INTELLIGENT GREEN SOFTWARE

PSI

ANNUAL REPORT **2019**

INTELLIGENT GREEN SOFTWARE

An Overview in Figures

The energy consumption of reheating furnaces can be reduced by up to

25%

with PSImetals

Involvement in

10

research projects on the energy grids of the future

1

international award for the pioneering smart grid project LINDA

10.7%

of revenues spent on research and development

Up to

240

electric buses can be charged in the first bus depot managed with PSI software

1

award as one of the most valuable German companies in terms of sustainability

Up to

50%

more renewable energy can be transported with intelligently managed power lines

Transportation costs and emissions can be cut by

10%

with PSI logistics software

PSI GROUP IN FIGURES

in EUR million	2019	2018	%
Revenues	225.2	199.2	13.0
Operating result	17.2	15.5	11.0
Earnings before taxes	16.4	14.5	13.1
Group net result	14.3	10.6	25.6
Shareholders' equity	94.5	86.6	8.1
Equity ratio (in %)	38.0	41.5	–9.4
Return on equity (in %)	14.2	12.2	16.4
Investments*	11.8	7.8	51.2
Research and development expenses	24.0	22.0	9.1
Research and development ratio (in %)	10.7	11.0	–0.3
New orders	236	217	8.8
Order backlog on December 31	142	139	2.2
Employees on December 31 (number)	1,984	1,787	11.0

* Company acquisitions, intangible assets, property, plant and equipment

OUR SEGMENTS

Energy Management

Intelligent solutions for energy grid operators and for public transport. The focus here is on reliable and cost-effective solutions for intelligent grid management and safe operation of transport systems, as well as solutions for energy trading and distribution.

	2019	2018
Revenues*	115,755	99,706
Operating result*	7,199	6,766
Employees	1,030	902

* in EUR thousand

Production Management

Software products and solutions for production planning, production control and logistics. The focus is on optimizing the use of resources and cost-effectiveness in the metals industry, machinery/plant engineering, the automotive industry and logistics.

	2019	2018
Revenues*	109,425	99,450
Operating result*	11,763	10,004
Employees	954	885

* in EUR thousand

PSI – INTELLIGENT SOFTWARE OPTIMIZES ENERGY AND MATERIAL FLOWS

PSI software products stand for safe, environmentally friendly and efficient energy supply and optimized production and logistics processes worldwide.

As an independent software producer, PSI has been a technological leader in process control systems for energy grid operation and industrial production since 1969. PSI software ensures efficient use of energy, labor and raw materials in the target sectors. In the Energy Management segment, PSI products support electricity and gas grids, heating, cooling and water networks, energy trading and public transport. In the Production Management segment, PSI software ensures efficiency in raw material extraction, metals production, automotive manufacturing, mechanical engineering and logistics. To this end, PSI has been successfully relying on a combination of artificial intelligence methods and other industrially proven optimization methods for two decades.

CONTENTS

INTELLIGENT GREEN SOFTWARE

For more than 50 years, PSI software solutions have been helping the energy industry and energy-intensive sectors increase efficiency and make responsible use of energy, raw materials and labor. PSI supports the 17 sustainability goals of the United Nations. With its advanced products, PSI particularly contributes to sustainable energy supply, sustainable production, resilient infrastructure and sustainable cities.

“We are preparing for the new age of B2B Internet and investing in an automated multi-cloud collaboration platform.”

Dr. Harald Schrimpf, 55
Chairman

Responsibilities: Marketing, Sales, Technology and Investor Relations

Harald Fuchs, 55
Member of the Board of Directors

Responsibilities: Organization, HR, Finances and Controlling

Ladies and gentlemen,

In 2019, the year of its fiftieth anniversary, PSI Software AG increased its revenues by 13% from EUR 199 million to EUR 225 million and its operating result by 11% from EUR 15.5 million to EUR 17.2 million. With strong license income in December, we managed to exceed the target of revenues of EUR 220 million and an operating result of “almost” EUR 17 million after all. In addition to the new orders of EUR 236 million from 2019, there were maintenance and upgrade fees of EUR 70 million at the start of the year, meaning that we will continue our growth in 2020, too. The market in Russia has returned to the range of tens of millions of euros and will make another good contribution in 2020.

The Production Management segment grew by 10% to EUR 109.4 million and increased its operating result by 18% to EUR 11.8 million. We achieved this in spite of the severe steel crisis in Central Europe by acquiring more orders from the U.S., Russia and China. We also managed to offset the effects of the diesel crisis, as we had developed a particular strength in swarm production for electric vehicle manufacturing in good time. In Poland, we are still growing strongly with orders for logistics, production and energy grids.

In the Energy Management segment, we acquired BTC Smart Grid with 170 employees and 100 customers and integrated it at a cost of EUR 2.1 million. There were further expenses from pilot projects in energy trading and energy schedule management in Germany and from a savings program in Malaysia. For this reason, the operating result of our Energy segment rose by only 6% to EUR 7.2 million, whereas revenues grew by 16% to EUR 115.8 million.

Green and Intelligent

In the climate debate, PSI believes that it has the ability and the obligation to contribute to the transition in energy, transport and heating with intelligent software and specialized hardware. The PSI Board of Managing Directors is involved in the Energy Transition Forum, a partner program of the United Nations Foundation, in order to work on solving tough questions in the energy transition on an interdisciplinary basis. No other grid control software is able to integrate such large quantities of fluctuating renewable energy with intelligent grid control as PSIcontrol with PSIsaso. In addition to several orders in Central Europe, we thus also received the first three orders from windy regions of North America in 2019.

With regard to the electrification of transport, PSI delivered the first German electric bus charging and depot management system and acquired additional orders in Germany and France. PSI is involved in research and development of mobility software for self-driving electric buses, electric cars and electric driverless transportation systems in industry. We see methane gas with its high share of hydrogen and increasing generation from wind power electrolysis (power-to-gas) or as biogas as indispensable fallbacks during lulls in renewable power generation. Our software manages heating grids and hydrogen and biodiesel pipelines, and will also manage CO_2 recycling in the future. We have already reduced business with software for non-decarbonizable raw materials to the per-thousand range. PSI Software makes a significant contribution to the energy-efficient, resource-conserving and environmentally friendly production of basic materials and finished products. Almost all German manufacturers of electric vehicles use PSI production software for swarm production or for sequence optimization in their plants.

In densely populated countries such as Germany, there is an increasing lack of space for the energy transition, making it necessary to push forward with the urban energy transition in centers of consumption. With more than thirty major references, PSI is the clear market leader with software for integrated energy through combined systems in cities, in neighborhoods, in infrastructure and in industry. With the acquisition and integration of BTC Smart Grid as at January 1, 2019, PSI has gained additional expertise and customers, for example in integrated energy at municipal utilities, the biggest heating grid in Europe and large offshore wind farms. We are already doing research on the next software generation with self-learning configuration for the management of decentralized energy systems.

The climate action program in Germany and the European Union's Green New Deal are in the mid tens of billions and in the hundreds of billions of euros, respectively. However, the fate of solar manufacturers and the wind turbine industry, powerline construction, virtual power plants and grid storage systems indicates that it is important to be equipped for delays and complications in the implementation of these programs. More reliable than political programs are the long-term learning curves of the solar, wind and battery storage industry, which will push the price per kilowatt-hour of renewable energy below that of fossil fuels in most climate zones within this decade. After decades of an ethically motivated, expensive energy transition, a much bigger, commercially driven energy transition is thus beginning – with major opportunities for global climate protection and for PSI.

Transition

PSI pressed ahead with its product and platform strategy again in 2019. Two thirds of the products have been migrated to the PSI Java platform, and we are working hard on the remaining third. All products on the platform not only have shared components and tools, but also now run on the Internet (or intranet) and on mobile devices without requiring modification. Higher software modules are now combined on the platform in order to increase duplication and thus profitability further. Three hundred employees at sales partners and in the Group's IT departments design business processes and user interfaces for their end customers with the unique PSI Click Design and business process editor. Although PSI is deeply rooted in the niche of energy and material flow optimization, we are preparing technologically and operationally for the new age of B2B Internet and investing in the expansion of the PSI Java platform into an automated multi-cloud collaboration platform.

Thanks and Respect

PSI's Board of Directors would like to thank the customers for their trust, fair cooperation and, in particular, exciting future projects. We would like to thank our employees for thousands of hours full of creativity and dedication, and our employees' families for their understanding and support for their loved ones. Our special thanks go to all those who are working hard on PSI's transformation into a modern one-platform company!

Outlook for 2020

Before the coronavirus crisis, PSI was aiming to continue its growth and increase its operating result by another 10% in 2020. However, the coronavirus will lead to delays in contract awards. At the same time, PSI is also important for crisis management for many customers. PSI had already equipped all 2,000 employees in advance with notebooks and remote access for working from home. Due to the high order backlog, the management therefore currently anticipates slightly weaker revenues and a one-off 20% decline in the operating result.

Dr. Harald Schrimpf

Harald Fuchs

Karsten Trippel,
Supervisory Board Chairman

REPORT BY THE SUPERVISORY BOARD

Dear PSI shareholders,
Dear friends and partners of our company,

As in the previous years, the Supervisory Board worked in trusting cooperation with the Board of Directors in the 2019 fiscal year. Its work particularly focused on the Group's current financial situation in the context of the economic environment, the medium-term corporate planning and the strategic development of the Group. We therefore regularly monitored the Board of Directors' work and provided advice according to the law, the company's Articles of Association and the German Corporate Governance Code. The Board regularly informed us promptly, in writing and orally about the situation of PSI Software AG. On this basis, we discussed business performance and decisions in detail. The Board of Directors fully met its obligations to provide the Supervisory Board with information.

The Supervisory Board ensured that the law, the Articles of Association and the rules of procedure of the Supervisory Board and the Board of Directors were complied with. It passed the resolutions required by the law and the Articles of Association. When business transactions required the Supervisory Board's approval, it discussed them in depth with the Board of Directors before passing a resolution. Cooperation between the Supervisory Board and the Board of Directors was always constructive and purposeful.

The Chairman of the Supervisory Board was also in regular contact with the Board of Directors outside of Supervisory Board meetings and was informed about the business situation and material business transactions. The consultation between him and the two Board of Directors members was ongoing and extensive. The Supervisory Board Chairman shared the material information from each of these exchanges with the other members of the Supervisory Board.

Main Areas of Discussion for the Supervisory Board

In the performance of its monitoring function, the Supervisory Board's discussions included the following main topics:

- Development of new orders, revenues and earnings of the PSI Group and the individual business units
- Ongoing supervision of the integration of BTC AG's Smart Grid division, acquired as at January 1, 2019
- Discussion of the export strategy in the metals sector in view of the European steel crisis
- Supervision of measures to improve earnings and further reduce risks in Southeast Asia
- Ongoing supervision of further steps in the Group's transformation to a product-based business model with a focus on increasing the share of recurring revenue
- Supervision of the digital sales and service initiative to digitalize and automate support for customers and partners to a greater extent
- New invitation to tender for the audit of the PSI Group's financial statements and development of a proposal for the election of the auditor for the 2020 fiscal year

Supervisory Board Meetings and Key Topics

The Supervisory Board held six ordinary meetings in order to perform its duties in 2019. It was in full attendance at all meetings. The key topics addressed by the Supervisory Board and the dates of the meetings are summarized in the table below:

March 19, 2019	Adoption of the 2018 annual financial statements
April 26, 2019	Preparation for the Annual General Meeting
September 4, 2019	Discussion of the Group strategy and its implementation status
September 5, 2019	Discussion of the current development of operating business
December 5, 2019	Audit of the Supervisory Board's work
December 6, 2019	Discussion of the Group's future development and strategy

In addition to the financial performance of PSI Software AG and the Group, the Supervisory Board also concerned itself with the development of individual subsidiaries, paying particular attention to their activities abroad. The Supervisory Board was also provided detailed information from the Board of Directors on an ongoing basis regarding the development of the business and financial situation, the risk situation, the market and competitive situation and the personnel situation in these areas.

Work of the Supervisory Board Committees

The Supervisory Board has formed two committees.

