level of innovation, paragon's organizational structure is characterized by flat hierarchies, fast decision-making and continual optimization of process management. The Group has the character of an owner-operated, medium-sized company while combining a long-term strategic orientation with the integration abilities of a publicly traded company. Thanks to this unique organizational orientation, the Management considers that the company is in position to successfully compete with substantially larger groups and to further expand its market position as a direct supplier to well-known automotive manufacturers.

The Management regularly compares its strategy with the actual business development of the paragon Group. In review meetings, follow-up activities and optimization measures are determined at the management level and fundamental changes in direction are made when necessary.

The company's domestic mechanical production at its plants in Suhl, St. Georgen and Limbach, as well as in Bexbach until 2019, is uniformly controlled by paragon electronic GmbH (formerly productronic GmbH). The goal of this joint management approach is to harmonize and standardize processes and workflows, in order to boost production efficiency. This will mainly be supported through further automation of production processes. By continuously increasing the degree of automation, the aim is to ensure a constant, stable quality level while reducing quality costs. Other production locations are Neu-Ulm, where paragon electroacoustic GmbH manufactures loudspeaker solutions, and Delbrück, Landsberg am Lech and Oroslavje, Croatia, where paragon movasys GmbH products such as spoilers and other kinematic components are manufactured.

To provide the Group with a better overview of the economic situation as well as improved planning and management of operational processes, the ERP system Microsoft Dynamics AX will be used throughout the Group in the future. The further introduction across several locations will be continued in fiscal year 2020.

paragon GmbH & Co. KGaA has a comprehensive planning and control system for operational implementation of its strategic planning. This includes constant monitoring of monthly and annual plans. These reports document possible deviations from the planned figures in a target/actual comparison and provide the basis for the business decisions. Another important control instrument is the regular manager meetings, where the current developments in the individual segments and medium to long-term outlooks are discussed, in addition to regular interdisciplinary and segment-related project status meetings.

Financial Performance Indicators

Management regularly uses key figures to measure the economic success of the operative implementation of its corporate strategy. The control system takes into account the type and/or amount of one-time or extraordinary effects on the performance indicators, particularly in relation to the development of the dynamically evolving Kinematics and Digital Assistance units. The internal targets are generally set as bandwidths for measuring and managing operative performance, depending on the respective planning horizon. In view of the current phase in which the Group finds itself, paragon's Management has decided to replace the prior financial performance indicator EBIT margin with the EBITDA margin. Using rolling medium-term planning that accounts for experience curve effects within a given corridor, the paragon Group now considers the relative development of the key figures of revenue, EBITDA margin and investments. For paragon GmbH & Co. KGaA, revenue and EBITDA margin are also considered financial performance indicators. Given the growth strategy pursued, this facilitates forward-looking management in terms of both risk- and opportunity-oriented corporate governance. The forecast for the paragon Group and paragon GmbH & Co. KGaA can be found in the forecast report.

Group Revenue

As a rule, revenue is generated primarily through the sale of products produced in-house by the Sensors, Interior and Kinematics operating segments to automobile manufacturers. In the Digital Assistance unit, revenue

is also generated through the sale of software licenses. Further sales revenues are generated by the electromobility operating segment from products manufactured in-house. The development environment is also licensed in some cases. In addition, paragon increasingly aims to develop recurring revenue sources (e.g. subscription models based on the number of units/apps activated per month).

In this respect, Group revenue is subject to various influences, which is accounted for with the provision of a target corridor (range) when providing forecasts.

Group EBITDA Margin

The EBITDA is controlled by Management so that operative earnings are developed in a way that implements the strategically defined growth course with appropriate profitability. In addition, the amount of capitalized development services according to IAS 38 (as an investment in intangible assets) is a key factor in corporate management.

The EBITDA margin is shown as a relative key figure in a range when providing forecasts. This means that medium-term planning also accounts for the dynamic effects that may arise over time in the relevant expenditure and income positions. In the prior year, instead of the EBITDA margin, the EBIT margin was one of the Group's key financial performance indicators. Scheduled depreciation and amortisation of € 22,212 thousand (prior year: € 14,410 thousand) and impairments of € 89,362 thousand (prior year: € 1,048 thousand) are not taken into account in the calculation of EBITDA.

Investments (CAPEX)

For paragon, investments are a key factor for managing the dynamic growth strategy as part of medium-term planning.

Information about total investments in property, plant and equipment and intangible assets included in the annual investment plan is given when reporting the forecast. Investments in financial assets and the acquisition of consolidated companies and other business units are not included.

In the past fiscal year, paragon once again invested heavily in the further expansion of its business activities. The Group's investments in intangible assets amounted to about € 18.1 million (prior year: € 27.2 million). Of the development work capitalized of € 19.1 million (prior year: € 15.7 million), € 16.6 million (prior year: € 15.1 million) related to own work pursuant to IAS 38.

The Group's investments in property, plant and equipment amounted to roughly € 23.1 million (prior year: € 21.6 million) in the reporting year.

Nonfinancial Performance Indicators

As the company is strategically positioned as an innovative provider of technologically sophisticated and high-quality products and systems that are based on current megatrends, the Management also uses nonfinancial performance indicators as part of its corporate management. The nonfinancial performance indicators are not material for the management of the paragon Group.

Employees

Successful sourcing, development and retention of qualified employees are particularly significant for the implementation of the long-term growth strategy, taking into account the specific business model of paragon. Human resources development is seen as a central component of corporate success.

The share of female employees in the Group increased to 34.0% (prior year: 30.6%). At 31.0%, the number of employees with university degrees also decreased slightly (prior year: 32.1%). The share of disabled employees

was 1.8% (prior year: 1.6%). The average age remained virtually unchanged at 42.2 years (prior year: 42.1) and the average length of employment increased to 5.3 years (prior year: 4.9).

Quality and the Environment

As a manufacturing company with a large portfolio of electronic components, paragon has many years of experience in optimizing production processes. All paragon locations are organized according to the international standard IATF 16949 and are monitored annually. The established interactive and process-oriented management system provides continuous improvements while emphasizing error prevention and waste reduction.

The paragon Group operates according to a "zero-defect strategy" that is pursued on a long-term basis along the entire production value chain.

Furthermore, environmental protection and occupational health and safety are an integral part of the corporate mission statement. paragon has integrated the requirements of DIN EN ISO 14001 into its management system. Its effectiveness is confirmed in annual audits. paragon also pursues sustainability through state-of-the-art production technologies as well as the careful handling of raw materials and energy resources.

Other Control Benchmarks

Only the financial performance indicators are significant for the management of the paragon Group. In addition to the nonfinancial performance indicators mentioned above, there are other control benchmarks for the Group.

Employee Development in the paragon Group

	Dec. 31, 2019	Dec. 31, 2018	Change in %
Number of employees	991	1,032	-4.0
Number of those engaged in development	243	270	-10.0
Number of temporary employees	46	107	-56.9
Number of those engaged in development	1	3	-66.7

Distribution of Permanent Employees at Group Sites:

	Dec. 31, 2019	Dec. 31, 2018	Change in %
Delbrück (corporate headquarters, North Rhine-Westphalia)	329	326	0.9
Aachen (North Rhine-Westphalia)	10	10	0.0
Bexbach (Saarland)	13	22	-40.9
Markgröningen (Baden-Württemberg)	7	16	-56.3
Landsberg am Lech (Bavaria)	108	97	11.3
Neu-Ulm (Bavaria)	58	63	-7.9
Nuremberg (Bavaria)	11	30	-63.3
Limbach (Saarland)*	81	65	24.6
St. Georgen (Baden-Württemberg)	35	35	0.0
Suhl (Thuringia)	270	273	-1.1
Total in Germany	922	937	-1.6
Austin (Texas, USA)	39	70	-44.3
Kunshan (China)	30	25	20.0
Total other countries	69	95	-27.4

* In the prior year: Saarbrücken

These other control benchmarks are of subordinate importance compared to the performance indicators. The Management pays particular attention to the activities in research and development in addition to the free liquidity and equity ratio benchmarks as indicators for control and further development.

Research and Development

Since paragon's business model is based on early expansion into lucrative market segments with product innovations it has developed in-house, specific competences and adequate capacities in the field of research & development (R&D) are additional control benchmarks.

The units have decentralized responsibility for the development of new products. Thanks to direct integration with the customer teams responsible for sales, this decentralized organizational structure enables the implementation of new ideas within a short period of time. Research and development activities are predominantly internal and application-related.

In fiscal year 2019, paragon spent € 29.3 million (prior year: € 24.9 million) on R&D activities. This corresponds to 15.2% of revenue (prior year: 13.3%). The ratio of capitalized development costs was approximately 56.7% (prior year: 61.2%) of overall research and development costs. In the fiscal year, high depreciation on capitalized development costs incurred.

The total number of employees in research and development decreased during the reporting year by 10.5% to 244 (prior year: 273). That figure accounts for about 24.0% of all Group employees as of the reporting date (prior year: 24.0%).

Investments in the development of innovative products in recent years led to further series launches in the year under review. The Management is accordingly convinced that the significant expenditure on development services in recent years as part of the market and product strategy in the automotive sector largely meets the needs of manufacturers, who are increasingly orienting themselves toward innovative fields.

Free Liquidity

Free liquidity includes all funding that is available within the paragon Group and is not appropriated. According to the definition of the company, the current net debt is therefore to be determined by subtracting free liquidity from the (short-term and long-term) interest-bearing liabilities.

Free liquidity developed as of the reporting date as follows:

€ '000	Dec. 31, 2019	Dec. 31, 2018
Free liquidity	18,002	48,926

Equity ratio

The equity ratio is used by the Management as an internal indicator for the management of the capital structure. In addition, the equity ratio reflects the current status of the investment cycle amid continuing operational implementation of the company's long-term growth strategy. In the long term, the Management sees an equity ratio of about 30% as optimal.

As of the reporting date, the equity ratio developed as follows:

in %	Dec. 31, 2019	Dec. 31, 2018
Equity ratio	19.2	49.1

Dividend Policy

Over the last few years, the Management has developed a dividend policy that is designed to meet the company's strategic goal of profitable growth. On the one hand, this is intended to enable paragon shareholders to further increase the value of their shares through dividend payments and provide an incentive for long-term investment decisions. On the other hand, the company's equity base should not be excessively burdened during its capital-intensive growth phase. Corporate profits are therefore largely reinvested. In the medium term, the Management would consider a disbursement ratio in the range of 20%

to 40% of paragon GmbH & Co. KGaA's balance sheet profit (as reported in the financial statements according to the German Commercial Code) as appropriate. In the year under review, an amount of € 3,937 thousand is subject to the payout block.

In light of the negative earnings according to the separate financial statements of paragon GmbH & Co. KGaA pursuant to the HGB, the Management and Supervisory Board are refraining from paying a dividend for fiscal year 2019 (prior year: € 0.25). Dividend distribution will resume as soon as the relevant conditions for a distribution have been met.

Remuneration Report for the Management and the Supervisory Board

The company is committed to a high degree of transparency in its reporting. This also applies to the remuneration of the Management, which is disclosed and explained in full in the remuneration report, together with all its components and on an individualized basis. The Management and Supervisory Board have therefore decided to use the Management remuneration sample tables provided by the German Corporate Governance Code (GCGC) in the remuneration report.

Management Remuneration

The remuneration of the members of the Management consists of an annual fixed remuneration, ancillary benefits and a one-year variable remuneration component. A cap (minimum/maximum) is not provided for the variable compensation component. A variable compensation

component for multiple years has not been specified. Finally, the total remuneration still includes a service cost under IAS 19 for Klaus Dieter Frers. This is recognized pursuant to the GCGC as part of total remuneration, even though this is not a newly granted contribution in the narrower sense, but a past decision of the Supervisory Board that continues to be effective.

The total remuneration of the Management contains salaries and short-term benefits of € 2,106 thousand (prior year: € 1,668 thousand) and includes fixed components of € 1,096 thousand (prior year: € 1,089 thousand) and variable components of € 1,010 thousand (prior year: € 578 thousand). The main variable remuneration components are oriented on EBITDA as defined by IFRS and the economic situation of the company. Expenses relating to share-based remuneration were not incurred in the year under review (prior year: € 0 thousand). Service costs amounted to € 0 thousand (prior year: € 1 thousand).

The following table shows the contributions (expenses booked in the fiscal year) granted to the members of the Management in the reporting year:

Contributions granted	Klaus Dieter Frers Chairman of the Board Entry date: April 11, 1988		Dr. Matthias Schöllmann Managing Director Entry date: September 1, 2018		Dr. Stefan Schwehr Managing Director Entry date: April 1, 2014 Exit date: March 31, 2019	
	2019	2018	2019	2018	2019	2018
in EUR						
Fixed remuneration	600,000.00	600,000.00	400,000.00	200,000.00	50,000.02	200,000.35
Ancillary benefits	24,190.84	70,986.36	18,393.60	5,510.40	3,586.47	12,931.45
Total	624,190.84	670,986.36	418,393.60	205,510.40	53,586.49	212,913.80
One-year variable remuneration*	0.00**	510,840.00	0.00	0.00	100,725.00	67,570.00
Total	624,190.84	1,181,826.36	418,393.60	205,510.40	154,311.49	280,501.80
Service costs	0.00	605.64	0.00	0.00	0.00	0.00
Total remuneration	624,190.84	1,182,432.00	418,393.60	205,510.40	154,311.49	280,501.80

* Uncapped (minimum/maximum)

** Total amount of variable remuneration for fiscal year 2018. No variable remuneration components are expected to be granted for fiscal year 2019.

Contributions paid	Klaus Dieter Frers Chairman of the Board Entry date: April 11, 1988		Dr. Matthias Schöllmann Managing Director Entry date: September 1, 2018		Dr. Stefan Schwehr Managing Director Entry date: April 1, 2014 Exit date: March 31, 2019	
	2019	2018	2019	2018	2019	2018
in EUR						
Fixed remuneration	600,000.00	600,000.00	400,000.00	200,000.00	50,000.02	200,000.35
Ancillary benefits	24,190.84	70,986.36	18,393.60	5,510.40	3,586.47	12,931.45
Total	624,190.84	670,986.36	418,393.60	205,510.40	53,586.49	212,913.80
One-year variable remuneration*	908,700.00**	510,840.00	0.00	0.00	100,725.00	67,570.00
Total	1,532,890.84	1,181,826.36	418,393.60	205,510.40	154,311.49	280,501.80
Service costs	0.00	605.64	0.00	0.00	0.00	0.00
Total remuneration	1,532,890.84	1,182,432.00	418,393.60	205,510.40	154,311.49	280,501.80

* Uncapped (minimum/maximum)

** Total amount of variable remuneration for fiscal year 2018. No variable remuneration components are expected to be granted for fiscal year 2019.

In fiscal year 2019, paragon GmbH & Co. KGaA reported expenses for the allocation of pension provisions to Klaus Dieter Frers in the amount of € 147 thousand (prior year: € 167 thousand) in the company's annual financial statements pursuant to the provisions of the German Commercial Code.

There are shown expenses for the allocation of pension provisions to Klaus Dieter Frers in the amount of € 300 thousand (prior year: € 154 thousand) in the company's consolidated financial statements pursuant to IFRS for fiscal year 2019.

Supervisory Board Remuneration

In accordance with the Articles of Association, the remuneration of the members of the Supervisory Board is determined by the Annual General Meeting and consists of a fixed remuneration. The Supervisory Board Chairman receives € 60 thousand and the remaining members of the Supervisory Board each receive € 30 thousand per fiscal year.

The members of the Supervisory Board received fixed remuneration totaling of € 120 thousand in the year under review (prior year: € 120 thousand).

The following table shows the remuneration of the Supervisory Board members:

€ '000	Prof. Dr. Lutz Eckstein Supervisory Board Chairman		Hermann Börnemeier Supervisory Board Vice-Chairman		Walter Schäfers	
	2019	2018	2019	2018	2019	2018
Fixed remuneration	60	60	30	30	30	30
Total remuneration	60	60	30	30	30	30

Economic Report

Global Economic Conditions

In its global economic outlook¹ in October 2019, the International Monetary Fund (IMF) indicated that global economic growth, which had slowed substantially in the last three quarters of 2018, had only stabilized to a limited extent in the first half of 2019. This year's economic performance was characterized in particular by the slowdown in production activity. Economists stressed that the outlook remains precarious in light of increasing trade disputes and geopolitical tensions. They noted that the business climate and global confidence in politics and markets have been affected.

Global economic growth was estimated at 3.0% in 2019 – the lowest level since the crisis years of 2008 and 2009, and furthermore a significant decline compared with the growth from 2017 to 2018. In April, global growth was still expected to be 3.3% in 2019. The uneven distribution of economic growth between developed economies (1.7%) and emerging markets (3.9%) remained unchanged. The adjustment of expected economic growth was almost equally sharp in both groups. In particular, economic growth in 2019 was estimated to have amounted to 2.9% in the U.S. (prior year: 2.9%), 1.2% in the eurozone (prior year: 1.9%), 0.5% in Germany (prior year: 1.5%) and 6.1% in China (prior year: 6.6%).

In this still good global economic environment, the German economy grew for the ninth consecutive year in the past fiscal year. However, the growth has once again lost momentum and is now well below the average for developed economies.

As a supplier to the automotive industry, in fiscal year 2019 paragon generated most of its Group revenue with premium automotive manufacturers headquartered in Germany and in the European Union. These, in turn, sell the vehicles they produce worldwide. Overall economic

development is therefore important for paragon in that it affects the sales opportunities for the automotive manufacturers it supplies, and thus also indirectly affects the development of private consumer demand for paragon products.

Market Development 2019

In line with the predominant significant slowdown in economic growth worldwide, global automobile sales also declined by varying degrees in the past fiscal year, especially with respect to the operating segments in the market. The German Association of the Automotive Industry (VDA) has calculated that around 80 million cars were newly registered worldwide in 2019.²

According to the VDA³, the global car market developed unevenly in a challenging environment in 2019. The European car market surpassed its high volume of the previous year. However, the performance of the individual markets varied in this respect. The large volume markets in Germany (+5%) and France (+2%) grew, while new registrations in Italy remained at the prior year's level. On the other hand, the markets in Spain (-5%) and the United Kingdom (-2%) declined.

The U.S. light vehicle market suffered a slight decline and was under the 17 million vehicle mark for the first time since 2014. The light trucks subsegment, which now dominates the American light vehicle market, cushioned the significant decline in car sales somewhat with growth of 3%. In China, last year's decline continued into 2019, and the market volume fell by 10%. The secondary sales markets such as Japan, Russia and especially India were not able to continue their partially significant increases from the prior year and recorded a decline in growth rates. In contrast, the Brazilian market for light vehicles grew particularly strongly in 2019.

New registrations/sales of passenger cars developed in the most important sales markets as follows:

1 <https://www.imf.org/en/Publications/WEO/Issues/2019/10/01/world-economic-outlook-october-2019>

2 VDA press release from December 4, 2019: Mattes: Policies Must Make Germany a "Weather-Resistant" Automotive Location

3 VDA press release from January 16, 2020: European Car Market Up Slightly in 2019

in millions of units	2019	2018	Change
USA	17.0	17.2	-1.4%
Europe	15.8	15.6	1.2%
China	21.0	23.3	-9.5%

The premium segment of the major German automotive manufacturers, which paragon caters to, has thus once again outperformed the overall market.

In 2019, the e-mobility market continued to be dynamic. Mass-market applications in particular attracted public attention, especially as a result of the increased activ-

ities and investments of automobile manufacturers. In the industrial submarkets and consumer goods markets occupied by Voltabox, there was no significant deterioration in the medium- and long-term market outlook in 2019 despite the weakening economic conditions. The unwaveringly high demand for electrification solutions was based on the ongoing replacement of diesel backup generators or lead-acid batteries with modern lithium-ion battery systems, as well as the general electrification trend.

paragon thus experienced a challenging economic environment during the past fiscal year.

Business Performance of the Group

The good revenue performance in the operating segment Mechanics (Kinematics, formerly: Body Kinematics unit) was a key factor in the company's growth in the fiscal year 2019.

Operating segment € '000 or as indicated	Electronics		Mechanics		Electromobility		Eliminations		Group	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Revenue (third party)	89,820	85,518	46,054	34,977	56,314	66,888	0	0	192,188	187,383
Revenue (intersegment)	4,396	8,272	234	45,503	303	19	-4,933	-53,794	0	0
Revenue	94,216	93,790	46,288	80,480	56,617	66,907	-4,933	-53,794	192,188	187,383
EBIT	-10,815	10,547	-4,543	-748	-104,612	5,609	23	-576	-119,948	14,832
EBIT Margin	-11.5%	11.2%	-9.8%	-0.9%	-184.8%	8.4%	-0.5%	1.1%	-62.4%	7.9%

The largest operating segment, Electronics, dominated Group activities again with revenue of € 94.2 million. Of this amount, € 89.8 million was attributable to third-party revenue in the Sensors, Interior and Digital Assistance units. Revenue in the Sensors unit decreased by 2.2% to € 33.5 million. This is primarily due to life cycle effects. In the Interior unit, revenue increased by 4.1% to € 52.1 million, mainly due to an increase in the take-rates of current vehicle models. The Cockpit segment posted

a decline in revenue of 12.4% to € 29.2 million. The Acoustics segment also posted an increase in revenue of 37.1% to € 22.9 million. The new Digital Assistance unit contributed € 4.2 million to segment revenue. The increase in the fields of acoustics and digital assistance is mainly due to the first-time full-year consolidation of three subsidiaries. EBIT for the operating segment amounted to € -10.8 million, which corresponds to an EBIT margin of -11.5%.

Segment third party revenue in the Mechanics operating segment totaled € 46.1 million (prior year: € 35.0 million). With an increase in growth of 31.7%, this operating segment achieved particularly strong growth. In the 2019 fiscal year, serial production of the newest generation of spoiler drive systems was a big revenue driver. In addition, revenues of € 6.5 million were generated from the realisation of development projects. EBIT for the operating segment amounted to € -4.5 million, which corresponds to an EBIT margin of -9.8%.

Segment revenue in the Electromobility operating segment totaled € 56.6 million, of which € 56.3 million was generated with third parties. This operating segment is represented by the Voltabox subgroup, which is fully

consolidated and currently being held for sale. With a decline of 15.8%, the operating segment did not show any growth dynamic compared to prior years as a result of revenue postponements. The largest contribution to revenue was made by the serial production of battery modules for intralogistics applications, especially for forklifts. Other revenue drivers in the Voltapower product segment were battery systems for trolleybuses and mining and agricultural vehicles. Furthermore, the Voltaforce product segment mainly created revenue from standardized batteries for pedelecs and e-bikes. EBIT for the operating segment amounted to € -104.6 million due to comprehensive valuation allowances, which corresponds to an EBIT margin of -184.8%.

Breakdown of revenue € '000	2019	Share in %	2018	Share in %	Change in %
Sensors	33,519	17.4	34,276	18.3	-2.2
Interior *	52,062	27.1	50,010	26.7	4.1
Digital Assistance	4,239	2.2	1,232	0.6	244.1
Kinematics **	46,054	24.0	34,977	18.7	31.7
Electromobility	56,314	29.3	66,888	35.7	-15.8
of which: Germany	50,117	26.1	57,808	30.9	-13.3
of which: USA	6,197	3.2	9,080	4.8	-31.8
Total	192,188	100.0	187,383	100.0	n. a.

* Previously: Cockpit and Acoustics

** Previously: Body Kinematics

As a consequence of these substantial and partially project-related uncertainties in regard to revenue generation, Voltabox AG revised its business planning for subsequent years with significantly more conservative assumptions. This resulted in the impairment test revealing a significant need for impairment for individual assets (especially capitalized development costs, inventories and all goodwill). In the context of this adjustment, the Group also reviewed the future benefits from all assets. This resulted in a need for unscheduled impairment for the 2019 fiscal year of € 80.7 million. In addition, earnings are also burdened by a € 3.0 million impending loss provision for a project that will result in heavy losses in the future.

For the remaining scope of consolidation of paragon GmbH & Co. KGaA, there is only an unscheduled impairment loss of € 8.7 million.

Business Performance of the Parent Company paragon GmbH & Co. KGaA

The business performance of paragon GmbH & Co. KGaA (HGB Annual Financial Statements) was mainly influenced by the Sensors and Interior units. Revenue in the Sensors unit decreased to € 38.2 million (prior year: € 40.3 million). This is primarily due to phasing out of products.

In the Interior unit, revenue decreased to € 48.9 million (prior year: € 57.9 million), mainly due to the phasing out of products and partly declining sales volumes.

Key Factors of Business Performance

The business performance of the paragon Group during the past fiscal year was again mainly characterized by an increase in the take-rate for certain air quality sensors and an increase in the output volume of the latest generation of hands-free microphones as well as several production starts for display instruments and the latest generation of adjustable spoilers. At the same time, production volumes for older product generations fell as part of their life cycles.

In the past fiscal year, the development and production of lithium-ion battery systems for industrial applications and significant extraordinary impairment losses have had a major impact on the course of business in the Electromobility operating segment, which is represented by the Voltabox subgroup.

Adjusted EBIT (Management report information not reviewed by the auditor)

Various adjustments were made in fiscal year 2019 relating to the EBIT.

These were added to EBIT:

- Impairment of current assets of € 54,221 thousand
- Impairment of goodwill of € 8,070 thousand
- Impairment of property, plant and equipment and intangible assets of € 27,071 thousand
- Foreign currency translation effects from refinancing of € 1,566 thousand
- Recognition of a provision for impending losses of € 3,015 thousand
- Reversal of an IP rights sale of € 9,190 thousand
- Expenses for the integration and consolidation of acquired companies of € 2,500 thousand
- Expenses in connection with the introduction of ERP software of € 500 thousand
- Expenses from the takeover of a company and launch problems for a major project of € 6,000 thousand

Only € 1,566 thousand (foreign currency translation effects from refinancing), € 960 thousand (impairment of property, plant and equipment and intangible assets) and € 2,500 thousand (integration expenses) are attributable to the Electronics operating segment.

In the operating segments, the adjusted key figures will not be subject to the same influences in fiscal year 2020 since the impairments were one-off and consequently very different.

€ '000	2019 - EBIT	2019 - Adjusted EBIT
Electronics	-10,815	-6,749
Mechanics	-4,543	3,457
Electromobility	-104,612	-3,045
Consolidation	23	23
Total EBIT	-119,947	-6,314

The adjusted EBIT figure has been reconciled with the operating result before income taxes as follows:

€ '000 in 2019	Electronics	Mechanics	Electromobility
Total adjusted EBIT	-6,749	3,457	-3,045
Impairment of current assets	0	0	-54,221
Impairment of goodwill	0	-1,500	-6,570
Impairment of property, plant and equipment and intangible assets	0	0	-27,071
Foreign currency translation effects from refinancing	-1,566	0	0
Recognition of a provision for impending losses	0	0	-4,515
Reversal of an IP rights sale	0	0	-9,190
Expenses for the integration and consolidation of acquired companies	-2,500	0	0
Expenses in connection with the introduction of ERP software	0	-500	0
Expenses from the takeover of a company and launch problems for a major project	0	-6,000	0
Earnings before interest and taxes	-10,815	-4,543	-104,612

Assets, Financial Position and Earnings

Earnings of the paragon Group

With revenue growth of 2.6% to around € 192.2 million (prior year: € 187.4 million), the paragon Group was able to continue its existing growth dynamic despite significant revenue shifts in some areas. Due to the failure to meet the revenue targets in the Electromobility operating segment, the revenue forecast, which was adjusted in the course of the year, was not achieved. With a Group EBIT margin of -62.4% (prior year: 7.9%), the Management's earnings forecast of -1 to -2%, which had been adjusted on August 12, 2019, was not achieved. This is due to the value adjustments of € 80.7 million in the electromobility operating segment and € 8.7 million in the automotive division.

Other operating income decreased by 4.8% to € 6.9 million (prior year: € 7.2 million). Development services capitalized increased to € 19.1 million (prior year: € 15.7 million). The Group is taking the necessary technological developments into account here. The cost of materials rose by 29.5% to € 137.2 million (prior year: € 105.9 million), particularly due to a margin decrease in the Electromobility operating segment. The margin deteri-

orated in the mechanics and electronics operating segments. This results in a gross profit for fiscal year 2019 of € 90.1 million (prior year: € 113.5 million), which corresponds to a gross profit margin 46.9% (prior year: 60.6%).

Personnel expenses rose by 14.7% to € 59.8 million (prior year: € 52.2 million) due to the full-year consolidation of three subsidiaries. As a result, the personnel expense ratio increased to 31.1% (prior year: 27.8%).

Other operating expenses increased by 24.3% to € 38.6 million (prior year: € 31.1 million). This is primarily due to increase of accruals for impending losses, currency and receivables measurements as well as higher insurance expenses. Unadjusted earnings before interest, taxes, depreciation and amortization (EBITDA) thus decreased to € -8.4 million (prior year: € 30.3 million), which corresponds to an EBITDA margin -4.4% (prior year: 16.2%).

Impairment losses on non-current assets of € 27.1 million (prior year: € 1.0 million) mainly relate to impairment losses on capitalised development costs and an investment grant in the electromobility operating segment. Impairment of current assets in the amount of € 54.2 million (prior year: € 0.0 million) mainly relates to impair-

ment of inventories and contractual assets in accordance with IFRS 15, particularly in the electromobility operating segment. Further information can be found in note (17). Impairment losses on goodwill amounted to € 8.1 million and are explained in note (22).

After increased depreciation and amortization totaling € 22.2 million (prior year: € 14.4 million), earnings before interest and taxes (EBIT) decreased to € -119.9 million (prior year: € 14.8 million). As a result, the EBIT margin fell to -62.4% (prior year: 7.9%).

The initial recognition of IFRS 16 resulted in a reduction of € 3.8 million in other operating expenses, an increase of € 3.5 million in depreciation and amortisation and an increase of € 0.5 million in interest expenses. Adjusted for IFRS 16 effects, EBITDA would have been € -12.2 million and the EBITDA margin -6.3%.

Due to increased finance costs following the issuance of a bond in the amount of CHF 35 million in 2019, the financial result was € -6.9 million (prior year: € 4.2 million). This resulted in a significant reduction in earnings before taxes (EBT) to € -126.8 million (prior year: € 10.6 million). The paragon Group generated a consolidated net income of € -123.5 million (prior year: € 3.4 million). This corresponds to earnings per share of € -18.29 (prior year: € 0.52).

The portion of consolidated net income attributable to minority interests amounted to € -40.7 million (prior year: € 1.0 million). The balance of the consolidated net income and other comprehensive income in the amount of € -40.9 million (prior year profit: € 0.9 million) has been allocated to the minority interests.

The total comprehensive income for the 2019 fiscal year is € -124.2 million (previous year: € 3.0 million).

Net Assets of the paragon Group

The paragon Group's assets decreased by 24.4% to € 274.1 million as of the end of the reporting period (December 31, 2018: € 362.3 million), mainly due to depreciation, amortization and write-downs and impairment of intangible assets, inventories and lower trade receivables.