The Personnel Committee deals with the employment contracts and personnel matters of the Board of Directors. The committee met three times in the fiscal year with full attendance. Among other things, it dealt with the structure of Board of Directors remuneration. This focused in particular on the vertical comparison between the remuneration of top management and the remuneration of the workforce of PSI as a whole – as required by the German Corporate Governance Code. The remuneration system for the members of the Board of Directors was presented to the Annual General Meeting on May 16, 2019, where it was approved by a majority of 74.07%.

The Audit Committee is particularly concerned with issues of accounting and risk management. The committee met three times in 2019, with one meeting serving to prepare the adoption of the annual financial statements and the approval of the consolidated financial statements. All three meetings were attended by all committee members.

Corporate Governance

As in previous year, the Board of Directors and the Supervisory Board monitored the Group's compliance with the rules of the German Corporate Governance Code. The Supervisory Board adopted the declaration of compliance according to section 161 of the German Stock Corporation Act on December 5, 2019. The company fulfils the majority of the Code's recommendations. The few deviations are explained in the corporate governance report, which was published in connection with the corporate governance declaration on the website at **www.psi.de.**

The Supervisory Board examined the efficiency of its own work again at an audit meeting in 2019.

In the 2020 fiscal year that has now begun, the company's corporate governance will once again be an important aspect of the work of the Supervisory Board and its committees. As at January 1, 2020, new legal provisions came into effect that also relate to the remuneration system for the Board of Directors. The German Corporate Governance Code was also reformed recently, issuing several new recommendations and proposals with regard to the remuneration of the Board of Directors. The Personnel Committee and the Supervisory Board will therefore carefully review the remuneration systems for the members of the Board of Directors, adapt it to the new requirements and then present it to the Annual General Meeting in 2021 for approval again.

Composition of the Supervisory Board and the Committees

In the 2019 fiscal year, the Supervisory Board comprised the shareholder representatives Karsten Trippel (Chairman), Prof. Ulrich Wilhelm Jaroni (Deputy Chairman), Andreas Böwing and Prof. Uwe Hack and the employee representatives Elena Günzler and Uwe Seidel. The Personnel Committee comprised the Supervisory Board members Karsten Trippel as Chairman, Prof. Ulrich Wilhelm Jaroni and Elena Günzler, while the Audit Committee comprised the Supervisory Board members Prof. Uwe Hack (Chairman), Andreas Böwing, Prof. Ulrich Wilhelm Jaroni, Uwe Seidel and Karsten Trippel.

Training and Development

The company supports the members of the Supervisory Board when they take office and with training and development measures. In the 2019 fiscal year, the employee representatives took part in a conference for Supervisory Board members lasting several days.

Audit of Annual and Consolidated Financial Statements

At the Annual General Meeting of PSI Software AG on May 16, 2019, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft was elected as the auditor of the financial statements. This company audited the annual financial statements, the management report, the consolidated financial statements and the consolidated management report for the fiscal year from January 1 to December 31, 2019, and issued an unqualified audit opinion in each case.

All Supervisory Board members received the financial statements and management reports, the auditor's reports and the Board of Directors' proposal on the appropriation of net profit after they were compiled and in due time ahead of the meeting convened to approve the annual accounts. After preparatory discussion by the Audit Committee, the Supervisory Board as a whole dealt with these documents at its meeting on March 20, 2020. These meetings were attended by members of the Board of Directors and representatives of the auditor. The latter reported on the audit in general, the audit priorities set, the material findings of the audit and the services that the auditor provided in addition to the audit services, and answered the Supervisory Board members' questions. There were no objections from the Supervisory Board, which therefore acknowledged and approved the results of the audit.

The Supervisory Board examined the consolidated financial statements and Group management report and the annual financial statements and management report for 2019 as well as the results of the audit by the auditor. In accordance with the conclusive findings of these examinations, it raised no objections and adopted the annual financial statements and approved the consolidated financial statements on March 23, 2020.

In addition, the Supervisory Board also reviewed the Board of Directors' (separate) non-financial CSR report for the company and the Group for 2019 and discussed it with the Board of Directors at the meeting on March 20, 2020. There were no objections to be raised, so the Supervisory Board also approved the CSR report.

In 2019, PSI recorded another increase in demand for solutions for the intelligent management of energy grids, the electrification of transport and the still booming logistics sector, causing new orders to rise further despite the weak situation in the European steel industry. Thanks to good year-end business, the PSI Group managed to compensate for the negative impact from the integration of the acquired BTC Smart Grid division and increase its new orders, revenues and earnings in 2019 as planned. In 2019, PSI continued to benefit from the technology investments made in recent years, which also form the basis for further increases in earnings. As in previous years, important new customers were acquired, and follow-up orders from existing customers were obtained in Germany and in export business. The successes achieved jointly by the Board of Directors, management and employees against the backdrop of dynamic changes in many target markets deserve recognition and respect. The Supervisory Board therefore thanks everyone involved for the work they have done and for their great commitment.

It also thanks customers and shareholders for the confidence they showed in 2019. In 2020, PSI will continue to work with all its strength on being a reliable partner for its customers and supporting them with innovative solutions for managing changes on their markets and the continuing digitalization of their business processes. Satisfied reference customers will continue to be the basis for gaining further new customers in the future and continuing PSI's positive development.

Berlin, March 2020

Karsten Trippel
Supervisory Board Chairman

Advancing the Energy Transition

Under the climate action program, the German energy sector is expected to make an important contribution to global climate protection. The share of electricity consumption from renewable energy is to rise to 65% by 2030, and electricity from coal is to be phased out by 2038. Combined with the expansion of electric mobility, this will place high demands on the distribution grids. Their operators are called upon to invest in the intelligence and controllability of the grids – with the German federal government promising good financing conditions for this.

PSI Benefits from Global Investments in Renewable Energy

The cost of generating renewable energy has been falling for years, chiefly due to further development of the technologies used and the growing size and number of systems installed. As a result, renewable energy is becoming an affordable alternative to conventional energy generation in more and more regions of the world. PSI software enables grid operators around the world to control and make optimal use of volatile wind and solar power. In this way, existing grids can be used better, and the costs of grid infrastructure can be reduced.

INTELLIGENT MANAGEMENT FOR COMPLEX GRIDS

The huge expansion of renewable energy together with the phasing out of coal and nuclear power is creating enormous fluctuations and growing complexity in the grids, which will require a great deal of intelligence to control.

MOVING INTO THE FUTURE OF ENERGY WITH GREEN GAS

Gas infrastructure is the climate-friendly answer to many questions of the energy transition. As a flexible reserve energy, reliable storage technology and part of the transition in heating, gas makes an important contribution to clean energy supply.

Gas as an Energy Source with a Future

Natural gas is already far superior to other conventional energy sources when it comes to emissions. With technologies such as power-to-gas, bio-methane and increased use of hydrogen, emissions are being reduced further. At the same time, power-to-gas enables surplus renewable energy to be used effectively.

Managing Hydrogen and Green Gas with Intelligent Software

With a distribution network of almost 500,000 kilometers and high storage capacity, Germany already has very good gas infrastructure that is to be made fit for a growing share of hydrogen and green gas over the coming years. Large parts of this infrastructure are already being managed safely and efficiently with PSI software that offers special features – such as reliable leak detection for hydrogen pipelines.

COMBINING ENERGY SYSTEMS

In the areas of heating, cooling and transport, fossil fuels are also increasingly to be replaced by electricity from renewable sources. This is possible by means of integrated energy – the intelligent connection of all sectors to form a single energy system.

Integrated Energy Transition: Combining Everything with Everything

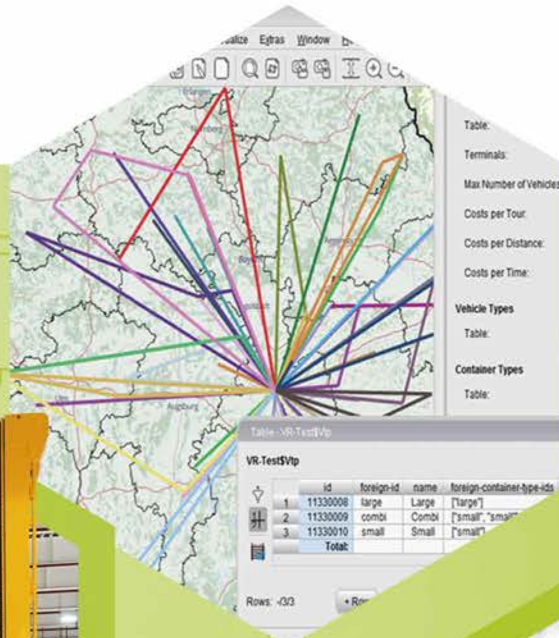
With our intelligent software, we have long been facilitating combined systems, i.e. the management of electricity, gas, water and heating infrastructure in a uniform system. We also support the inclusion of the transport sector through the integration of smart charging.

Using Renewable Energy in All Sectors

In other sectors, too, increased use of electricity from renewable sources is leading to higher complexity and greater fluctuations in electrical distribution grids. This arises, for example, from the growing share of electric vehicles, increased use of heating pumps in the building sector and the use of power-to-gas. This presents PSI with additional market opportunities for new, AI-based features that facilitate safe and efficient grid management.

Investments in Clean Transport and Smart Logistics

The expansion of public transport is giving rise to a growing need for software solutions for intelligent vehicle, train and depot management. The necessary charging infrastructure for electric mobility must be integrated in the existing electricity grids and managed in an intelligent way. In order to realize potential savings in goods transportation, existing logistics chains must be optimized with intelligent software.



Growing Demand for Intelligent Transport Solutions

PSI's control system software helps serve the growing demand for reliable and efficient local public transport services. Depot management with integrated charging optimization establishes the framework for the electrification of bus fleets. Our software for strategic logistics optimization optimizes operating times, capacity utilization, emissions, location costs and transport costs.

MAKING TRANSPORT CLIMATE-FRIENDLY

Expanding public transport and promoting electric mobility are key elements for reducing transport emissions. The optimization of supply chains in goods transportation offers additional potential.

INTELLIGENT SWARM PRODUCTION FOR ELECTRIC VEHICLES

The expansion of electric mobility requires significant investments in new vehicle models and production lines. This presents the opportunity to use more efficient production processes right from the start.

Efficiently Advancing Electric Mobility

The climate action program calls for at least seven million electric vehicles to be registered in Germany by 2030, which will require investments by vehicle manufacturers and suppliers. At the same time, the industry is expected to increase its energy and resource efficiency, partly through digitalization and Industry 4.0.

New, Flexible Forms of Production Require New Software

PSI software allows for innovative Industry 4.0 swarm production, thereby ensuring flexible and efficient production processes. Instead of fixed conveyor belt structures, production is based on driverless transportation systems managed using industrial artificial intelligence methods, thereby cutting time and costs by up to 20%. This higher flexibility also allows for individually configurable model variants at affordable prices.

More Efficiency for Lower Emissions

By introducing new technologies and taking advantage of existing savings potential, emissions in the metals industry can be reduced significantly in the long term – even to the point of CO_2-neutral steel production. Short-term savings effects can be achieved by way of improvements in production and sequence planning and optimization of energy use.

Realizing Savings Potential with Intelligent Software

In the metals industry, PSI software helps increase efficiency and use energy and raw materials responsibly. By optimizing the entire supply chain using industrial artificial intelligence, significant productivity gains can be achieved. Integrated energy management allows for energy-optimized production planning and the use of quantities of energy that are released during production. Overall, a 10% increase in throughput and a 10% decrease in energy consumption can be achieved.

RESOURCE-EFFICIENT STEEL AND ALUMINUM PRODUCTION

Energy-intensive industrial sectors such as metal production are also to reduce their emissions in the future. First, there will be associated subsidy programs for the development of climate-friendly processes, and second, efficiency will need to be increased by way of optimization.

With PSI Click Design, user interfaces can easily be adjusted during runtime using drag-and-drop.

FIT FOR THE FUTURE THANKS TO MODERN PLATFORM

The modern PSI technology platform forms the basis for the functionally attractive and future-proof product portfolio

With the Group's own software platform based on Java technology, PSI has modern, scalable technology with outstanding characteristics. Here, PSI combines in-depth industrial process knowledge with the whole range of artificial intelligence methods. The platform ensures independence from technology cycles and individual database and operating system manufacturers.

The model-based, object-oriented software architecture allows for highly productive development and implementation at the customer. Business processes are supported in real-time and optimized using a range of different artificial intelligence methods. By means of integrated business process modelling, the business logic can be mapped simply and individually in the software and automated using workflow management. PSI Click Design, which is also integrated, offers individually modifiable user interfaces that can easily be adjusted using drag-and-drop and saved in profiles. Thanks to the WORA (write once, run anywhere) principle, user interfaces and PSI Click Design are identical on desktop clients, web interfaces and mobile applications.

THE PSI SHARE

In 2019, most stock indices reached new highs. Even the uncertainty over international trade conflicts and Brexit had only a temporary negative impact on the markets. With the rise of the Fridays for Future movement, climate protection became a major topic on the capital markets, too.

Analyst Recommendations on the PSI Share in 2019

–1	+1	=	+1.96
6	**1**	**0**	**22.13**
positive	neutral	negative	Average price target of EUR

Share Performance during the Year

Modest Start to the Year and Final Spurt at the End of the Year

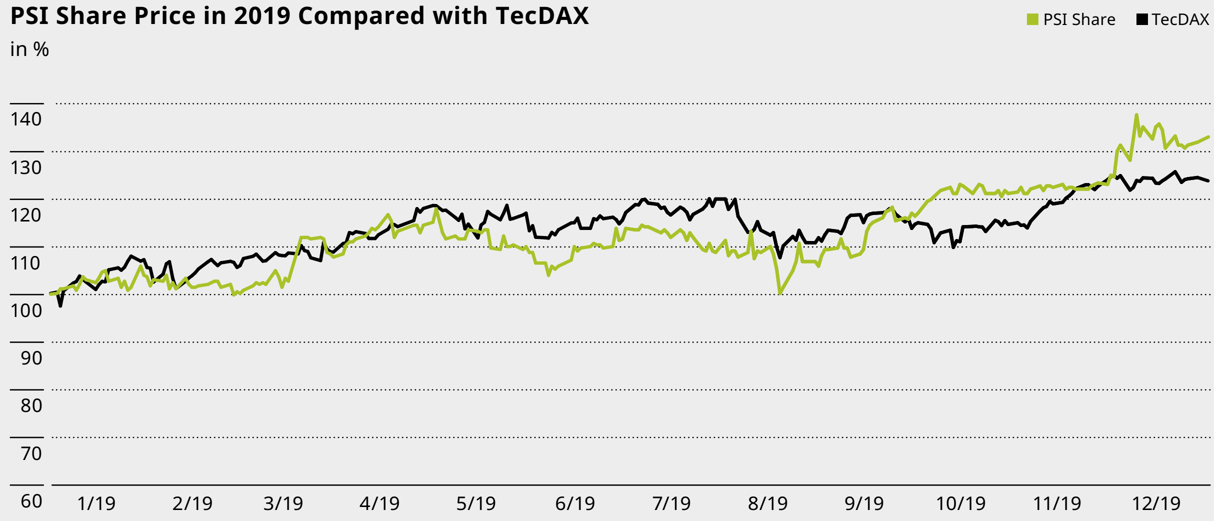
The PSI share price started 2019 at EUR 15.65, tracked sideways until the publication of the annual report in March and then rapidly climbed to EUR 18.75 by the end of April. After the figures for the first quarter were published, it returned to a sideways trend before dropping to its low for the year of EUR 15.25 in August. As a result of increased discussion of the climate action program, the share price started to move up again and reached its high for the year of EUR 21.70 in early December, before ending the year at EUR 20.80 – up 32.9% on the previous year's closing price.

Continuous Dialogue with the Capital Market

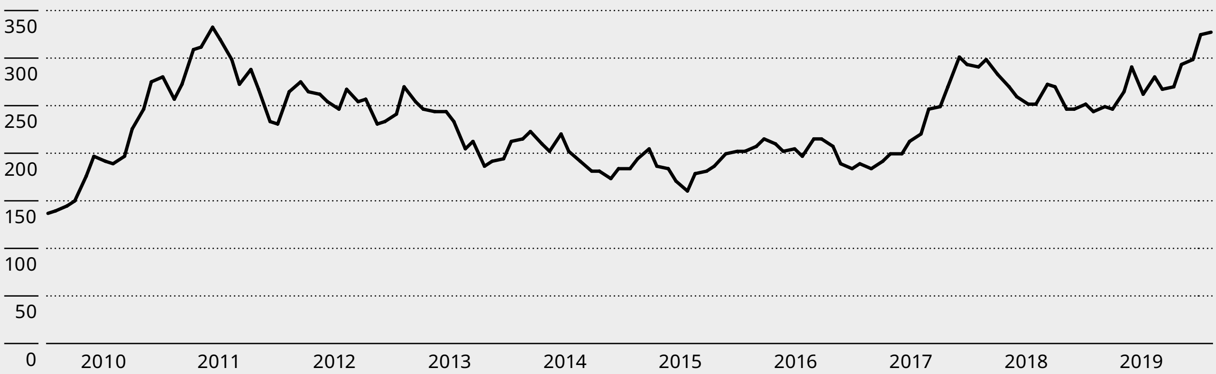
In 2019, we once again communicated actively and intensively with the capital market. We presented PSI at 15 investor conferences and roadshows in Europe and the USA. In addition, we were visited by investors and investor groups on 13 occasions and were in close contact with various investors by telephone. We maintained intensive dialogue with financial and business journalists, resulting in 60 positive reports on PSI in print media, in online media and on stock market radio and TV. Once again, the most important topic was PSI's long-term transformation strategy. As a result of the intensive public debate, PSI products' positive contribution to climate protection and the resulting opportunities for PSI increasingly became a focus of discussions with investors and journalists.

PSI Share Price in 2019 Compared with TecDAX

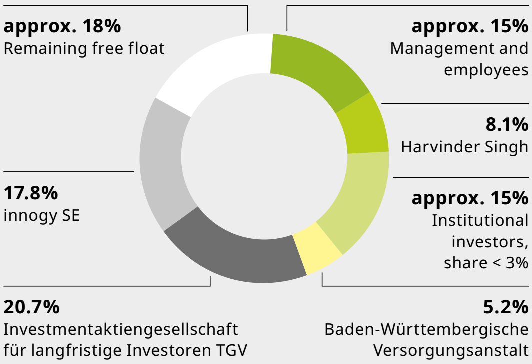
in %



PSI Market Capitalization, 2010–2019
in EUR million



Shareholder Structure on December 31, 2019:



Key Figures and Data on the PSI Share

Key Figures on the PSI Share	2019	2018
Earnings per share in EUR	0.91	0.68
Market capitalization on December 31 in EUR	326,505,213	245,663,778
High for the year in EUR	21.70	20.50
Low for the year in EUR	15.25	14.25
Number of shares on December 31 in EUR	15,697,366	15,697,366

Data on the PSI Share

Stock exchanges	Xetra, Frankfurt, Berlin, Stuttgart, Düsseldorf, Hamburg, Hanover, Munich, Tradegate
Stock exchange segment	Regulated Market, Prime Standard
Inclusion in indices	Technology All Share, DAXsector Software, DAXsector All Software, DAXsubsector Software, DAXsubsector All Software, Prime All Share, CDAX
ISIN	DE000A0Z1JH9
Securities identification number (WKN)	A0Z1JH
Stock exchange symbol	PSAN

Creating Long-term Value

Transforming into a Software Product Provider

In 2019, PSI continued to press ahead with its transformation into a software product provider with long-term customer relationships and increasing recurring revenues. To this end, we invested heavily again in standardizing our product base on the basis of the technologically leading PSI technology platform PJF. Innovative technologies such as PSI Click Design and parallel support of web and desktop clients enhance the products' attractiveness and profitability, thereby increasing enterprise value.

Industrial Artificial Intelligence Brings Competitive Advantages

PSI combines the outstanding industry expertise it has gathered over five decades with more than 50 different artificial intelligence methods that create tangible competitive advantages for customers and thereby make them fit for technological change and the challenges of the future. This creates additional growth potential for revenues and profits at PSI.

Pioneer in Digitalization, Integrated Energy and Industry 4.0

PSI has invested at an early stage in future topics such as new, digital business models for energy distribution, integrated energy in the energy transition and decentralized, self-organizing manufacturing structures. This enables our customers to achieve digital transformation of their business processes and opens up new growth potential both for them and for us.

Growth Potential from Climate Protection and Transition in Energy and Transport

PSI products make a key contribution to integrating the growing share of renewable energy into the existing electricity grids. Our systems for safe and cost-effective gas supply management support the increased use of green gas and hydrogen as part of the supply infrastructure. With specialized solutions for intelligent charging management and intelligent production of electric vehicles with Industry 4.0 methods, PSI is supporting the transition to zero-emission public and private transport.

FINANCIAL STATEMENTS

CONSOLIDATED MANAGEMENT REPORT

CONSOLIDATED REVENUES
13% above previous year

OPERATING RESULT
up 11% to EUR 17.2 million

CONSOLIDATED NET PROFIT
improved by almost 35% year-on-year

NEW ORDERS
up 8.8% on previous year's level at EUR 236 million

MAINTENANCE
Share of revenues attributable to maintenance increased from 31.9% to 33.5%

LICENSE REVENUES
up 17% to EUR 18.6 million

Basic Information on the Group

Business Model of the Group

The core business of the PSI Group consists of process control and information systems for the management of energy and material flows in the following target industries:

- utility companies in the electricity grid, gas grid, pipeline, heating and water network sectors and public transport providers
- industry in the metallurgy, mechanical and plant engineering, automotive, automotive supply and logistics sectors

The Group is accordingly divided into the Energy Management and Production Management segments. For these economic sectors, PSI develops and sells its own software products and complete systems based on these software products.

In the Energy Management segment, the PSI Group develops software products in the areas of control systems for electricity grids, cross-sector control systems, gas and pipeline management systems, and products for energy trading, energy distribution, virtual power plants, power plant optimization, gas industry planning and the operation of public transport systems.

In Production Management, PSI has an integrated portfolio of solutions for planning and controlling production processes in metals production, logistics, mechanical engineering and automotive manufacturing.

PSI has almost 2,000 employees worldwide. As a specialist in process control and optimization systems, the Group has gained a leading position nationally, as well as internationally in the target export markets, particularly among utility companies and metals producers. PSI continuously invests in the functionality and innovativeness of its products in order to secure and improve its competitive position. PSI was established in 1969, making it one of the most experienced German software companies.

In Germany, the PSI Group has locations in Berlin, Aachen, Aschaffenburg, Dortmund, Düsseldorf, Essen, Hamburg, Hanover, Karlsruhe, Munich, Oldenburg, Potsdam and Stuttgart. Internationally, PSI is represented by subsidiaries and representative offices in Austria, Bahrain, Belgium, Brazil, China, Denmark, India, Japan, Malaysia, Oman, Poland, Russia, Sweden, Switzerland, Thailand, the United Kingdom and the U.S.

Strategy and Control System

The central aspects of the Group's strategy are increasing its market share, internationalization and a stronger focus on the software product business. In this way, PSI creates and maintains sustainable and secure jobs. To achieve its strategic goals, the PSI Group focuses on technology leadership, the openness of the Group technology platform and a high pace of development in order to influence the target sectors. In some cases, products and technologies are developed in collaboration with customers in pilot projects.

PSI pursues a growth strategy with a particular focus on international business. After establishing subsidiaries in Russia, Poland, China and Southeast Asia, PSI is investing in the markets in Northern and Central Europe and increasingly also in North America. Over the coming years, PSI will endeavor to achieve a further increase in the share of revenues attributable to products, to expand the share attributable to exports, and to step up business in the geographical target markets. This will create economies of scale and therefore improve the conditions for further increases in profitability.

As a result of its strategy aimed at growth and profitability, the PSI Group has almost doubled its revenues from EUR 115.2 million in 2004 to EUR 225.2 million. The share of the Group's revenues attributable to international business more than tripled from 13.4% to 41.0% in this period. In the same period, the share of consolidated revenues attributable to license business was doubled from 4.1% to 8.3%, and the share of revenues attributable to long-term maintenance agreements was also doubled, rising from 17% to 33.5%.