Noncurrent assets decreased to € 166.9 million (December 31, 2018: € 176.7 million). This is due to the extraordinary impairment of intangible assets and goodwill. Property, plant and equipment increased from € 50.5 million to € 69.3 million. This is due to accruals resulting from the first-time application of IFRS 16. Financial assets rose from € 0.3 million to € 1.5 million. This is the result of a new investment by Voltabox AG in ForkOn GmbH.

Current assets decreased to € 107.2 million (December 31, 2018: € 185.6 million). This is attributable to the 24.0% decrease in inventories to € 44.8 million (December 31, 2018: € 58.9 million) due to impairments in the electromobility operating segment. The 36.3% decrease in trade receivables to € 45.0 million (December 31, 2018: € 70.7 million) due to the planned reduction of payment terms for Voltabox customers. The negative cash flow from operating and investment activities led to a decrease of cash and cash equivalents to € 9.5 million (December 31, 2018: € 41.8 million).

Equity decreased to € 52.6 million (December 31, 2018: € 177.8 million) particularly as a result of a significantly lower consolidated net income of € -82.8 million (December 31, 2018: € 2.3 million).

The equity ratio was 19.2% (December 31, 2018: 49.1%) on the balance sheet date. With regard to the capital increase of € 319 thousand, we refer to the explanations in note (29) of the notes to the consolidated financial statements. The introduction of IFRS 16 led to a reduction of the equity ratio.

Noncurrent provisions and liabilities rose to € 143.5 million (December 31, 2018: € 100.1 million), due in particular to the increase in bond liabilities to € 82.6 million (December 31, 2018: € 49.9 million) as a result of the emission of the bond in Swiss francs. The increase in lease liabilities of € 19.4 million (December 31, 2018: € 0.9 million) is mainly due to the initial application of IFRS 16.

Current provisions and liabilities were reduced to € 78.0 million (December 31, 2018: € 84.4 million). In addition to the 30.3% reduction in current loans to € 28.9 million (December 31, 2018: € 41.4 million) due to repayments, trade payables increased by 17.2% to € 33.1 million

(December 31, 2018: 28.2 million) due to longer payment terms.

Financial Position of the paragon Group

Cash flow from operating activities improved in the period under review to € -10.4 million (prior year: € -53.5 million). Taking into account the € 137.4 million decline in earnings before taxes (EBT) as well as an increase in depreciation of fixed assets, this development was attributable in particular to a reduction in trade receivables and inventories.

Cash flow from investment activity decreased in the period under review to € -35.4 million (prior year: € -73.4 million). This development is the result of lower investments in intangible assets and lower payments for business combinations. The Management had forecast an investment volume (CAPEX) of around € 40 million for the year under review, which was exceeded by 3.2% with € 41.3 million.

This results in a free cash flow of € -51.7 million (prior year: € -102.3 million).

Cash and cash equivalents fell accordingly to € 9.5 million as of the end of the reporting period (prior year: € 41.8 million).

General Statement on the Net Assets, Financial Position and Earnings of the paragon Group

External and internal factors had a negative impact on the assets, financial position and results of operations of the paragon Group in the past fiscal year. A deterioration of margins especially in the electromobility operating segment led to a burden of the EBITDA. Furthermore, impairment effects burdened the consolidated net income. For this reason, earnings were mainly influenced by the significant unscheduled valuation allowances. In the reporting year, the net assets were characterized in particular by significant movements in current assets, especially the reduction in receivables together with the reduction of inventories. With regard to the current financial position of paragon GmbH & Co. KGaA at the time the consolidated financial statements were prepared, please refer to the section on liquidity risks in the risk report.

Earnings of paragon GmbH & Co. KGaA

The revenue of paragon GmbH & Co. KGaA in the HGB Annual Financial Statements was € 94.2 million in the year under review and thus fell by 13.7% compared to the prior year (prior year: € 109.2 million). In the 2019 fiscal year, internally generated intangible assets were capitalized for the first time in the amount of € 5.3 million.

The cost of materials ratio for the year under review was almost unchanged at 72.0% (prior year: 72.5%). As a result of structural adjustments, personnel expenses fell to € 13.4 million (prior year: € 13.8 million). Other operating expenses amounted to € 20.2 million in the year under review (prior year: € 14.5 million) due to currency expenses and value adjustments on intercompany receivables of € 4.0 million.

EBIT fell to € -5.2 million (prior year: € -0.5 million), which corresponds to an EBIT margin of -5.5% (prior year: -0.4%).

The financial result of paragon GmbH & Co. KGaA in the year under review was € -4.4 million (prior year: € -0.9 million). This is due in particular to higher finance costs and lower income from profit and loss transfer agreements. The profit transfer comprises the transferred profit of paragon electronic GmbH of € 0.7 million (prior year: € 1.8 million) and the transferred profit of SphereDesign GmbH of € 0.0 million (prior year: € 0.0 million). Write-downs on financial assets in the amount of € 3.2 million had a negative impact on the earnings.

paragon GmbH & Co. KGaA thus reported a net loss of € -14.9 million for the year under review (prior year: € -1.4 million).

Net Assets of paragon GmbH & Co. KGaA

The assets of paragon GmbH & Co. KGaA in the HGB individual financial statements are at the same level as in the previous year at € 156.1 million as of the balance sheet date (December 31, 2018: € 151.8 million).

Fixed assets increased by € 5.2 million to € 104.5 million (December 31, 2018: € 99.3 million). The main reason for this increase is the initial capitalization of internally generated intangible assets in the separate financial state-

ments amounting to € 5.3 million. Property, plant and equipment increased by € 3.3 million. This is mainly due to investments in technical equipment and machinery. Due to extraordinary write-downs on shares in paragon Automotive Kunshan Co. Ltd. amounting to € 2.0 million due to a continuing loss situation, on shares in paragon Automotive Technology (Shanghai) Co. Ltd. amounting to € 0.2 million due to the unexpected future benefits and on shares in SphereDesign GmbH amounting to € 1.0 million due to a reduced expectation of realization, the value of financial assets fell from € 62.0 million in the prior year to € 58.8 million in the year under review.

Inventories decreased from € 2.2 million in the prior year to € 1.3 million in the year under review. Receivables and other assets increased to € 46.5 million (prior year: € 39.5 million). The main reason for the increase was the rise in receivables from affiliated companies of € 9.1 million to € 36.0 million. Value adjustments on receivables of paragon Automotive Kunshan Co. Ltd. in the amount of € 4.0 million had an opposite effect. Due to lower sales of receivables at the balance sheet date, trade receivables increased by € 1.2 million to € 8.6 million.

Cash and cash equivalents were € 2.8 million as of the end of the reporting period (December 31, 2018: € 10.6 million).

Meanwhile, equity decreased by € 15.7 million from € 23.0 million to € 7.3 million.

The provisions of paragon GmbH & Co. KGaA amounted to € 4.1 million as of the end of the reporting period (December 31, 2018: € 4.8 million). Liabilities increased to € 142.3 million as of the end of the reporting period (December 31, 2018: € 123.2 million), mainly as a result of the issue of the new bond.

Financial Position of paragon GmbH & Co. KGaA

The net loss for the year of € 14.9 million resulted in a negative impact on cash flow from operating activities. The capitalisation of development services and depreciation and amortisation have no effect on cash flow.

Investments in fixed assets amounting to € 17.5 million burdened the cash flow from investment activities.

The issue of the CHF 35 million bond led to a positive cash flow from financing activities.

General Statement on the Net Assets, Financial Position and Earnings of paragon GmbH & Co. KGaA

The net assets, financial position and results of operations essentially developed according to plan in the past fiscal year, whereby special effects from impairment and foreign currency effects as well as declining revenues influencing the result.

Opportunity and Risk Report

paragon has established a comprehensive risk management system to identify opportunities and risks in corporate development. All the operating segments regularly issue risk reports, from which Management is informed about the probability of occurrence and possible damages resulting from the risks identified. The risk reports contain an assessment of the risks as well as suggestions for appropriate countermeasures. For information on the risk management objectives and methods with regard to the use of financial instruments, please refer to the notes to the consolidated financial statements (note (39)).

Opportunity Report

Opportunities

The German Association of the Automotive Industry expected a slight decline in passenger car sales for 2020.¹ The paragon product portfolio is specifically positioned in the premium segment, and there is a correspondingly high proportion of these vehicles in the model penetration of paragon products. In view of this, as well as market research institute IHS Markit's² expected 4.3% growth rate for paragon's customer base, there are still opportunities for paragon in the Electronics and Mechanics operating segments. For years, the Management has pursued the goal of increasing the share of revenue per vehicle, for instance by increasing take-rates with existing customers, winning new customers for existing products internationally and developing innovative products and systems with a higher added value.

In addition, numerous new product innovations from the Digital Assistance and Sensors operating segments are currently being intensively marketed. Due to its strategic positioning, paragon will be able to profit from changes in the automotive value chain that will arise from the mega-

trends of digitalization, electrification, shared mobility, CO2 reduction and autonomous driving.

The "Mastering new mobility"³ study published by McKinsey management consultants in September 2019 dealt with the current transformation and the resulting challenges and opportunities in the automotive industry.

In order to successfully navigate the upheavals in the automotive industry, the players in automotive production are increasingly seeking partnerships. According to McKinsey, more than 250 agreements on intensified cooperation have been concluded since 2014. However, the majority of these (94 cooperation agreements) are still based on the classic development of combustion engines. The high level of investment and development of skills involved in the e-mobility megatrend would also be absorbed through collaboration between different companies. Accordingly, there are already 65 partnership agreements in this field, 26 of them between car manufacturers. Partnerships with technology companies whose core business lies outside the automotive sector have also been identified as a trend. These companies are the ones that disrupt and penetrate the market, creating a new reality for established manufacturers. Despite concerns about e-mobility that are currently being widely discussed in the media, especially regarding the cars' range and available infrastructure, 64% of potential buyers in Germany would consider purchasing an e-car next, compared to 86% in China.

In the "Global Automotive Supplier"⁴ study published jointly in August 2019, the Roland Berger consulting firm and the Lazard investment bank analyzed key figures of 600 companies worldwide to identify current challenges for automotive suppliers and recommend actions. It is primarily the surge in demand for e-mobility and new data-based and digital business models that offer new potential. In addition, the new forms of mobility requiring a modified mobility mix, and the vision of autonomous

1 VDA press release from December 4, 2019: Mattes: Policies Must Make Germany a "Weather-Resistant" Automotive Location

2 IHS Markit, Customized reporting of light vehicle production according to paragon's specifications, August 2019

3 https://www.mckinsey.de/~media/McKinsey/Locations/Europe%20and%20Middle%20East/Deutschland/News/Presse/2019/2019-09-09%20Mastering%20new%20mobility/McKinsey_Mastering_new_mobility_September%202019.ashx

4 <https://www.lazard.com/media/451032/global-automotive-supplier-study-2019.pdf>

driving that is being promoted despite high technical hurdles and legal uncertainties, are also moving the market. According to the authors, suppliers with a broad product portfolio are well prepared for a new mobility ecosystem. The study foresees a high likelihood of significant shifts within the current automotive industry ecosystem based on the current effects. As a result, the market position of new mobility providers will increase significantly, forcing traditional players to act and requiring new business models to be developed.

In 2020, the market research institute IDTechEx⁵ expects a market growth of about 7% for battery systems in the industrial sub-markets and mass markets currently occupied or newly addressed by Voltabox. The average annual growth rate until 2024 is estimated at around 6% in these sub-markets (reference year: 2019). The reduced figures compared to the prior year are a result of the entry into markets such as buses and automobiles. Although these are large in scale, they are growing less strongly than previous industrial sub-markets due to the market size they have achieved.

As a result, paragon has the following opportunities, particularly in the medium term, which the company regards as significant as the prior year:

- Thanks to its business model focusing on the independent development of product innovations as well as the acquisition of complementary technologies, paragon is able to realize competitive advantages in the Electronics operating segment due to the dynamic technology transformation surrounding current megatrends.
- The focus on the development of product innovations is increasingly shifting from the component level to the system level in the Electronics and Mechanics operating segments. This provides paragon with the opportunity to increase the added value that each vehicle provides.
- In the Interior business unit, opportunities arise from the demand for solutions in the area of (active) noise cancellation in vehicles. This interest on the part of OEMs applies both to the premium segment and to manufacturers of volume models. In particular, the greater penetration of electric cars – in which the lack of noise from a combustion engine makes the rolling noise of the tires on the road clearly audible in the interior – is increasing the relevance of the technology that paragon has in its portfolio. There are also opportunities for paragon's wireless charging products to be used in the automotive sector; the cyclical change in model generations means that an increasing number of smartphones are in use that have the technical requirements for inductive charging.
- With the expanded technological structure of paragon semvox's digital assistants and AI platforms – for example, through the introduction of the new software architecture geni:OS – the Group aims to be sustainably anchored in OEMs' assistance systems. The technological lead of semvox solutions can be a decisive factor in our early establishment with the respective OEMs, providing particular opportunities. The complexity of the software in the manufacturers' platform economy, and thus its deep integration, promises long-term establishment in the penetrated vehicle platforms. The integration of office applications under "The mobile office" provides paragon with additional opportunities, especially regarding premium models used as company cars.
- The external speakers marketed by paragon electroacoustic have growing sales potential, since from July 1, 2019, an "Acoustic Vehicle Alerting System" (AVAS) will be mandatory in the EU for hybrid electric and pure electric vehicles.
- According to the German Association of the Automotive Industry, the Chinese automotive market maintained its importance in the past fiscal year as the largest sales market with some 21.0 million new registrations, albeit in conjunction with a significant decline compared to the prior year. In fiscal year 2020, the decline in the sales rate will slow down and was originally expected to be around -2%. With

5 IDTechEx, study "Electric Vehicles 2020-2030": <https://www.idtechex.com/de/research-report/electric-vehicles-2020-2030/670>

paragon Automotive Kunshan Co., Ltd., paragon has its own local production facility. The Chinese government's five-year plan (2016–2020) provides concrete targets for the significant reduction of air pollution. The Chinese automotive industry is now one of the world's largest growth drivers for the rapid spread of resource-conserving technologies. This means there is particularly high sales potential in the Chinese automotive market for paragon in the medium term if it can acquire Chinese automotive manufacturers as new customers for the DUST-PROTECT particle filter system with high take-rates and sales figures.

- The Kinematics operating segment's growing product portfolio is providing a significant contribution to vehicles' safety and energy efficiency. Opportunities also present themselves from our initial development and application experience with Kinematics products for vehicle interiors (e.g. rear seat swivel table). As a result of the trend toward increasing comfort in vehicles, advanced primarily by the increasing shift of the driver's tasks to electrical assistance systems – which leads to the continuous configuration of forms of autonomous driving – paragon's experience with the interaction of mechanics and actuators may be in greater demand in the future.

Overall Assessment of Opportunities

Through the regular and structured monitoring of opportunities within the paragon Group and the relevant sales markets as well as internal, barrier-free communication at the various levels of management, the Management is in a good position to identify opportunities for the Group. At the end of fiscal year 2019, both external and internal opportunities were identified or confirmed that are basically unchanged compared to the prior year.

The significance of the listed opportunities as well as the resulting positive effects on the financial performance indicators projected for fiscal year 2020, and thus on the short-term development of the paragon Group as a whole, is classified as low.

Risk Report

Risk Management

paragon uses a comprehensive risk management system as part of its risk-oriented corporate governance.

Risks are defined in the paragon Group not only as activities, events and developments endangering the company's existence, but also those affecting its business success. Particular attention is paid to risk concentrations, e.g. dependencies on individual customers, suppliers, products or countries. In the case of material risks, mutual dependencies and impacts are taken into account, since individual risks can mutually reinforce each other or cause compensation effects between them. We understand business success in terms of measurable values, e.g. revenue and EBITDA. Risks are therefore represented in these figures in the reports from the respective process owners. Risk assessment is always based on the risk outcome. A risk includes the possibility that a threat exposes a vulnerability and causes damage to or the loss of an object and thereby directly or indirectly results in a negative impact. The aim is also to identify and evaluate these risks in order to be able to select suitable and appropriate countermeasures on this basis.

Strategic Governance and Risk Management

The aim of risk management is to secure the company's continued existence, i.e., securing its future development and profitability as well as reducing the risks of breaching the confidentiality, integrity and availability of the information or data used or contained in the performance of activities. The task of risk management is also to report deviations from the corporate objectives at an early stage and thereby enable timely countermeasures. Risk guidelines are defined in the risk manual.

Group-wide responsibility for risk management lies with the Management. Risk management at the respective sites is adequately covered and secured in regular (video and telephone) meetings with the respective senior management. This means that the Management is directly informed of the situation and the correspon-

ding risks are continuously monitored and managed by the Management. In risk fields where quantification is not possible or useful, work is also done to identify risk factors.

Central Risk Management

An important role in the risk management and control process belongs to central risk management. Within its responsibility for the risk situation of the company, the Management transfers the task of implementing permanent risk management activities to the central risk management team. Responsibility for central risk management lies with the Head of Controlling. paragon's central risk management team is responsible for coordinating all decentralized risk management functions, evaluating risk analyses and consolidating them into risk reporting as well as improving and enhancing the risk management system. Working with the Management, the central risk management team determines the reporting cycles and defines the thresholds for the risks which, when exceeded, require a risk control report to be prepared outside the obligatory reporting requirements. Both the threshold values and the reporting cycles are based on the relevance of the risks.

Central risk management supports the decentralized risk managers in the preparation of risk analyses and checks their returns and plausibility. It summarizes the individual risk profiles in a joint document. This means that interactions between the risks can be analyzed and the overall risk situation of the paragon Group can be recorded, evaluated and commented on. This summary is referred to as risk reporting. This task is of particular importance because the objective of an integrated risk management system is the holistic consideration of a company's risk situation. Risk reporting acts as the basis for the statements on the paragon Group's risk situation in the management report.

The decentralized risk managers are consulted whenever new risk management measures are established or existing measures are adapted.

Decentralized Risk Management

Decentralized risk management in the paragon Group is located within the company's individual segments and sites. The area and process managers are responsible for risk management in their respective areas of work as decentralized risk managers. The decentralized risk management team reports on the development of risks in these areas as part of risk control measures. For each quarterly reporting cycle, the decentralized risk managers write up a report on the risks for which they are responsible. The focus here is on the description of the expected development of the risk. With this, measures for future risk management or the improvement of existing measures are developed and included in the risk control report as proposed measures for implementation. The decision on implementation is the responsibility of the Management. In addition, the Management must be informed without delay of any risks incurred throughout the year. This is known as ad-hoc risk reporting. According to a resolution by the Management, regular meetings with all decentralized risk managers are no longer held. Instead, individual discussions are held with the decentralized risk managers.

Risk Monitoring

Risk monitoring is the task of decentralized and central risk management. Early warning indicators for critical success factors are defined by the decentralized risk managers. The task of central risk management is to monitor the defined early warning indicators. As soon as the defined thresholds are reached, a risk report is prepared by the decentralized risk manager, i.e., a forecast of the expected effects of the risk event for paragon. These forecasts are to be supplemented by scenario analyses, which take into account different data constellations. Risk monitoring thus serves as a form of knowledge enhancement to assist with management decisions, as attempts are made to reduce uncertainty regarding the future development of the company or the risk situation.

Based on this information and the recommendations made by the decentralized risk managers and central risk management, the Management decides whether and to what extent measures are to be implemented or whet-

her an adjustment of the company's objectives is necessary. The monitoring of the early warning indicators and their associated threshold values as well as the creation of scenario analyses is the responsibility of decentralized risk management.

Risk Reporting

The quarterly report to the Management contains all new risks identified in the reporting period as well as risks that have changed by 50% or more relative to the prior month.

Central risk management is required to provide an ad hoc report to the Management in the case of risks that have changed by 100% or more as compared to the previous reporting period. The Management, in turn, is then obliged to provide a report to the Supervisory Board within 24 hours of being informed about the risk.

The risks continually analyzed by paragon as part of risk monitoring can be assigned to the following risk categories, each of which is divided into individual risks:

- Strategic and Environmental Risks
- Market Risks
- Operating Risks
- Transaction Risks
- Liquidity risks
- Financial Risks
- Management and Organizational Risks

At the end of the reporting year, a total of 26 individual risks were recorded in the paragon Group (prior year: 24) that equally affect the individual company. In the opinion of the company, only one of these individual risks endangered its continued existence. This risk is explained in the section on liquidity risk.

Risks

Strategic and Environmental Risks

Overall economic development is observed in the risk management system due to its possible influence on end customer behavior within the automotive industry. This

can lead to fundamental changes to supply and demand behavior in the procurement and sales markets for paragon. For example, a longer-term economic downturn, possibly triggered by the economic policy measures of individual sub-markets such as the U.S. or China, could have a negative impact on the company's assets, financial position and earnings. A politically motivated move away from the rule-based international trade system or its disturbance through isolated protectionist measures could lead to distortions in the global automotive value-added chain. As the paragon Group has its own production facilities in China and the U.S., and as it has a specific customer/product structure, the Management views the overall risk of protectionist influence on earnings as low.

The outbreak of the coronavirus (SARS-CoV-2) and the associated COVID-19 illnesses represents a relatively new macroeconomic risk. The resulting measures to contain the virus and avert a pandemic will lead to a significant drop in global economic growth. Depending on how the virus spreads, a global decline in productivity is also possible. There are risks for the paragon Group depending on the impact on the sales performance of its main customers, which may have an impact on the earnings and liquidity situation. Please refer to the section on liquidity risks.

As a result of the plant shutdowns by some OEMs and the resulting reduction in orders, paragon temporarily shut down its own production sites or cut back on production in the first and second quarters of 2020. paragon successfully resumed production at all production plants in the second quarter of 2020.

There is great uncertainty worldwide regarding the further impacts of the COVID-19 pandemic, which also affects the paragon Group. A further long-term interruption of operations in China or at the German sites, for example as a result of official measures, could pose a significant risk for paragon.

Specifically, the risks could include the possibility that reduced customer orders could lead to deviations in revenue planning. The paragon Group's refinancing efforts could also be made more difficult due to potentially negative effects on the capital markets and the banking sector. In addition, an unfavorable economic develop-

ment could result in agreed credit terms not being met. This risk stemming from the COVID-19 pandemic could potentially be classified as a threat to the existence of the company.

Market Risks

For years, paragon has held a strong market position as a proven and innovative direct supplier to premium German manufacturers in the automotive industry. In 2019, the global sales market for passenger cars was not able to maintain the high volume seen in the prior year. The main cause is the further decline of the Chinese market. A shrinking of the global sales market in the 2020 fiscal year was already expected before the corona crisis occurred.⁶

paragon's close ties to the German premium car manufacturers and its concentration on specific market niches shape the company's strategic positioning. Sales opportunities and risks are assessed through a comprehensive operative sales management system. Key components of this system are the analysis of market and competition data, rolling planning for the short and medium term and regular coordination between sales, production and development. The company's comparatively broad portfolio demonstrates its relatively strong level of independence in relation to individual product groups and customers.

paragon generates 36.6%, 14.2% and 10.1% of its revenues with its three largest customers. Nevertheless, the loss of a major customer could have a significant impact on the company's assets, financial position and earnings in the medium term. However, due to the multi-year contract periods for the various series, the loss of a key customer would be known at an early stage. paragon counteracts this risk by comprehensive development work on product innovations as well as detailed permanent order backlog analyses focusing on early risk identification. At the same time, paragon has observed that even during the nomination periods, there is an increase in price pressure by manufacturers from global sourcing tenders and projects. The Group is attempting to coun-

teract this trend with efficiency enhancement and cost reduction programs.

The paragon innovation process is characterized by independent product development that takes the interests and wishes of car users into consideration. In contrast to many other automotive suppliers, paragon does not wait for automotive manufacturers to make certain demands and specific requirements, but rather develops its own innovative solutions, which are implemented in cooperation with pilot customers and subsequently offered to a wider customer base. As a growing number of automotive innovations are electronic in nature, paragon sees a wide range of market opportunities for its Electronics operating segment. However, it cannot be ruled out that a product development may not achieve its expected quantities or may not find a market or that the economic success may be lower or may ensue later than originally planned. The capitalized development costs as of the balance sheet date amount to EUR 44.4 million. Against the background of the high proportion of capitalized development work in the balance sheet, a corresponding value adjustment of the intangible assets could have a negative effect on the net assets, financial position and results of operations of the Company.

Operating Risks

In terms of operating risks, paragon is currently focusing on its research and development, materials management, production and information technology activities.

The market for automotive electrics, electronics and mechatronics is subject to increasingly dynamic, technological change. paragon's future economic success will therefore depend on the ability to continuously develop new and innovative products on time – for customers and in collaboration with them – and to successfully introduce them to the market. Recognizing new technological developments and trends at an early stage, reacting to them and implementing solutions in partnership with customers is key here. Should paragon not be able to, or not quickly enough, recognize and implement new trends, changing customer requirements

6 VDA press release from December 4, 2019: Mattes: Policies Must Make Germany a "Weather-Resistant" Automotive Location

or future technological advances or to develop new products and adapt existing products in accordance with business principles, this may have a detrimental effect on the company's assets, financial position and earnings.

In close cooperation with the development departments of important customers, paragon contributes to automotive product innovations with its wide range of development projects and innovative solutions. Significant deviations from the project objectives in terms of time and money may result in cost and legal risks (such as contractual penalties). Ongoing development and project monitoring is undertaken to limit associated risks.

With continuous investments in machinery and plants, paragon ensures that the production facilities at all of the Group's sites meet the high requirements of the automotive industry.

In its procurement activities, paragon took advantage of the global price competition on all relevant markets and secured a substantial portion of its procurement prices through framework contracts, annual agreements and long-term supplier relationships. The Group continues to purchase around 90% of its purchase value from European contract partners, while the rest is purchased directly in Asia and the USA. The major purchasing currency is the euro; around 10% of invoices were billed in U.S. dollars in the year under review. Currency risks arise primarily for purchases in U.S. dollars that are intended for the European currency area. These risks are minimized by sliding-price clauses and other appropriate measures.

The increasing penetration of information technology (IT) and networking along the Group's entire value chain holds many opportunities as well as risks, such as system failures or unauthorized external access to company data and information. In cooperation with specialized service partners, paragon has implemented established security solutions to avert potential threats to the IT infrastructure and critical data.

Combined with organizational security measures, paragon is sufficiently protected against cyberattacks from the point of view of the relevant Group experts. In addi-

tion to modernizing its IT infrastructure, in fiscal year 2019 the company implemented ERP software to integrate the operating segments that were added through recent acquisitions. This resulted in synergies in processes and cooperation.

In the fiscal year under review, goodwill impairments impacted on the Group result. In particular, a deterioration in the business prospects of the subsidiaries paragon movasys GmbH and paragon semvox GmbH could lead to a further need for impairment. Capitalized goodwill totals € 22.4 million.

Transaction Risks

paragon includes all risks associated with the purchase and sale of companies or parts of companies in the category of transaction risks. With the decision by Management to examine the possibility of partially or completely selling the 60% stake in Voltabox AG, which previously represented the Electromobility operating segment, paragon will focus on the company's original core business. Possible delays in due diligence, the negotiations or the actual implementation of the transaction could result in risks such as excessive demands on the resources of the Management and downstream management levels, or an unforeseen increase in the costs associated with the transaction. Furthermore, a significant deviation from planned sale proceeds could lead to a negative impact on earnings. In order to minimize the risks associated with the transaction, paragon uses professional support from renowned investment banks and experienced external advisors during the marketing process.

Financial Risks

In addition to interest rate, liquidity and currency risks, paragon also monitors risks associated with the loss of receivables, balance sheet risks and tax risks in the financial risks category.

There are currency risks from the issue of the CHF 35 million bond, which are explained in note (39). The risk is partially countered by forward exchange transactions. The conditions for hedging are not met and separate accounting is used.

Interest rate risks are virtually meaningless for paragon, as fixed interest rates are currently agreed upon for most of its long-term liabilities.

The coronavirus pandemic poses a fundamental risk in terms of the willingness of equity and debt capital providers to supply funds for further growth.

Financial covenants were concluded for the CHF bond. This refers to the equity ratio (the ratio between equity and consolidated balance sheet total), which may not fall below a contractually defined value of 25%. Due to the valuation allowances at the subsidiary Voltabox in fiscal year 2019, there is a formal shortfall in the equity ratio. Even before the consolidated financial statements were prepared, an extraordinary bondholders' meeting for the CHF bond resolved the formal breach of covenant. The bondholders' meeting reached the necessary majority of votes on August 17, 2020. The reason for the possible maturity of the bond with regard to the equity ratio as of December 31, 2019 has thus been eliminated. paragon undertakes to repay 15% of the nominal value of the outstanding bonds without further notice in the amount of CHF 5,250,000 plus accrued interest until the date of the partial repayment. The remaining outstanding nominal value of the bonds (i.e. CHF 29,750,000) will be repaid on the date of the scheduled final maturity. The partial repayment amounting to 15% of the nominal value is agreed within 10 banking days after the cash flow from the sale of the Voltabox stake.

The company's ability to pay is ensured by comprehensive planning and monitoring of liquidity. These plans are prepared on a short, medium and long-term basis. In addition, paragon has a rigorous receivables management system to ensure timely cash inflows. A substantial portion of the receivables is also hedged by means of a commercial credit insurance. An additional possibility for short-term financing exists in the form of factoring agreements. The increased relevance of counterparty default risk from extended payment terms for a customer of Voltabox AG was significantly reduced in fiscal year 2019. paragon must increasingly react to the intention of its customers to pre-finance development services, tools or operating resources. The Management has also taken appropriate measures to harmonize the sharply increased conditions imposed by customers regarding payment

of nonrecurring costs in the scope of series deliveries with paragon's role as a major supplier of important and high-quality components.

Liquidity risks

The spread of the coronavirus and the impact of the pandemic on the global economy have significantly changed the overall risk situation of paragon GmbH & Co. KGaA in comparison with the prior year. Revenue risk has increased due to global risk factors and potential disruptions of production. The Group is working to counteract this by reducing expenses to the minimum level necessary to operate and by increasing the flexibility of costs. Nevertheless, a conclusive risk assessment is only possible to a limited extent at the current time. Due to the pandemic, liabilities due in the 2nd and 3rd quarters cannot be settled as scheduled. Deferral agreements have been concluded with the respective creditors. The deferrals are agreed for a period of one to nine months. In addition, it was also possible to extend the terms of some financing arrangements. As a result, the financial situation is strained. It is intended to generate the necessary liquidity through the sale of the Voltabox shares before a positive cash flow will also contribute to stabilisation in 2021. The sales negotiations themselves are in the final phase with several interested parties and give confidence that they can be finalized in the interest of paragon. However, since the conclusion of the sales negotiations and the achievable proceeds (package sale) as well as the alternatively planned successive sale of the shares are naturally uncertain with regard to the amount, the volume of the shares sold and the timing, this results in a significant uncertainty with regard to the continuation of business activities. The Management remains generally confident regarding the success of the sales negotiations; however, the risk can fundamentally endanger the company's continued existence.

The company monitors possible currency risks on the procurement and sales side by continuously tracking foreign currency exchange rates. paragon does not use financial instruments to hedge currency risks.