The key performance indicators for achievement of the strategic goals are:

– the ratio of operating result to revenues (EBIT margin) as the main key figure for improvement in the Group's profitability

– the development of revenues as a key figure for the Group's growth rate

– new orders as a significant leading indicator of future revenues growth

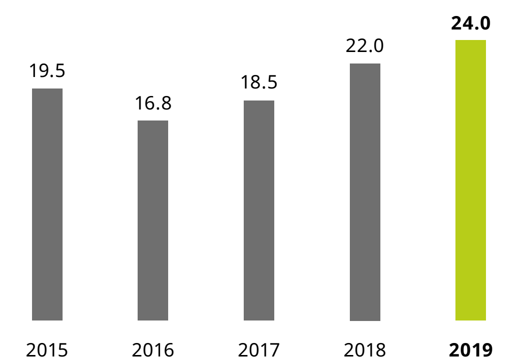
– the share of consolidated revenues attributable to license revenues and maintenance revenues as key figures for PSI's transformation from a service-oriented IT provider to a software product provider

In the non-financial area, the PSI Group has since 2017 been calculating the following key figures to measure its performance with regard to employee commitment and customer loyalty:

– an employee commitment index showing the employees' motivation and loyalty and the extent to which they identify with PSI

– a customer loyalty index that measures the customers' willingness to rely on PSI in the long term and to provide a reference

R&D Expenses Increased Again
(in EUR million)



Research and Development

PSI continuously invests in the further development of existing products, new software components and products, and the modernity of the Group-wide technology plaform. The goal of these investments is to strengthen the competitive position by developing innovative software products and creating new unique selling points. Functionality and modernity are pivotal factors for economic success, as are the use of Group-wide development platforms and the exchange of new functionalities within the Group.

When developing new products, PSI works closely with pilot customers. This collaboration is intended to ensure the marketability of the products right from the start. These products are then continuously evolved in follow-up projects and adapted to the development in the target markets. The resulting products form the basis for wider distribution and export.

One focus of development activities in 2019 was the expansion of the Group-wide software platform with the aim of providing user interfaces and modification tools on traditional PC workstations (rich clients), as web applications (thin clients) and on mobile devices from a uniform application. PSI has established a Group-wide development community and developed a modern software platform that will form the basis for all products in the medium term. All relevant products in the Production Management segment and a third of the Energy Management products already run on the platform. The objective is to further increase reuse of the same software modules in the Group and to standardize software tools and the programming language for all employees worldwide. The software platform improves the conditions for further export growth and also reduces development costs.

In 2019, the PSI Group's research and development expenses (costs recognized directly as expenses and capitalized software development costs) amounted to EUR 24.0 million, up 9.1% from EUR 22.0 million in the previous year. This amount did not include any relevant purchased services.

Development work in 2019 focused on:

– the new version 4.7 of the PSIcontrol grid control system with enhanced functions for grid stability analysis and decentralized, mobile grid management

– the new version 4.0 of the field force management system PSIcommand for maintenance and fault elimination in grids

– the further development of the AI-based depot management system with integrated charging and load management for electric buses

– the expansion of the PSIgassuite with new functions for gas transportation management, regional gas distribution and storage operations

– the expansion of the logistics suite with new dynamic resource planning and interactive warehouse visualization

– the expansion of the metals production software PSImetals with new functions for quality assessment, 3D warehouse visualization and graphic modelling of processes

– ongoing further development of the Group-wide software platform and its rollout in additional products. This further development particularly relates to the possibility to modify user interfaces easily using the Click Design technology and to the parallel support of desktop and web interfaces based on uniform development

In addition, PSI has also been involved in state-subsidized research projects for fundamental technology development for many years. One focus of this research is projects dedicated to implementing the future-oriented Industry 4.0 project initiated by the German federal government. This includes developing platforms for creating adaptable production systems, implementing autonomous transport and logistics concepts and optimizing series production. In this latter project, conveyor belts are replaced with swarm manufacturing concepts, and the work pieces' route through production is managed intelligently.

Another focus of PSI's research is projects that deal with the development of technologies for the digital transformation of energy supply. This includes the development of smart grid technologies, intelligent integration of electric mobility in municipal distribution grids, grid restoration taking account of future generation structures, marketing of energy flexibilities of industrial consumers, and mathematical methods for the simulation of power grids taking account of future integrated energy scenarios.

The knowledge gained in the projects is used in accordance with the cooperation or consortium agreements concluded between the parties involved in the respective research association. The subsidies cover around 40% to 50% of the personnel expenses and operating expenses incurred for these research projects in the PSI Group. In the 2019 fiscal year, the PSI Group received state subsidies totaling EUR 2.0 million.

Economic Report

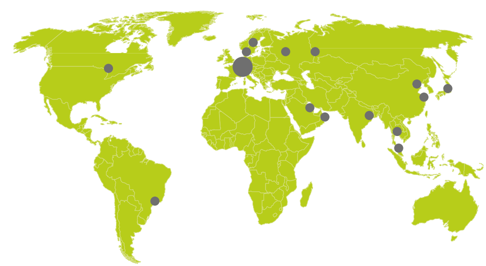
Business Performance and General Conditions

Global Steel Market Displays Regional Differences

For a focused software provider like PSI, the economic development in its key target sectors is particularly important. According to the World Steel Association, the global steel market, in which PSI is one of the main software suppliers, recorded a 3.4% increase in global crude steel production in 2019 after growth of 4.6% in the previous year. A decline of 4.9% in the EU was offset by increases of 1.5% in the USA and 8.3% in China. In this environment, PSI improved on the previous year's new orders for steel software, partly due to major orders from China and Russia. PSI's Gas Grids and Pipelines division saw steady demand against the backdrop of stable raw material prices and slightly increased its new orders.

In the Electrical Energy division, the positive trend of the previous years continued with another year-on-year increase in new orders. This was particularly attributable to demand for software for intelligent electricity grid management in Germany, which increased as a result of the growing share of renewable energy in the German energy mix and the expansion of charging infrastructure for electric vehicles.

International Presence and Locations in Europe and Worldwide

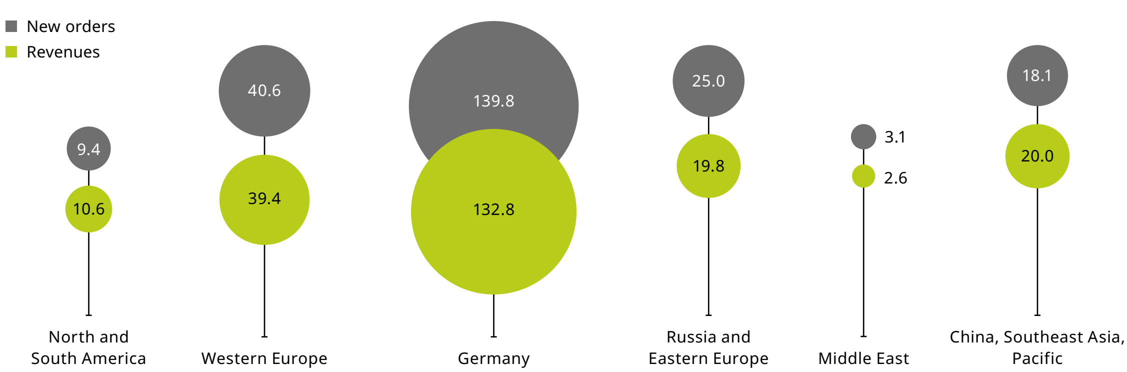


PSI locations: Austria, Bahrain, Belgium, Brazil, China, Denmark, Germany, India, Japan, Malaysia, Oman, Poland, Russia, Sweden, Switzerland, Thailand, United Kingdom, U.S.

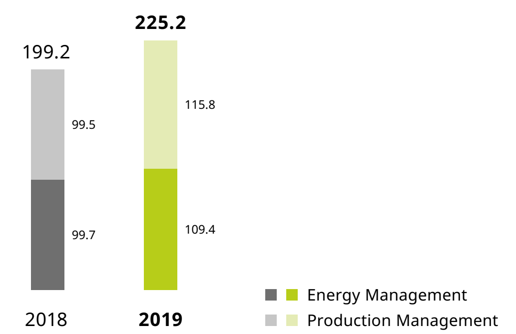
Revenues and Earnings Increase in Energy Segment

Primarily thanks to the significant improvement in earnings in production management and strong growth in energy management, PSI continued the previous year's positive trend. The Group further increased its revenues as well as its operating result and the Group net result. At EUR 236 million, new orders were 8.8% higher than the previous year's level of EUR 217 million. The order backlog at the end of the year was up 2.2% year-on-year at EUR 142 million.

New Orders and Revenues by Region
(in EUR million)



PSI's Revenues Grow by 13%
(in EUR million)



In the Production Management segment, the Automotive & Industry, Metals Production and Logistics divisions increased their new orders, revenues and earnings. In the energy market, the Electrical Energy division significantly increased its new orders and revenues, while its earnings were improved only slightly due to the costs for the integration of BTC Smart Grid. The Gas Grids and Pipelines division increased its new orders and revenues, as in the previous year, and even recorded substantial growth in its earnings.

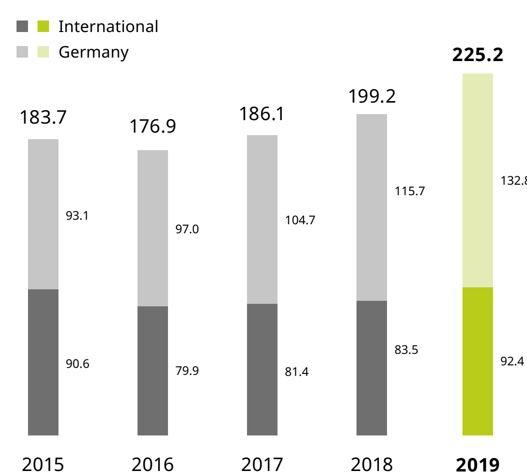
In public transport business, PSI successfully entered the French market with its depot management system with integrated charging management and improved its revenues and earnings. After the previous year's record new orders, however, this area posted a considerably lower order volume overall.

The acquisition of BTC Business Technology Consulting AG's grid control software division "Smart Grid" that was agreed upon in December 2018 was implemented with effect from January 1, 2019. The PRINS division is a provider of grid control software for electrical distribution grids and local sub-grids that focuses on the German market.

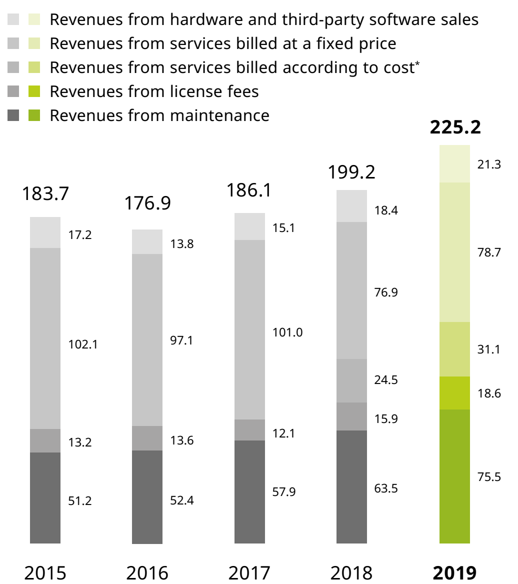
Overall Assessment of the Business Performance

With an 11% increase to EUR 17.2 million, PSI slightly exceeded its 2019 target of a roughly 10% rise in its operating result to EUR 17 million. PSI also exceeded the targeted revenue growth of just under 10% with an increase of 13% to EUR 225.2 million. As a result of this stronger revenue growth, the EBIT margin decreased slightly from 7.8% in the previous year to 7.6%. The share of total revenues attributable to license business climbed from 8.0% to 8.3%, while that of maintenance business rose from 31.9% to 33.5%. A significant increase in revenues in Energy Management – particularly with electricity grids – was accompanied by a very good earnings performance in Production Management. Overall, business continued to develop positively in the industrialized countries of Northern and Western Europe in particular, while it stagnated in Southeast Asia in particular. Thanks to its success in industrialized countries in Europe, the PSI Group continued its positive earnings and growth trend again in 2019.

Domestic Revenues Grow Faster than Exports (in EUR million)



Further Increase in Share of Revenues Attributable to Maintenance and Licenses
(in EUR million)



* recognized separately from 2018 onward

Result of Operations

Consolidated Revenues up 13%

Consolidated revenues amounted to EUR 225.2 million in 2019, up 13% on the previous year's figure of EUR 199.2 million. Energy Management generated a 16.1% increase in revenues as against the previous year, while Production Management achieved revenue growth of 9.9%. Revenues per employee, based on the average number of people employed in the Group including countries with lower labor costs, increased from EUR 114,000 in the previous year to almost EUR 115,000.