Management and Organizational Risks

In this risk category, paragon primarily monitors risk factors resulting from its dynamic growth strategy. This includes personnel and organizational risks in particular, as well as management and communication risks. Clear assignments and demarcations in the respective areas of responsibility, within the system of owner-oriented governance, are intended to prevent missing interfaces and functional overlaps. Currently, the Management does not consider there to be any material risks to paragon in this area.

However, the company is fundamentally dependent on attracting and retaining qualified personnel and persons in key positions in the long-term. The future economic success of paragon depends to a considerable extent on the continued involvement of its executives, senior employees and employees in key positions. This is particularly the case for its founder, primary shareholder and Management Chairman, Klaus Dieter Frers, who is the company's engine and an important source of ideas. In addition, paragon also relies on qualified employees in the areas of management, research and development, and sales. The company cannot guarantee that it will be able to hold key executives, senior executives and employees in key positions or attract new executives and employees with appropriate qualifications. There is increasing competition for such qualified employees and the personnel market, particularly in regions outside major German cities, is comparatively small. This means that individual experts can only be replaced with difficulty or not at all. If paragon is unable to obtain sufficient personnel in the future, the strategic and economic objectives of the company may not be achievable or only achievable at a later date. This could have a detrimental impact on the company's assets, financial position and earnings.

Overall Assessment of the Risk Situation

The company's risk management was further adapted to the dynamic development of the paragon Group over the past year. The Management currently expects that its ongoing Group-wide monitoring of operating risks will become increasingly important as business activities expand.

In the future, paragon will also protect itself against general market risks in the automotive industry. For paragon, the market risk represents the most significant individual risk. In the year under review, the share of revenue with the three most important customers pursuant to IFRS 8.34 was still around 60.9% (prior year: 68.2%). The company's strategic positioning as a direct supplier to premium German manufacturers and its long-standing, successful business relationships with these companies are expected to further reduce this risk. However, it can be assumed that car manufacturers will pass on to suppliers the increasing cost pressure resulting from the transformation process in terms of technologies and business models. The existing customer contacts nonetheless offer considerable opportunities to position new product innovations in the automotive operating segments. The increasing diversification of the Group's product portfolio should help to further reduce market risks.

With paragon's ambitious growth strategy, the company's overall economic development remains linked to the economic development of the automotive industry and, particularly, its key customers.

Against the backdrop of the COVID-19 pandemic, the depiction of the risks for the paragon Group must be adjusted substantially. After December 31, 2019, the spread of the coronavirus advanced rapidly. This has had an extensive effect on the paragon Group. At first, only the industry in China, the assumed country of origin of the virus, was affected; shortly afterwards, an increasing number of regions and entire countries in Europe and then all continents were affected by its impact as well. In this context, production at the paragon plant in Kunshan, China, was suspended for four weeks in the first quarter. In mid-March, the paragon Group's main customers announced that they would temporarily suspend production at many of their plants in Central Europe with immediate effect in order to protect their own employees and in view of a slump in demand that had already occurred or was expected to occur. In doing so, the customers invoked force majeure. This was also referenced by some paragon suppliers who were no longer able to continue their deliveries in accordance with the orders placed. As a result, paragon also had no other option than to stop production at all German production sites due to force majeure events. On this basis, paragon GmbH &

Co. KGaA announced reduced working hours for large parts of the company. The Management adopted these measures with the goal of protecting existing jobs in the long term. The potential consequences of the coronavirus crisis may include suppliers and customers completely abandoning their business activities because continuing their company is no longer possible for reasons of insufficient liquidity, insufficient orders etc. For paragon GmbH & Co. KGaA, this means that it is necessary to establish new procurement channels and sales opportunities. paragon GmbH & Co. KGaA will record revenue losses due to the pandemic, meaning that the original company goals and those announced in the previous fiscal year cannot be achieved. An exact determination of the quantitative consequences is impossible due to the high level of uncertainty regarding the further course of the COVID-19 pandemic.

paragon GmbH & Co. KGaA will continue to focus heavily on liquidity management in order to ensure the continued existence of the company. As of the time of publication of this report, however, the possible risks from the current pandemic and their unknown future effects are extensive. Generally speaking, the continued existence of the company could potentially be endangered should the liquidity situation experience further tension due to future effects from the COVID-19 pandemic. However, the expected proceeds from the sale of shares in Voltabox will significantly improve the liquidity situation as planned. We refer to the description of the risk threatening the company's existence in the section on liquidity risks.

A differentiated view on the development of the automotive industry shows that the company is positioned in forward-looking market segments or sub-markets, has promising customer relationships and offers diverse niche products that are in some cases only offered on the market by paragon.

Possible impacts on the general future development of the paragon Group and financial and nonfinancial performance indicators in fiscal year 2019 prompted the Management to already initiate a cost-cutting program in the year under review. This cost-cutting, which has been carried over to an efficiency program, is also contributing to the sustainable strengthening of earnings in the current fiscal year. On this basis, the Management expects

that the business development described in the forecast will not be significantly impacted by the disclosed risks. paragon GmbH & Co. KGaA classifies the risks in the Group as equivalent.

Description of the Key Characteristics of the Internal Control and Risk Management System With Regard to the Group Accounting Process (Section 315 (4) of the German Commercial Code)

Since the internal control and risk management system is not legally defined, paragon based its definition on that of the Institut der Wirtschaftsprüfer in Deutschland e.V., Düsseldorf, Germany, regarding accounting-related internal control systems (IDW PS 261).

An internal control system is therefore understood as the principles, procedures and measures enacted by management that are aimed at the organizational implementation of management's decisions. The objectives are as follows:

- a) Ensure the effectiveness and profitability of the business (including the protection of assets and the prevention and detection of asset damages)
- b) Ensure the regularity and reliability of internal and external accounting
- c) Comply with the legal and statutory regulations applicable to the company

The Group's risk management system includes all organizational regulations and measures for risk identification and handling risks related to entrepreneurial activity.

The Management of paragon GmbH & Co. KGaA bears the overall responsibility for the internal control and risk management system with regard to the accounting process. The principles, procedural instructions, procedural organization and processes of the accounting-related internal control and risk management system are laid down in organizational instructions that are adapted at regular intervals to current external and internal developments.

In view of the size and complexity of the accounting process, Management has determined the scope and

design of the control activities and implemented them in this process. Independent controls have also been established. The control activities address those control risks which, in terms of their probability of occurrence and their impact, could have a significant influence on the accounting and overall statement of the consolidated financial statements, including the Group management report. Key principles, procedures, measures and control activities include:

- Identification of the key control risks relevant to the accounting process
- Process-independent controls for monitoring the accounting process and its results at the level of the Management of paragon GmbH & Co. KGaA
- Control activities in the finance department of paragon GmbH & Co. KGaA that provide essential information for the preparation of the annual financial statements and management report including the required separation of functions and approval procedures
- Measures that ensure the proper computerized processing of accounting-related information

Risk Reporting in Relation to the Use of Financial Instruments (Section 315 (2) No. 1 of the German Commercial Code)

The following risks arise from the paragon Group's use of financial instruments:

Interest rate risks are virtually meaningless for paragon, as fixed interest rates are currently agreed upon for most of its long-term liabilities.

Financial covenants were concluded between the issuers of the CHF bond and paragon. This refers to the equity ratio (the ratio between equity and consolidated balance sheet total), which may not fall below a contractually defined value of 25%. It was also agreed that if the equity ratio is between 25% and 35% according to paragon GmbH & Co. KGaA's most recently published, audited IFRS consolidated financial statement, the total distribution to paragon GmbH & Co. KGaA's sharehold-

ers in the following year will exceed 50% of the consolidated net income of the most recently published, audited IFRS consolidated financial statement. The equity ratio of 25% was not reached as of December 31, 2019. A formal breach of covenant was successfully avoided in negotiations with the creditors. The bondholders' meeting reached the necessary majority of votes on August 17, 2020. We refer to the presentation in the risk report in the section "Financial risks".

The company's ability to pay is ensured by comprehensive planning and monitoring of liquidity. These plans are prepared on a short, medium and long-term basis. In addition, paragon has a rigorous receivables management system to ensure timely cash inflows. A substantial portion of the receivables is also hedged by means of a commercial credit insurance. An additional possibility for short-term financing exists in the form of factoring agreements.

The company monitors possible currency risks on the procurement and sales side by continuously tracking foreign currency exchange rates. The individual risks are explained in the risk report in the section "Financial risks".

Forecast

Market Development 2020

The International Monetary Fund (IMF) published its outlook for the global economy during 2020 in October 2019⁷. Overall, economic growth was expected to remain at a low level. However, it showed hope for momentum for a slight upswing despite difficult conditions.

Conditions completely changed as a result of the rapid spread of the novel coronavirus (SARS-CoV-2) and the associated COVID-19 epidemic from approximately the

second half of January onwards. Over a period of two months, the pockets of infection shifted from the epidemic's presumed country of origin to Central Europe and Germany. At that time, the World Health Organization changed its classification of the epidemic and henceforth classified it as a pandemic due to its worldwide spread. With the aim of containing the spread of SARS-CoV-2 and maintaining the functionality of the health care system, countries reacted successively with drastic measures to protect the population. These disruptions in public life had a serious impact on the countries' economic performance. As a result, the IMF reduced its forecast for 2020 to a global economic development of -3% on April 6.⁸ This would mean a much sharper decline in the global

7 <https://www.imf.org/en/Publications/WEO/Issues/2019/10/01/world-economic-outlook-october-2019>

8 <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020>

economy than during the 2008/2009 financial crisis. The growth forecast has therefore been adjusted downwards by more than 6 percentage points compared with the forecasts from the October 2019 World Economic Outlook and the January 2020 update, which is an unusual correction in such a short period of time. According to a baseline scenario that assumes the pandemic will lessen in the second half of the year, the IMF expects the global economy to grow by 5.8% in 2021. The prerequisite for this is that economic activity returns to normal even if the risks for an even more serious outbreak of the virus continue to exist and are significant due to their likelihood. In view of this, there is extreme uncertainty about the global growth outlook.

The IMF also continues to expect an uneven distribution of economic growth between developed economies (-6.1% in 2020 and 4.5% in 2021) and emerging markets (-1.0% in 2020 and 6.6% in 2021). Based on the calculations to determine the global economic outlook published in April 2020, the IMF specifically assumed that economic development in the U.S. would amount to -5.9% in 2020 and 4.7% in 2021, in the eurozone to -7.5% in 2020 and 4.7% in 2021, in Germany to -7.0% in 2020 and 5.2% in 2021 and in China to 1.2% in 2020 and 9.2% in 2021.

Against this background, the global automotive industry will in all probability also fall well short of original expectations in the current fiscal year. According to VDA research, 3.3 million new vehicles were sold on the European car market in the first four months of the year.⁹ This represents a decrease of 39% compared to the same period of the previous year. With 4.2 million light vehicles sold, the U.S. market shrank by 21% in the first four months. While the Chinese car market suffered a 35% decline with 4.4 million newly registered vehicles from January to April 2020, the latest figures show an improved trend there once again. Given these impressions, the Center of Automotive Management was originally assuming in a baseline scenario that the global decline in the automotive market will amount to around

17% in 2020 as a whole.¹⁰ Accordingly, while the year-on-year decline will be around 10% in China and around 17% in the USA, the slump in Europe¹¹ will be the most severe at 21%.

In its Electromobility operating segment, paragon is mainly active in industrial sub-markets and in select mass markets through the Voltabox subgroup. These currently include:

- Trolleybuses and conversion of conventional diesel buses from the public transport sector
- Forklifts and automated industrial trucks in intralogistics and networked production environments
- Underground mining vehicles
- Agricultural and construction vehicles
- Starter batteries for motorcycles
- Pedelecs and e-bikes

The development in these submarkets is essentially characterized by a substitution process for lead-acid batteries, or diesel generators in the case of trolleybuses and the entire powertrain in diesel buses, with lithium-ion batteries – from which Voltabox benefits with its modular product portfolio. These are trends that have a period of several years and typically show a saturation curve with increasing market penetration. Furthermore, individual industrial and mass markets are driven by the general trend towards electrification, which is sometimes also underpinned by regulatory requirements.

In 2020, the market research institute IDTechEx¹² expects a market growth of about 7% for battery systems in the submarkets currently occupied by Voltabox and newly-addressed industrial submarkets, as well as in mass markets whose growth is less strong due to the volume already achieved. Of course, IDTechEx's estimates do

⁹ VDA, press release from May 19, 2020: International Automotive Market Continues Nosedive in April

¹⁰ <https://auto-institut.de/automotiveperformance/globaler-automobilmarkt-szenarien-2020/>

¹¹ 28 EU countries and the 4 EFTA countries

¹² CAPEX = investments in property, plant and equipment + investment in intangible assets

not take into account any unexpected economic factors and thus, for example, the corresponding effects of the spread of the coronavirus. However, a reliable indication of e-mobility growth within these markets is not possible.

As a result, the following assumptions are particularly important for establishing the paragon Group's forecast:

- Extraordinary, temporary influence of the COVID 19 pandemic on the preservation of value chains within the automotive industry and on the end consumer's demand
- Relative robustness of the premium segment against cyclical influences on the automotive industry and only short-term effects of the corona pandemic
- paragon GmbH & Co. KGaA plans to sell its shares in Voltabox AG. The forecast therefore refers to the Automotive segment (the paragon Group without Voltabox AG). paragon GmbH & Co. KGaA can only foresee the overall Group effects in fiscal year 2020 to a limited extent due to a potentially only proportionate annual consolidation of Voltabox AG.
- We assume that the liquidity risks (see section on liquidity risk) will be successfully countered by the planned measures. If the measures planned by the management (sale of Voltabox AG) do not lead to success, there is a material uncertainty regarding the continuation of business activities.

paragon Group

The Group's corporate planning is based on detailed sales and revenue planning and is broken down by customer to the product level. The main cost components are planned via individual planning models for a period of several years and are then updated in proportion to the development of revenue.

Significant parameters, such as price changes in purchasing or sales as well as possible cost increases in personnel or changes in the tax base, are integrated into the planning. The constantly updated risk management sys-

tem allows the company to identify risks at an early stage and, if necessary, counter them accordingly.

The Management's original forecast was based on the solid order situation for 2020 and the sales expectations of automotive customers that were already known last year as well as the forecast of the subsidiary Voltabox. Accordingly, Management expected to achieve revenue of € 130 to 140 million and thus to grow by at least 7%. All operating segments should have contributed to growth.

Following extensive plant closures by paragon's customers in mid-March as a result of the worsening COVID-19 pandemic, which ultimately lasted several weeks, paragon suffered an almost complete loss of production. On March 27, 2020, the Management withdrew its forecast for fiscal year 2020 after the subsidiary Voltabox had already announced that it would not achieve the forecast in the current year. Due to the uncertainty about the further development of the pandemic and its effects, it was not possible to make a new forecast at that time.

Based on updated customer orders, Management expects revenue in the automotive business to reach between € 105 and 115 million in fiscal year 2020 – with continued limited visibility in the automotive sector and the corresponding uncertainty about the ongoing continuation of production at manufacturers and suppliers and the development of demand from end customers. In the core automotive business, paragon is aiming for an EBITDA margin of 8 to 12% in view of the challenging environment.

Voltabox AG, which represents the Electromobility operating segment and may no longer be included in the scope of consolidation of the paragon Group in the course of the year depending on the sales efforts of paragon GmbH & Co. KGaA, plans for revenue of € 25 to 45 million with an EBITDA margin not exceeding -6%.

paragon's Management plans an investment volume (CAPEX) of around € 20 million in the automotive sector in the current year. Own work capitalized should be around 54%.

Development of Key Performance Indicators:

€ '000 or as indicated	2018	2019	Change in %	Forecast 2020	
Financial performance indicators				paragon Automotive	Voltabox AG subgroup
Group revenue	187,383	192,188	2.6	€ 105 to 115 million	€ 25 to 45 million
EBITDA margin	16.2%	-4.4%	n. a.	8 to 12%	not exceeding -6%
Investments (CAPEX)*	48,805	41,277	-15.4	approx. € 20 million	-

* CAPEX = investments in property, plant and equipment + investment in intangible assets

paragon GmbH & Co. KGaA

In the current fiscal year, against the backdrop of the implications of the COVID-19 pandemic management expects a significant decline in sales with a reduced

EBITDA margin compared to the previous year for paragon GmbH & Co. KGaA in the HGB annual financial statements. Due to the currently uncertain development of the corona pandemic, there is an unavoidable forecast uncertainty.

€ '000 or as indicated	2018	2019	Change in %	Forecast 2020
Financial performance indicators				
Revenues	109,220	94,237	-13.7	Significant decrease; maximum EUR 70 million
EBITDA margin	3.7%	0.4%	-3.3%	low single-digit margin
Investments (CAPEX)*	14,292	17,498	22.4	Significant decrease

* CAPEX = investments in property, plant and equipment + investment in intangible assets

Disclosures Required Under Takeover Law Pursuant to Sections 289a (1) and 315a (1) HGB

Composition of the Subscribed Capital

paragon GmbH & Co. KGaA's subscribed capital (share capital) amounts to € 4,526,266.00 and is divided into 4,526,266 no-par-value shares with a nominal value of € 1.00 each. All shares are entitled to dividends. Each share grants one vote at the Annual General Meeting.

Stock Voting Right and Transfer Restrictions

The Management is not aware of any limitations affecting voting rights or the transfer of shares.

Holdings That Exceed 10 Percent of the Voting Rights

The Management Chairman (and founder of the predecessor company), Klaus Dieter Frers, held 2,232,263 shares in the company as of the reporting date. This equates to a proportion of 49.3% of the share capital of paragon GmbH & Co. KGaA.¹³

Shares With Special Rights of Control

There are no shares that confer special rights of control.

Voting Right Controls for Employees Participating in the Capital

Insofar as employees participate in the limited liability capital (share capital) as shareholders, they cannot derive any special rights from them.

Appointment and Dismissal of Members of the Management and Amendments to the Articles of Association

paragon GmbH manages paragon GmbH & Co. KGaA as a general partner. With this type of capital-based structure for the partnership limited by shares (KGaA), the management bodies of the general partner thus effectively manage the business of the partnership limited by shares. The provisions of the German Stock Corporation Act that apply to a management board apply analogously to the management.

However, unlike in the case of the management board of a stock corporation, the general partner is a "born" management body, i.e., it is entitled to manage the company's business and to represent it permanently and not just for a specific period of time. The general partner is appointed on the basis of the Articles of Association rather than by the Supervisory Board or the Annual General Meeting. For this reason, the general partner cannot be dismissed by the Supervisory Board or the Annual General Meeting.

Regarding the rules for amending the Articles of Association, please refer to Section 278 (3) and Section 179 (2) Clause 2 of the German Stock Corporation Act.

Authorization of the Management to Issue Shares

Pursuant to the resolution of the Annual General Meeting of May 10, 2017, the general partner is authorized, with the consent of the Supervisory Board, to increase the company's share capital once or several times by up to € 2,263,133.00 until May 9, 2022, inclusive, via the issue of up to 2,263,133 new no-par-value shares against contributions in cash and/or in kind (Authorized Capital 2017/I).

Shareholders are to be granted a subscription right. The statutory subscription right may also be granted by having the new shares taken over by a banking consortium with the obligation to offer the shares indirectly to shareholders for subscription pursuant to Section 186 (5) of

¹³ A previous allocation of 30,871 shares in pursuant to Section 34 of the German Securities Trading Act (WpHG) is no longer made.

the German Stock Corporation Act. However, the general partner is authorized, with the consent of the Supervisory Board, to exclude the statutory subscription rights of shareholders in the cases specified in Section 4 No. 6 of the company's Articles of Association in the version dated May 8, 2018.

Pursuant to a resolution passed by the Annual General Meeting on May 10, 2017, the company's share capital underwent a conditional increase of up to € 2,263,133.00 by issuing 2,263,133 new no-par-value shares (Conditional Capital 2017/I).

The conditional capital was created exclusively to grant shares to holders or creditors of convertible bonds and/or bonds with options that are issued by the company (or by a Group company as defined in Section 18 of the German Stock Corporation Act, in which the company has a shareholding of at least 90%) pursuant to the authorization by the Annual General Meeting on May 10, 2017, against contributions in cash or in kind until May 9, 2022. In accordance with the respective terms and conditions for convertible bonds and bonds with options, the conditional capital increase also serves to issue shares to holders of convertible bonds and/or bonds with options subject to conversion or option obligations.

The conditional capital increase shall only be implemented to the extent that the holders of warrants from options or creditors of convertible bonds exercise their conversion or option rights, or the holders or creditors of convertible or warrant-linked bonds who are obligated to exercise or convert the option or warrant-linked bonds fulfill their obligation to exercise or convert the option or warrant-linked bonds, provided that the conversion or option rights are not serviced by granting treasury stock or other forms of settlement. These rights must have been issued by the company (or by a Group company as defined in Section 18 of the German Stock Corporation Act, in which the company has a direct or indirect shareholding of at least 90%) based on the authorization granted by the Annual General Meeting, which lasts from May 10, 2017, through May 9, 2022. The new shares shall be issued at the conversion/option prices in the bond or option conditions to be determined in accordance with the aforementioned authorizing resolution. The new shares may be granted a dividend entitlement

starting in the fiscal years for which the Annual General Meeting has not yet passed a resolution on the appropriation of profits. The general partner is authorized to determine the further details regarding the implementation of the conditional capital increase.

Change of Control and Compensation Agreements

According to Section 6 No. 3 of the company's Articles of Association as of May 8, 2018, further general partners may be admitted to the company, with or without an authorization to manage its business and/or to represent it. This admission will require the consent of the general partner and the Annual General Meeting. The provisions of the company's Articles of Association concerning the general partner apply analogously for general partners newly joining the company.

Pursuant to Section 6 No. 4 of the company's Articles of Association as of May 8, 2018, the general partner will retire from the company in the event that a person other than Brigitte Frers or a direct relative of Klaus Dieter Frers (Section 1589 (1) Clause 1 of the German Civil Code) becomes the legal or beneficial owner of a majority of the voting rights in the general partner and does not provide the company's shareholders with a takeover or mandatory offer in accordance with the provisions of the German Securities Acquisition and Takeover Act within three months of this acquisition coming into effect.

In the event that the general partner retires from the company without another general partner being admitted at the same time, pursuant to Section 6 No. 5 of the company's Articles of Association of May 8, 2018, the limited liability shareholders will continue to manage the company's business on their own, on a temporary basis. In this event, the Supervisory Board is required to request the appointment of a substitute representative without delay who will represent the company until a new general partner is admitted.

Sustainability Reporting

For fiscal year 2019, the company has prepared a consolidated nonfinancial report for the paragon Group and for

paragon GmbH & Co. KGaA. This report is not part of the management report. The Management has produced this report separately and has published it on the company's website (<https://ir.paragon.ag>).

The company has included the components required by law in its sustainability reporting and has supplemented these with further comments where clarification is necessary. paragon GmbH & Co. KGaA applies the framework provided by the German Sustainability Code (GSC) – while complying with Section 289c of the German Commercial Code – for its sustainability reporting.

Corporate Governance Statement Pursuant to Section 315d and Section 289f (1) of the German Commercial Code

The Management and the Supervisory Board of the company are committed to the principles of transparent and responsible corporate governance and supervision. They ascribe a high priority to the standards of good corporate governance. With the Management Chairman as the majority shareholder and the specific legal form-related characteristics of a partnership limited by shares, in terms of its entrepreneurial responsibility the Management adheres particularly strongly to the principles of the “honorable merchant,” from the point of view of its operational procedures. This includes the obligation to ensure the continued viability of the company and its sustained value creation (corporate interests) in conformity with the principles of the “social market economy.”

The Corporate Governance Statement pursuant to Section 315d and Section 289f (1) of the German Commercial Code can be accessed at any time on paragon's website at <https://ir.paragon.ag>. It contains the corporate governance declaration pursuant to Section 161 of the German Stock Corporation Act and the corporate governance report pursuant to No. 3.10 of the German Corporate Governance Code.

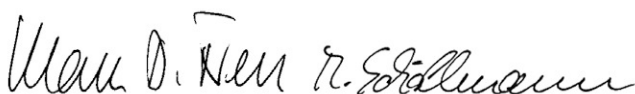
With regard to Section 76 (4) and Section 111 (5) of the German Stock Corporation Act as well as points 4.1.5 and 5.1.2 of the German Corporate Governance Code (GCGC) on the topic of diversity, in 2020 the Supervisory Board and the Management jointly determined the current proportion of women on the Supervisory Board and the corporate management body (Management Board/ Management) and defined target figures for February 28, 2023. The current quota for paragon GmbH & Co. KGaA is zero for both bodies. The defined targets for both bodies were set at zero, taking into consideration the status quo at that time, since the contract periods or the terms of office of these two bodies continued beyond this date.

On December 31, 2019, the share of women at the downstream management levels accounted for 15.6% of the management personnel (prior year: 14.7%). The Group intends to increase the quota of women for downstream management levels to 25% in the long term.

At paragon GmbH & Co. KGaA, entrepreneurial activity is closely linked with responsibility towards employees, customers, the environment and society. Values such as taking responsibility, team spirit, integrity, passion and a respectful, appreciative approach to daily interaction play a decisive role for paragon GmbH & Co. KGaA and form the core of its corporate culture. The members of the Management are aware of their own function as role models and pay particular attention to ensuring that all company executives exemplify the aforementioned values.

Delbrück, Germany, August 20, 2020
paragon GmbH & Co. KGaA

The Management



Klaus Dieter Frers
CEO

Dr. Matthias Schöllmann
Managing Director
of Automotive

Corporate Governance Report

German Corporate Governance Code

The recommendations of the German Corporate Governance Code (GCGC) promote transparency and thereby strengthen the trust of international and national investors, business partners and company employees. The Management and the Supervisory Board of paragon GmbH & Co. KGaA uphold the obligation highlighted in the GCGC of ensuring the continued viability of the company and its sustained value creation (corporate interests) in conformity with the principles of the “social market economy.”

Legal Form-Specific Details

The German Corporate Governance Code (GCGC) has been designed for companies with the legal form of a stock corporation (AG) or a European company (SE) and does not take into consideration the specific characteristics of a partnership limited by shares (KGaA). Many of the recommendations made in the GCGC can therefore only be applied to paragon GmbH & Co. KGaA in a modified form. In particular, the following legal form-specific details have resulted in significant modifications:

Legal Nature of a Partnership Limited by Shares (KGaA)

A partnership limited by shares is a legal entity that combines a stock corporation with a limited partnership. In place of the capital contributions provided by limited liability partners, the limited liability shareholders participate in the company under stock corporation law. The shares of the partnership limited by shares are tradable in the same way as the shares of a stock corporation and may therefore be admitted to trading on a stock exchange, unlike in the case of capital contributions provided by limited liability partners. A partnership limited by shares thus has one or more general partners and one or more limited liability shareholders. The legal status of the general partner (also in relation to the limited liability shareholders and the creditors of the company) is subject to limited partnership law pursuant to Section 278 (2)

of the German Stock Corporation Act and Sections 161, 105 et seq. of the German Commercial Code, while the partnership limited by shares itself and the limited liability shareholders are subject to stock corporation law pursuant to Section 278 (3) of the German Stock Corporation Act. The general partner is liable personally, directly and without limit for all liabilities of the partnership limited by shares. The limited liability shareholders are only required to provide a capital contribution on the basis of the shares for which they have subscribed; they are otherwise not liable.

Annual General Meeting

As in the case of a stock corporation, the company's Annual General Meeting is the decision-making body for the limited liability shareholders of the partnership limited by shares. The Annual General Meeting follows the same procedure as for a stock corporation. The Annual General Meeting of a partnership limited by shares has sole responsibility for the approval of the annual financial statements. This resolution will require the consent of paragon GmbH as the general partner. Basic transactions that likewise require a resolution to be passed at the Annual General Meeting in case of a stock corporation require the consent of the limited liability shareholders. In particular, this relates to transactions resulting in changes to the share capital or transformation measures for which resolutions passed by the Annual General Meeting are mandatory pursuant to the German Business Reorganization Act. Such resolutions will likewise require the consent of paragon GmbH as the general partner.

The limited liability shareholders exercise their rights in the company's affairs at the Annual General Meeting, unless otherwise stipulated by law. The Annual General Meeting passes resolutions on issues expressly specified in the law and in the Articles of Association. Only those limited liability shareholders who have registered in good time and proven their right to participate in the Annual General Meeting and to exercise their voting right are entitled to take part in the Annual General Meeting and exercise voting rights. Registration must be done in writing (Section 126b of the German Civil Code [BGB]) and must be in German or English. The right to participate in the Annual General Meeting and to exercise voting rights

is demonstrated by means of a written proof of share ownership from the custodial institution.

At the Annual General Meeting, the Management shall, upon request, provide each limited liability shareholder or limited liability shareholder representative with information on the company's affairs, including the company's legal and business relationships with affiliated companies, as well as on the Group's position and that of the companies included in the consolidated financial statements, insofar as the disclosure is necessary for the proper assessment of an item on the agenda and there is no right to withhold the information.

At the Annual General Meeting on May 15, 2019, the (then) Management Board submitted to the shareholders the adopted annual financial statements of the company and the approved consolidated financial statements as of December 31, 2018, the status reports of the company and the Group, the explanatory Management Board report on the information required in accordance with Sections 289 (4), 315 (4) of the German Commercial Code as well as the respective Supervisory Board report for fiscal year 2018.

In addition, the following resolutions were passed with the required majority of voting capital in each case:

- Resolution on the adoption of the annual financial statements of paragon GmbH & Co. KGaA for fiscal year 2018
- Resolution on the appropriation of the balance sheet profits from fiscal year 2018
- Resolution on the discharge of the former Management Board of paragon Aktiengesellschaft for the period from January 1, 2018 to July 5, 2018
- Resolution on the discharge of the former Supervisory Board of paragon Aktiengesellschaft for the period from January 1, 2018 to July 5, 2018
- Resolution on the discharge of the general partner for the period from July 5, 2018 to December 31, 2018

- Resolution on the discharge of the Supervisory Board for the period from July 5, 2018 to December 31, 2018
- Selection of the auditor and Group auditor for fiscal year 2019 as well as of the auditor for an audit review of the half-year financial report for fiscal year 2019, where applicable
- Amendment to the Articles of Association in accordance with Section 58 (5) AktG

Supervisory Board

The Supervisory Board of paragon GmbH & Co. KGaA consisted of three members throughout fiscal year 2019: Prof. Dr. Lutz Eckstein (Chairman), Hermann Börnemeier (Vice-Chairman) and Walter Schäfers. The Supervisory Board oversaw the work of the Management Board and the Management and provided them with advice. In fiscal year 2019, there were no conflicts of interest among the members that would have to have been disclosed to the Supervisory Board. The Supervisory Board regularly assesses the efficiency of its work through self-evaluation.

In respect of the services personally provided by members of the Supervisory Board for the company in fiscal year 2019, we refer to the disclosures in the consolidated financial statements as well as the combined management report for paragon GmbH & Co. KGaA and the paragon Group.