Higher Staff Costs

Expenses for purchased goods and services rose by EUR 3.3 million to EUR 32.3 million. Expenses for project-related procurement of hardware and licenses increased by EUR 1.6 million, while expenses for purchased services increased by EUR 1.7 million. At EUR 137.8 million, personnel expenses were up 13.6% year-on-year.

Further Improvement in Operating Result and Group Net Result

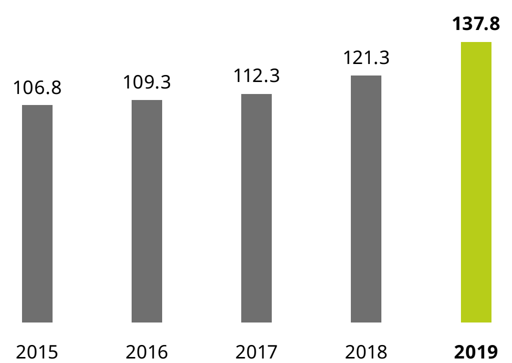
The Group increased its operating result by 11% from EUR 15.5 million in the previous year to EUR 17.2 million. The Group net result increased from

Group Structure as at December 31, 2019

Energy Management	
PSI Software AG Electrical Energy Gas/Oil	
PSI GridConnect GmbH	100%
PSI SMARTGRID Sp. z o.o.	100%
PSIAG Scandinavia AB	100%
PSI Incontrol Group	100%
PSI Energy Markets GmbH	100%
Time-steps AG (Switzerland)	100%
PSI Transcom GmbH	100%
Moveo Software GmbH	100%
OOO PSI (Russia)	100%
OOO OREKHsoft (Russia)	49%
OOO PROGRESS (Russia)	49%
OOO Gazavtomatika dispetcherskije sistemy (Russia)	33%
caplog-x GmbH	31.3%

Production Management	
PSI Mines&Roads GmbH	100%
PSI Automotive & Industry GmbH	100%
PSI Automotive & Industry Austria GmbH	100%
PSI Metals GmbH	100%
PSI Metals Austria GmbH	100%
PSI Metals Belgium NV	100%
PSI Metals Non Ferrous GmbH	100%
PSI Information Technology Shanghai Co. Ltd. (China)	100%
PSI Metals North America Inc.	100%
PSI Metals Brazil Ltda.	100%
PSI Metals UK Ltd.	100%
PSI Metals India Private Ltd.	100%
PSI Logistics GmbH	100%
PSI AG (Switzerland)	100%
PSI FLS Fuzzy Logik & Neuro Systeme GmbH	100%
PSI Polska Sp. z o.o.	100%

Personnel Expenses Develop in Line with Growth in Capacity (in EUR million)



EUR 10.6 million to EUR 14.3 million in the year under review. Earnings per share accordingly improved from EUR 0.68 to EUR 0.91. Electrical Energy, Metal Production, Automotive & Industry, Gas Grids and Pipelines and Logistics made a particularly strong contribution to earnings.

New Orders up on Previous Year

New orders amounted to EUR 236 million in 2019, up 8.8% on the previous year's figure of EUR 217 million and thus 5% higher than revenues. The order backlog as at the end of the year was up 2.2% year-on-year at EUR 142 million.

Growth on German Market; Share Attributable to Maintenance Business Increases

Revenues generated outside Germany increased by 10.7% from EUR 83.5 million in the previous year to EUR 92.4 million. Due to the even higher increase in consolidated revenues, this meant that the export share declined from 41.9% to 41.0%. The share of international orders increased from 34% to 41%, mainly due to major orders.

Maintenance revenues were increased from EUR 63.5 million to EUR 75.5 million, causing the share attributable to maintenance to rise from 31.9% to 33.5%. License revenues posted an increase from EUR 15.9 million to EUR 18.6 million. In line with the focus on increasing software product business, maintenance and long-term upgrade contracts in particular are to increase further.

Energy Management posted stronger growth than Production Management, causing the share of consolidated revenues attributable to this segment to rise slightly from 50.1% in the previous year to 51.4%. The share attributable to Production Management accordingly declined from 49.9% to 48.6%.

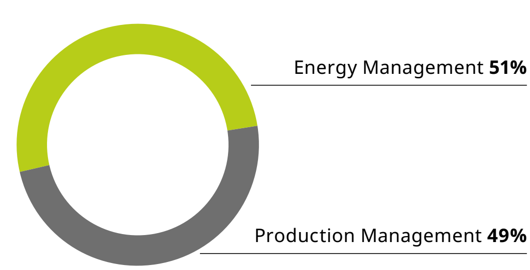
Energy Management Segment Posts Significant Revenue Growth in 2019

In 2019, Energy Management was characterized by significant revenue growth in the Electrical Energy division and by growth and improved earnings in the areas of gas grids and pipelines and public transport. Overall, revenues increased by 16.1% to EUR 115.8 million, thus exceeding expectations. The segment comprises the areas of electricity grids, gas grids, oil pipelines, energy trading, public transport and business in South Asia. Despite the costs for the integration of BTC Smart Grid, the operating result improved from EUR 6.8 million in the previous year to EUR 7.2 million.

Significant Jump in Earnings in Production Management

Revenues in Production Management were increased by 9.9% to EUR 109.4 million in 2019, in line with expectations. In this segment, PSI develops solutions for efficient planning and controlling of production and logistics processes. The segment's operating result rose significantly from EUR 10.0 million in the previous year to EUR 11.8 million and was thus in line with expectations. The highest margins were once again generated by PSI FLS Fuzzy Logik & Neuro Systeme, PSI Metals and PSI Automotive & Industry. After the capacity growth of the previous year, PSI Logistics increased its revenues and earnings.

Revenue Allocation by Segment
(in %)



Financial Position

PSI's monthly liquidity planning and the measures derived on this basis ensure that the financial requirements for operating business and investments are covered. Risk Management prepares a rolling monthly forecast that covers all companies and has a planning horizon of twelve months. This minimizes taking up bank loans by the individual Group companies and optimizes net finance costs. Current financial liabilities fell from EUR 1.8 million to EUR 1.1 million in 2019.

Financing from Operating Business as far as Possible

PSI's investing activities are focused on further development of its products on the basis of the Group-wide technology platform and international expansion of its business, both of which are intended to be financed from operating business as far as possible. With regard to both internationalization and the development of new products and functionalities, PSI focuses on collaboration with pilot customers and partners.

On December 31, 2019, PSI had guarantee and cash credit facilities totaling EUR 109.0 million for financing its operating business. In the previous year, guarantee and cash credit facilities had amounted to EUR 106.7 million. Utilization related entirely to the guarantee credit facilities and increased from EUR 40.0 million in the previous year to EUR 44.4 million as at the end of the reporting period. In the 2019 fiscal year, the Group was able to meet its payment obligations at all times. The Group has internal ratings from its principal banks that roughly correspond to the rating categories between BBB+ and A–.

Cash Flow from Operating Activities down on Previous Year

Cash flow from operating activities declined from EUR 19.0 million in the previous year to EUR 12.5 million. It was mainly influenced by the year-on-year increase in working capital, compensated by the effect from the application of IFRS 16.

Cash flow from investing activities declined from EUR –7.4million to EUR –8.7 million. It was affected by the acquisition of BTC Smart Grid and by replacement investments in property, plant and equipment and intangible assets.

Cash flow from financing activities declined from EUR –4.8 million to EUR –10.2 million, chiefly as a result of effects from the application of IFRS 16.

Cash and cash equivalents at the end of the year fell from EUR 44.6 million to EUR 38.7 million.

Net Asset Situation

Asset Structure: Increase in Goodwill

In 2019, the PSI Group invested a total of EUR 11.2 million in intangible assets and property, plant and equipment. The investments primarily related to intangible assets and property, plant and equipment acquired from third parties. Investments in intangible assets were significantly influenced by the acquisition of BTC Smart Grid in 2019, while property, plant and equipment also increased by EUR 27.3 million due to the initial application of IFRS 16. In the previous year, investments had amounted to EUR 6.2 million.

The carrying amount of goodwill increased from EUR 49.4 million to EUR 54.9 million due to the acquisition of BTC Smart Grid.

Structure of the Balance Sheet: Equity Ratio Falls to 38.0%

Total assets of the PSI Group rose from EUR 208.7 million to EUR 248.8 million in 2019, particularly due to the initial application of IFRS 16.

On the assets side, non-current assets increased from EUR 80.9 million to EUR 112.5 million. Current assets rose from EUR 127.8 million to EUR 136.3 million. Within this category, cash and cash equivalents decreased by EUR 5.9 million, while trade receivables were EUR 4.1 million higher and receivables from long-term development contracts rose by EUR 6.3 million.

On the equity and liabilities side, current liabilities increased from EUR 66.0 million to EUR 70.7 million. Non-current liabilities rose from EUR 56.1 million to EUR 83.6 million, driven primarily by the initial application of IFRS 16. Equity increased from EUR 86.6 million to EUR 94.5 million. As a result of the increase in total assets, the equity ratio fell from 41.5% to 38.0%.

Overall Assessment of Net Assets, Financial Position and Results of Operations

In the 2019 fiscal year, the Group's net assets and results of operations improved year-on-year, whereas its financial position worsened. There were particularly significant declines in cash flow from operating activities and in the liquidity position. Overall, the Group still has the financial prerequisites to finance organic growth and selective acquisitions.

Statutory Disclosures

Disclosures in Accordance with Section 315a (1) of the German Commercial Code (HGB)

As at December 31, 2019, the share capital of PSI Software AG amounted to EUR 40,185,256.96 and was divided into 15,697,366 no-par-value shares with an accounting par value of EUR 2.56. Each share confers the right to one vote. There are no different classes of shares. The shareholders exercise their voting rights at the Annual General Meeting in accordance with the statutory requirements and the Articles of Association. There may be statutory restrictions on voting rights in accordance with section 136 of the German Stock Corporation Act (AktG) or, to the extent that the Company holds treasury shares, in accordance with section 71b AktG. In the second half of 2018, PSI Software AG issued a total of 42,276 shares in PSI Software AG to employees as staff shares. A contractual prohibition on the sale of these shares until September 28, 2020, was agreed upon. In the second half of 2019, PSI Software AG issued a total of 18,994 shares in PSI Software AG to employees as staff shares. A contractual prohibition on the sale of these shares until December 2, 2021, was agreed upon. There are no further restrictions with regard to voting rights or transfers of shares.

In the 2019 fiscal year, Mr. Norman Rentrop, Germany, held a 20.65% interest in PSI Software AG, held via Investmentaktiengesellschaft für langfristige Investoren TGV, which he controls. According to the notification in accordance with section 27a (1) of the German Securities Trading Act (WpHG) dated September 7, 2017, the investment in PSI Software AG serves the long-term objective of generating trading profits.

In the 2019 fiscal year, innogy SE, Essen, Germany, held a 17.77% interest in PSI Software AG. According to PSI Software AG's knowledge, innogy SE is a company in which E.ON SE, Essen, has a majority shareholding. innogy SE is a major distribution grid operator and an important customer of PSI Software AG in the Energy Management segment. According to the notification from E.ON SE in accordance with section 43 (1) sentence 3 of the German Securities Trading Act (WpHG) dated October 22, 2019, the investment in PSI Software AG is a direct consequence of the acquisition of the majority interest in innogy SE and thus serves the purpose of implementing strategic goals.

PSI Software AG has not issued any shares with special rights.

There are no voting right controls at PSI Software AG in relation to employee shares if employees have an investment in the Company's capital and do not exercise control rights directly.

In accordance with Article 8 (1) of the Articles of Association, members of the Board of Directors are appointed and dismissed by the Supervisory Board, which also determines the number of members of the Board of Directors. Sections 84 et seq. AktG also apply to the appointment and dismissal of Board of Directors members.

In accordance with Article 11 of the Articles of Association, the Supervisory Board is authorized to make amendments and additions to the Articles of Association that affect the wording only. Other than this, the Articles of Association are resolved by the Annual General Meeting with a simple majority of the votes cast and a simple majority of the share capital represented when the resolution is adopted, as stipulated in Article 19 of the Articles of Association. This applies except in cases where the law requires resolutions to be adopted with a majority of at least three-quarters of the share capital represented when the resolution is adopted.

PSI Software AG has authorized capital of EUR 8.0 million in place until May 15, 2024, that was created by resolution of the Annual General Meeting on May 16, 2019. This resolution authorizes the Board of Directors, with the approval of the Supervisory Board and without requiring a further resolution by the Annual General Meeting, to increase the Company's share capital in exchange for cash or contributions in kind. This can be utilized for any purpose permitted by law. The Company has not yet exercised this authorization to date.

PSI Software AG also has contingent capital of EUR 8.0 million in place until May 15, 2022. This serves the purpose of servicing convertible and warrant-linked bonds and profit-sharing certificates. The Company was authorized to issue this contingent capital in a total nominal amount of up to EUR 100.0 million by the Annual General Meeting on May 16, 2017. The Company has not yet exercised this authorization to date.

The Board of Directors of PSI Software AG was authorized by the Annual General Meeting on May 16, 2017, to acquire treasury shares in the Company in a volume of up to 10% of the share capital until the end of June 30, 2020. Together with treasury shares acquired for other reasons that are owned by or attributable to the Company, the shares acquired on the basis of this authorization must not exceed 10% of the Company's share capital at any time. Treasury shares may be acquired only if the Company was able to establish a reserve in the amount of the expenses for the acquisition without reducing the share capital or any reserve to be established in accordance with the law or the Articles of Association that must not be used for payments to the shareholders. The authorization must not be used for the purpose of trading in treasury shares. In keeping with the principle of equal treatment, the Board of Directors shall choose to acquire the shares either on the stock market or by way of a public purchase offer to all shareholders of the company. The authorization may be exercised one or more times in full or in partial amounts.

There are no significant agreements of the Company that are subject to the condition of a change of control following a takeover bid.

Supplementary Report

No significant events occurred after the balance sheet date.

Risk Report

The PSI Group's risk policy has the aim of securing the Group's success in the long term. This requires effective identification and analysis of business risks in order to eliminate or limit them by means of suitable control measures.

To this end, PSI has set up a risk management system that is used by the management of the Company as a tool for the early recognition and prevention of risks. This particularly applies to risks whose effects could jeopardize the continued existence of the PSI Group as a going concern. The risk management tasks comprise risk identification, risk assessment, risk communication, risk management and control, risk documentation and risk system monitoring. The Company's risk management system is developed further on an ongoing basis and the knowledge gained from the management system is integrated in corporate planning.

Description of the Key Features of the Internal Control and Risk Management System with Regard to the Group Accounting Process (section 315 (4) HGB)

The PSI Group's risk management system covers all organizational regulations and measures for identifying and dealing with the risks and opportunities of its business activities.

The Board of Directors has overall responsibility for the internal control and risk management system with regard to the accounting processes of the consolidated companies and the accounting process in the Group. The Accounting department prepares the consolidated financial statements for the PSI Group based on the recognized separate financial statements of the companies and reports consolidated financial information to the Board of Directors. The separate financial statements are prepared on the basis of a Group-wide accounting manual. All companies and divisions included in the consolidated financial statements are integrated by way of a clearly defined management and reporting organization.

With regard to the accounting processes of the consolidated companies and the group accounting process, we consider features of the internal control and risk management system to be material if they could have a significant impact on the group accounting and the overall view presented in the consolidated financial statements including the Group management report. This particularly includes the following elements:

– identification of key risk areas and control areas relevant to the Group-wide accounting process

– controls for monitoring the Group-wide accounting process and its results at Board of Directors level and division level

– preventive control measures in the Finance and Accounting departments of the Group and the divisions and in operational, performance-related business processes that generate significant information for the preparation of the consolidated financial statements and the Group management report, including a separation of functions and predefined approval processes in relevant areas

– measures that ensure proper IT-based processing of facts and data relating to Group accounting

– In addition, the Group has implemented a risk management system with regard to the accounting process that includes measures to identify and assess significant risks and corresponding measures to limit risks in order to ensure the correctness of the consolidated financial statements

PSI has identified the following key risks and integrated them in its early warning system:

– market: too low level of new orders/order backlog

– employees: lack of availability of the necessary qualifications

– liquidity: bad payment terms and insufficient credit facilities

– costs and revenues: deviation from planning figures, particularly in project implementation or development

When assessing the risks, the individual categories are regularly regarded at business unit level. Depending on the risk assessment and the importance of the business unit for the Group, the Board of Directors intensifies the dialogue with the management of the business unit and resolves specific measures as required.

In the 2019 fiscal year, the risks were classified as not jeopardizing the Group's continued existence as a going concern, neither individually nor in combination.

The risk management guideline governs the areas of:

– risk strategy: explicit principles for minimizing the main risks and general risk management principles

– risk management organization: responsibilities of the management levels and controllers involved

– risk identification, control and monitoring: tools for identifying risks and monitoring the key figures used

– risk management system: application of the Group-wide commercial information system and a Group-wide issue tracking solution

These provisions are supplemented by a guideline on risk management in projects. This governs the implementation of risk management in the project, the identification, recording, analysis and assessment of risks, and the planning, specification and monitoring of measures to minimize risks in the context of projects. This particularly relates to measures to limit prefinancing in projects.

The commercial information system has an integrated management information system (MIS) and serves as a uniform information and controlling tool for all levels of the Group. Regular MIS reports, which are generally prepared on a monthly basis, provide key figures from the divisions as defined in the guideline system:

– development of the order situation and capacity utilization

– liquidity planning

– development of net asset situation and financial position

– forecast of key economic figures

– sales forecast and market development

– project controlling and contract management

Analysis of Opportunities and Risks

The PSI Group is exposed to a number of risks, including normal risks from its business operations, general economic risks, tax and financial risks, and risks that could arise from the shareholder structure. In the 2019 fiscal year, the risk profile changed mainly as a result of the economic slowdown in Germany and Europe. There were no substantial changes in the risk profile with regard to the shareholder structure or the regulatory environment in the energy sector.

As a result of the spread of the novel coronavirus SARS-CoV-2 (Covid-19), there is a risk of a global economic slowdown due to the disruption of international supply chains. PSI has a high order backlog and, as a software producer with a large proportion of internally generated value added, would hardly be affected by a disruption of supply chains. However, in the first half of 2020 in particular, there is a risk that customers in the industrial and logistics sectors may postpone contract awards and, in the event of quarantine measures, working hours at the affected locations may be reduced.

Opportunities and Risks for the Segments

In Energy Management, PSI increased its new orders, revenues and earnings again in 2019, driven in particular by the Electricity Grids and Gas Grids divisions. In the short term, there could be a decline in investments in electrical distribution grids in Germany due to regulatory uncertainties, particularly with regard to the regulation of fees for electricity and gas grids, whereas the planned measures under the German federal government's climate protection package present an opportunity for further increases in demand. In Gas Grids and Pipelines, a possible decrease in raw material prices would entail a risk of declining demand in export business, whereas in Germany there are opportunities arising from the federal government's planned development of hydrogen infrastructure. In the long term, the transnational effects of the expansion of renewable energy, continuing digitalization, integrated energy, electric mobility and the expansion of storage technologies will result in additional business potential, as investments will be required for these purposes. The expansion of international business may result in an increased need for prefinancing and guarantee credit.

By their nature, major export projects involve implementation risks in relation to local partners and their training, differing performance interpretations and standards and sometimes also changes in customer policy. The existing international partnerships extend the sales reach and thus increase the opportunities for sales of PSI's products. At the same time, they also create new dependencies.

In the Transport Systems division, PSI is largely dependent on the financial situation of its predominantly public-sector clients. Over the last few years, PSI has developed unique selling points and consolidated its market position, particularly for depot management systems. As a result of the increasing deployment of electric vehicles in local public transport, this means there is growth potential in the shape of new functions such as range management and charging management.

With the PSI Incontrol Group, PSI has had direct access to the electrical energy markets in Southeast Asia and the Middle East since 2009. PSI has access to inexpensive hardware and integration services. As a result of the high share of system integration business and the associated need to prefinance projects, business at PSI Incontrol also entails risks. In 2019, PSI continued to invest in training IT specialists and developing the software business, which is less strongly impacted than system integration business by fluctuations in the economic cycle.

In Production Management, PSI benefited from the positive overall economic development again in 2019, although it observed a deterioration in the economic situation at some individual customers in the automotive and metal production sectors. In the Metal Production division, the continuing discussion regarding import duties led to uncertainty and postponed investments among European customers, while PSI also recorded higher new orders in China and Russia. Despite stabilization in the global steel market, there is still a risk that investments may be postponed as a result of uncertainty in connection with the reduction of excess capacity and possible import duties. There are opportunities in the event of trade agreements between the U.S. and Europe or between the U.S. and China, as well as continuing opportunities due to growing demand from large metal producers for group rollouts of PSI solutions. In some countries of East Asia, the risk remains as a result of a not completely developed awareness for quality and trademark protection.

The Logistics and Production Control/ERP divisions are particularly affected by fluctuations in the economic climate on account of their market position and customer structure. For this reason, there is a risk that new orders may be too low in the event of a weak domestic economy. In the Logistics division, PSI is therefore primarily focusing on solutions for logistics service providers, Internet companies and the automotive industry.

Continued good demand in the Logistics division could be negatively impacted by a deterioration in the consumer climate, while growth in online mail order business and the increasing complexity of industrial logistics flows will give rise to further growth potential for PSI's logistics solutions in the short and medium term. The production software subsidiary PSI Automotive & Industry is increasingly focusing on the growth trend Industry 4.0 and has received orders from electric vehicle manufacturers. This creates growth potential due to the establishment of additional electric vehicle production plants, but also results in implementation risks, particularly in export business.

Opportunities and Risks of Internationalization

The share of international activities decreased again slightly in 2019, causing an increase in dependency on the domestic market. At the same time, the export share of 41% continues to limit dependency on the domestic economy and presents further international growth opportunities. However, the international expansion will give rise to new risks from the integration of new subsidiaries into the Group and dependency on international partners, exchange rates and legal systems. On the other hand, opportunities and risks will be more broadly diversified as a result of the further expansion of international activities. Due to the low share of revenues in the U.K., Brexit does not pose any relevant risk to the PSI Group.

Opportunities and Risks from New Products and Technologies

In order to strengthen its competitive position, PSI constantly invests in new product versions and product enhancements. At the same time, PSI has brought products and components together on a joint platform as part of a Group-wide convergence process to enable it to benefit from high quantities. The future income and liquidity development of the PSI Group will largely depend on the market success of its new products and on its command of newly developed technologies.

Risks from the Shareholder Structure

If attendance of the Annual General Meeting is considerably below 100%, there is a risk that one of the major shareholders of PSI Software AG may exercise decisive influence on the Annual General Meeting and use this for its own interests, which may differ from the Company's aims. The same risk arises if there is high attendance at the Annual General Meeting but major shareholders coordinate their voting. In addition, an acquisition of shares with negative tax effects cannot be ruled out.

Tax Risks

PSI cannot rule out the risk that external audits by the taxation authorities may lead to subsequent tax claims for which the Company has not recognized provisions or that result in an unforeseen liquidity requirement. The tax audit for the years 2010 to 2013 was completed in 2018.

Financial Risks

To finance its operating business, PSI uses instruments that chiefly consist of trade receivables, cash and cash equivalents, liabilities to banks and guarantees. The main risks in this context are credit risks, liquidity risks and fair value risks. Credit risks and liquidity risks are managed by using credit facilities and monitoring procedures. There is no concentration of credit risk for PSI with individual counterparties or with a group of counterparties. The Group endeavors to ensure that it has sufficient liquidity and credit facilities to meet its obligations.

The PSI Group predominantly enters into transactions concluded in euro. In the 2019 fiscal year, the Group did not use any transactions to hedge currency risks.

Employees

Because PSI performs technically challenging tasks, the Group is reliant on employing suitably qualified staff. In Germany in particular, there is a risk that it may not be able to acquire a sufficient number of suitable employees due to the demographic development. PSI counters this risk with active HR marketing and measures to strengthen employee loyalty. In this way, we have so far succeeded in hiring, integrating and permanently retaining a sufficient number of qualified employees at our Company. Our staff turnover rate is low. The remuneration structure includes performance- and earnings-related components. Since the freezing of the pension provisions as at the end of 2006, all future benefits have been specified, direct salary components and have been almost entirely covered by insurance policies.