As in the case of a stock corporation, the supervisory board of a partnership limited by shares is a supervisory body. In particular, it is responsible for supervising the general partner's management of the company. For this purpose, it has the same rights to information and inspection rights as the supervisory board of a stock corporation. Unlike in the case of a stock corporation, it is also responsible for fulfillment of the resolutions passed by the Annual General Meeting.

In principle, a supervisory board is not entitled to make specific management measures subject to its consent, to prepare a list of transactions requiring its consent or to

issue rules of procedure for the general partner encompassing such business measures. However, according to the Articles of Association of paragon GmbH & Co. KGaA the following transactions of the company and affiliated companies require the consent of the Supervisory Board:

- Transformation measures resulting in a change in the Group's structure
- The purchase, disposal or encumbrance of land, rights equivalent to real property or rights to land insofar as the value of the respective measure exceeds an amount of € 3 million
- Participation in other companies or the relinquishment of such participations, insofar as the value of the respective measure exceeds an amount of € 5 million
- Assumption of sureties, guarantees and similar liability outside the scope of normal business activities, insofar as the measure in question is significant for the Group
- Grant of loans or other credits outside the scope of normal business activities, insofar as the measure in question is significant for the Group

In addition, the Supervisory Board is responsible for representing the partnership limited by shares in relation to the general partner.

Unlike in the case of a stock corporation, the supervisory board of a partnership limited by shares is not involved in the approval of the annual financial statements of the partnership limited by shares. However, the supervisory board is required to review the annual financial statements, the management report and the proposal on the appropriation of the balance sheet profits by virtue of its supervisory role, which is mandatory under stock corporation law.

Nor is the supervisory board responsible for the appointment and dismissal of the general partner, since the general partner will assume this role with permanent effect according to the articles of association.

In principle, the members of the supervisory board will be appointed in accordance with the rules applicable for

a stock corporation. However, the mandatory statutory incompatibility prescription of the members of the supervisory board and general partners must be complied with. The mandatory statutory prescription concerning the incompatibility of members of the supervisory board and general partners must also be complied with. Pursuant to Section 287 (3) of the German Stock Corporation Act, general partners may not be supervisory board members. If the general partner is a limited liability company, this ground for exclusion will apply analogously for the managing director(s) of paragon GmbH as the general partner and for the shareholders with significant interests in this company.

Management

Unlike a stock corporation, a partnership limited by shares does not have a management board. The general partner(s) is/are responsible for the company's management. The provisions of the German Stock Corporation Act that apply to a management board apply analogously to the management. However, unlike in the case of the management board of a stock corporation, the general partner is a "born" management body, i.e., it is entitled to manage the company's business and to represent it permanently and not just for a specific period of time. The general partner is appointed on the basis of the Articles of Association rather than by the Supervisory Board or the Annual General Meeting. For this reason, the general partner cannot be dismissed by the Supervisory Board or the Annual General Meeting. It is not necessary for the general partner to participate in the company's share capital; however, the general partner may simultaneously be a limited liability shareholder.

General partners could be natural persons, a limited liability company, a stock corporation or other legal persons (capital-based partnership limited by shares). In the case of a capital-based partnership limited by shares, the management bodies of the general partner thus effectively manage the business of the partnership limited by shares. Moreover, due to its legal form (stock corporation or limited liability company) in the case of a capital-based partnership limited by shares the otherwise direct, personal and unlimited liability of the general partner for all of the company's liabilities is limited to the company

assets of the general partner and thus effectively to its share capital or nominal capital.

The company's general partner is paragon GmbH, headquartered in Delbrück. In the reporting year, the Management of paragon GmbH initially consisted of the three members Klaus Dieter Frers (Chairman), Dr. Matthias Schöllmann and Dr.-Ing. Stefan Schwehr. The appointment of Dr.-Ing. Stefan Schwehr ended on 3/31/2019. From then on, and on 12/31/2019, the Management consisted of Klaus Dieter Frers (Chairman) and Dr. Matthias Schöllmann. Unlike in the case of the management board of a stock corporation, the managing directors of paragon GmbH have not been appointed for a limited period of time. The shares in paragon GmbH are held by Klaus Dieter Frers, Brigitte Frers and Niklas Frers. The associated shareholder rights are exercised by the shareholders' meeting.

The remuneration of the members of the Management consists of an annual fixed remuneration, ancillary benefits and a one-year variable remuneration component. A cap (minimum/maximum) is not provided for the variable compensation component. A variable compensation component for multiple years has not been specified. Finally, the total remuneration still includes a service cost under IAS 19. This is recognized pursuant to the GCGC as part of total remuneration, even though this is not a newly granted contribution in the narrower sense, but a past decision of the Supervisory Board that continues to be effective.

The company is committed to a high degree of transparency in its reporting. This also applies to the remuneration of the Management, which is disclosed and explained in full in the remuneration report, together with all its components and on an individualized basis. The Management and the Supervisory Board have therefore decided to use the Management Board remuneration sample tables provided by the GCGC in the remuneration report, which is contained in the combined management report for the paragon Group and paragon GmbH & Co. KGaA for fiscal year 2019.

Cooperation Between the Management and the Supervisory Board

The Supervisory Board of paragon GmbH & Co. KGaA fulfilled the consulting and monitoring obligations incumbent upon it according to law, the Articles of Association and the German Corporate Governance Code (GCGC) in their respective current versions with great care in fiscal year 2019. Here, the Supervisory Board supervised the company's Management on an ongoing basis and made sure of its legal and regulatory compliance, appropriateness and effectiveness. Furthermore, the Supervisory Board was available to the Management for consultation and was involved in discussions and decisions regarding issues of material importance. Thanks to the good cooperation between the Supervisory Board members, even time-sensitive decisions were resolved quickly after appropriate consideration.

The Management comprehensively informed the Supervisory Board in written and oral form in the Supervisory Board meetings on all proceedings of material importance, the Company's general performance and its current situation. Here, it gave particular priority to the topics of strategy, planning, business development, the risk situation and risk management. The Supervisory Board intensively reviewed the Management's reports and discussed them at its meetings. In addition to the Supervisory Board meetings and conference calls involving all of the members of the Management and the Supervisory Board, the Supervisory Board Chairman and the Management Chairman discussed important matters when necessary. The Supervisory Board was fully informed about exceptional instances that were of material importance for assessing the year's results.

Financial Communications

paragon GmbH & Co. KGaA regularly and simultaneously informed all of the capital market participants about the economic situation of the company. The continuous reporting included the annual report for fiscal year 2018 (published on April 1, 2019), the interim report as of March 31, 2019 – 1st quarter (published on May 13, 2019), the interim report as of June 30, 2019 – 1st half-year (published on August 22, 2019) and the interim

report as of September 30, 2019 – 9 months (published on November 13, 2019), among others. In addition to these reporting dates, paragon GmbH & Co. KGaA published financial notices, which also included the Management's assessment of further business development.

The Management's revenue and earnings forecast for fiscal year 2019 dated March 7, 2019 was outlined in the Group management report published on April 1, 2019 as an interval forecast including the key assumptions on which the forecasts are based. On August 12, 2019, the company issued a profit warning, mainly as a result of postponed projects at subsidiary Voltabox AG and the resulting delays in sales, which led to a reduction in the forecast for revenue and EBIT margin.

In the past fiscal year, the company continued to solidify its ongoing communication with institutional and private investors both at the paragon Group level and at the level of its subsidiary Voltabox AG, which is also publicly traded.

More than 250 individual meetings were held with institutional investors from Germany, the United Kingdom, France, Finland, Sweden, Denmark, Luxembourg, the Netherlands, Switzerland, Austria, Italy, Spain, Poland, the USA and Canada as well as with private investors. Over the course of the year, 6 research firms (prior year: 6) published a total of 30 studies (prior year: 31) on paragon GmbH & Co. KGaA, and 7 research firms published a total of 35 studies on the subsidiary Voltabox AG.

The company sees effective financial communication as the targeted reduction in the asymmetric flow of information between Management and shareholders on the current economic situation and specific future potential of paragon GmbH & Co. KGaA. Accordingly, the ongoing dialogue with professional capital market participants is given a high priority. Furthermore, the company aims to provide the broader public with up-to-date and relevant information via various media channels and to be available as a personal contact for private investors.

Directors' Holdings

The Management Chairman (and founder of the predecessor company), Klaus Dieter Frers, held 2,232,263

shares in the company as of the reporting date. This equates to a proportion of 49.3% of the share capital of paragon GmbH & Co. KGaA.¹⁴

The Management member Dr. Matthias Schöllmann held 2,920 shares of the company as of the reporting date.

The members of the Supervisory Board held 4,000 shares of the company as of the reporting date.

Accounting

paragon GmbH & Co. KGaA prepared the consolidated financial statements as of December 31, 2019, in accordance with the International Financial Reporting Standards (IFRS) and the International Accounting Standards (IAS) as adopted by the EU. The Annual General Meeting on May 15, 2019, selected Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, to be the auditor for the fiscal year from January 1, 2019, to December 31, 2019, and the company was subsequently commissioned accordingly by the Supervisory Board.

Declaration of paragon GmbH & Co. KGaA on the German Corporate Governance Code

The German Corporate Governance Code has been designed for companies with the legal form of a stock corporation or a European company (SE) and does not take into consideration the specific characteristics that the legal form of a partnership limited by shares entails. Accordingly, in connection with the following declaration of compliance, the characteristics specific to the legal form of paragon GmbH & Co. KGaA, which are outlined in further detail in the Corporate Governance Statement pursuant to Section 315d in conjunction with Section 289f (1) of the German Commercial Code, must be taken into consideration.

Pursuant to Section 161 of the German Stock Corporation Act, the Management and the Supervisory Board of paragon GmbH & Co. KGaA make the following declaration of compliance with the recommendations of the Government Commission on the German Corporate Governance Code in the version from February 7, 2017, that was published on April 24, 2017, in the German Federal Gazette:

The Management and the Supervisory Board welcome the suggestions and rules of the German Corporate Governance Code. They are committed to transparent, responsible and value-oriented management and governance. paragon GmbH & Co. KGaA complied and complies with the recommendations of the German Corporate Governance Code, with the following deviations:

- It is planned to push ahead with the integration of a compliance management system in accordance with ISO 19600 in 2020 (No. 4.1.3).
- The current employment contracts of the managing directors do not currently stipulate any maximum limits for the total remuneration or the variable remuneration components. The Management and

¹⁴ A previous allocation of 30,871 shares in pursuant to Section 34 of the German Securities Trading Act (WpHG) is no longer made.

the Supervisory Board do not consider this necessary because of the clear correlation between the variable portions and earnings indicators (No. 4.2.3).

- A limit on severance payments (severance payment cap) has not been agreed for Management Chairman Klaus Dieter Frers because he holds the majority of the company's share capital (No. 4.2.3).
- The shareholders' meeting of paragon GmbH has not been influenced by the issue of diversity in its appointment of the current members of the Management (No. 5.1.2).
- The Supervisory Board has not formed any committees as this is considered inefficient by the three members due to the small size of the Supervisory Board (Nos. 5.3.1 to 5.3.3).
- No age limit has been set for the members of the Supervisory Board or the Management since the expertise of the members is given priority (Nos. 5.1.2 and 5.4.1).
- paragon GmbH & Co. KGaA publishes the annual financial statements and the interim reports in accordance with legal requirements and also strives to comply with the periods recommended by the Code (90 days for annual financial statements, 45 days for interim financial statements). However, these periods may be exceeded for organizational reasons (No. 7.1.2).

Delbrück, Germany, February 2020

The Management

The Supervisory Board

Consolidated Income Statement

€ '000	Notes	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Revenue	11, 44	192,188	187,383
Other operating income	12	6,851	7,197
Increase or decrease in inventory of finished goods and work in progress		9,081	9,231
Other own work capitalized	13	19,099	15,656
Total operating performance		227,219	219,467
Cost of materials	14	-137,152	-105,931
Gross profit		90,067	113,536
Personnel expenses	15	-59,808	-52,155
Depreciation of property, plant and equipment and amortization of intangible assets	17	-22,212	-14,410
Impairment of current assets	17	-54,221	0
Impairment of goodwill	22	-8,070	0
Impairment of property, plant and equipment and intangible assets	17	-27,071	-1,048
Other operating expenses	16	-38,632	-31,091
Earnings before interest and taxes (EBIT)		-119,947	14,832
Financial income	18	33	6
Financial expenses	18	-6,917	-4,228
Financial result		-6,884	-4,222
Earnings before taxes (EBT)		-126,831	10,610
Income taxes	19	3,307	-7,245
Consolidated net income		-123,524	3,365
Earnings per share in € (basic)	20	-18,29	0,52
Earnings per share in € (diluted)	20	-18,29	0,52
Average number of shares outstanding (basic)	20	4,526,266	4,526,266
Average number of shares outstanding (diluted)	20	4,526,266	4,526,266

Consolidated Statement of Comprehensive Income

€ '000

	Notes	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Consolidated net income		-123,524	3,365
Actuarial gains and losses	33	-401	113
Currency translation reserve		-265	-487
Total comprehensive income		-124,190	2,991
			prior year
Net income attributable to minority interests:			
paragon Group shareholders		-82,786	2,334
Minority interests		-40,738	1,031
Total comprehensive income attributable to minority interests:			
paragon Group shareholders		-83,334	2,078
Minority interests		-40,856	913

Consolidated Statement of Financial Position

€ '000	Notes	Dec. 31, 2019	Dec. 31, 2018
ASSETS			
Noncurrent assets			
Intangible assets	21	71,284	91,688
Goodwill	22	22,375	30,395
Property, plant and equipment	23	69,307	50,527
Financial assets	24	1,521	326
Other assets		2,142	1,528
Deferred tax assets	19	270	2,193
		166,899	176,657
Current assets			
Inventories	25	44,799	58,927
Trade receivables	26	45,027	70,713
Income tax assets		84	91
Other assets	27	7,791	14,064
Cash and cash equivalents	28	9,456	41,841
		107,157	185,636
Total assets		274,056	362,293

€ '000	Notes	Dec. 31, 2019	Dec. 31, 2018
EQUITY AND LIABILITIES			
Equity			
Subscribed capital	29	4,526	4,526
Capital reserve	29	15,485	15,165
Minority interests	29	20,759	61,900
Revaluation reserve	29	-1,202	-802
Profit/loss carried forward		97,181	95,883
Consolidated net income		-82,788	2,334
Currency translation differences	8	-1,354	-1,207
		52,607	177,799
Noncurrent provisions and liabilities			
Noncurrent lease liabilities	30	19,433	937
Noncurrent loans	31	15,373	17,579
Noncurrent bonds	32	82,625	49,881
Special item for investment grants	35	829	917
Deferred taxes	19	18,623	24,059
Pension provisions	33	3,320	2,885
Other noncurrent liabilities	34	3,256	3,837
		143,459	100,095
Current provisions and liabilities			
Current lease liabilities	30	2,685	861
Current loans and current portion of noncurrent loans	31	28,858	41,378
Trade payables		33,093	28,242
Other provisions	36	4,155	579
Income tax liabilities	37	716	618
Other current liabilities	34	8,483	12,721
		77,990	84,399
Total equity and liabilities		274,056	362,293

Consolidated Cash Flow

€ '000	Notes	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Earnings before taxes (EBT)		-126,831	10,610
Depreciation/amortization of noncurrent assets		22,212	14,410
Financial result		6,884	4,222
Gains (-) / losses (+) from the disposal of property, plant and equipment and financial assets		2,389	1,624
Increase (+) / decrease (-) in other provisions and pension provisions		4,011	-405
Income from the reversal of the special item for investment grants		-88	-88
Other non-cash income and expenses		4,102	-3,848
Increase (-) / decrease (+) in trade receivables, other receivables, and other assets		31,345	-39,237
Impairment of assets		35,141	1,048
Increase (-) / decrease (+) in inventories		14,128	-37,329
Increase (+) / decrease (-) in trade payables and other liabilities		613	-606
Interest paid		-4,416	-4,228
Income tax expenses (+)/ Income (-) without deferred taxes		254	352
Income taxes paid		-156	0
Cash flow from operating activities	43	-10,412	-53,475

€ '000	Notes	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Cash receipts from the disposal of property, plant and equipment		7,275	0
Cash payments for investments in property, plant and equipment		-23,144	-21,619
Cash payments for investments in intangible assets		-18,133	-27,186
Cash receipts from the disposal of intangible assets		0	1,789
Cash payments for investments in financial assets		-1,400	0
Cash payments resulting from the acquisition of consolidated companies and other business units		0	-26,340
Interest received		33	6
Cash flow from investing activities	43	-35,369	-73,350
Dividend payouts		-1,323	-1,132
Loan repayments		-26,384	-5,152
Proceeds from loans		11,657	43,032
Increase in finance lease obligations due to IFRS 16		20,790	0
Increase in fixed assets from the initial application of IFRS 16		-20,790	0
Proceeds from the inclusion of finance lease obligations		4,839	0
Repayments of lease liabilities		-5,309	-861
Net proceeds from bond issue		29,916	0
Net outflow from the payment of bonds		0	-13,047
Cash flow from financing activities	43	13,396	22,840
Changes in cash and cash equivalents		-32,385	-103,985
Cash and cash equivalents at beginning of period		41,841	145,826
Cash and cash equivalents at end of period	28, 43	9,456	41,841

Statement of Changes of Equity

€ '000	Statement of financial position profit							
	Subscribed capital	Capital reserve	Revaluation reserve	Currency translation reserve	Profit carried forward	Consolidated net income	Minority interests	Total
January 1, 2018	4,526	15,165	-915	-837	96,926	0	61,105	175,969
Consolidated net income	0	0	0	0	0	2,334	913	3,247
Actuarial gains and losses	0	0	113	0	0	0	0	113
Currency translation	0	0	0	-370	0	0	-117	-487
Other comprehensive income	0	0	113	-370	0	0	-117	-374
Total comprehensive income	0	0	113	-370	0	2,334	796	2,873
Initial adjustment effect IFRS 15 and IFRS 9	0	0	0	0	89	0	0	89
Dividend payout	0	0	0	0	-1,132	0	0	-1,132
December 31, 2018	4,526	15,165	-802	-1,207	95,883	2,334	61,901	177,800

€ '000	Statement of financial position profit							
	Subscribed capital	Capital reserve	Revaluation reserve	Currency translation reserve	Profit carried forward	Consolidated net income	Minority interests	Total
January 1, 2019	4,526	15,165	-802	-1,207	98,217	0	61,901	177,800
Consolidated net income	0	0	0	0	0	-82,788	-40,737	-123,525
Actuarial gains and losses	0	0	-400	0	0	0	0	-400
Currency translation	0	0	0	-147	0	0	-118	-265
Other comprehensive income	0	0	-400	-147	0	0	-118	-665
Total comprehensive income	0	0	-400	-147	0	-82,788	-40,855	-124,190
Contribution to equity	0	320	0	0	0	0	0	320
Dividend payout Voltabox	0	0	0	0	97	0	-287	-190
Dividend payout paragon	0	0	0	0	-1,133	0	0	-1,133
December 31, 2019	4,526	15,485	-1,202	-1,354	97,181	-82,788	20,759	52,607

Notes to the Consolidated Financial Statements 2019

(1) General Information

paragon Aktiengesellschaft (hereafter “paragon GmbH & Co. KGaA” or “paragon”) is a joint stock corporation incorporated under German law. The company’s headquarters are at Artegastrasse 1, 33129 Delbrück, Germany. paragon GmbH & Co. KGaA’s shares have been traded on the Frankfurt Stock Exchange in the Prime Standard segment of the regulated market since the year 2000. Paragon GmbH & Co. KGaA is entered in the commercial register of the district court of Paderborn (HRB 13491).

The Management of paragon GmbH, the general partner of paragon GmbH & Co. KGaA, authorized the consolidated financial statements as of December 31, 2019, and the management report for the period from January 1 to December 31, 2019, for submission to the Supervisory Board on August 20, 2020.

The consolidated financial statements and management report of paragon GmbH & Co. KGaA for the period from January 1 to December 31, 2019, are published in the electronic Federal Gazette and are available as part of the Annual Report on the company’s website (<https://www.paragon.ag/>).

(2) Application of the International Financial Reporting Standards (IFRS)

The consolidated financial statements of paragon GmbH & Co. KGaA as of December 31, 2019, have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), London, as adopted by the European Union (EU) and applicable as of the date of the statement of financial position, and in accordance with the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRSIC).

(3) Going Concern

The financial statements for the reporting period from January 1 to December 31, 2019, have been prepared under the going concern assumption. The carrying amounts of assets and liabilities were therefore determined on the basis of going concern values.

At the time of preparation of the consolidated financial statements, liabilities due cannot be settled as scheduled. Deferral agreements have been concluded with the respective creditors. The deferrals are agreed for a period of one to nine months. In addition, the terms of some financing arrangements were extended. However, since the conclusion of the sales negotiations for the sale of Voltabox AG and the achievable proceeds (package sale) as well as the alternatively planned successive sale of the shares are uncertain with regard to the amount, the volume of the shares sold and the timing, this results in a significant uncertainty with regard to the continuation of business activities. Further details can be found in the management report in the section on liquidity risks.

(4) Events After the Balance Sheet Date

The consolidated financial statements are prepared on the basis of the circumstances existing as of the date of the statement of financial position. In accordance with IAS 10.7, events after the reporting period include all events up to the date the consolidated financial statements are authorized for issue. The consolidated financial statements as of December 31, 2019, were authorized by the Management and submitted to the Supervisory Board for approval on August 20, 2020. The following major events occurred in the period up to this date:

paragon GmbH & Co. KGaA announced on March 3, 2020, that as part of a strategic realignment, it was considering selling its stake in Voltabox AG in the form of a complete or partial sale.

Options include a partial sale as well as a sale of the entire investment. On March 3, 2020, and March 4, 2020, a total of 350,000 Voltabox AG shares were sold by the company at a price of € 5.00. The shareholding of paragon GmbH & Co. KGaA in Voltabox AG decreased from 9,500,000 shares (60.03%) to 9,150,000 shares (57.82%) at the time when the company's annual financial statements were prepared.

paragon GmbH & Co. KGaA made the decision to sell the Voltabox subgroup after the balance sheet date and actively started searching for potential buyers. The sale is expected to be completed within twelve months.

As a result of the sale, paragon GmbH & Co. KGaA will lose control over the subsidiaries Voltabox AG, Voltabox of North America Inc., Voltabox Kunshan Co. Ltd and the minority interest in ForkOn GmbH. For this reason, in financial statements prepared after January 1, 2020, the Voltabox subgroup is reported as a "discontinued operation" in accordance with IFRS 5. It represents the Electromobility operating segment in the paragon Group.

The spread of the novel coronavirus (SARS-CoV-2) has progressed considerably between the balance sheet date and the date on which the financial statements were approved for publication. In paragon's consolidated financial statements, the effects of the pandemic are considered non-adjusting events. These must be taken into consideration as adjusting events for financial statements following December 31, 2019. The pandemic has far-reaching consequences for paragon GmbH & Co. KGaA. Suppliers are unable to make deliveries, orders from customers have decreased, and employees' situations are also affected by uncertainty due to reduced working hours, for example. It is not yet possible to specifically quantify the financial impact, as it is unclear how the dynamic development of the pandemic will continue and what the possible effects of the corresponding national countermeasures will mean for the business activities of paragon and the entire automotive industry.

By resolution of July 2, 2020, the activities of the affiliated companies paragon electroacoustic GmbH, Neu Ulm, and ETON Soundsysteme GmbH, Neu Ulm, will be transferred to other sites of the paragon Group.

(5) New Accounting Principles Due to New Standards

The impact of new accounting principles whose scope of application is compatible with the activities of paragon GmbH & Co. KGaA is detailed below. For reasons of materiality, paragon GmbH & Co. KGaA does not present changes in accounting that do not affect the company. There were no material changes to existing IFRS standards.

IFRS 16 – Leases

Since January 1, 2019, paragon GmbH & Co. KGaA has applied the new IFRS 16 accounting standard. IFRS 16 essentially changes accounting by lessees and leads to recognition of nearly all leases. The new standard replaces IAS 17 and related interpretations. The previous distinction between finance and operating leases is eliminated. In addition, IFRS 16 includes a number of additional rules on disclosure, including in the Notes, as well as on sale and leaseback transactions. According to IFRS 16, a lease exists if the lessor grants the lessee the contractual right to control the use of an identified asset for a certain period of time in return for payment. For all leases, the lessee recognizes a lease liability in its statement of financial position, while simultaneously capitalizing a right-of-use asset in the amount of the present value of the lease installments. As a result, the right-of-use asset is generally subject to straight-line depreciation and the lease liability is measured according to the effective interest method. This generally leads to higher expenses at the beginning of the term of a lease contract.

paragon GmbH & Co. KGaA is introducing IFRS 16 using the modified retrospective method. The impact of the initial retrospective application of the accounting standard is presented in note (6) and an explanation of the accounting and measurement methods applied is presented in note (9).

IFRIC 23 – Uncertainty over Income Tax Treatments

This interpretation clarifies the recognition of deferred taxes in relation to taxable profits (tax losses), the tax base, unused tax losses, unused tax credits and tax rates in case of uncertainty about the income tax treatment under IAS 12.

Tax risks are to be recognized if it is probable that the interpretation and assessment by the tax authorities regarding a certain tax-relevant matter would deviate from those of the company preparing financial statements.

A possible discovery risk is irrelevant for both recognition and measurement of tax risks. It is always to be assumed that the tax authorities are fully informed. The measurement shall be based on the most probable value or expected value, depending on the value that best reflects the existing risk. IFRIC 23 comes into effect for reporting periods beginning on or after January 1, 2019. There were no effects on the Group from the first-time application.

Amendment to IFRS 9

This amendment changes the existing rules in IFRS 9 on termination rights so as to enable measurement at amortized cost or (depending on the business model) directly in equity at fair value, even in the case of negative compensation. On the basis of this amendment, whether the compensatory payment is positive or negative is not relevant, i.e. a payment for the benefit of the party bringing about the early repayment may be possible, depending on the interest rate at the time of termination. This compensatory payment must be calculated in the same way both in case of a prepayment penalty and a prepayment gain. paragon GmbH & Co. KGaA does not expect this amendment to IFRS 9 to have any effect on future reporting periods.

Clarifications were also provided regarding the restructuring of financial liabilities, which does not result, or has not resulted, in their derecognition. Accordingly, following restructuring the carrying amount of a financial liability is adjusted directly in profit or loss. Retrospective adjustments may therefore be required if the effective interest rate rather than the amortized cost has been adjusted to date. From the 2019 reporting year, the amendment to IFRS 9 must be applied in relation to prepayment features with negative compensation. There were no effects on the Group from the first-time application.

Annual Improvement of IFRS (2015 – 2017 Cycle)

The project covers amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23. However, these will not have any impact on the reporting of paragon GmbH & Co. KGaA. The amendments are effective from January 1, 2019.

Amendments to IAS 1 and IAS 8

This amendment standardizes the definition of materiality in all IFRS as well the conceptual framework of IFRS. It clarifies that the question of whether information is material depends on the nature and/or magnitude of impact of the underlying issue. The materiality of informa-

tion is to be evaluated within the context of the financial statements as a whole. In addition, the concept of “concealment” is introduced. This is present whenever the resulting impact is comparable to the omission or misrepresentation of this information. The amendment is effective from January 01, 2020.

Revised Conceptual Framework of IFRS

The IASB has published a revision of its conceptual framework for accounting which is the direct basis for the development of new standards and interpretations. These amendments are effective as of January 1, 2020. The major amendments are:

- An increase in the significance of the accountability or responsibility of management for the objectives of financial reporting.
- Emphasis on the principle of prudence, defined as exercising caution in making discretionary judgments in an uncertain environment, as a contribution to neutrality.
- Definition of a reporting enterprise, which can be a legal entity or a portion of a legal entity.
- Revision of the definition of an asset as a present economic resource controlled by the enterprise as a result of past events.
- Revision of the definition of a liability as a present obligation of an enterprise to transfer an economic resource as a result of past events.
- Removal of the probability threshold for recognition and inclusion of additional guidance for the disposal of assets and liabilities.
- Inclusion of additional explanations regarding different measurement bases and factors to consider when selecting a measurement basis.
- Definition of profit or loss as the primary performance indicator and determination that income and expenses recognized in other comprehensive income should generally be reclassified to profit or loss if this would enhance the relevance or faithful representation of the financial statements.

The revision of the conceptual framework has not altered any existing IFRS. However, enterprises that develop their own accounting policies with reference to the conceptual framework in the absence of IFRS regulations will have to apply the revised conceptual framework from January 1, 2020 and evaluate whether their existing accounting policies are still applicable.

(6) Impact of IFRS 16 Using Modified Retrospective Accounting

paragon GmbH & Co. KGaA is applying the new IFRS 16 accounting standard for the first time in the 2019 reporting year. IFRS 16 addresses accounting for leases. The necessity for the accounting change has been discussed in note (5).

paragon GmbH & Co. KGaA is applying the IFRS 16 accounting standard for the first time in this Annual Report.

Lease contracts that already existed before January 1, 2019 have not been reevaluated as to whether they constitute finance or operating leases. Contracts previously classified as operating leases were recorded with a right-of-use asset at the carrying amount as of January 1, 2019, as if IFRS 16 had been applied at the beginning of the lease relationship. Discounting has been calculated on the basis of the incremental borrowing rate of interest as of initial application. The right of use to be recorded was tested for impairment at the time of conversion. The lease liability is carried in the amount of the right-of-use asset. If a finance lease previously existed, no change was made to the carrying amount of assets and liabilities. paragon GmbH & Co. KGaA makes an adjustment only for reasons of materiality, provided that the remaining contract period as of January 1, 2019, is more than 12 months and the outstanding lease or rental payments exceed a threshold of € 5 thousand.

A statement of financial position extension results from the initial recognition of a lease previously defined as operating along with the associated lease liability. Using the modified retrospective first-time application, the following change in statement of financial position items is effective from the beginning of the fiscal year:

€ '000	Dec. 31, 2018	IFRS 16 Adjustment	Jan. 1, 2019
Property, plant and equipment	50,527	20,021	70,548
Assets	362,293	20,021	382,314
Current lease liabilities	861	3,355	4,216
Noncurrent lease liabilities	937	16,666	17,603
Equity and liabilities	362,293	20,021	382,314

The leased asset is reported on the assets side within property, plant and equipment. Right-of-use assets and other property, plant and equipment are reported separately in note (42). The individual rights of use are allocated to the various categories of property, plant and equipment as follows:

	Right-of-use asset	Current lease liability	Noncurrent lease liability
Property	13,042	1,062	11,981
Technical equipment and machinery	5,106	1,520	3,586
Other office furniture and equipment	1,872	773	1,099

The following reconciliation was made starting from other financial obligations from rent, tenancy and lease contracts as of December 31, 2018 to the opening balance of lease liabilities as of January 1, 2019.

€ '000

Recognized lease liabilities as of December 31, 2018	1,798
Outstanding lease installments for previously unrecognized financial obligations from rental, tenancy and lease agreements as of December 31, 2018	26,751
Financial obligations from rental, tenancy and lease agreements as of December 31, 2018	28,549
Application simplification for short-term leases	-385
Facilitation of application for leases of low-value assets	-4
Effect of discounting	-6,341
Carrying amount of lease liabilities according to IFRS 16 as of January 1, 2019	21,819

In previous fiscal years, the lease expense was recognized as an operating lease expense under other operating expenses. As a result of the new rule, expense recognition is divided into the depreciation of the right-of-use asset and the interest portion of the lease payment. In the process, the depreciation of the right-of-use asset is based on the shorter of the lease term or the economic life. The lease principal is reduced by the repayment portion of the paid lease installments. Thus interest expense is calculated as the current remaining principal multiplied by the interest rate on which the lease is based. If this cannot be determined, the lessee's incremental borrowing rate is used.

Therefore, dividing expense into interest and principal portions results in a higher expense burden in the initial years compared to a straight-line expensing; however, this is reduced in subsequent years.

IFRS 16 has an impact on the structural recognition of cash flows in comparison with to IAS 17. IFRS 16 leads to a shift of cash flows in the cash flow statement. According to IAS 17, lease payments of the lessee are recognized as operating cash flow. According to IFRS 16, the repayment and interest portions of the lease payment are regarded as cash flow from financing activities. Consequently, the payment outflows in the operational area decrease, while operating cash flow and "free cash flow" both increase. At the same time, however, cash flow from financing activities is reduced due to the recognition of the repayment portion in accordance with IFRS 16.

(7) Scope of Consolidation

In addition to the parent company, paragon GmbH & Co. KGaA, Delbrück, all subsidiaries are fully consolidated. The reporting date for all companies is December 31. The scope of consolidation and the shareholdings are shown in the following table

Name and registered office of the company	Share-holding	Consolidation	Currency	Revenue in local currency (before consolidation) in thousands
Deutschland				
paragon GmbH & Co. KGaA, Delbrück	n. a.	n. a.	EUR	85,463
Voltabox AG, Delbrück	60.03%	consolidated subsidiary	EUR	65,255
paragon electronic GmbH, Delbrück (previously: productronic GmbH)	100%	consolidated subsidiary	EUR	56,122
SphereDesign GmbH, Bexbach	100%	consolidated subsidiary	EUR	4,056
Nordhagen Immobilien GmbH, Delbrück	100%	consolidated subsidiary	EUR	0
paragon movasys GmbH, Delbrück	100%	consolidated subsidiary	EUR	46,288
paragon semvox GmbH, Limbach ¹	82%	consolidated subsidiary	EUR	4,282
paragon electroacoustic GmbH, Neu-Ulm	100%	consolidated subsidiary	EUR	8,233
ETON Soundsysteme GmbH, Neu-Ulm	100%	consolidated subsidiary	EUR	4,338
paragon electrodrive GmbH, Delbrück	100%	consolidated subsidiary	EUR	0
China				
paragon Automotive Technology (Shanghai), Co., Ltd.	100%	consolidated subsidiary	RMB	922
paragon Automotive (Kunshan), Co. Ltd.	100%	consolidated subsidiary	RMB	20,058
Voltabox Kunshan, Co. Ltd.	60,03%	consolidated subsidiary	RMB	0
USA				
Voltabox of Texas, Inc., Austin	60.03%	consolidated subsidiary	USD	6,928

¹ paragon semvox GmbH is consolidated at 100%, and the noncontrolling interests are shown in the financial statements as other long-term purchase price liabilities of € 3,256 thousand.

Voltabox AG acquired the entire share capital of ACCURATE – Smart Battery Systems – GmbH on September 1, 2018. As of September 30, 2019, ACCURATE – Smart Battery Systems – GmbH was merged with Voltabox AG retroactively as of January 1, 2019.

Concurrent Design, Inc. was merged into Voltabox of Texas, Inc. with effect from January 30, 2019, through an agreement dated February 12, 2019.

Consolidation Methods

The consolidated financial statements are based on the separate financial statements of the companies included in the Group, which were prepared using uniform accounting policies under IFRS as of December 31, 2019. The financial statements are included in the consolidated financial statements from the date on which control is obtained until the end of control. Adjustments were made to the audited annual financial statements of paragon GmbH & Co. KGaA prepared in accordance with German commercial law as of December 31, 2019, in order to prepare the financial statements in compliance with IFRS.

The scope of consolidation is defined in accordance with IFRS 10. The consolidation was performed using the purchase method in accordance with IAS 27.22 and IFRS 3. The carrying amount for the investments in associates recorded by the parent companies is replaced by the fair value of the assets and liabilities of the associates included in the consolidation. As a result, the equity of the subsidiaries is compared with the carrying amount of the investment recorded by the parent company. Any remaining excess from consolidation is reported as goodwill under noncurrent assets and is tested annually for impairment in accordance with IFRS 3 in conjunction with IAS 36.

In addition, debt consolidation was carried out, as was consolidation of income and expenses. The differences arising from the consolidation of income and expenses were offset through profit or loss.

Assets arising from intercompany deliveries that are recognized in noncurrent assets and inventories are adjusted for interim profit and loss.

Effects on Earnings from Capital Consolidation

paragon semvox GmbH is fully consolidated in the consolidated financial statements at 100%, although 18% are attributable to other shareholders. There are long-term put options of the other shareholders and long-term call options (other liability) of the company for the acquisition of the remaining 18% of shares in paragon semvox GmbH. This was written down by € 773 thousand in profit or loss in the fiscal year and increased by the interest effect of € 155 thousand. The fair value of the options as of the balance sheet date was € 3,256 thousand (prior year: € 3,837 thousand).

The performance-related future purchase price payment (other liability) for paragon electro-acoustic GmbH was written down by € 500 thousand in profit or loss in the fiscal year and increased by the interest effect of € 30 thousand. The fair value of the purchase price payment as of the balance sheet date was € 0 thousand (prior year: € 470 thousand).

Scheduled depreciation on disclosed hidden reserves amounted to € 4,117 thousand in the fiscal year (depreciation of property, plant and equipment and amortization of intangible assets) and impairment in the fiscal year amounted to € 4,133 thousand. Impairments on capitalized goodwill amount to € 8,070 thousand. The impairments relate to the companies paragon movasys GmbH, Concurrent Design, Inc. and ACCURATE – Smart Battery Systems – GmbH.

(8) Currency Translation

In paragon's consolidated financial statements, receivables and liabilities denominated in foreign currencies are measured at the transaction rate in effect at the date they are initially recognized, and subsequently adjusted to the exchange rate applicable as of the date of the statement of financial position. Exchange rate gains and losses are recognized in profit and loss within other operating income or other operating expenses. The conversion of statements in foreign currency is carried out in accordance with IAS 21.39 et seq.

Exchange rate losses arising on operating activities of € 2,059 thousand (prior year: € 324 thousand) and exchange rate gains of € 446 thousand (prior year: € 1,388 thousand) are recognized in the consolidated statement of comprehensive income. These exchange rate differences are reported within other operating expenses and other operating income, respectively. Income from the valuation of Swiss franc derivatives that do not have a hedging relationship with underlying transactions amounted to € 1,088 thousand (prior year: € 0 thousand).

Exchange rate differences arising from the translation of financial statements prepared in foreign currencies and on exchange rate differences arising during consolidation were recognized directly in equity in accordance with IAS 21. The currency translation reserve amounted to € -1,354 thousand as of the reporting date on December 31, 2019 (prior year: € -1,207 thousand). The amount from foreign currency translation recognized in other comprehensive income is € -265 thousand. Of this, € -147 thousand is attributable to the paragon Group's shareholders and € -118 thousand to minority interests. The currency differences item contains a monetary item from the net investment in the foreign operation of Voltabox of Texas, Inc. amounting to € -1,036 thousand (prior year: € -1,366 thousand).

The exchange rates of the currencies significant to the paragon Group developed as follows:

Foreign currency for € 1	Statement of financial position average exchange rate on Dec. 31, 2019	Income statement average rate 2019	Statement of financial position average exchange rate on Dec. 31, 2018	Income statement average rate 2018
US dollar (USD)	1.1216	1.1108	1.1445	1.1376
Swiss franc (CHF)	1.0854	1.0924		
Chinese renminbi yuan (RMB)	7.8150	7.8842	7.8713	7.8405

The functional currency of the American subsidiaries is the USD, since the companies primarily generate and expend cash in this currency.

In fiscal year 2019, the company issued a bond denominated in Swiss francs with a nominal value of CHF 35 million.

The functional currency of the Chinese subsidiaries is RMB, as the companies mainly generate and spend cash in this currency.

(9) Description of Accounting Policies and Measurement Methods

The consolidated financial statements were prepared in euros (€). The reporting currency is the euro. Unless stated otherwise, all amounts are stated in thousands of euros (€ thousand). The reporting period for paragon in these financial statements extends from January 1 to December 31, 2019. Individual items in the consolidated statement of financial position and the consolidated statement of comprehensive income have been combined in order to provide better clarity and transparency. Where this has occurred, the items are explained individually in the notes to the financial statements. The consolidated statement of comprehensive income is presented using the nature of expense method, as in previous periods. Assets and liabilities are classified into noncurrent and current assets and liabilities in the statement of financial position; further details on their maturity are presented in the notes. Assets and liabilities are recognized as current if they mature within twelve months.

The consolidated financial statements comprise the consolidated statement of financial position, the consolidated statement of comprehensive income, the notes to the consolidated financial statements, the consolidated cash flow statement and the consolidated statement of changes in equity. A Group management report has been prepared as a supplement to the above statements.

Recognition of Acquisitions

Goodwill is recognized in the Group's statement of financial position as a result of acquisitions. When an acquisition is initially consolidated, all identifiable assets, liabilities and contingent liabilities are recognized at fair value as of the acquisition date. One of the most significant estimates relates to determining the fair values of these assets and liabilities as of the acquisition date. Property, buildings and office equipment are generally valued on the basis of independent expert opinions, while marketable securities are valued at the stock exchange price. If intangible assets are identified, the fair value is determined internally using an appropriate measurement technique, which is usually based on the estimate of total expected future cash flows. These valuations are closely linked to the assumptions made by management regarding the future performance of the respective assets and to the assumed changes in the discount rate to be applied.

Intangible Assets

Intangible assets acquired for monetary consideration are recognized in the statement of financial position at their acquisition cost, taking into account ancillary costs and any purchase price reductions.

Research costs are recognized as expenses in the period in which they are incurred. Costs incurred in connection with the development of patents and customer-specific solutions are only recognized as intangible assets at their production cost when the costs are clearly attributable to the asset as required by IAS 38 Intangible Assets, the technical feasibility and marketability or use is assured, and when the anticipated realization of future economic ben-

efits has been demonstrated. The costs of production comprise all costs that are directly or indirectly attributable to the development process, as well as a proportionate share of necessary project-related overhead costs. If the asset recognition requirements are not fulfilled, development costs are directly expensed in profit or loss within other operating expenses in the year in which they are incurred. Subsequent to initial recognition, development costs are reported in the statement of financial position at cost less cumulative amortization and cumulative impairment losses.

Intangible assets that have limited useful lives are amortized on a straight-line basis over their useful economic lifetimes. Amortization starts as soon as the asset is available for use, i.e., when it is at the location and condition necessary for it to be capable of operating in the manner intended by management. Intangible assets with indefinite useful lives are subject to annual impairment tests. As of each reporting date for the statement of financial position, the carrying amounts of such intangible assets are examined in order to determine whether there are indications that the value of the asset may be impaired. An impairment test pursuant to IAS 36 Impairment of Assets was performed where there were such indicators. The residual values, useful lives and amortization methods are reviewed at the end of each fiscal year and amended as necessary.

The useful lives for internal development costs correspond to the expected product life cycles and routinely amount to seven years. paragon GmbH & Co. KGaA performs an individual measurement of the useful life of products and reviews the useful life annually. The useful lives for licenses, patents and software range from three to twelve years.

Goodwill is carried at acquisition cost and tested for impairment on an annual basis, as well as additionally on other dates when there are any indications of potential impairment. Impairment losses are recognized as a separate item in the statement of comprehensive income.

Property, Plant and Equipment

Additions to property, plant and equipment are measured at cost plus incidental acquisition costs and less any purchase price reductions received. If the purchase or production costs of individual components of an item of property, plant and equipment are significant when measured against the item's total purchase or production cost, then such components are recorded as separate assets and depreciated individually. Depreciation is generally recorded on a straight-line basis. The useful life for depreciation purposes ranges from 20 to 33 years for buildings, five to ten years for technical plants and three to ten years for other plants, operating and office equipment.

Fully depreciated noncurrent assets are presented under cost and accumulated depreciation until the asset is retired. Amortized cost and accumulated depreciation are deducted from the sales proceeds generated on disposal. Gains and losses generated on disposal (disposal proceeds less residual carrying amounts) are shown in the consolidated statement of comprehensive income within other operating income or other operating expenses. All residual values, useful lives and depreciation methods are reviewed annually and amended as necessary.

As of each reporting date for the statement of financial position, the carrying amounts of property, plant and equipment (which are depreciated in accordance with their useful lives) are examined in order to determine whether there are indications that the value of the asset may be impaired. If such indicators exist, an impairment test is performed.

Leases

The effects of the initial application of IFRS 16 are presented in note (6).

paragon GmbH & Co. KGaA assesses at the beginning of each lease whether the contract creates or contains a lease. This is the case when the contract gives the right to control the use of an identified asset for a specified period of time in return for the payment of a fee. In the event of contract amendments, paragon GmbH & Co. KGaA reassesses whether a contract constitutes a lease.

The Group has decided in accordance with the electoral right in IFRS 16.5 to 16.8 not to recognize leases if the lease agreement has a term of up to twelve months or the determined right of use does not exceed a value of € 5,000. In these cases, the expense from the lease is recognized on a straight-line basis over its specific term and recognized under other operating expenses.

The individual lease components and non-lease components are accounted for separately. If a lease exists, the contract is allocated to the individual lease components on the basis of the contractually agreed relative individual selling prices of the lease components and the aggregated individual selling prices of the non-lease components. In doing so, paragon GmbH & Co. KGaA determines the relative individual selling price with reference to the price that a lessor or similar supplier of paragon GmbH & Co. KGaA would charge separately for these or similar components. Where no observable market exists, paragon GmbH & Co. KGaA makes use of estimates.

When determining the term of the lease, paragon GmbH & Co. KGaA takes the non-terminable basic term and an optional extension period as a basis, insofar as the company is sufficiently certain that it will exercise this option. If there is a termination option, this is taken into account accordingly when determining the term, provided that the exercise of the option is sufficiently certain. paragon GmbH & Co. KGaA regularly checks whether the use of an option is reasonably certain.

On the provision date, paragon GmbH & Co. KGaA recognizes an asset for the right of use and a lease liability. On the provision date, the right-of-use asset is valued at its acquisition cost. The acquisition costs comprise:

- Present value of lease payments not yet made on the provision date
- Lease payments made on or before provision
- Initial direct costs
- Estimated costs for dismantling and removal

The lease liability comprises the lease payments not yet made as of the provision date. Discounting is calculated on the basis of the underlying constant interest rate. If this is not available, paragon uses an incremental borrowing rate of interest that is used as a basis for comparable lease financing. Lease payments not yet made comprise

- all fixed payments less lease incentives received,
- variable lease payments,
- amounts expected to be paid at the end of the lease term under residual value guarantees,
- the exercise price of a call option, provided that the exercise is sufficiently certain and
- penalties for termination, provided that it is reasonably certain that they will be exercised.

The right-of-use asset is amortized on a straight-line basis and adjusted for revaluation of the lease liability. These impairments are measured in accordance with IAS 36.

The carrying amount of the lease liability is increased by the interest expense and reduced by the payments made after provision on the reporting date. A remeasurement of the lease liability is immediately taken into account.

Right-of-use assets are not shown as separate items in the statement of financial position of paragon. For this reason, a separate listing is provided in the notes – consolidated fixed assets schedule. Lease liabilities are shown as separate items in the statement of financial position.

If sale and leaseback transactions exist, paragon GmbH & Co. KGaA assesses whether the transaction of the asset subsequently leased back meets the criteria of a sale under IFRS 15. The Group bases this on the transfer of control of the underlying asset. If the transaction enables the lessor to determine the use of the underlying asset and derive all the remaining economic benefits from it substantially, the transaction is a sale under IFRS 15. In this case, paragon recognizes the disposal of the underlying asset and realizes the sales profit to the extent that it relates to rights to use the asset actually transferred to the lessor. A right-of-use asset is recorded for the remaining share. If there is no sale under IFRS 15, the transaction is recorded as a loan.

Impairment of Nonfinancial Assets

As of each reporting date of the statement of financial position, an assessment takes place to ascertain whether there are any indications that the value of nonfinancial assets (in particular intangible assets with definite useful lives) are impaired. If there are indications of impairment, an determination of the recoverable amount of the relevant asset is made. In accordance with IAS 36.6 Impairment of Assets, the recoverable amount reflects the higher of fair value less cost to sell and value in use of the asset or an identifiable group of assets that represent a cash-generating unit (CGU). If the carrying amount of an asset or a CGU exceeds the respective recoverable amount, the asset is impaired and written down to its recoverable amount.

For property, plant and equipment and intangible assets other than goodwill, an assessment is made at each reporting date of the statement of financial position to establish whether there is any indication that a previously recognized impairment loss no longer exists or has decreased. If there are such indications, an determination of the recoverable amount of the

asset or the CGU is made. A previously recognized impairment loss is reversed only if the assumptions used in determining the recoverable amount have changed since the last impairment loss was recognized. The reversal of the impairment loss is limited in that the carrying amount of an asset may not exceed its recoverable amount or the carrying amount that would have resulted after taking depreciation and amortization into account if no impairment loss had been recorded for the asset in earlier years.

Financial Instruments

Financial instruments are contracts which generate a financial asset for one party and a financial liability or an equity instrument for the other party. Primary financial instruments include, in particular, trade receivables, lending, cash and cash equivalents as well as financial liabilities and trade payables. Its other financial assets and other financial liabilities likewise exclusively comprise financial instruments.

Primary financial instruments are recognized as of the settlement date in case of a regular way purchase or sale. Receivables and liabilities denominated in foreign currency are measured at their reporting date exchange rates.

Financial assets and financial liabilities are reported gross at paragon. They are only netted if there is an enforceable set-off right in respect to the amounts at the present time and it is intended to bring about the offset on a net basis.

Financial assets are classified in terms of the following categories for accounting and measurement purposes:

- measured at amortized cost (AC),
- measured at fair value through profit or loss (FVTPL),
- fair value through other comprehensive income (FVOCI).

The following categories were established for the accounting and measurement of financial liabilities:

- measured at amortized cost (AC),
- measured at fair value through profit or loss (FVTPL).

paragon allocates financial assets and financial liabilities to these categories as of the date of their addition and regularly reviews whether the criteria for their classification are complied with.

Classification based on the business model criteria for financial assets is undertaken on an ongoing basis for each quarterly report.

paragon derecognizes financial assets where the contractual rights to the cash flows from an asset expire or it transfers the rights to receive these cash flows in a transaction through which all material risks and opportunities associated with the ownership of this financial asset are likewise transferred. Derecognition also occurs in cases where paragon has transferred all of the material risks and opportunities associated with ownership and it has not retained the

power of disposal over the transferred asset. Any portion of such transferred financial assets that accrue or remain is accounted for as a separate asset or separate liability.

Financial liabilities are derecognized if the contractual obligations have been fulfilled or canceled or have expired.

Valuation allowances for financial assets which are measured at amortized cost and for contractual assets resulting from agreements with customers are implemented on the basis of a future-oriented model, taking expected loan losses into consideration. The consolidated financial statements do not include any FVOCI financial assets, since receivables which are intended for sale to a factoring bank are assigned immediately as and when they arise. For this reason, the difference between the purchase amount and the nominal value of the receivable is treated as income.

Allowances for trade receivables, contractual assets, and lease receivables are determined using the simplified approach with lifetime expected credit loss.

With the exception of financial assets measured at fair value through profit or loss, financial assets are tested for possible indications of impairment on each reporting date. Financial assets are considered to be impaired if there is an objective indication of a negative change in the expected future cash flows for a financial instrument due to one or more events occurring following the initial recognition of the asset in question. Various facts such as defaults over a specific period of time, the initiation of coercive measures, the risk of insolvency or over-indebtedness, application for or initiation of insolvency proceedings or the failure of restructuring measures may constitute objective indications of impairment.

Financial assets are measured at amortized cost where the business model envisages the holding of a financial asset for the collection of the contractual cash flows and the contractual terms of the instrument will exclusively result in cash flows which comprise interest and principal repayments.

Upon initial recognition, financial instruments belonging to the AC category are reported at fair value plus the directly allocable transaction costs.

As part of the subsequent measurement, financial assets measured at amortized cost are measured using the effective interest method. Where the effective interest method is used, all directly allocable fees, charges paid or received, transaction costs and other premiums or discounts included in the calculation of the effective interest rate are amortized over the expected term of the financial instrument.

Interest revenue and expenses resulting from application of the effective interest method are recognized through profit or loss under interest revenue or interest expenses from financial instruments.

Non-interest bearing and low-interest receivables with a term of more than twelve months are discounted at the interest rate which is appropriate for the respective term.

Cash and cash equivalents comprise cash on hand as well as current account balances with banks and other financial institutions. They are only reported under cash and cash equivalents if they can be converted at any time into cash amounts which may be determined in advance, are only subject to slight fluctuation risks and have a remaining term of not more than three months from the date of acquisition.

Where the business model envisages the holding and sale of the financial asset and the contractual terms for the instrument will exclusively result in cash flows which comprise interest and principal repayments, the financial asset is reported at fair value with value adjustments recognized in other comprehensive income (FVOCI).

Financial assets which are exclusively held for trading purposes are recognized at fair value through profit or loss with changes in value reported through profit or loss (FVTPL). Derivatives are included in this category. There is also an option to measure financial instruments recognized at amortized cost at fair value through profit or loss by means of the fair value option if this will significantly reduce or prevent inconsistency in their measurement or recognition. paragon GmbH & Co. KGaA does not make use of the fair value option.

Equity instruments are always measured at fair value. At initial recognition, there is an irrevocable option to report realized and non-realized changes in value in the statement of comprehensive income instead of the income statement, provided that the equity instrument is not held for trading purposes. Amounts recognized in comprehensive income may not be reclassified to the income statement at a later point in time.

Current and noncurrent financial liabilities to banks, trade payables and other liabilities are measured as financial liabilities at amortized cost, with the exception of derivative financial instruments. Noncurrent liabilities are measured on the basis of the effective interest method, less directly attributable transaction costs.

They are initially recognized at fair value less the directly attributable transaction costs.

Interest revenue and expenses resulting from application of the effective interest method are recognized through profit or loss under interest revenue or interest expenses from financial instruments.

Financial liabilities are measured at fair value through profit or loss where they are held for trading purposes or are thus designated upon initial recognition. Financial liabilities are classified as held for trading purposes where they are acquired for the purpose of disposal in the near future. Directly attributable transaction costs are recognized in profit or loss as soon as they are incurred.

Fair Value – Measurement

The measurement of asset and liabilities at fair value is based upon a three-level hierarchy, in accordance with the proximity of the measurement factors employed to an active market. A market is said to be “active” if the quoted prices are easily and regularly available and these prices are based on actual, regularly occurring market transactions at arm’s length.

Level 1: prices for identical assets and liabilities quoted on active markets (which are used unchanged).

Level 2: input data observable either directly or indirectly for the asset or liability which are not considered Level 1 quoted prices. The fair values of the Level 2 financial instruments are calculated on the basis of the terms in effect on the balance sheet date using recognized models, e.g., discounted cash flow models.

Level 3: input data used for the measurement of the asset and the liability which is not based upon observable market data (non-observable input data).

The fair values were determined on the basis of the available market conditions as of the reporting date of the statement of financial position using financial measurement methods. They correspond to the prices received between independent market participants for the sale of an asset or for the transfer of a liability.

Reclassifications between the levels of the fair value hierarchy are taken into account at the respective reporting dates. In fiscal years 2019 and 2018, no reclassifications were implemented between Level 1, Level 2 or Level 3.

Income Taxes

Income taxes contain both taxes that are payable on income and deferred taxes.

Income taxes payable for current and earlier periods are measured at the amount at which a refund from or payment to fiscal authorities is anticipated. The calculation of that amount is based on the current status of tax legislation and therefore on the tax rates that are in effect or that have been announced as of the date of the statement of financial position.

Deferred taxes are recognized using the balance sheet liability method in accordance with IAS 12 Income Taxes. Deferred tax assets and liabilities are recognized to reflect temporary differences between the carrying amount of a specific item in the statement of financial position in the IFRS consolidated financial statements and its tax base (temporary concept). Deferred taxes are also recognized for future tax refund claims.

Deferred tax assets on deductible temporary differences and tax refund claims are recognized to the extent it can be assumed that they can be expected to be used in future periods based on the availability of adequate taxable income.

The calculation of current and deferred taxes is based on judgments and estimates. If actual events deviate from these estimates, this could have a positive or negative impact on assets, financial position and earnings. A deciding factor for the recoverability of deferred tax assets is the estimate of the probability of reversal of measurement differences or the usability of the tax loss carryforwards or tax benefits that led to recognition of the deferred tax assets. This is in turn dependent on the generation of future taxable profits during the period in which the tax loss carryforwards can be used. Deferred taxes are measured using the tax rates

applicable at the time of realization based on the current legal situation as of the date of the statement of financial position.

Current income tax assets and liabilities and deferred income tax assets and liabilities are only offset if it is legally permissible to do so and the deferred tax assets and liabilities relate to income taxes that have been levied by the same tax authority and if there is a legally enforceable right to offset current tax refund claims against current tax liabilities. Deferred taxes are reported as noncurrent in accordance with IAS 1.70.

Inventories

Inventories are measured at the lower of cost and net realizable value. In accordance with IAS 2 Inventories, the costs of conversion include all costs directly related to the units of production as well as a systematic allocation of fixed and variable production overheads. In addition to direct materials and direct labor, they therefore also contain proportional indirect materials and overheads. Administration and social welfare expenses are taken into account provided they can be attributed to production. Financing costs are not recognized as part of the cost of acquisition or conversion because the assets do not meet qualification criteria. Inventory risks resulting from the storage period and reduced usability are taken into account during the calculation of the net realizable value by applying appropriate write-downs. Lower values as of the reporting date resulting from reduced selling prices are also taken into account. Raw materials, consumables and supplies as well as merchandise are primarily measured using the moving average method.

Trade Receivables and Other Current Assets

Trade receivables are classified as financial assets in the category of loans and receivables and measured at amortized cost less any necessary write-downs. Write-downs in the form of specific valuation allowances take sufficient account of the expected default risks. Specific defaults lead to the derecognition of the receivables concerned. The calculation of write-downs for doubtful receivables is primarily based on estimates and evaluations of the credit-worthiness and solvency of the respective customer.

Other current assets are measured at amortized cost, taking into account necessary write-downs sufficient to cover the expected default risks. If recourse to the courts is made for the collection of these receivables, paragon firmly expects that the amounts recognized in the statement of financial position will be fully enforceable. Where these represent financial assets (financial instruments), they are classified as loans and receivables.

Cash and Cash Equivalents

Cash and cash equivalents include cash and bank balances with original maturities of up to three months. The total of cash and cash equivalents reported in the cash flow statement corresponds to the cash and cash equivalents stated in the statement of financial position (cash and bank balances).

Provisions for pensions

Provisions for pensions are calculated using the projected unit credit method in accordance with the (revised) requirements of IAS 19 Employee Benefits. The projected unit credit method not only takes into account the pension benefits and benefit entitlements known as of the balance sheet date, but also the increases in salaries and pension benefits to be expected in the future based on relevant estimation factors. The calculation is based on actuarial calculations using biometric actuarial principles. Amounts not yet recorded in the balance sheet arise from actuarial gains and losses due to changes in inventory and differences between the assumptions made and actual developments. Actuarial gains and losses occurring in the reporting period are recognized in full directly in equity within other comprehensive income. The service cost is shown under personnel expenses. The interest cost included in pension expenses is recorded in the financial result.

The valuation as of December 31, 2019, was discounted using the expected long-term market rate of interest of 0.80% to 0.85% (prior year: 1.74%). The valuation of provisions for pensions is based on the "2018 G" actuarial guideline tables by Prof. Dr. Klaus Heubeck.

The remaining assumptions used in the actuarial valuation were a salary growth rate of 0% from 2009 onwards and pension growth of 2.00%, as in the prior year.

Other Provisions

Other provisions are recognized in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets when paragon has legal or constructive obligations to third parties as a result of past events that are likely to lead to outflows of resources. Provisions are measured based on a best estimate of the expenditure needed to discharge the liability. Reimbursement claims are not offset against these amounts. Each situation is evaluated separately to determine the probability that pending proceedings will be successful or to qualify the possible amount of the payment obligations. In each case, the most probable settlement amount has been taken into account. Noncurrent provisions have been measured at their discounted settlement amount as of the balance sheet date.

Due to the uncertainty associated with these evaluations, the actual settlement obligation or the actual outflow of resources may deviate from the original estimates and, accordingly, from the amounts of the provisions made. In addition, estimates may change based on subsequent new information, which may have a substantial impact on the future earnings position.

Government Grants

Government grants are recognized in accordance with IAS 20 Accounting for Government Grants and Disclosure of Government Assistance and shown in the balance sheet under noncurrent liabilities. In accordance with IAS 20, government grants are recognized only if there is reasonable assurance that the conditions attached to them will be complied with and that the grants will be received. Government grants are accounted for as a deferred liability and released to income over the average useful life of the assets subsidized. The grants are

released to income over the expected assumed useful life of the assets subsidized and credited to other operating income.

Recognition of Income and Expenses

Income is recognized when it is probable that economic benefits will flow to paragon and the amount of the income can be measured reliably. Income is measured at the fair value of the consideration received. VAT and other levies are not included. If transactions provide for a declaration of acceptance on the part of the purchaser, the related revenue is only recognized once such a declaration has been issued. If the sale of products and services includes multiple delivery and service components (multiple element arrangements), such as varying remuneration agreements in the form of prepayments, milestone payments and similar payments, a review takes place to ascertain whether revenue should be recognized separately for partial sales at different points in time. Contractually agreed prepayments and other nonrecurring payments are deferred reported in profit or loss over the period during which the contractually agreed service is performed.

Income from the sale of products is recognized once the significant risks and rewards associated with ownership of the products sold have been transferred to the purchaser. This normally occurs upon shipment of the products, consistent with the agreements entered into with customers. Revenue is shown after the deduction of discounts, rebates and returns.

Interest expenses for the bonds are measured by means of the effective interest method. Operating expenses are recorded in profit and loss when the relevant services are rendered or when the expenses are incurred.

Borrowing Costs

Borrowing costs are recognized as an expense in the period in which they are incurred. They are capitalized if they fulfill the requirements of a qualifying asset in accordance with IAS 23 Borrowing Costs. When capitalizing borrowing costs, the weighted average of borrowing costs for such loans of the company serves as a reference.