Future Risks

PSI's strategy for the coming years is focused on the Group's further transformation into an international software product provider and on ongoing internationalization. If this does not succeed as planned, there is a risk that the PSI Group may not achieve its revenues and earnings targets. In addition, PSI would then still be dependent to a large extent on the general economic development and regulatory framework in Germany.

Forecast

PSI started 2020 with an increased order backlog of EUR 142 million and a strengthened market position in the Electrical Energy division due to the acquisition of BTC Smart Grid. Despite the costs for the integration of the acquired division and continued high expenses for research and development, there was an improvement in the operating result. With the further product migrations and pilot projects, the conditions were created for a broader-based marketing of the new product versions to existing and new customers.

As a provider of software products for the optimization of energy and material flows at operators of energy and transport infrastructure and in the steel and automotive industry, PSI sees the climate debate as an opportunity and an obligation to contribute to the success of the climate protection measures with intelligent software products. Specifically, this relates to the integration of growing quantities of significantly fluctuating renewable energy in the existing infrastructure, the increasing interconnection of the electricity, heating and transport sectors (integrated energy) and the associated trend towards expansion of electric mobility. As a leading provider of cross-sector grid control systems, PSI is very well positioned in this market and has increased its market share in recent years. In production management, the development of production capacity for electric vehicles and vehicle components requires investments in new manufacturing processes and software, while in local public transport investments in infrastructure and infrastructure management are needed. PSI developed new products and functions for these areas and launched them in 2019. Following the integration of the activities acquired in 2019, PSI's focus in the Electrical Energy division in 2020 will increasingly be on export business, as the expansion of renewable energy is giving rise to additional sales opportunities in further export regions. In the Gas Grids and Pipelines division, the importance of gas as a backup technology for the fluctuating generation from renewable energy sources will increase following the decision to phase out coal power. There will also be effects from the increasing generation of hydrogen and green gas using renewable energy.

By means of the migration of further products to the new, uniform software platform and convergence of our technical base, we intend to further increase the quantities sold and expand the share of revenues attributable to licenses, upgrades and maintenance. Customers also use the PSI software platform for their own developments, modifications and rollouts. This reduces risks for PSI and increases the quantities sold. We will continue to selectively expand our portfolio in order to take advantage of opportunities and increase our efficiency. In this way, we will improve the basis for enabling us to generate double-digit returns in the future.

Before the outbreak of the coronavirus crisis, we anticipated a positive trend for Electrical Energy and continued high demand in the Gas Grids and Pipelines division in the Energy Management segment in 2020. In Production Management, we are continuing to invest in the future-oriented topic of Industry 4.0 and software for industrial intelligence. We intend to improve our revenues and profitability further in the long term with the renewed product base and the digitalization of our own sales and service processes. Overall, we are now expecting contract awards to be postponed due to the effects of the novel coronavirus SARS-CoV-2 and are therefore currently anticipating a slight decrease in new orders and consolidated revenues in 2020. We anticipate a 20% decline in the operating result in 2020 due to the one-off effect from the coronavirus. In this environment, we are aiming to keep license and maintenance revenues roughly stable, with our focus here being on long-term maintenance and upgrade agreements and less on licenses. In order to achieve our goals, we will continue to invest in the unique selling points and quality of our development and runtime platform and our products.

Berlin, March 16, 2020

Dr. Harald Schrimpf

Harald Fuchs

SUSTAINABILITY AND CSR

Ever since the Company was founded in 1969, social responsibility and sustainability have been a very important issue for PSI, both in customer projects and in its internal processes. In addition to environmental and social concerns, this particularly includes the areas of employees and customers.

Transparent and Responsible Corporate Governance

PSI follows ethical principles in its dealings with customers, shareholders, employees, partners and competitors. These principles are set out in the Code of Conduct, which is publicly accessible on the Group's website at **www.psi.de.** Here, PSI commits to fair business practices and compliance with legal standards for fair working conditions, protection of natural resources, fair business conduct and protection of intellectual property.

In addition to the Code of Conduct, PSI has adopted a guideline system that governs many different aspects of sustainable and responsible corporate governance. PSI once again complied with the recommendations of the Government Commission on the German Corporate Governance Code in 2019, with a small number of exceptions that are discussed in the declaration of compliance. The declaration of compliance and the corporate government declaration are published on PSI's website at **www.psi.de/en/psi-investor-relations/corporate-governance.**

Sustainability in PSI Products and Internal Processes

PSI's software products make a significant contribution to careful and sustainable use of energy, raw materials and labor in the energy industry and the production sector. For this reason, PSI's production management systems for the steel and aluminum industry incorporate functions for optimizing the use of energy and using quantities of energy that are released during production.

PSI's control systems for managing major electricity grids have been and still are continuously expanded with functions that enable the feed-in of renewable energy to be managed intelligently. Together with partners from the energy industry and academia, PSI is actively involved in developing the intelligent energy supply infrastructure of the future. This includes products for virtual power plants, smart microgrids and the integration of charging infrastructure for electric vehicles into the existing electricity grids. PSI's gas management systems allow optimized control of the compressor stations required for grid operation and minimize technical losses. Leak detection and location systems help reduce losses when transporting gas and oil over long distances and avoid environmental damage.

In the field of logistics and transport, PSI has in recent years developed new solutions for dynamic control of optimized logistics networks that help reduce transport costs and emissions by up to 10%. Further functions include energy-optimized driving in rail transport and a depot management system with route and fueling optimization, as well as range management and charging management for electric buses. This gives customers effective support in reducing greenhouse gases and saving energy.

Due to the fact that PSI as a services company does not manufacture any physical products, the PSI business processes impact the environment and resources only in a marginal fashion. PSI works with green IT equipment and uses combined heat, cooling and power generation at its location in Aschaffenburg. To evaluate energy flows and potential for improvement in the area of energy efficiency, in 2016, PSI carried out an energy audit in line with DIN EN 16247 1. A follow-up audit was begun at the end of 2019 and is planned to be completed in the first quarter of 2020. PSI has participated in the Carbon Disclosure Project since 2011 and improved its score to C in 2019 after D in the previous year. As in previous years, PSI was again awarded the DZ Bank Seal of Quality for Sustainability in 2019. The magazine Focus Money rated PSI as one of the most valuable German companies in terms of environmental, economic and social responsibility in 2019. Implementation of environmental management is currently being evidenced by external energy audits and involvement in the Carbon Disclosure Project. Preparations are being made for certification in line with DIN EN ISO 14001.

Employees and Social Commitment

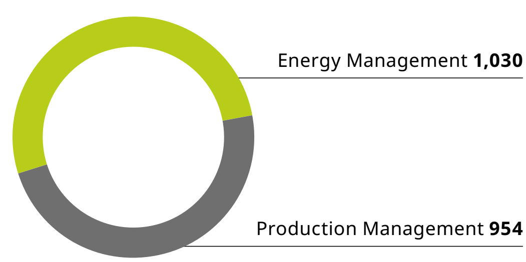
For a specialized software provider like PSI, the high qualifications and motivation of its employees are key success factors. For this reason, the PSI Group has for many years been characterized by a particularly high proportion of graduates with specialist industry expertise. The proportion of employees with a university degree averages over 80%. The largest share of these employees have an engineering degree.

Employee development and training are crucial for the functionality and innovativeness of the products developed by PSI. The main focus areas here are specialist training for new employees at the international locations and in Germany and employee development for internationalization. This takes place in the form of sales, project management and contract law training and courses relating to Group software tools. Group-wide work teams focusing on the topics of technology, infrastructure, product management, maintenance, quality management, controlling and marketing promote knowledge transfer and standardization within the Group. Employee training for the uniform Java technology platform is particularly important for the strategic development of the Group.

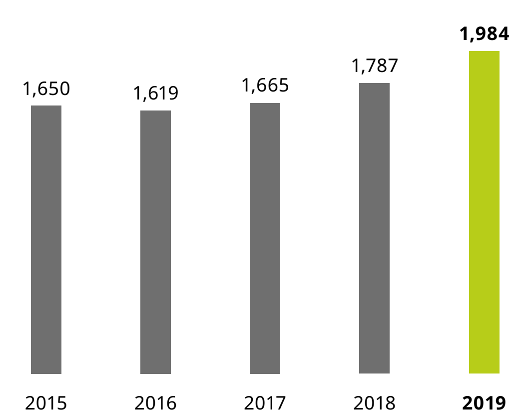
In order to make contact with graduates in the relevant courses of study at an early stage, PSI is involved in promoting education and research in science and engineering at many different levels. For example, at its main locations, the PSI Group has formed university partnerships that range from offering internships to cooperating on dual courses of study.

Since fall of 2010, PSI has been involved as an industry partner of the logistics research cluster and as a project partner in the environmentally friendly and sustainable energy

Breakdown of Workforce to the Segments
(Number of Employees)



Number of Employees Increases Further
(Employees on December 31)



engineering cluster, while since the beginning of 2016, it has also acted as a technology partner at the new European 4.0 Transformation Center on the RWTH Aachen Campus.

One special aspect at PSI is that a significant share of PSI stock amounting to around 20% is held by employees and managers. After PSI went public, a large number of employees joined together to form a consortium. Its main objectives are the coordination of uniform voting by the employee shareholders involved at the Annual General Meeting. Since 2011, PSI has issued staff shares to promote employee participation; these shares can be acquired for this purpose on the stock market, for example.

The number of employees as at the end of the year rose by 197 to 1,984. A total of 1,030 employees were allocated to the Energy Management segment and 954 to Production Management.

PSI has been involved in social activities for many years. Examples include various regional initiatives to support charitable organizations based near PSI locations. In addition, PSI supports team sports activities of various employee groups by funding participation in competitions and equipment. In early 2019, PSI was ranked 19th in the telecommunications and IT sector in a large-scale survey of working conditions at 2,000 German companies conducted by the magazine FOCUS and was recognized as a top employer.

Non-financial Statement

In an internal process, PSI assessed the non-financial topic areas of the environment, customers, employees, society, human rights and combating corruption in terms of their relevance to the Group and derived non-financial key performance indicators on this basis. Because PSI is a developer of specialized software solutions that does not manufacture any physical products, it is primarily employee commitment and long-term customer relationships that are key to the PSI Group's success. In order to measure its performance with regard to these parameters, PSI has been calculating an employee commitment index and a customer loyalty index since 2017.

Employee commitment shows the employees' motivation and loyalty and the extent to which they identify with PSI. The employee commitment index includes average employee turnover, employee satisfaction and the average sick leave rate in the Group, with targets being defined for all three criteria. In the subsequent calculation of the index based on the respective level of target achievement, employee turnover and employee satisfaction are given a higher weighting than the sick leave rate. The PSI Group achieved an employee commitment index score of 85% in 2019 after 80% in 2018 and was thus above the target range. For 2020, PSI is aiming for an index value of between 84% and 88%.

Long-term customer relationships form the basis for the PSI Group's sustained positive economic performance. The customer loyalty index therefore takes account of customers' willingness to conclude long-term maintenance and upgrade contracts and to provide a reference. Targets are defined, and their achievement is measured both for the share of consolidated revenues attributable to maintenance and upgrade contracts and for the level of willingness to provide a reference. The target achievement levels calculated in this way are included in the index with equal weightings. In 2019, the customer loyalty index score came to 86% after 84% in the previous year, thus reaching the upper end of the target range. For 2020, PSI is aiming for an index value of between 84% and 88%.