(10) Use of Estimates and Assumptions

The preparation of the consolidated financial statements in accordance with IFRS requires assumptions and estimates to be made that impact the assets and liabilities recorded, the disclosure of contingent liabilities as of the balance sheet date and the presentation of income and expenses during the period under review. If actual events deviate from these estimates, this could have a positive or negative impact on the assets, financial position and earnings. For paragon GmbH & Co. KGaA, estimates and assumptions were made in particular in the impairment tests for capitalised development costs, goodwill, disclosed hidden reserves from capital consolidation and contractual assets in accordance with IFRS 15. If these assumptions and estimates were not correct, there would be an impact on the net assets and earnings situation.

When applying the accounting policies, the following estimates and assumptions were made that significantly influenced the amounts contained in the financial statements:

Measurement of the Fair Values of the Assets Acquired and Liabilities Assumed in Business Combinations

The fair values as well as the allocation of acquisition costs to the assets acquired and liabilities assumed were determined on the basis of experience and estimates regarding future cash inflows. The actual cash inflows may differ from the estimated amounts.

Goodwill

As described in the accounting principles, the Group tests goodwill for impairment once a year and when there are any indications that the value of goodwill may be impaired. This involves estimating the recoverable amount of the cash generating unit. This corresponds to the higher of fair value less costs of disposal and value in use. When determining the value in use, adjustments and estimates have to be made concerning the forecast and discounting of future cash flows. Although the Management believes that the assumptions used to determine the recoverable amount are appropriate, unforeseeable changes in these assumptions could lead to an impairment loss that could have a negative influence on the assets, financial position and earnings.

Capitalized Development Costs

In order to measure capitalized development costs, assumptions have been made about the amount of anticipated future cash flows from assets, about the discount rates to be used and about the period of time during which these assets will generate anticipated future cash flows. The assumptions made regarding the timing and amount of future cash flows are based on expectations of the future development of the order backlog from those customers with whom development projects are being conducted. The duration of ordinary business use corresponds to the estimated economic life.

Transfer of Assets and Leased Assets

The question of when all the significant risks and rewards of ownership of financial assets and leased assets are essentially transferred to other companies is regularly subject to discretionary decisions.

Leases

paragon GmbH & Co. KGaA accounts for individual lease components and non-lease components separately. If a lease exists, the contract is allocated to the individual lease components on the basis of the contractually agreed relative individual selling prices of the lease components and the aggregated individual selling prices of the non-lease components. In doing so, paragon GmbH & Co. KGaA determines the relative individual selling price with reference to the price that a lessor or similar supplier of paragon GmbH & Co. KGaA would charge sepa-

rately for these or similar components. Where no observable market exists, paragon GmbH & Co. KGaA makes use of estimates.

aragon GmbH & Co. KGaA makes assumptions about the incremental borrowing rate in the context of the replacement approach to leases and bases this on an easily observable interest rate based on the same payment profile as that of the lease. Otherwise, it is discounted at the lessee's incremental borrowing rate, i.e. the rate of interest that would be payable by the lessee if they had to borrow funds to acquire, in a similar economic environment, an asset of similar value for a similar term with comparable security and under similar conditions. Wherever possible, financing arrangements entered into with third parties by the individual lessee are used as a starting point. Where necessary, these are adjusted to take into account changes in conditions since receipt of the financing. If there are no recent borrowings from third parties, the Group uses a risk-free interest rate as a starting point and adjusts it to the credit risk of the lessee. Other adjustments also relate to those for the term of the lease, the economic environment, the currency of the lease and collateralization.

Inventories

In specific cases, inventories are measured based on anticipated revenue less the estimated costs to completion and the estimated selling costs required. Actual revenue and the actual costs to completion may deviate from anticipated amounts.

Information about the measurement discounts can be found in the comments on inventories in the previous note (9).

Estimates are required for the recognition of income from the provision of services on the basis of the percentage of completion as of the balance sheet date. The main measurement parameter is the percentage of completion which is determined on the basis of a careful estimate of the total contract costs, the costs to be incurred up to the time of completion, the total contract revenue, the contract risks and other assumptions.

Other Assets and Liabilities

Assumptions and estimates are also necessarily made when calculating allowances for doubtful receivables, when estimating contingent liabilities and other provisions and when determining the fair value of long-lived assets included in property, plant and equipment and intangible assets.

In individual cases, actual values may deviate from the assumptions and estimates made, requiring an adjustment of the carrying amounts of the assets or liabilities concerned.

Deferred Tax Assets

Deferred tax assets are only recorded if a positive tax result is expected in future periods and as a result their realization appears sufficiently assured. In addition, there are estimation uncertainties regarding the reversal effects under IAS 12.29 a (ii). The actual taxable income

situation in future periods may deviate from the estimate made at the time the deferred tax assets were recognized.

Provisions for Pensions

Expenses arising from defined benefit plans are calculated using actuarial valuation reports. The actuarial valuation reports are based on assumptions concerning discount rates, expected revenue from plan assets, future wage and salary increases, mortality rates and future pension increases. These estimates are subject to significant uncertainty due to the long-term nature of these plans.

Other Provisions

The recognition and measurement of other provisions was based on the estimated probability of the future outflow of benefits and on experience values, and on the facts and circumstances known as of the balance sheet date. The subsequent actual outflow of benefits may therefore differ from the amount recorded within other provisions as of the balance sheet date.

Contingent Liabilities

The recognition of an identified contingent liability within the scope of a purchase price allocation is based upon assumptions which the Management arrives at on the basis of the information available as of the date of acquisition.

Legal Risks

From time to time, paragon Group companies may become parties to legal disputes. Management regularly analyzes the latest information available for these cases and, where necessary, recognizes provisions to cover probable obligations, including the estimated amount of associated legal costs. External attorneys are consulted in the process of making these assessments. In determining the need for provisions, the Management accounts for the probability of an unfavorable outcome and whether the obligation can be measured with sufficient reliability. The filing of a lawsuit, the formal assertion of a claim or the presence of a disclosure for legal dispute in the notes does not automatically mean that a provision for the respective risk is appropriate.

Revenue

The Management makes discretionary decisions regarding the classification of the transaction price to performance obligations. The transaction prices are allocated to performance obligations on the basis of the relative individual sale prices.

For revenue with return rights, the company estimates the probability that the customer will make the return

(11) Revenue

Revenue consists of the proceeds from sales of products and services less any sales reductions. The total revenue for the period under review amounted to € 192,188 thousand (prior year: € 187,383 thousand). Of this, € 121,250 thousand (prior year: € 134,659 thousand) were generated domestically and € 70,938 thousand (prior year: € 52,724 thousand) abroad.

Revenue is classified on the basis of operating segments and realized over time or at a certain point in time. paragon has the strategic operating segments of Electronics, Mechanics and Electromobility.

2019 € '000	Electronics	Mechanics	Electromobility	Total
Realization at a certain point in time	89,820	39,499	54,394	183,713
Realization over time	0	6,555	1,920	8,475
Total for operating segments	89,820	46,054	56,314	192,188

2018 € '000	Electronics	Mechanics	Electromobility	Total
Realization at a certain point in time	85,518	31,638	61,590	178,746
Realization over time	0	3,339	5,298	8,637
Total for operating segments	85,518	34,977	66,888	187,383

In the Electronics operating segment, the core focus is on the automotive area. paragon recognizes revenue as a direct supplier to the automotive industry. The Electronics operating segment's portfolio includes innovative air quality management, state-of-the-art display systems, connectivity solutions and high-end acoustics systems. Revenue in this segment was realized at a certain point in time during the fiscal year. Recognition occurs upon delivery and the transfer of power of disposal to the customer. Payments terms are used that are customary for the industry without significant financing components. Variable consideration does not occur regularly.

In the Mechanics operating segment, paragon also operates as a direct supplier of the automotive industry. paragon recognizes revenue through individually developed mechanics within the framework of long-term serial supply contracts. Revenue in this segment was realized both at a certain point in time and over time during the fiscal year. Recognition occurs upon delivery and the transfer of power of disposal to the customer. Revenue over time results from order developments agreed in advance as part of long-term production and supply contracts. Payments terms are used that are customary for the industry without significant financing components. Variable consideration does not occur regularly.

The Electromobility operating segment is within the area of activity of the subgroup Voltabox AG. Its focus is on selected industrial sub-markets that are marked by the replacement of lead-acid batteries and diesel backup generators with modern lithium-ion battery systems. Revenue in this segment was realized both at a certain point in time and over time during the fiscal

year. Recognition occurs upon delivery and the transfer of power of disposal to the customer. Revenue over time results from order developments agreed in advance as part of long-term production and supply contracts. Payments terms are used that are customary for the industry without significant financing components. Variable consideration does not occur regularly.

As of December 31, 2019, trade receivables amounted to € 45,027 thousand (December 31, 2018: € 70,713 thousand) and contractual assets amounted to € 1,022 thousand (December 31, 2018: € 8,764). The contract asset in the Electromobility operating segment amounted to € 5,425 thousand at the beginning of the fiscal year and increased by € 1,920 thousand in the fiscal year due to recorded revenue. All asset values in the amount of € 7,345 thousand were impaired in the fiscal year. The contract assets in the Mechanics operating segment amounted to € 3,339 thousand at the beginning of the fiscal year. They were reduced to € 1,022 in the fiscal year by services rendered in the amount of € 513 thousand and impairments of € 1,803 thousand.

Impairment losses of € 9,148 thousand (prior year: € 0 thousand) were recognized for contract assets from contracts with customers. In fiscal year 2019, the impairment results from the recognition of expected credit losses under IFRS 9.

Other revenue of € 12,803 thousand (prior year: € 16,214 thousand) was generated from development services in the reporting period.

(12) Other Operating Income

Other operating income mainly comprises the following items:

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Disposal of fixed assets	2,168	388
Measurement gains/losses from outstanding purchase price installments	1,273	0
Income from derivative instruments (FV PL)	1,088	0
Use of company cars by employees	650	523
Exchange rate differences	446	1,388
Income from grants	301	88
Release of risk provisioning	289	206
Advance payments and compensation payments	0	2,927
Miscellaneous	636	1,677
Total	6,851	7,197

(13) Other Own Work Capitalized

For development projects that meet the requirements of IAS 38.21 and IAS 38.57 in the reporting period and for which project-related development costs have been capitalized, the capitalized development costs have been recognized in other own work capitalized. The amounts capitalized are recognized under intangible assets. Other own work capitalized also includes costs incurred in manufacturing test equipment.

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Project-related development costs	17,608	15,103
Production costs for test equipment	1,491	553
Other own work capitalized	19,099	15,656

(14) Cost of Materials

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Raw materials, consumables and supplies	134,066	101,949
Expenses for purchased services	3,086	3,982
Cost of materials	137,152	105,931

(15) Personnel Expenses

Personnel expenses amounted to € 59,808 thousand in the reporting period (prior year: € 52,155 thousand) and consist of the following:

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Wages and salaries	47,585	38,656
Social contributions/pensions	8,236	6,547
Staff leasing	3,987	6,952
Personnel expenses	59,808	52,155

The average number of employees including temporary workers has changed as follows in comparison to the prior year:

	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Salaried employees	605	648
Hourly-paid employees	432	491
Number of employees	1,037	1,139

(16) Other Operating Expenses

Other operating expenses mainly comprise the following items:

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Accruals for impending losses	4,500	0
Third-party services	3,857	3,497
Insurance and leasing	3,601	2,569
Legal and consulting costs	3,401	2,917
EDP and telephone	3,399	3,006
Building rent and expenses	3,125	2,691
Exchange rate losses	2,059	324
Freight and packaging costs	1,847	1,624
Advertising and marketing costs	1,142	787
Energy costs	1,010	983
Repair and maintenance	858	1,214
Bad debt losses	822	9
Vehicle costs	744	634
Asset disposals	108	1,620
Miscellaneous	8,160	9,216
Total:	38,632	31,091

(17) Depreciation and Amortization

A breakdown of depreciation, amortisation and impairment losses on intangible assets, property, plant and equipment and financial assets can be found in the consolidated statement fixed assets.

Impairment of property, plant and equipment and intangible assets in the amount of € 27,071 thousand is shown in the following overview:

	Balance sheet item	Devaluation amount € '000
Impairment of capitalized development costs in the Electromobility operating segment	Intangible assets	12,641
Impairment of capitalized development costs in the Automotive sector	Intangible assets	3,748
Devaluation of the investment grant to Triathlon Batterien GmbH	Intangible assets (licenses)	5,593
Devaluation of disclosed hidden reserves in the Electromobility operating segment	Intangible assets (licenses, patents, software, customer list)	2,783
Devaluation of disclosed hidden reserves in the Automotive sector	Intangible assets (licenses, patents, software, customer list)	1,350
Other impairment	Miscellaneous	956
		27,071

Impairment of current assets in the amount of € 54,221 thousand is shown in the following overview:

	Balance sheet item	Devaluation amount € '000
Impairment of inventories in the Electromobility operating segment	Inventories	44,935
Impairment of contract assets according to IFRS 15 in the Electromobility operating segment	Other current assets	7,345
Impairment of contract assets according to IFRS 15 in the Automotive sector	Other current assets	1,803
Other impairment	Trade receivables	138
		54,221

(18) Financial Result

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Financial income	33	6
Interest revenue	33	6
Financial expenses	-6,917	-4,228
Other financial and interest expenses	-6,917	-4,228
Financial result	-6,884	-4,222

Other financial and interest expenses include interest expenses to banks of € 3,455 thousand (prior year: € 4,102 thousand).

Net income from financial instruments is summarized below, with a breakdown for different measurement categories. The carrying amounts for the measurement categories are indicated in note (38).

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Financial assets		
Measured at amortized cost	33	6
Measured at fair value through profit or loss	0	0
	33	6
Financial liabilities		
Measured at amortized cost	-6,732	- 4,185
Measured at fair value through profit or loss	-185	- 37
	- 6,884	- 4,222

Interest expenses of € 455 thousand were incurred for IFRS 16 leases in the reporting year. Net income from financial instruments includes netted interest revenues and expenses, measurements at fair value, currency translation, valuation allowances and disposal effects. Net income includes effective interest gains on financial instruments measured at amortized cost in the amount of € 194 thousand (prior year: € 460 thousand).

(19) Income Taxes

Domestic deferred taxes were calculated as of December 31, 2019, at a combined income tax rate of 30.0% (prior year: 30.0%). This includes a corporate tax rate of 15% and a solidarity surcharge of 5.5%. The income tax rate also reflects trade taxes, taking into account the breakdown of the trade tax assessment rates among the municipalities in which the company's branches are located. The deferred taxes for Voltabox of Texas, Inc. were calculated as

of December 31, 2019, at a combined income tax rate of 27.6% (prior year: 27.6%). In China, a combined income tax rate of 34.6% (prior year: 34.6%) was applied.

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Current taxes	254	525
Current taxes – Germany	254	525
Current taxes – other countries	0	0
Deferred taxes	-3,561	6,720
Deferred taxes – Germany	-3,387	5,652
Deferred taxes – other countries	-174	1,068
Income taxes	-3,307	7,245

Current taxes include corporate income tax and trade tax refunds for prior years in the current fiscal year.

As of the end of the reporting period, of deferred tax assets in the amount of € 271 thousand (prior year: € 2,193 thousand), € 271 thousand (prior year: € 2,193 thousand) relates to Germany and € 0 thousand (prior year: € 0 thousand) relates to other countries. As of the end of the reporting period, of deferred tax liabilities in the amount of € 18,623 thousand (prior year: € 24,015 thousand), € 18,623 thousand (prior year: € 23,841 thousand) relates to Germany and € 0 thousand (prior year: € 174 thousand) relates to other countries.

Deferred tax assets and liabilities were recognized for the following items:

€ '000	Dec. 31, 2019		Dec. 31, 2018	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets	0	17,473	0	23,163
Property, plant and equipment	396	659	253	0
Receivables and other assets	0	749	0	1,182
Provisions for pensions	362	0	588	0
Bonds	5	274	0	373
Inventories	0	127	0	0
Loss carryforwards	0	0	2,011	0
IFRS 16 lease liabilities	167	0		
Deferred tax assets and liabilities	930	19,282	2,852	24,718
Offsetting	-659	-659	-659	-659
Deferred tax assets and liabilities after offsetting	271	18,623	2,193	24,059

An amount of deferred taxes of € 85 thousand (prior year: € 64 thousand) arising on pension provisions was recorded directly in equity within the revaluation reserve. This also corresponds to the amount of deferred tax assets in other comprehensive income.

Dividends to be paid by paragon GmbH & Co. KGaA in Germany in the future have no impact on the tax burden of paragon GmbH & Co. KGaA.

The actual tax expense is compared with the tax expense that would theoretically result from multiplying the applicable tax rates and the reported earnings before tax in accordance with IAS 12.81 (c). The following table shows the reconciliation from the calculated tax expense to the actual tax expense.

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Earnings before tax	-126,831	10,610
Calculated tax income (prior year tax expense) with a tax rate of 30.0% (prior year: 30.0%)	38,049	-3,183
Valuation allowance on deferred taxes	0	-1,099
Differing foreign tax burden	-491	0
Non-recognition of deferred taxes	-34,221	-2,692
Goodwill impairments	2,421	0
Current taxes relating to other periods	-187	0
Loss from merger in separate financial statements	-1,462	0
Miscellaneous	-802	-271
Actual tax income (prior year: tax expense)	3,307	-7,245

The calculated tax expense is determined by multiplying the tax rate by the income calculated for tax purposes. There are substantial tax losses carried forward in Germany and abroad (especially at paragon GmbH & Co. KGaA and Voltabox AG). No deferred tax assets are recognized on these losses carried forward.

(20) Earnings Per Share

Basic earnings per share are calculated by dividing the result for the reporting period which is attributable to the owners of paragon GmbH & Co. KGaA by the weighted average number of shares issued. The weighted average number of shares issued in the reporting period was 4,526,266 (prior year: 4,526,266).

Based on the result for the reporting period which is attributable to the owners of paragon GmbH & Co. KGaA in the amount of € -82.786 thousand (prior year: € 2,334 thousand), basic earnings per share amount to € -18.29 (prior year: € 0.52).

The diluted earnings per share are calculated by adjusting the weighted average number of shares issued by the number of potentially dilutive shares.

Stock option plans generally result in a potential dilution of earnings per share. There were no share option rights to acquire paragon GmbH & Co. KGaA shares during the fiscal year from January 1 to December 31, 2019.

(21) Intangible Assets

Capitalized Development Costs

The changes in and analysis of intangible assets, property, plant and equipment and financial assets are shown in the consolidated statement of fixed assets. A description of investments made can be found in the management report.

Intangible assets include capitalized development costs of € 44,441 thousand (prior year: € 52,412 thousand). Total development costs in the period amounted to € 29,326 thousand (prior year: € 24,925 thousand). This includes internal development costs of € 16,646 thousand (prior year: € 14,991 thousand) capitalized as intangible assets in the reporting period.

Amortization of these internal development costs in the reporting period amounted to € 7,129 thousand (prior year: € 4,333 thousand). The depreciation period for development projects is usually seven years from when they are first ready to use.

The capitalized development costs were subjected to an impairment test in accordance with IAS 36. The respective recoverable amount represents the fair value of the development projects determined on the basis of recent information on the marketability of the project. The impairment loss in accordance with IAS 36 totaled € 16,389 thousand in the reporting year (prior year: € 1,048 thousand).

The recoverable amount of internally generated intangible assets is determined based on the calculation of the value-in-use using estimated cash flows, which are in turn derived from revenue forecasts adopted by the Management. The revenue forecasts cover a period of five years. A growth rate is determined for each product based on market analyses. A risk-adjusted discount factor of 4% is applied to the estimated cash flows.

The amount of capitalized borrowing costs at an interest rate of 4% is € 801 thousand.

(22) Goodwill

In accordance with IFRS 3 Business Combinations and the two standards revised in this context, namely IAS 36 Impairment of Assets and IAS 38 Intangible Assets, goodwill and internally generated intangible assets whose production is not yet complete are subject to regular impairment tests.

This involves goodwill and internally generated intangible assets whose production is not yet complete being tested for potential impairment once a year. In addition, the impairment test is also to be performed more frequently should any events or changes in circumstances indicate that a potential impairment has occurred.

The impairment tests performed at paragon Group involve comparing the residual carrying amounts of individual cash generating units (CGUs) with their respective recoverable amounts, i.e., the higher of their fair value less costs to sell and their value in use. Where the carrying amount of the cash-generating unit is higher than its recoverable amount, an impairment loss is recognized in the amount of the respective difference. The recoverable amount is determined by calculating the value in use by means of the discounted cash flow method. The cash flows used to calculate the value in use are determined on the basis of management's medium-term planning. These plans are based on past experience and on expectations as to future market developments, taking account of strategic and operative measures already initiated to manage the respective business field. The detailed planning period is usually a period of five years.

The cost of capital is calculated as the weighted average of equity and debt capital costs (weighted average cost of capital – WACC). Equity costs are derived from a peer group analysis of the relevant market sector, i.e., information that can be obtained from capital markets. To account for the different return and risk profiles of our different fields of activity, we calculate individual cost of capital rates for our companies (CGUs). The weighted average cost of capital, i.e., WACC before taxes used to discount cash flows, amounted to 8.21 % (prior year: 4.0%). The growth rate following the detailed planning period is 1 %.

€ '000	Dec. 31, 2019	Dec. 31, 2018	Impairment loss for 2019
SphereDesign GmbH	843	843	0
paragon movasys GmbH	5,067	6,567	1,500
paragon semvox GmbH	16,130	16,130	0
paragon electroacoustic GmbH/ ETON Soundsysteme GmbH	335	335	0
ACCURATE – Smart Battery Systems – GmbH	0	4,122	4,122
Concurrent Design, Inc.	0	2,398	2,398 (+50 currency change)
Total	22,375	30,395	8,070

The goodwill of paragon movasys GmbH was written down due to an adjustment of the interest rate and a deterioration of the business outlook compared with the prior year. At the end of fiscal year 2019, the goodwill of Concurrent Design, Inc. and Accurate – SMART BATTERY SYSTEMS – GmbH was written down in full since the original reason for the recognition of goodwill has been permanently eliminated following the merger and refocusing as an internal development service provider and the change in the business model.

(23) Property, Plant and Equipment

Depreciation in the reporting period (not including right-of-use assets in accordance with IFRS 16) amounted to € 6,867 thousand (prior year: € 6,915 thousand). Land and buildings are subject to property charges as collateral for long-term bank loans. The depreciation of right-of-use assets according to IFRS 16 amounts to € 3,513 thousand.

Certain items of movable noncurrent assets are financed by leases. Generally, these leases have terms of four to five years. The corresponding payment obligations for future lease installments are recognized as liabilities. The net carrying amount of assets capitalized under leases amounted to € 22,210 thousand as of December 31, 2019 (prior year: € 1,176 thousand). The corresponding payment obligations for future lease installments amounted to € 22,118 thousand (prior year: € 1,797 thousand) and are recognized as liabilities at their present value. The capitalized assets under leases wholly relate to technical plants and machinery. The majority of these lease arrangements provide for the transfer of ownership without further payments after full settlement of all obligations during the basic lease period (full amortization). No firm agreements have been entered into concerning the further use of the leased assets following expiry of the basic lease period. Nevertheless, paragon assumes that the leased assets can be acquired at a favorable price after the basic lease period has expired or may continue to be used at a favorable lease rate.

Advance payments for machinery and equipment amounting to € 5,778 thousand were made in the reporting year (prior year: € 2,365 thousand).

The loss on disposal of property, plant and equipment amounted to (Disposal of acquisition/production costs minus accumulated depreciation) € 13,950 thousand (prior year: € 1,633 thousand).

(24) Financial Assets

Company	Share	Revenue 2019 in € '000	Equity in 2019	Net profit/ loss for 2019
Consolidated Subsidiaries				
paragon Automotive Technology (Shanghai) Co., Ltd., China	100.00%	120	36	-7
Voltabox of Texas, Inc., Austin, USA	100.00%	6,197	-37,556	-21,247
Voltabox AG, Delbrück	60.03%	65,255	92,512	-74,413
SphereDesign GmbH, Bexbach	100.00%	4,056	274	0
paragon electronic GmbH, Delbrück	100.00%	56,122	7,819	0
paragon Automotive (Kunshan) Co., Ltd., China	100.00%	2,589	-1,906	-288
paragon movasys GmbH, Delbrück	100.00%	46,288	-5,396	-1,992
Nordhagen Immobilien GmbH, Delbrück	100.00%	0	-49	-50
paragon semvox GmbH, Limbach	82.00%	4,282	-3,812	-1,308
paragon electroacoustic GmbH, Neu-Ulm	100.00%	8,233	1,873	-582
ETON Soundsysteme GmbH, Neu-Ulm	100.00%	4,338	1,258	212
paragon electrodrive GmbH, Delbrück	100.00%	0	25	0
Voltabox Kunshan Co., Ltd. China	100.00%	0	302	-111
Financial assets / Investments				
Bilster Berg Drive Resort GmbH & Co. KG (limited partnership investment)*	€ 120,000			
ForkOn GmbH, Haltern am See*	9.45%			

* Financial key figures of the investments are not yet available at the time of preparation of the financial statements.

(25) Inventories

Inventories consist of the following:

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Raw materials, consumables and supplies	26,109	25,591
Work in progress and finished goods and services	22,152	29,872
Advance payments for inventories	-3,461	3,464
Inventories	44,799	58,927

No reversals were recognized in the reporting period, as in the prior year. Inventories were written down by € 51,768 thousand in the reporting period (prior year: € 3,108 thousand). At the balance sheet date, inventories of € 0 thousand served as collateral for liabilities (prior year: € 0 thousand) with the exception of normal reservation of ownership.

(26) Trade Receivables

The carrying amount of trade receivables is derived as follows:

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Gross trade receivables	46,133	70,829
Less valuation allowances (Expected credit loss for IFRS 9 and individual value adjustments)	-1,106	-116
Trade Receivables	45,027	70,713

Trade receivables are assigned as part of factoring, if possible, and intended by the Management. As of the reporting date, there are no receivables which will be assigned within the scope of factoring in the following reporting year. For this reason, trade receivables have been allocated to the measurement category AC under IFRS 9.

The maturity structure of trade receivables for which no impairment allowances have been recorded as of the balance sheet date is as follows:

€ '000	Carrying amount	of which neither impaired nor overdue	thereof past due as follows but not impaired			
			0 – 30 days	30 – 60 days	60 – 90 days	> 90 days
Dec. 31, 2019						
Trade Receivables	44,111	36,257	1,876	1,192	683	4,103
Dec. 31, 2018						
Trade Receivables	70,648	60,860	3,208	2,250	728	3,602

There were no indications as of the balance sheet date that debtors with receivables that are neither impaired nor overdue will fail to meet their payment obligations.

The expense arising on recording impairment losses and on derecognition of trade receivables is reported within other operating expenses. Income from receipts for derecognized receivables is reported under other operating income.

(27) Other Current Assets

Other current assets were as follows:

€ '000	Dec. 31, 2019			Dec. 31, 2018
	AC	FVPL	FVOCI	AC
Other Current Assets				
Purchase price retention due to factoring	1,605	0	0	912
Deferrals	526	0	0	784
Creditors with debit balances	226	0	0	458
CHF forward exchange transaction	0	1,088	0	0
Contract assets	1,022	0	0	8,764
Outstanding payments into the capital reserve	319	0	0	0
Other assets	3,005	0	0	3,146
Other Current Assets	6,703	1,088	0	14,064

The overdue amounts included in other current assets as of the balance sheet date were as follows:

€ '000	Carrying amount	of which neither impaired nor overdue	of which past due but not impaired			
			0 – 30 days	30 – 60 days	60 – 90 days	> 90 days
Dec. 31, 2019						
Other Current Assets	7,791	7,791	0	0	0	0
Dec. 31, 2018						
Other Current Assets	14,064	14,064	0	0	0	0

As of December 31, 2019, there were no indications that significant amounts included in other current assets would not be collectible. With regard to the CHF forward exchange transaction, we refer to the information in note (39).

(28) Cash and Cash Equivalents

Cash on hand and bank deposits are recognized at their nominal amounts. Cash and cash equivalents include € 41 thousand (prior year: € 25 thousand) in cash on hand and € 9,415 thousand (prior year: € 41,826 thousand) in bank deposits. Changes in cash and cash equivalents are presented in the consolidated cash flow statement. As of December 31, 2019, the Group reported receivables of € 1,133 thousand (prior year: € 751 thousand) relating to factoring agreements under cash and cash equivalents.

(29) Equity

The changes in the individual components of equity for the fiscal year from January 1 to December 31, 2018, and for the reporting period from January 1 to December 31, 2019, are presented in the consolidated statement of changes in equity.

Share Capital

paragon GmbH & Co. KGaA's share capital as of December 31, 2019 amounted to € 4,526 thousand (prior year: € 4,526 thousand) and is divided into 4,526,266 no-par-value shares with a notional share in the share capital of € 1.00 each.

Conditional Capital

Conditional Capital 2017/I Pursuant to the Resolution by the Annual General Meeting on May 10, 2017

The resolution passed by the Annual General Meeting on May 10, 2017 authorized the Management Board of paragon AG (now: paragon GmbH & Co. KGaA), with the consent of the Supervisory Board, to issue on one or more occasions bearer or registered bonds with warrants and/or convertible bonds or a combination of these instruments (hereinafter also jointly the "bonds") with a total nominal amount of up to € 150,000,000.00 and with a term of up to 10 years and to grant the holders or creditors (hereinafter jointly the "holders") of bonds with warrants and convertible bonds conversion rights or options for up to a total of 2,263,133 new no-par-value shares of the company, as stipulated in the terms of these bonds in the period up to and including May 9, 2022. The bonds may be issued in return for a cash payment or contribution in kind, particularly investments in other companies. Bonds with warrants may be issued in return for a contribution in kind where the warrant terms stipulate that the option price for each share in the company is payable in cash in full upon exercise. The bond terms may also establish a conversion or option obligation for bearers at the end of the term or on a different date or stipulate the right of the company to grant the bearers of these bonds shares in the company in whole or in part instead of the payment of the amount due upon maturity of bonds which include a conversion or option right (this includes maturity due to termination).

The bond terms may stipulate that, in the event of conversion or the exercise of an option or fulfillment of the conversion or option obligations, the company may, at its discretion, either issue new shares out of conditional capital (in particular, the new Conditional Capital 2017/I which will be created in connection with this authorization), but may also exclusively or, at the company's discretion, alternatively grant shares in the company out of authorized capital or out of treasury shares of the company or a Group company which are currently held or are yet to be acquired.

The conditional capital increase serves exclusively to grant shares to holders or creditors of convertible bonds and/or bonds with options that are issued by the company (or by a Group company as defined in Section 18 of the German Stock Corporation Act (AktG), in which the company has a shareholding of at least 90%) pursuant to the authorization by the Annual

General Meeting on May 10, 2017, against contributions in cash or in kind until May 9, 2022. In accordance with the respective terms and conditions for convertible bonds and bonds with options, the conditional capital increase also serves to issue shares to holders of convertible bonds and/or bonds with options subject to conversion or option obligations.

There was no increase in share capital as a result of the exercise of options under the company's stock option plan in the reporting period.

Authorized Capital

Authorized Capital 2017/I Pursuant to the Resolution by the Annual General Meeting on May 10, 2017

By resolution of the Annual General Meeting on May 10, 2017, the Management Board was authorized, with the consent of the Supervisory Board, to increase the company's share capital on one or on several occasions, by up to € 2,263,133.00 until May 9, 2022, by issuing up to 2,263,133 new no-par-value shares in exchange for contributions in cash and/or in kind (Authorized Capital 2017/I). Shareholders are to be granted a subscription right. The statutory subscription right may also be granted by having the new shares taken over by a banking consortium with the obligation to offer the shares indirectly to shareholders for subscription pursuant to Section 186 (5) of the German Stock Corporation Act (AktG). The Management Board or Management is however authorized, with the consent of the Supervisory Board, to exclude the statutory subscription rights of shareholders in the cases specified in Section 5 (6) of the Articles of Association as updated in May 2017.

Capital Reserve

The capital reserve amounted to € 15,485 thousand as of December 31, 2019 (prior year: € 15,165 thousand). Pursuant to Sections 207 et seq. of the German Stock Corporation Act (AktG) concerning capital increases from capital reserve and based on a resolution adopted by the Annual General Meeting on May 9, 2012, the company's share capital was increased by transferring an amount of € 1,029 thousand from the capital reserve as reported in the balance sheet as of December 31, 2011.

The capital reserve increased in fiscal year 2016 by € 12,715 thousand to € 15,165 thousand as a result of the successful placement of 411,478 new no-par-value shares under partial utilization of the authorized capital approved by the Annual General Meeting on April 27, 2016. Based on the dividend refund agreement from October 14, 2019, the main shareholder of paragon GmbH & Co. KGaA, Klaus Dieter Frers, undertook to pay a partial amount of € 319 thousand from the dividend amount received for 2018 as a voluntary contribution to the company's capital reserves within the meaning of Sections 266 (3) A II and 272 (2) No. 4 of the German Commercial Code (HGB) and thus to partially refund the dividend payment received to the company. The additional payment is due within five working days of being requested by the company and was not requested by the date of the preparation of the annual financial statements.

In order to comply with the requirement to recognize actuarial gains and losses from provisions for pensions directly in equity in accordance with the revised IAS 19 Employee Benefits, actuarial losses in the amount of € 1,202 thousand (prior year: 802 thousand have been reclassified to the revaluation reserve. In the reporting period, an amount of € -400 thousand net of deferred taxes (prior year: € 113 thousand) was recognized in the revaluation reserve.

Dividends

The company will not submit any proposal to the Annual General Meeting for the payment of a dividend for the reporting period ending on December 31, 2019.

In the fiscal year, paragon GmbH & Co. KGaA paid a dividend of € 1,133 thousand for the prior year. In the fiscal year, the listed subsidiary Voltabox AG paid a dividend of € 475 thousand for the prior year. Of this amount, € 190 thousand was attributable to minority shareholders.

Minority Interests

Due to the IPO of Voltabox AG on October 13, 2017, information about minority interests were included in the paragon consolidated financial statements for the first time. In the reporting year, a total comprehensive income of € -40,856 thousand (prior year: € 913 thousand) was allocated to minority interests. This is composed of a consolidated net result of € -40,738 thousand (prior year € 1,031 thousand and other comprehensive income of € -118 thousand (prior year: € -118 thousand). Minority interests amounted to € 20,759 thousand (prior year: € 61,900 thousand) as of December 31, 2019.

(30) Lease liabilities

The initial recognition of the lease liability comprises the lease payments not yet made at the present value of the lease payments as of the provision date. Discounting is calculated on the basis of the underlying constant interest rate. If this is not available, paragon GmbH & Co. KGaA uses an incremental borrowing rate of interest that is used as a basis for comparable lease financing. The interest rates range from 4.97% to 5.41% for leased land, 6.47% to 6.66% for technical equipment and 8.77% to 8.86% for operating and office equipment. The interest expense from lease liabilities for fiscal year 2019 amounts to € 598 thousand. The rental expense from unrecognized leases reported in other expenses is insignificant.

In fiscal year 2019, the company sold two developed plots of land with a residual book value of € 3,433 thousand to Frers Grundstücksverwaltungs GmbH & Co. KG, Delbrück, Germany at a selling price of € 3,426 thousand. This resulted in a book value loss of € 7 thousand for the company. As part of this sale and leaseback transaction, an agreement had been concluded for a developed plot of land by the time the annual financial statements were prepared (see note (46)).

Voltabox of Texas, Inc. sold a developed property to third parties in the reporting year. This transaction resulted in other operating income of € 1,940 thousand. The developed land will

be leased in the form of a sale and leaseback agreement until the end of 2034. A graduated rent was arranged. The annual rent for 2020 is € 774 thousand. As of December 31, 2019, the lease liability and the capitalized right-of-use asset amount to € 10,482 thousand.

Lease payments not yet made comprise

- all fixed payments less lease incentives received,
- variable lease payments,
- amounts expected to be paid at the end of the lease term under residual value guarantees,
- the exercise price of a call option, provided that the exercise is sufficiently certain and
- penalties for termination if exercise is reasonably certain.

The carrying amount of the lease liability is increased by the interest expense and reduced by the payments made after provision on the reporting date. A remeasurement of the lease liability is immediately taken into account.

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	Dec. 31, 2019	Dec. 31, 2018
Minimum lease payments	3,520	8,807	13,938	26,265	1,865
Future interest payments	-835	-1,820	-1,492	-4,147	-67
Lease liabilities (repayment portion)	2,685	6,987	12,446	22,118	1,798
thereof reported under noncurrent liabilities				19,433	937
thereof reported under current liabilities				2,685	861

Changeover effects in connection with IFRS 16 as of January 1, 2019, are presented in note (6). The development of right-of-use assets can be seen in note (42).

(31) Liabilities to Banks

Current and noncurrent liabilities to banks totaled € 44,231 thousand (prior year: € 58,957 thousand). Securities in the amount of € 19,620 thousand (prior year: € 25,733 thousand) were issued for the existing deferred liabilities to banks.

Liabilities to banks are secured by property charges for loan liabilities in the amount of € 23,189 thousand (prior year: € 23,365 thousand) and by charges over property, plant and equipment of € 5,773 thousand (prior year: € 5,200 thousand).

Liabilities to banks mature as follows:

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	Dec. 31, 2019	Dec. 31, 2018
Liabilities to Banks	28,858	10,334	5,039	44,231	58,957
thereof reported under noncurrent liabilities				15,373	17,579
thereof reported under current liabilities				28,858	41,378

There is no exposure to interest rate risk for the loans with fixed interest rates. Loans with floating interest rates (€ 0 thousand, prior year: € 3,280 thousand) are subject to interest rate risk (see note (17)).

The liabilities have been assigned to the IFRS 9 measurement category AC.

(32) Bonds

On June 28, 2017, the company issued a non-subordinated and unsecured bearer bond with a nominal value of € 50,000 thousand. The bond is listed and traded on the Open Market of the Frankfurt Stock Exchange (WKN: A2GSB8). The bond has an interest coupon of 4.5% and a term from July 5, 2017, to July 5, 2022. The transaction costs of € 1,713 thousand incurred in connection with the placement are being amortized over the term of the bond using the effective interest method. The carrying amount of the bond at the balance sheet date amounted to € 50,213 thousand including the accrued interest liability for fiscal year 2019 amounting to € 1,125 thousand.

On April 23, 2019, the company issued a bearer bond with a nominal volume of CHF 35.0 million (WKN: A2TR8X), traded on the SIX Swiss Exchange. The interest coupon is 4.0% and the bond has a term of 5 years, maturing on April 23, 2024. This financial instrument is measured at its redemption amount of € 32,412 thousand and has been reported in the Bonds item in the liabilities section of the balance sheet. The issue costs of this bond in the amount of € 120 thousand were recognized as other operating expenses in the past fiscal year. As of the balance sheet date, interest expenses in the amount of € 903 thousand have been deferred and reported under bond liabilities.

The bonds have been assigned to the IFRS 9 measurement category AC.

(33) Provisions for pensions

paragon recognizes a provision for a defined benefit pension plan in accordance with the revised IAS 19 Employee Benefits. The paragon Group has pension commitments to two persons. Provisions exist for pension commitments to Management member Klaus Dieter Frers in the amount of € 2,913 thousand and a further commitment in the amount of € 406 thousand. The commitment to Mr. Frers relates to a single contractual commitment to the payment of a fixed amount from age 65 based on an individual contract arrangement. In addition to this

existing pension agreement, a new commitment was made in fiscal year 2005. This involves a single contractual commitment to payments from age 65, the amount of which is based on length of employment and salary level. In accordance with a resolution approved by the Supervisory Board on August 31, 2009, a portion of provisions for pensions amounting to € 794 thousand and the corresponding plan assets of € 1,425 thousand were transferred to HDI Gerling Pensionsfonds in fiscal year 2010. In accordance with a resolution approved by the Supervisory Board on December 10, 2013, another partial transfer of provisions for pensions to Allianz Pensionsfonds AG was effected in the amount of € 1,453 thousand during fiscal year 2013.

An actuarial loss of € 401 thousand was recognized in other comprehensive income (prior year: gain of € 113 thousand).

The actuarial calculations are based on the following assumptions:

in %	Dec. 31, 2019	Dec. 31, 2018
Discount rate	-0.85	1.74
Expected return on plan assets	0	0
Salary increase (commitment based on individual contracts until 2009, thereafter 0%)	0	0
Pension increase	2.00	2.00
Fluctuation	0	0

Actuarial gains or losses may arise from increases or decreases in the present value of the defined benefit obligations. These may be brought about by, among other things, changes in calculation parameters and changes in estimates of the risks related to the pension obligations, and may impact on the level of equity. The net pension provisions have been calculated as follows:

Present value of the defined benefit obligation:

€ '000	Dec. 31, 2019	Dec. 31, 2018
Present value of the defined benefit obligation at the start of the year	3,311	3,470
Service costs	-89	-84
Interest expense	55	38
Actuarial gains (-), losses (+)	401	-113
Present value of the defined benefit obligation as of the reporting date	3,678	3,311

The actuarial losses incurred in fiscal year 2019 were recognized directly in equity in the revaluation reserve in accordance with the revised IAS 19. Changes in demographic assumptions had no effect on the level of actuarial losses in the reporting year.

Net amount of defined benefit obligation recognized for which there are no corresponding plan assets:

€ '000	Dec. 31, 2019	Dec. 31, 2018
Present value of the defined benefit obligation	3,678	3,311
Less fair value of the plan assets	-358	-426
Uncovered defined benefit obligation on reporting date	3,320	2,885

Movements on the net amount were as follows:

€ '000	Dec. 31, 2019	Dec. 31, 2018
Uncovered defined benefit obligation at start of year	2,885	3,001
Pension expenses	34	-3
Actuarial gains (-), losses (+)	401	-113
Uncovered defined benefit obligation on reporting date	3,320	2,885

The following amounts have been recognized in the consolidated statement of comprehensive income:

€ '000	Dec. 31, 2019	Dec. 31, 2018
Service costs	-89	-84
Interest expense	55	38
Actuarial gains (-), losses (+)	401	-113
Pension expenses/income	367	-159

The actuarial gains and losses in the reporting year and prior years were classified in full to other comprehensive income. The provisions for the Managing Director Klaus Dieter Frers are still in the qualifying phase. As a rule, significant changes in the value of provisions for pensions result only from changes in the interest rate.

Disclosures on sensitivities and risks. The sensitivity analysis is only available for the provisions for Klaus Dieter Frers:

€ '000	Dec. 31, 2019	Dec. 31, 2018
DBO as of Dec. 31, 2019 interest rate 0.55 % (prior year: interest rate 1.49 %)	320	2,714
DBO as of Dec. 31, 2019 interest rate 1.05 % (prior year: interest rate 1.99 %)	2,802	2,518
DBO as of Dec. 31, 2019 pension increase 1.75 % (prior year: pension increase 1.75 %)	2,807	2,520
DBO as of Dec. 31, 2019 pension increase 2.25 % (prior year: pension increase 2.25 %)	3,025	2,711

Salary increase sensitivities have not been disclosed as there have been no such salary increases since the 2010 service period. There are no material extraordinary or company-specific risks in connection with the provisions for pensions reported.

(34) Other Liabilities

Other liabilities were as follows:

€ '000	Dec. 31, 2019	Dec. 31, 2018
Other current liabilities		
Financial liabilities		
Deferred income	5,219	6,390
Purchase price liability from company acquisition	0	470
Other Liabilities	1,231	2,626
Liabilities from other taxes	2,033	3,235
Other current liabilities	8,483	12,721

Deferrals mainly contain personnel-related obligations.

Other liabilities mature as follows:

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	Dec. 31, 2019	Dec. 31, 2018
Other Liabilities	8,483	3,256	0	11,739	16,558
thereof reported under noncurrent liabilities				3,256	3,837
thereof reported under current liabilities				8,483	12,721

The noncurrent liabilities relate to the purchase price liabilities of paragon semvox GmbH and are allocated to IFRS 9 - measurement category FVPL. The other current liabilities have been assigned to the IFRS 9 measurement category AC.

(35) Special Item for Investment Grants

This represents investment grants recorded as deferred income in accordance with IAS 20. An amount of € 88 thousand (prior year: € 88 thousand) was amortized in the reporting period. The Group received government assistance of € 0 thousand in the reporting period (prior year: € 0 thousand) and disclosed a special item for investment grants of € 829 thousand (prior year: € 917 thousand) as a noncurrent liability in the consolidated balance sheet.

(36) Other Provisions

Other provisions are all due within one year. The movements on the provisions were as follows:

€ '000	Jan. 1, 2019	Utilization	Release	Allocation	Dec. 31, 2019
Guarantees and goodwill settlements	579	493	86	1,140	1,140
Impending loss provisions	0	0	0	3,015	3,015
Other Provisions	579	493	86	4,155	4,155

At Voltabox AG, a provision for impending losses in the amount of € 3,015 thousand was created for a future unprofitable project. The expense from the creation of this provision is shown under other operating expenses.

(37) Income Tax Liabilities

This item relates exclusively to liabilities for trade tax and corporate income tax in respect of prior reporting periods.

(38) Additional Disclosures on Financial Instruments

This section provides an overview of financial instruments in use at paragon. The carrying amounts of the financial instruments included in the consolidated financial statements in accordance with the IFRS 9 measurement categories are summarized below:

€ '000	Dec. 31, 2019	Dec. 31, 2018
Financial assets		
Measured at amortized cost	63,328	128,146
Measured at fair value through profit or loss	2,609	326
Measured at fair value directly in equity	0	0
	65,937	128,472
Financial liabilities		
Measured at amortized cost	190,550	151,091
Measured at fair value through profit or loss	3,256	4,345
	193,806	155,436

paragon has not implemented any reclassification between these categories in fiscal year 2019.

As of the reporting date, the carrying amounts and the fair values of the current and non-current financial assets are as follows:

Dec. 31, 2019	AC		FVPL		FVOCI	
	CA	FV	CA	FV	CA	FV
€ '000						
ASSETS						
Cash and Cash Equivalents	9,456	9,456	0	0	0	0
Trade Receivables	45,027	45,027	0	0	0	0
Other assets	8,845	8,845	1,088	1,088	0	0
Investments	0	0	1,521	1,521	0	0
Total assets	63,328	63,328	2,609	2,609	0	0
LIABILITIES AND EQUITY						
Liabilities to Banks	44,231	44,231	0	0	0	0
Bonds	82,625	55,781	0	0	0	0
Finance lease	22,118	22,118	0	0	0	0
Trade payables	33,093	33,093	0	0	0	0
Other Liabilities	8,483	8,483	3,256	3,256	0	0
Total equity and liabilities	190,550	163,706	3,256	3,256	0	0
Dec. 31, 2018						
€ '000						
ASSETS						
Cash and Cash Equivalents	41,841	41,841	0	0	0	0
Trade Receivables	70,713	70,713	0	0	0	0
Other assets	15,592	15,592	0	0	0	0
Investments	0	0	326	326	0	0
Total assets	128,146	128,146	326	326	0	0
LIABILITIES AND EQUITY						
Liabilities to Banks	58,957	58,957	0	0	0	0
Bonds	49,881	49,125	0	0	0	0
Finance lease	1,798	1,798	0	0	0	0
Trade payables	28,242	28,242	0	0	0	0
Other Liabilities	12,213	12,213	4,345	4,345	0	0
Total equity and liabilities	151,091	150,335	4,345	4,345	0	0

paragon does not hold any cash collateral. Derivative financial instruments, balances and liabilities to banks are reported gross in the consolidated balance sheet. Derivative financial instruments (other assets) are shown netted in the amount of € 259 thousand – further information on derivatives can be found in note (39).

Within the scope of factoring, paragon pledges sight deposits in the amount of € 855 thousand for the benefit of the factoring bank. These accounts safeguard the validity guarantee for sold receivables. In the event of insolvency, other account balances with can be offset against any balances and liabilities between the respective counterparties. At the present time, paragon neither has a legal right of set-off nor intends to settle on a net basis.

There are no significant potential offsetting situations involving the relevant parties in the event of insolvency.

paragon distinguishes between collectible and doubtful or non-performing and uncollectible financial assets. Collectible financial assets are impaired based on the twelve-month expected credit losses. Doubtful or non-performing financial assets are impaired in the amount of the lifetime expected credit loss. Uncollectible receivables are recorded as disposals. A receivable is considered to be non-performing (definition of default) when there is a strong indication that a debtor will not fulfill its payment obligations to paragon.

Asset quality and the maximum default risk for the financial assets measured at amortized cost are summarized below, on the basis of the aforementioned categories:

Dec. 31, 2019 € '000	Credit quality	Treatment	Gross carrying amount	Valuation allowance	Net carrying amount
Other assets	Collectible	12-month ECL	9,933	0	9,933
	Collectible	Lifetime ECL	0	0	0
	Non-performing	Lifetime ECL	0	0	0
			9,933	0	9,933
Trade Receivables	simplified approach	Lifetime ECL	46,133	-1,106	45,027
	simplified approach	Lifetime ECL	0	0	0
	Non-performing	Lifetime ECL	0	0	0
			46,133	-1,106	45,027
Cash and Cash Equivalents	Collectible	12-month ECL	9,456	0	9,456
	Collectible	Lifetime ECL	0	0	0
	Non-performing	Lifetime ECL	0	0	0
			9,456	0	9,456

Dec. 31, 2018 € '000	Credit quality	Treatment	Gross carrying amount	Valuation allowance	Net carrying amount
Other assets	Collectible	12-month ECL	15,592	0	15,592
	Collectible	Lifetime ECL	0	0	0
	Non-performing	Lifetime ECL	0	0	0
			15,592	0	15,592
Trade Receivables	Simplified approach	Lifetime ECL	70,829	- 116	70,713
	Non-performing	Lifetime ECL	0	0	0
			70,829	- 116	70,713
Cash and Cash Equivalents	Collectible	12-month ECL	41,841	0	41,841
	Collectible	12-month ECL	0	0	0
	Non-performing	Lifetime ECL	0	0	0
			41,841	0	41,841

paragon recognizes valuation allowances for loans and other receivables while taking into consideration past events and expectations regarding the future development of credit risk. There has been no change in the methods used to measure valuation allowances since the prior year. The balance from valuation allowances has changed as follows:

€ '000		
Jan. 1, 2019		116
Adjustments due to changes in credit rating parameters	Increase due to remeasurement of receivables	990
	Reduction due to reversals of impairments	0
Adjustments due to changes in the gross amount of assets	Reduction due to the derecognition of assets	0
	Increase due to the capitalization of assets	0
Dec. 31, 2019		1,106

Cash and cash equivalents comprise cash on hand and bank deposits. paragon only deposits cash and cash equivalents with banks with the highest level of creditworthiness and default probabilities close to zero. On grounds of materiality, the valuation allowance has not been reported. In the event of a significant increase in the probability of default, the Group companies are required to withdraw cash and cash equivalents without delay. For this reason, cash and cash equivalents are allocated to the collectible (12-month ECL) or uncollectible (lifetime ECL) category. The change in the carrying amounts of uncollectible cash and cash equivalents is attributable to currency translation.

In accordance with the simplified approach under IFRS 9.5.5.15, valuation allowances on trade receivables are measured consistently on the basis of the lifetime expected credit losses.

The relevance of counterparty default risk in general became more significant in fiscal year 2019.

For the calculation of the valuation allowance, the receivables are divided up into risk categories and assigned different loss rates. Receivables are written off where a debtor is in serious financial difficulties and there is no prospect of collection.

The companies of the paragon Group determine the risk of default on the basis of individual methods, taking into consideration duration-specific as well as operating segment-specific risks. The companies use data from Schufa, historical default rates and customer-specific future-oriented credit risk analyses, inter alia. paragon GmbH & Co. KGaA has no significant holdings of past due assets.

(39) Management of Risks Associated with Financial Instruments

Market price fluctuations can involve substantial cash flow and profit risks for paragon. Changes in exchange rates and interest rates influence business operations as well as investing and financing activities. In order to optimize the Group's financial resources, the risks associated with changes in interest rates and exchange rates are analyzed on an ongoing basis and used to manage and supervise current business and financial market activities.

Fluctuations in currency exchange rates and interest rates can result in significant profit and cash flow risks. Accordingly, paragon centralizes these risks as far as possible and manages them in a proactive manner, which includes making use of derivative financial instruments. The management of these risks within the overall risk management system is a core responsibility of paragon GmbH & Co. KGaA's Management.

paragon has implemented an internal sensitivity analysis system based on a variety of risk analysis and risk management methods. The use of sensitivity analyses enables the Group to identify risk positions within the segments. Sensitivity analyses quantify the risks that can arise within given assumptions when certain parameters are changed in a defined range. They include the following assumptions:

- An appreciation of the euro against all foreign currencies by 10 percentage points
- A parallel shift in interest rate curves of 100 basis points (one percentage point)

The potential effects of the sensitivity analysis are estimates and are based on the assumption that the supposed negative market changes will occur. The actual effects may differ significantly if market developments deviate from assumptions made.

Foreign Currency Risks

Due to the international nature of its operations, paragon's ongoing business operations are exposed to foreign currency risk. The company uses derivative financial instruments to limit these risks. Exchange rate fluctuations can lead to undesirable earnings and liquidity fluctu-

ations. For paragon, the risk arises on foreign currency positions and possible changes in the relevant exchange rates. The uncertainty involved in future trends is referred to as exchange rate risk. paragon limits this risk by primarily settling purchases and sales of merchandise and services in the respective local currencies.

The sensitivity to potential fluctuations in foreign currency exchange rates is determined by aggregating the net currency positions of the operating business that are not denominated in the Group's functional currency. Sensitivity is calculated by simulating a 10% depreciation of the euro in relation to all foreign currencies. The simulated appreciation of the euro would have resulted in a change in future payment inflows (trade receivables) in the amount of € 401 thousand as of December 31, 2019 (prior year: € 414 thousand). To the extent that future purchases are not hedged against currency exchange risks, a depreciation of the euro against other currencies would have a negative effect on the financial position and earnings as the Group's purchases in foreign currencies exceed its foreign currency cash inflows.

The following table provides an overview of the net foreign currency exchange risk from trade payables by currency as of December 31, 2019:

€ '000	Dec. 31, 2019		Dec. 31, 2018	
	USD	Other	USD	Other
Transaction-related foreign currency risk	23,100	32	1,167	264
Foreign currency risk from balance sheet items	0	0	0	0
Foreign currency risk from pending transactions	21,388	1	1,167	264
Net exposure – foreign currency positions	23,100	32	1,167	264
Change in foreign currency positions due to 10% appreciation of the euro	2,310	3	117	26

There are foreign currency risks from the issue of the CHF-denominated bond with a nominal value of CHF 35 million. Interest payments of CHF 1.4 million are due in April each year; the CHF 35 million will be repaid in April 2024. Swiss franc liabilities are converted at a rate of 1.0854 CHF/EUR. CHF 42,000 thousand is accumulated over the term of the bond (converted at the closing rate € 38,695 thousand). If the Swiss franc were to appreciate by 10% to 0.9769 CHF/EUR, this would result in additional expenses of € 4,298 thousand.

As of December 31, 2019, the company has twelve derivative financial instruments (Swiss franc futures) with a nominal value of CHF 41,200 thousand and maturities from April 2020 to April 2024. There is no hedging relationship with the bond; accordingly, the derivatives are measured at fair value in profit or loss in the amount of € 1,088 thousand. Of these, six derivatives have a positive fair value of € 1,347 thousand, and the other six derivatives have a fair value of € -259 thousand.

Derivatives with the same remaining time to maturity are shown netted. Derivatives include current and non-current items; for reasons of simplification, they are reported as other current assets. A decline in the CHF exchange rate against the EURO has a reducing effect on the market value of the derivatives and leads to a reduction in earnings. Conversely, a decline in the CHF exchange rate leads to currency gains from the translation of the CHF bond. The Company expects that the negative impact on earnings from the valuation of the derivatives and the CHF bond will have an opposite effect, but the strict conditions of a hedging relationship in terms of hedge accounting are not met.

Interest Rate Risks

Interest rate risk refers to any change in interest rates that impacts earnings or equity. Interest rate risk primarily arises in connection with financial liabilities.

The interest-bearing financial liabilities mainly have fixed interest rates. Accordingly, changes in the interest rate would only have an effect if the financial instruments were recorded at fair value. As this is not the case, the financial instruments with fixed interest rates are not subject to interest rate risks within the meaning of IFRS 7.

The interest rate risks associated with variable-rate financial liabilities are measured using cash flow sensitivity techniques. The paragon Group had variable-rate financial liabilities of € 0 thousand (prior year: € 3,239 thousand) as of December 31, 2019. A change in interest rates (+1/-1 percentage point) is associated with the following cash flow risk

€ '000	Dec. 31, 2019		Dec. 31, 2018	
	+ 1%	- 1%	+ 1%	- 1%
Cash flow risk				
related to floating rate financial instruments	0	0	-32	32

Liquidity Risks

Liquidity risk, i.e., the risk that paragon might not be able to meet its payment obligations as they fall due, is managed by means of flexible cash management. As of December 31, 2019, paragon had cash and cash equivalents of € 9,454 thousand (prior year: € 41,841 thousand). Unused credit lines totaling € 22,458 thousand were available as of December 31, 2019 (prior year: € 2,245 thousand). In addition to the instruments providing assurance of liquidity described above, the Group follows developments on financial markets on an ongoing basis in order to take advantage of attractive financing opportunities as they become available.

The following table shows the maturity date of installments, maturity repayments and interest arising on the financial liabilities recorded in the balance sheet as of December 31, 2019:

€ '000	2020	2021 – 2024	2025 and thereafter
Non-derivative financial liabilities			
Liabilities resulting from bonds	3,540	79,085	0
Liabilities to Banks	28,858	10,701	5,039
Finance Lease Obligations	2,685	11,179	8,254
Trade payables	33,093	0	0
Other financial liabilities	8,483	3,256	0
Non-derivative financial liabilities	76,659	104,221	13,293

The net liquidity and net borrowing are derived from the sum of cash and cash equivalents less liabilities to banks and lease liabilities as shown in the statement of financial position.

€ '000	Dec. 31, 2019	Dec. 31, 2018
Cash and cash equivalents	9,456	41,841
Total liquidity	9,456	41,841
Current financial liabilities and portions of noncurrent financial liabilities due in the short term	31,543	42,239
Noncurrent financial liabilities	117,434	68,397
Total financial liabilities	148,977	110,636
Net debt	-139,521	-68,795

Credit Risks

Credit risk is defined as the financial loss that arises when a contract partner fails to meet its payment obligations. The maximum risk of default is therefore equal to the positive fair value of the respective interest rate instruments. The effective monitoring and control of credit risk is a core task of the risk management system. paragon performs credit checks for all customers requiring credit limits exceeding predefined amounts. The Group monitors credit risk on an ongoing basis.

(40) Capital Management

The primary goal of capital management is to maintain an appropriate equity ratio. The capital structure is managed and adapted to changing economic conditions. No significant changes in capital management goals, methods or processes were made in the fiscal year up to December 31, 2019.

Capital management refers exclusively to paragon GmbH & Co. KGaA's equity as reported in the balance sheet. Changes in equity are shown in the statement of changes in equity.

paragon was not required to comply with any financial covenants by the terms of agreements made with banks providing loan capital during the reporting period up to December 31, 2019. paragon GmbH & Co. KGaA has committed itself to maintaining an equity ratio of 25 % (IFRS consolidated financial statements) as part of the bond issue. At a meeting of the bondholders, the deviation in this year's consolidated financial statements from the equity ratio to be maintained was explained. The creditors waived their extraordinary right of termination.

(41) Commitments, Contingent Assets, Contingent Liabilities and Other Financial Obligations

There were no commitments or off-balance sheet contingent assets or contingent liabilities as of December 31, 2019. Other financial liabilities are as follows:

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	Dec. 31, 2019	Dec. 31, 2018
Order commitments	42,186	0	0	42,186	129,064
Tenancy obligations	341	8	0	349	13,603
Other obligations	2,368	1,185	0	3,553	7,367
Other financial obligations	44,895	1,193	0	46,088	150,034

The purchase commitment includes purchase order items from noncurrent assets and inventories.

(42) Consolidated Statement of Movements on Noncurrent Assets

Consolidated Statement of Movements on Noncurrent Assets as of December 31, 2019

€ '000	Acquisition costs							Dec. 31, 2019
	Jan. 1, 2019	Initial recognition IFRS 16	Exchange rate change	Additions	Additions from company acquisition	Disposals	Transfers	
Intangible assets								
Licenses, patents, software, customer list	63,195	0	0	2,865	0	688	0	65,372
Capitalized development expenses	65,124	0	0	14,933	0	0	0	80,057
Goodwill	30,395	0	0	0	0	0	0	30,395
Advance payments for intangible assets	1,747	0	0	335	0	0	0	2,082
Total intangible assets	160,460	0	0	18,133	0	688	0	177,905
Right-of-use assets								
Land and buildings	0	13,042	0	0	0	0	0	13,042
Technical equipment and machinery	0	5,106	0	0	0	0	0	5,106
Other plant, office furniture and equipment	0	1,872	0	0	0	0	0	1,872
Total right-of-use assets	0	20,021	0	0	0	0	0	20,021
Property, Plant and Equipment								
Land and buildings	46,858	0	80	3,257	0	14,291	3,787	39,691
Technical equipment and machinery	38,426	0	0	2,024	0	1,826	7,044	45,668
Other plant, office furniture and equipment	18,826	0	75	1,050	0	404	1,426	20,973
Advance payments	2,365	0	0	16,813	0	1,143	-12,257	5,779
Total property, plant and equipment	106,475	0	155	23,144	0	17,664	0	112,110
Financial Assets								
Investments	326	0	0	1,400	0	0	0	1,726
Total financial assets	326	0	0	1,400	0	0	0	1,726
Grand total	267,264	20,021	155	42,677	0	18,352	0	311,763

Depreciation and amortization							Carrying amounts		
Jan. 1, 2019	Exchange rate change	Additions	Additions from company acquisition	Impairment acc. IAS 36/38	Disposals	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	
25,666	-225	4,704	0	10,476	11	40,611	37,529	24,761	
12,713	-615	7,129	0	16,389	0	35,616	52,412	44,441	
0	-50	0	0	8,070	0	8,020	30,395	22,375	
0	0	0	0	0	0	0	1,747	2,082	
38,379	-890	11,833	0	34,935	11	84,246	122,083	93,659	
0	0	1,081	0	0	0	1,081	0	11,961	
0	0	1,627	0	0	0	1,627	0	3,480	
0	0	805	0	0	0	805	0	1,067	
0	0	3,513	0	0	0	3,513	0	16,508	
11,829	11	1,395	0	0	1,779	11,456	35,029	28,235	
29,895	48	3,974	0	0	1,773	32,144	8,530	13,524	
14,225	149	1,498	0	0	162	15,710	4,602	5,262	
1	0	0	0	0	0	1	2,365	5,778	
55,950	208	6,867	0	0	3,714	59,311	50,526	52,799	
0	0	0	0	205	0	205	326	1,521	
0	0	0	0	205	0	205	326	1,521	
94,329	-682	22,212	0	35,141	3,724	147,276	172,935	165,487	

Consolidated Statement of Movements on Noncurrent Assets as of December 31, 2018

€ '000	Acquisition costs						Dec. 31, 2018
	Jan. 1, 2018	Exchange rate change	Additions	Additions from company acquisition	Disposals	Transfers	
Intangible assets							
Licenses, patents, software, customer list	35,568	-918	11,098	17,311	0	136	63,195
Capitalized development expenses	52,834	-1,577	15,656	0	1,789	0	65,124
Goodwill	7,410	-181	0	23,166	0	0	30,395
Advance payments for intangible assets	1,439	0	432	0	0	-124	1,747
Total intangible assets	97,251	-2,676	27,186	40,477	1,789	12	160,461
Property, Plant and Equipment							
Land and buildings	33,736	277	481	15	0	12,349	46,858
Technical equipment and machinery	34,694	12	2,005	156	261	1,819	38,425
Other plant, office furniture and equipment	16,567	236	1,108	504	0	412	18,827
Advance payments	553	0	18,025	0	1,620	-14,592	2,366
Total property, plant and equipment	85,549	525	21,619	675	1,881	-12	106,476
Financial Assets							
Investments	326	0	0	0	0	0	326
Total financial assets	326	0	0	0	0	0	326
Grand total	183,126	-1,207	47,211	41,807	3,669	0	267,269

Depreciation and amortization							Carrying amounts		
Jan. 1, 2018	Exchange rate change	Additions	Additions from company acquisition	Impairment acc. IAS 36/38	Disposals	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	
22,499	5	3,162	0	0	0	25,666	13,070	37,529	
7,315	16	4,333	0	1,048	0	12,712	45,518	52,412	
0	0	0	0	0	0	0	7,410	30,395	
0	0	0	0	0	0	0	1,439	1,747	
29,814	21	7,495	0	1,048	0	38,378	67,437	122,083	
10,625	11	1,193	0	0	0	11,829	23,110	35,029	
25,698	64	4,385	0	0	252	29,895	8,996	8,530	
12,866	18	1,337	0	0	-4	14,225	3,700	4,602	
0	1	0	0	0	0	1	553	2,365	
49,189	94	6,915	0	0	248	55,950	36,360	50,526	
0	0	0	0	0	0	0	326	326	
0	0	0	0	0	0	0	326	326	
79,003	115	14,410	0	1,048	248	94,328	104,123	172,935	

(43) Notes to the Consolidated Cash Flow Statement

The consolidated cash flow statement shows the cash flows within a given fiscal year in order to present information about movements in the company's cash and cash equivalents in accordance with IAS 7 Statement of Cash Flows. The consolidated cash flow statement has been prepared pursuant to the indirect method as defined in IAS 7.18 (b). Cash flows are classified separately as cash flows from operating activities, cash flows from investing activities and cash flows from financing activities.

The current cash inflows and outflows resulting from the factoring agreement entered into have been allocated to the cash flow from operating activities.

The cash and cash equivalents shown in the consolidated cash flow statement include all cash and cash equivalents reported in the balance sheet that are available for use at short notice.

The cash flow statement was expanded in the reporting year by the effects of the initial application of IFRS 16. The increase in lease liabilities, lease assets, payments for the repayment of lease liabilities and payments for the assumption of lease liabilities are shown under cash flows from financing activities and not in profit or loss.

€ '000	Dec. 31, 2019	Dec. 31, 2018
Bank balances	9,415	41,816
Cash on hand	41	25
Cash and cash equivalents	9,456	41,841

(44) Segment Reporting

The Group's business activities are allocated to and reported as three operating segments on a recurring basis based on the requirements of IFRS 8. The "Electronics" operating segment includes paragon GmbH & Co. KGaA's activities for the development and sale of sensors, microphones and instruments, primarily for the automotive industry, together with the SphereDesign GmbH and the paragon Kunshan Co., Ltd businesses. The companies paragon GmbH & Co. KGaA, paragon electronic GmbH, SphereDesign GmbH, paragon semvox GmbH, paragon electroacoustic GmbH, ETON Soundsysteme GmbH, paragon Automotive Technology Co. Ltd., paragon Automotive Kunshan Co. Ltd. and Nordhagen Immobilien GmbH are assigned to the Electronics operating segment.

The "Electromobility" operating segment includes the activities of manufacturing battery systems and battery management systems for various industries within Voltabox AG and Voltabox of Texas, Inc. and Voltabox Kunshan Co., Ltd.

The Mechanics operating segment includes activities in developing and marketing electromechanical components for the automotive industry and the mechanical manufacturing of the paragon Group's products at paragon movasys GmbH.

Beginning in 2019, paragon electronic GmbH was assigned to the Electronics operating segment. In the prior year, it was assigned to the Mechanics operating segment. An adjustment of the segment table for the prior period and a presentation of the segment table according to the old segment allocation are omitted for reasons of materiality and clarity.

The various legal entities within the paragon Group enter into supply agreements with one another. Invoices for such supplies are raised on the same basis as with third parties, including an appropriate margin. Internal revenue primarily arises with productronic GmbH, as this company is responsible for all manufacturing processes within the Group, and with paragon GmbH & Co. KGaA, which is responsible for development work and central coordinating activities. This includes, among other things, central purchasing arrangements, human resources and commercial management activities to the extent that these activities are not performed by the individual entities, as well as the Group's central management function. Also included are rentals paid by subsidiaries for the use of land, buildings, plant and other equipment owned by paragon GmbH & Co. KGaA. Charges made between the operating segments are based on the utilization made of the respective items charged. Segment assets and segment liabilities are presented on the same basis. It is not possible to clearly allocate interest revenue, interest expenses and income tax expenses by operating segment; this information is omitted.

€ '000	2019				Group
	Electronics	Mechanics	Electromobility*	Eliminations	
Revenue from third parties	89,820	46,054	56,314	0	192,188
Intersegment revenue	4,396	234	303	-4,933	0
Operating segment revenue	94,216	46,288	56,617	-4,933	192,188
Inventory changes, other operating income & capitalized development services	13,186	1	23,204	-1,360	35,031
Expenses from intersegment offsetting	-448	-1,240	-4,628	6,316	0
Cost of materials, personnel expenses and other operating expenses	-97,742	-44,964	-92,886	0	-235,592
Operating segment EBITDA	9,212	85	-17,693	23	-8,374
Depreciation and amortization (incl. impairment)	-20,026	-4,629	-86,919	0	-111,574
Of this scheduled depreciation	-14,163	-1,779	-6,271	0	-22,213
Of this impairments	-5,863	-2,850	-80,648	0	-89,362
Operating segment EBIT	-10,814	-4,544	-104,612	23	-119,948
Financial result for Group	n. a.	n. a.	n. a.	n. a.	-6,884
Group earnings before taxes	n. a.	n. a.	n. a.	n. a.	-126,831
Assets	227,228	28,107	133,970	-115,519	273,785
Investments (CAPEX)	25,004	2,765	15,008	0	42,777
Liabilities	-190,370	-36,358	-89,730	113,632	-202,826

* The Electromobility operating segment includes 39.97% minority interests.
The report contains rounding differences. Assets and liabilities are reported in 2019 without deferred taxes.

€ '000	2018				Group
	Electronics	Mechanics	Electromobility*	Eliminations	
Revenue from third parties	85,518	34,977	66,888	0	187,383
Intersegment revenue	8,272	45,503	19	-53,794	0
Operating segment revenue	93,790	80,480	66,907	-53,794	187,383
Inventory changes, other operating expenses & capitalized development services	18,027	9,009	12,711	-7,663	32,084
Expenses from intersegment offsetting	-45,520	-11,982	-3,379	60,881	0
Cost of materials, personnel expenses and other operating expenses	-46,305	-76,224	-66,648	0	-189,177
Segment EBITDA	19,992	1,283	9,591	-576	30,290
Depreciation and amortization (incl. impairment)	-9,445	-2,031	-3,982	0	-15,458
Segment EBIT	10,547	-748	5,609	-576	14,832
Financial result for Group	n. a.	n. a.	n. a.	n. a.	-4,222
Group earnings before taxes	n. a.	n. a.	n. a.	n. a.	10,610
Assets	226,953	37,307	209,301	-111,268	362,293
Investments (CAPEX)	29,092	6,150	13,563	0	48,805
Liabilities	-168,861	-33,962	-57,612	75,941	-184,494

* The Electromobility operating segment includes 39.97% minority interests.

Information on Geographical Areas

The following table shows a geographical analysis of the Group's revenue with external customers. The revenues generated with external customers for the purposes of the geographical analysis is based on the location of the registered head office of the respective external customer. The vast majority of assets are located in Germany.

€ '000	Germany		EU		Third country		Total	
	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Revenue	121,250	134,659	41,708	39,673	29,230	13,050	192,188	187,383

Information About Transactions with Key Customers

In fiscal year 2019, three groups of companies exceeded the threshold of 10% in the revenue share according to IFRS 8.34. Of these, one group of companies, which is to be regarded as one customer because of its joint control, had a revenue share of 36.6%. Another group of

companies, which is to be regarded as one customer due to its joint control, had a revenue share of 14.2% and a further group of companies had a revenue share of 10.1%.

(45) Directors and Officers

The management of paragon GmbH & Co. KGaA has been carried out by the general partner company paragon GmbH, Delbrück, since August 1, 2018. paragon GmbH has a share capital of € 100 thousand. paragon GmbH and thus paragon GmbH & Co. KGaA is carried out by the following two managing directors: Klaus Dieter Frers (Chairman), Delbrück, full-time Managing Director of paragon GmbH, business strategy and development, production, finance, human resources as well as business segments mechanics and electromobility, Chairman of Supervisory Board of Voltabox AG. Dr. Matthias Schöllmann, Paderborn, full-time Managing Director of paragon GmbH, automotive business segment. Dr. Stefan Schwehr, Stuttgart (until March 29, 2019), full-time Managing Director of paragon GmbH.

The following persons are members of the Supervisory Board:

Name	Occupation	Memberships in Supervisory Boards and Other Supervisory Committees
Prof. Dr. Lutz Eckstein (Chairman)	Prof. Dr., Head of the Chair and Institute for Automotive Engineering (ika), RWTH Aachen University	Supervisory Board mandates: <ul style="list-style-type: none"> • ATC GmbH, Aldenhoven (member) Further mandates: <ul style="list-style-type: none"> • Chairman of the Advisory Board of Forschungsgesellschaft Kraftfahrwesen Aachen mbH (fka) • Member of the VDI Advisory Council for Vehicle and Traffic Engineering (VDI-FVT) • Member of the Advisory Board of VOSS Holding GmbH & Co. KG, Wipperfürth • Member of the Advisory Board of flyXdrive GmbH, Aachen • Managing Director of Driving Innovation GmbH
Hermann Börnemeier	Dipl. Financial Consultant and Tax Advisor, Managing Director of Treu-Union Treuhandgesellschaft mbH	Supervisory Board mandates: <ul style="list-style-type: none"> • Voltabox AG (member)
Walter Schäfers	Lawyer, Partner at Societät Schäfers Rechtsanwälte und Notare	Honorary Board mandate: <ul style="list-style-type: none"> • SC Paderborn 07 GmbH & Co. KGaA, Paderborn (member)

(46) Related Party Disclosures

Related parties as defined in IAS 24 Related Party Disclosures include members of the Management, the Supervisory Board and their immediate families as well as affiliated companies.

Treu-Union Treuhandgesellschaft mbH, Steuerberatungsgesellschaft, Paderborn, rendered services totaling € 142 thousand under an ongoing agreement in fiscal year 2019 (prior year: € 135 thousand). Hermann Börnemeier, a member of the Supervisory Board of paragon GmbH & Co, KGaA, is also managing director of the above company.

In fiscal year 2019, Societät Schäfers, Rechtsanwälte & Notare, Paderborn, rendered services in the amount of € 0 thousand (prior year: € 0 thousand). Walter Schäfers, a member of the Supervisory Board at paragon GmbH & Co. KGaA, is also a partner in this company.

In fiscal year 2019, Forschungsgesellschaft Kraftfahrwesen mbH Aachen rendered development services totaling € 4 thousand (prior year: € 3 thousand). Professor Dr. Lutz Eckstein, a member of the Supervisory Board at paragon GmbH & Co. KGaA, is the Chairman of the Advisory Board of this company.

Members of the Supervisory Board held 4,000 shares (prior year: 4,000) out of a total of 4,526,266 shares as of the balance sheet date. Klaus Dieter Frers held 2,232,263 shares as of the balance sheet date and thus 49.3% of the company's limited liability capital. On the balance sheet date, Dr. Matthias Schöllmann owned 2,920 shares.

Klaus Dieter Frers is the sole owner of Artega GmbH. paragon GmbH & Co. KGaA generated income of € 192 thousand by passing costs on to Artega GmbH. This had no effect on earnings. The receivables from Artega GmbH as of the balance sheet date were € 187 thousand.

Frers Ltd, a company majority-owned by Nils Frers, was commissioned within the scope of a development project of paragon semvox GmbH. In 2019, the total order comprised a volume of € 116 thousand in direct payments to Frers Ltd.

Klaus Dieter Frers is the sole owner of Frers Grundstücksverwaltungs GmbH & Co. KG. In fiscal year 2019, the company sold two developed plots of land with a residual book value of € 3,433 thousand to Frers Grundstücksverwaltungs GmbH & Co. KG, Delbrück, Germany at a selling price of € 3,426 thousand. This resulted in a book value loss of € 7 thousand for the company. The receivable from the sale amounting to € 3,426 thousand was still outstanding as of the balance sheet date. The original payment deadline was June 30, 2020. Due to outstanding documents, the receivable was not yet due by the time the annual financial statements were prepared.

Frers Grundstücksverwaltungs GmbH & Co. KG has concluded a rental agreement (concerning one of the developed plots from the sale and lease back transaction) with Voltabox AG as of January 1, 2020. This results in rental expenses of TEUR 10 per month. The rental agreement has a fixed term of 10 years.

As of the balance sheet date, performance guarantees with a maximum amount of € 153 thousand had been provided by Klaus Dieter Frers with respect to paragon GmbH & Co. KGaA's liabilities to banks (prior year: € 153 thousand). Related commission in the amount of € 2 thousand (prior year: € 2 thousand) was paid in the year under review.

Brigitte Frers (wife of Klaus Dieter Frers) is the company's Head of Communication. The company has concluded an employment contract with her subject to normal market terms and conditions (according to XING salary study 2018). She receives annual remuneration in the amount of € 149 thousand (prior year: € 149 thousand), which is comparable with similar positions in the company.

We refer to the consolidated financial statements of Voltabox AG in respect of the related party disclosures for the members of the Management Board of Voltabox AG as well as the members of the Supervisory Board of Voltabox AG, Klaus Dieter Frers (Supervisory Board Chairman), Walter Schäfers and Hermann Börnemeier.

There are other receivables from Klaus Dieter Frers in the amount of € 319 thousand from a payment still to be made to the capital reserve of paragon GmbH & Co. KGaA.

In the fiscal year, paragon GmbH received remuneration of EUR 950 thousand (previous year: EUR 1,033 thousand) for taking over the management of the Company; the expenses were reported as other operating expenses.

The remuneration report is included in the management report.

(47) Share Based Remuneration

The Stock Option Plan 2012 expired on May 8, 2017.

(48) Auditor's Fee

The total fee balanced by the auditor Baker Tilly GmbH & Co. KG, Wirtschaftsprüfungsgesellschaft in the reporting period from January 1 to December 31, 2019 amounts to € 472 thousand (prior year: € 300 thousand). It has been recognized as expense. € 390 thousand (prior year: € 235 thousand) of this fee was paid for audit services, € 82 thousand (prior year: € 65 thousand) for other assurance services and € 0 thousand (prior year: € 0 thousand) for other services. The fee for audit services mainly relates to the audit of the annual financial statements and the audit of the IFRS consolidated financial statements of paragon GmbH & Co. KGaA and Voltabox AG. The fee for other assurance services relates to support services in conjunction with the FREP examination procedure.

(49) Risk Management

The company's risk management is described in the management report.

(50) Application of the Exemption Provisions of Section 264 (3) of the German Commercial Code (HGB)

The following fully consolidated domestic subsidiaries make use of some of the exemption provisions for the year under review (disclosure and audit):

productronic GmbH, Delbrück
SphereDesign GmbH, Bexbach

(51) Declaration Pursuant to Section 160 (1) No. 8 of the German Stock Corporation Act (AktG)

Voting Right Notifications

In the year under review, the company received no notifications pursuant to Section 26 (1) of the German Securities Trading Act (WpHG) that require disclosure in accordance with Section 160 (1) No. 8 of the German Stock Corporation Act (AktG).

Directors' Dealings

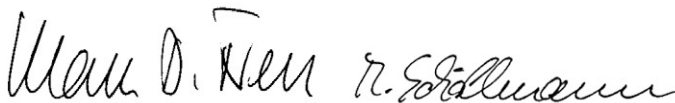
The company received no reports on proprietary transactions by executives in accordance with Art. 19 of the EU regulation No 596/2014 (MAR) on market abuse (market abuse regulation) during the reporting period.

Corporate Governance Declaration

The Declaration of Conformity with the German Corporate Governance Code (GCGC) required under Section 161 of the German Stock Corporation Act (AktG) was most recently submitted on February 28, 2020 and is available to shareholders on a permanent basis on the company's website (<https://www.paragon.ag/>). For the listed subsidiary Voltabox AG, the Declaration of Conformity with the German Corporate Governance Code (GCGC) required under Section 161 of the German Stock Corporation Act (AktG) was most recently submitted in February 2020 and is available to shareholders on a permanent basis on the company's website (<https://www.voltabox.ag/>).

Delbrück, Germany, August 20, 2020
paragon GmbH & Co. KGaA

The Management



Klaus Dieter Frers
Chairman of the Board,
CEO

Dr. Matthias Schöllmann
Managing Director
of Automotive

Independent Auditor's Report

To paragon GmbH & Co. KGaA, Delbrück, Germany

Report on the audit of the consolidated financial statements and the combined management report

Audit Opinions

We have audited the consolidated financial statements of paragon GmbH & Co. KGaA and its subsidiaries (the Group), which comprises the consolidated balance sheet as of December 31, 2019, the consolidated statement of comprehensive income (incl. the consolidated income statement), the consolidated statement of changes in equity and the consolidated cash flow statement for the fiscal year starting January 1 and ending December 31, 2019, as well as the notes to the consolidated financial statements, including a summary of important accounting policies. We have also audited the combined management report of paragon GmbH & Co. KGaA for the fiscal year from January 1 to December 31, 2019.

In our opinion, based on the findings of our audit,

- the enclosed consolidated financial statements comply with IFRS as adopted by the EU and the additional requirements pursuant to Section 315e (1) of the German Commercial Code (HGB), and provide a true and fair view of the net assets and financial position of the Group as of December 31, 2019, as well as its earnings for the fiscal year starting January 1 and ending December 31, 2019, in accordance with these requirements.

- The enclosed combined management report provides a suitable view of the Group's position. The combined management report is consistent with the consolidated financial statements, complies with all statutory regulations and suitably presents the opportunities and risks of future development.
- In accordance with German legal requirements, the declaration on Corporate Governance made in the section "Corporate Governance Statement Pursuant to Section 315d and Section 289f (1) of the German Commercial Code" of the Combined Management Report, the non-financial statement pursuant to Section 289b HGB contained in the section "Sustainability Reporting" and the sections of the Combined Management Report marked as unaudited have not been audited.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any objections to the regularity of the consolidated financial statements and the combined management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and the combined management report in accordance with Section 317 HGB and the EU Audit Regulation (no. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities according to those requirements are further described in the "Auditor's Responsibility for the Audit of the Consolidated Financial Statements and the Combined Management Report" section of our auditor's

report. We are independent of the Group companies in accordance with the requirements of European law and German commercial law and professional rules of conduct, and we have fulfilled our other German professional responsibilities in compliance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided any non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and the combined management report.

Material Uncertainty in Connection with the Continuation of Business Operations

We refer to the disclosures in the notes to the consolidated financial statements in the section “Going Concern” and in the “Risk Report” section of the combined management report under “Liquidity Risks,” in which the legal representatives describe that the Group is in a tight liquidity situation due to the economic development in fiscal year 2019 and the consequences of the corona pandemic. As discussed in the forementioned sections, these events and circumstances, together with other matters discussed therein, indicate the existence of material uncertainty that could cast significant doubt on the company’s ability to continue as a going concern and which represents a risk threatening the existence of the Group within the meaning of Section 322 (2) sentence 3 HGB. Our audit opinions have not been altered in respect to this matter.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from January 1 to December 31, 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our opinion, the following matters were most significant in our audit:

- Appropriateness of the going concern assumption
- Impairment of goodwill
- Measurement of capitalized development costs

Our presentation of these key audit matters has the following structure:

- 1.) Specific matter and problem
- 2.) Audit approach and findings
- 3.) Further information

I. Appropriateness of the Going Concern Assumption

1.) The consolidated financial statements of paragon GmbH & Co. KGaA have been prepared under the going concern assumption. In view of the coronavirus pandemic and its consequences on the macroeconomic situation alongside the associated decline in revenue, the Management withdrew its previous revenue and earnings forecast for the 2020 fiscal year on March 27, 2020. The Management also believes that there is significant uncertainty about the duration and impact of the pandemic and the resulting consequences for the Group’s financial position. The tight liquidity situation at the time of reporting has been stabilized by extensive deferral agreements with creditors. An essential component of liquidity planning is the (partial) sale of shares in Voltabox AG in particular. The sales negotiations are reportedly in the final phase.

2.) Based on the adjusted income and liquidity planning for the 2020 fiscal year, we have assessed, both for the Group companies and for the Group as a whole, whether the Management’s assessment of the paragon Group’s ability to continue as a going concern is appropriate. To this end, we first checked the submitted planning for formal consistency (mathematical accuracy, correct implementation of the underlying premises). In addition, we compared the planning assumptions (especially with regard to the revenue forecast) with existing customer orders and checked the plausibility of the main cost types. We inspected existing deferral agreements with creditors on a random basis. We have informed ourselves

about the status and progress of the process to sell the shares in Voltabox AG. In our opinion, the going concern assumption on which the legal representatives are acting has been reasonably and appropriately derived from the budget planning.

3.) The information provided by the company to assess its ability to continue as a going concern is contained in the risk and forecast report of the combined management report as well as in section 3 of the notes to the consolidated financial statements.

II. Impairment of Goodwill

1.) In the consolidated financial statements of paragon GmbH & Co. KGaA, € 22.4 million is reported under the balance sheet item "goodwill," which is subject to an impairment test by the company as of December 31 of each fiscal year. The fair values are determined using a valuation model based on the discounted cash flow method. The result of this valuation depends to a large extent on the estimation of future cash inflows by the legal representatives and the discount rate used and is therefore subject to considerable uncertainty. Against this background, the assessment of the recoverability of goodwill within the scope of our audit was particularly important.

2.) We first investigated the appropriateness of the planning process for the cash-generating units to which goodwill has been allocated by assessing how the planning is prepared and approved. To this end, we held discussions with those responsible for planning and for cash-generating units to which significant goodwill has been allocated. We assessed the planning and the assumptions underlying it for comprehensibility and consistency with our knowledge of the unit and other audit findings. We also reviewed and assessed the valuation method (discounted cash flow method) used to determine the recoverable amount of the cash-generating units, and in particular the discount rates used. In addition, we independently estimated the respective values for cash-generating units to which significant goodwill has been allocated based on the approved plans for these units using our own valuation models. Our independent estimates are consistent with the Management's findings after valuation allowances regarding the recoverability of goodwill.

3.) The company's disclosures on goodwill are given in Note (22) to the consolidated financial statements.

III. Measurement of Capitalized Development Costs

1.) As of December 31, 2019, the Group has reported capitalized development work in its balance sheet as intangible assets in the amount of € 44.4 million. Due to the significant overall effects of this item on the Group's net assets and earnings and the complexity of accounting and measurement, the capitalized development costs were particularly important for the purpose of our audit.

2.) Within the scope of our audit of the capitalized development costs, on a test basis we conducted disclosure-related audit activities and a system audit in order to review the measurement of capitalized development costs. We reviewed the methodological approach applied in the measurement of capitalized development costs and evaluated this calculation in terms of its amount. For this purpose, for the selected samples the project documentation was analyzed, discussions were held with the project manager responsible and the related planned profit contribution calculation was analyzed. Our audit did not give rise to any objections to the recognition of own work capitalized in the balance sheet.

3.) The company's disclosures concerning the effects of the capitalization of development costs are included in the Notes to the consolidated financial statements, mainly in the following sections: "(9) Description of Accounting Policies and Measurement Methods – Intangible Assets," "(10) Use of Estimates and Assumptions – Capitalized Development Costs," "(13) Other Own Work Capitalized" and "(21) Intangible Assets."

Other Information

The company's legal representatives and the Supervisory Board are responsible for the other information. Other information include the declaration on corporate governance pursuant to Section 289f (1) HGB provided in the section "Corporate Governance Statement Pursuant to Section 315d and Section 289f (1) of the German Commercial Code" of the Combined Management Report, the non-financial statement in accordance with Section 289b HGB contained in the section "Sustainability Reporting"

and the sections of the Combined Management Report marked as unaudited. The other information also include the residual parts of the Annual Report, with the exception of the audited consolidated financial statements, the audited combined management report and our auditor's report, as well as

- the declaration by the legal representatives in accordance with Section 264 (2) Sentence 3 HGB (German Commercial Code) for the consolidated financial statements and the declaration by the legal representatives in accordance with Section 289 (1) Sentence 5 HGB for the combined management report,
- the Corporate Governance Report pursuant to No. 3.10 of the German Corporate Governance Code (in the 2017 version) and
- other parts of the annual report of paragon GmbH & Co. KGaA, Delbrück for the fiscal year ended December 31, 2019, which are not subject to audit.

Our audit opinions on the consolidated financial statements and the combined management report do not cover this other information, and consequently we do not express an audit opinion or any other form of audit conclusion thereon.

In connection with our audit, our responsibility is to read this other information and, in so doing, to consider whether this other information

- is materially inconsistent with the consolidated financial statements, the combined management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibility of the Company's Legal Representatives and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The company's legal representatives are responsible for the preparation of the consolidated financial statements that comply with the IFRS as adopted by the EU as well as the German supplementary statutory regulations

applicable under Section 315e (1) HGB in all significant respects and for ensuring that the consolidated financial statements provide a true and fair view of the net assets, financial position and earnings of the Group in accordance with these provisions. In addition, the company's legal representatives are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the company's legal representatives are responsible for assessing the Group's ability to continue as a going concern. They are also responsible for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the company's legal representatives are responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the company's legal representatives are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and the combined management report.

Auditor's Responsibility for the Audit of the Consolidated Financial Statements and the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German generally accepted standards for the audit of financial statements promulgated by IDW will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement in the consolidated financial statements and the combined management report, 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 audit opinions. 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 of the consolidated financial statements and of arrangements and measures relevant to the audit of the combined management report, in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the company's legal representatives and the reasonableness of estimates made by the company's legal representatives and related disclosures.
- Draw conclusions regarding the appropriateness of the company's legal representatives' 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 Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective audit opinions. 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 Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events such that the consolidated financial statements give a true and fair view of the net assets, financial position and earnings of the Group in compliance with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and the combined management report. We are responsible for the direction, supervision and per-

formance of the audit of the consolidated financial statements. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with German law and the view of the Group's position that it provides.
- Perform audit procedures regarding the prospective information presented by the company's legal representatives in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the company's legal representatives as a basis for the prospective information, and evaluate whether this prospective information has been properly derived from these assumptions. We do not express a separate audit opinion on this prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We discuss 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 the relevant independence requirements, and discuss with them any relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

On the basis of the matters discussed with the persons charged with governance, we determine the matters that were of most significance in the audit of the consolidated financial statements for the current period under review and are therefore the key audit matters. We describe these matters in our auditor's report unless any law or other regulation precludes public disclosure of this matter.

Other legal and regulatory requirements

Further Information Pursuant to Article 10 of the EU Audit Regulation

We were elected as the auditor of the consolidated financial statements by the Annual General Meeting held on May 15, 2019. We were engaged by the Supervisory Board on December 14, 2019. We have audited the consolidated financial statements of paragon GmbH & Co. KGaA without interruption since fiscal year 2013.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the Supervisory Board pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German public accountant responsible for the audit

The public accountant responsible for conducting the audit is Christoph Tyralla.

Düsseldorf, August 20, 2020

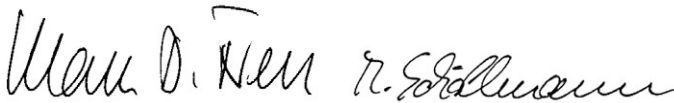
Baker Tilly GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
(Düsseldorf)

Thomas Gloth
German Public
Accountant

Christoph Tyralla
German Public
Accountant

Declaration by the Legal Representatives

We declare that to the best of our knowledge and in accordance with the applicable accounting principles, the consolidated financial statements give a true and fair view of the assets, financial position and earnings of the Group, and that the combined management report presents the development of business, including the business results and the position of the Group, in such a way that a true and fair view is conveyed and the significant opportunities and risks of the Group's foreseeable development are described.



Klaus Dieter Frers
Chairman of the Board,
CEO

Dr. Matthias Schöllmann
Managing Director,
Automotive

Financial Calendar

August 20, 2020	2019 Annual Report – consolidated financial statements
August 20, 2020	Group interim report as of March 31, 2020 – First Quarter
September 4, 2020	Group interim report as of June 30, 2020 – Half-year
September 15, 2020	Annual General Meeting, Delbrück (Virtual)
September 29, 2020	Family Office Day, Vienna
November 12, 2020	Group interim report as of September 30, 2020 – Nine Months
November 16–18, 2020	Equity Forum (Virtual)

Imprint

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