March 16, 2020

Dr. Harald Schrimpf

Harald Fuchs

CONSOLIDATED FINANCIAL STATEMENTS (IFRS)

Consolidated Balance Sheet
as at December 31 (IFRS)

in EUR thousand	Note	2019	2018
ASSETS			
Non-current assets			
Property, plant and equipment	C. 1	37,039	13,592
Intangible assets	C. 1	64,423	58,885
Investments in associated companies	C. 2	440	440
Deferred tax assets	C. 12	10,625	7,967
		112,527	**80,884**
Current assets			
Inventories	C. 2	10,612	8,712
Net trade receivables	C. 3	38,455	34,407
Receivables from long-term development contracts	C. 4	40,725	34,367
Other assets	C. 5	7,862	5,722
Cash and cash equivalents	C. 6	38,656	44,579
		136,310	**127,787**
		248,837	**208,671**

in EUR thousand	Note	**2019**	2018
EQUITY AND LIABILITIES			
Shareholders' equity			
Share capital	C. 7	40,185	40,185
Capital reserves	C. 7	35,137	35,137
Reserve for treasury shares	C. 7	16	–88
Other reserves	C. 7	–22,257	–19,719
Unappropriated surplus	C. 7	41,458	31,115
		94,539	**86,630**
Non-current liabilities			
Pension provisions and similar obligations	C. 8	54,737	51,284
Deferred tax liabilities	C. 12	6,328	4,797
Lease liabilities	C. 9	22,523	0
		83,588	**56,081**
Current liabilities			
Trade payables		17,454	16,440
Other liabilities	C. 11	34,932	31,194
Liabilities from long-term development contracts	C. 4	17,212	16,531
Financial liabilities	C. 10	1,112	1,795
		70,710	**65,960**
		248,837	**208,671**

Consolidated Income Statement

for the period from January 1 to December 31 (IFRS)

in EUR thousand	Note	**2019**	2018
Revenues	D. 13	225,180	199,156
Other operating income	D. 14	6,601	5,902
Cost of materials	D. 15	–32,259	–28,919
Personnel expenses	D. 16	–137,795	–121,279
Depreciation and amortization	C. 1	–10,832	– 4,611
Other operating expenses	D. 17	–33,690	–34,799
Operating result		**17,205**	**15,450**
Net finance costs	D. 18	–765	–927
Earnings before taxes		**16,440**	**14,523**
Income taxes	C. 12	–2,178	–3,938
Group net result		**14,262**	**10,585**
Consolidated earnings per share (basic and diluted) (in EUR)	D. 19	0.91	0.68
Average number of shares outstanding (in thousands)	D. 19	15,671	15,651

Consolidated Statement of Comprehensive Income

for the period from January 1 to December 31

in EUR thousand	**2019**	2018
Group net result	14,262	10,585
Items that are reclassified to consolidated net profit in subsequent periods **Currency translation of foreign operations**	**704**	**320**
Items that are not reclassified to consolidated net profit in subsequent periods Actuarial losses	–4,620	–1,733
Income tax effects	1,378	517
	–3,242	**–1,216**
Other comprehensive income after taxes	**–2,538**	**– 896**
Consolidated total comprehensive income	**11,724**	**9,689**

Consolidated Cash Flow Statement

for the Period from January 1 to December 31 (IFRS)

in EUR thousand	**2019**	2018
1. Cash flow from operating activities		
Consolidated earnings before income taxes	**16,440**	**14,523**
Adjustment of annual earnings for non-cash transactions		
Amortization of intangible assets	2,619	2,071
Depreciation of property, plant and equipment	3,045	2,540
Amortization of right of use	5,168	0
Income from investments in associated companies	–288	–134
Interest income	–80	–177
Interest expense	1,525	1,084
Other non-cash income/expenses	404	766
	28,833	**20,673**
Change in inventories	–2,081	–943
Change in trade receivables and receivables from long-term development contracts	–9,578	–3,711
Change in other assets	–2,070	–623
Change in provisions	–1,193	–1,670
Change in trade payables	1,024	1,811
Change in other liabilities	134	5,085
	15,069	**20,622**
Interest paid	–139	–252
Income taxes paid	–2,452	–1,381
	12,478	**18,989**
2. Cash flow from investing activities		
Outflows for investments in intangible assets	–1,872	–2,527
Outflows for investments in property, plant and equipment	–4,078	–3,649
Outflows for investments in associated companies	0	–290
Outflows for investments in subsidiaries	–3,127	–1,500
(less cash and cash equivalents acquired)	268	231
Inflows from distributions by associated companies	0	134
Interest received	80	177
	–8,729	**–7,424**
3. Cash flow from financing activities		
Outflows for the acquisition of treasury shares	–275	–422
Dividends paid to shareholders of the parent	–3,919	–3,596
Outflows for the repayment of lease liabilities	–4,759	0
Interest paid on leases	–544	0
Inflows/outflows from the repayment/borrowing of financial liabilities	–683	–827
	–10,180	**–4,845**
4. Cash and cash equivalents at end of period		
Cash-effective change in cash and cash equivalents	–6,431	6,720
Exchange-rate-related changes in cash and cash equivalents	508	–273
Cash and cash equivalents at beginning of period	44,579	38,132
	38,656	**44,579**

Consolidated Statement of Changes in Equity
for the period from January 1 to December 31 (IFRS)

in EUR thousand	Share capital	Capital reserve	Reserve for treasury shares
Balance as at January 1, 2018	**40,185**	**35,137**	**–328**
Group net result			
Other comprehensive income after taxes			
Consolidated total comprehensive income after taxes			
Dividend payment to shareholders of the parent			
Acquisition of treasury shares			–422
Issue of treasury shares			662
Total capital transactions	0	0	240
Balance as at December 31, 2018	**40,185**	**35,137**	**–88**
Group net result			
Other comprehensive income after taxes			
Consolidated total comprehensive income after taxes			
Dividend payment to shareholders of the parent			
Acquisition of treasury shares			–275
Issue of treasury shares			379
Total capital transactions	0	0	104
Balance as at December 31, 2019	**40,185**	**35,137**	**16**

Consolidated Segment Reporting
for 2019 and 2018 (IFRS)

	Energy Management		**Production Management**	
in EUR thousand	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
REVENUES				
Revenues with third parties	115,755	99,706	109,425	99,450
Revenues with other segments	3,227	2,917	9,774	8,651
Total revenues	**118,982**	**102,623**	**119,199**	**108,101**
Segment operating result before depreciation and amortization	**12,644**	**9,056**	**17,053**	**12,252**
Segment operating result before depreciation and amortization from purchase price allocation	**7,492**	**6,851**	**12,245**	**10,500**
Depreciation and amortization from purchase price allocation	–293	–85	–482	–496
Segment operating result	**7,199**	**6,766**	**11,763**	**10,004**
Net finance costs	–203	–449	–751	–343
Segment result	**6,996**	**6,317**	**11,012**	**9,661**

Other reserves	Unappropriated surplus	Total
–18,823	**24,126**	**80,297**
	10,585	10,585
–896		–896
–896	**10,585**	**9,689**
	–3,596	–3,596
		–422
		662
0	–3,596	–3,356
–19,719	**31,115**	**86,630**
	14,262	14,262
–2.538		–2,538
–2,538	**14,262**	**11,724**
	–3,919	–3,919
		–275
		379
0	–3,919	–3,815
–22,257	**41,458**	**94,539**

Reconciliation		**PSI Group**	
Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
0	0	225,180	199,156
–13,001	–11,568	0	0
–13,001	**–11,568**	**225,180**	**199,156**
–1,660	**–1,246**	**28,037**	**20,062**
–1,757	**–1,320**	**17,980**	**16,031**
0	0	–775	–581
–1,757	**–1,320**	**17,205**	**15,450**
189	–135	–765	–927
–1,568	**–1,455**	**16,440**	**14,523**

Development of Fixed Assets

for the period from January 1 to December 31, 2018 (IFRS)

in EUR thousand	Costs						
	Jan. 1, 2018	Exchange differences	Change in scope of consolidation	Reclassifications	Additions	Disposals	**Dec. 31, 2018**
Intangible assets							
Other intangible assets	23,913	–10	815	0	2,354	541	26,531
Goodwill	50,547	399	729	0	0	0	51,675
Capitalized software development costs	3,278	0	0	0	173	0	3,451
	77,738	**389**	**1,544**	**0**	**2,527**	**541**	**81,657**
Property, plant and equipment							
Land and buildings	18,491	15	0	81	227	0	18,814
Computers and computer accessories	17,272	15	14	0	2,434	923	18,812
Other equipment, operating and office equipment	7,826	5	19	0	988	533	8,305
Rights of use from leases (net)	81	0	0	–81	0	0	0
	43,670	**35**	**33**	**0**	**3,649**	**1,456**	**45,931**
Financial assets							
Investments in associated companies	150	0	0	0	290	0	440
	150	0	0	0	290	0	440
	121,558	**424**	**1,577**	**0**	**6,466**	**1,997**	**128,028**

Development of Fixed Assets

for the period from January 1 to December 31, 2019 (IRFS)

in EUR thousand	Costs						
	Jan. 1, 2019	Exchange differences	Change in scope of consolidation	Reclassifications	Additions	Disposals	**Dec. 31, 2019**
Intangible assets							
Other intangible assets	26,531	15	104	0	2,413	103	28,960
Goodwill	51,675	716	494	0	4,265	0	57,150
Capitalized software development costs	3,451	0	0	0	151	0	3,602
	81,657	**731**	**598**	**0**	**6,829**	**103**	**89,712**
Property, plant and equipment							
Land and buildings	18,814	17	0	0	152	0	18,983
Computers and computer accessories	18,812	60	0	0	2,817	442	21,247
Other equipment, operating and office equipment	8,305	57	0	0	1,400	524	9,238
Rights of use from leases (net)	23,361	–7	0	0	3,928	0	27,282
	69,292	**127**	**0**	**0**	**8,297**	**966**	**76,750**
Financial assets							
Investments in associated companies	440	0	0	0	0	0	440
	440	0	0	0	0	0	440
	151,389	**858**	**598**	**0**	**15,126**	**1,069**	**166,902**

Accumulated amortization/depreciation					Carrying amounts	
Jan. 1, 2018	Exchange differences	Additions	Disposals	**Dec. 31, 2018**	**Dec. 31, 2018**	Dec. 31, 2017
17,656	–8	1,455	541	18,562	7,969	6,257
2,258	0	0	0	2,258	49,417	48,289
1,335	0	617	0	1,952	1,499	1,943
21,249	**–8**	**2,072**	**541**	**22,772**	**58,885**	**56,489**
11,155	15	316	0	11,486	7,328	7,336
13,764	18	1,686	913	14,555	4,257	3,508
6,220	–20	537	439	6,298	2,007	1,606
0	0	0	0	0	0	81
31,139	**13**	**2,539**	**1,352**	**32,339**	**13,592**	**12,531**
0	0	0	0	0	440	150
0	0	0	0	0	440	150
52,388	**5**	**4,611**	**1,893**	**55,111**	**72,917**	**69,170**

Accumulated amortization/depreciation					Carrying amounts	
Jan. 1, 2019	Exchange differences	Additions	Disposals	**Dec. 31, 2019**	**Dec. 31, 2019**	Dec. 31, 2018
18,562	0	2,083	102	20,543	8,417	7,969
2,258	0	0	0	2,258	54,892	49,417
1,952	0	536	0	2,488	1,114	1,499
22,772	**0**	**2,619**	**102**	**25,289**	**64,423**	**58,885**
11,486	16	329	0	11,831	7,152	7,328
14,555	37	2,121	439	16,274	4,973	4,257
6,298	49	595	504	6,438	2,800	2,007
0	0	5,168	0	5,168	22,114	0
32,339	**102**	**8,213**	**943**	**39,711**	**37,039**	**13,592**
0	0	0	0	0	440	440
0	0	0	0	0	440	440
55,111	**102**	**10,832**	**1,045**	**65,000**	**101,902**	**72,917**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

PSI Software AG, Berlin, as of December 31, 2019

A. General Information on the Company

The parent company of the PSI Group is PSI Software AG (PSI AG), headquartered at Dircksenstrasse 42–44 in 10178 Berlin, Germany. It is entered in the commercial register of Berlin-Charlottenburg with the number HRB 51463.

The Board of Directors prepared the consolidated financial statements as of December 31, 2019, and the group management report for the 2019 fiscal year on March 6, 2020, and then approved them for submission to the Supervisory Board.

The business operations of the PSI Group comprise the development and sale of software systems and products that meet the specific needs and requirements of customers chiefly operating in the following industries and service sectors: energy supply, production, infrastructure, software technology, Internet applications and business consultancy. In addition, the PSI Group performs services of all kinds in the field of data processing, sells electronic equipment and runs data processing systems.

The PSI Group is divided into two main business areas (segments), Energy Management and Production Management.

The Company is publicly listed in the Prime Standard on the German stock exchange in Frankfurt am Main (securities identification number (WKN), A0Z1JH).

B. Presentation of Accounting Policies and Financial Risk Management Methods

Basis of Preparation of the Financial Statements

The consolidated financial statements of the PSI Group are generally prepared on the basis of the historical cost principle.

The consolidated financial statements of the PSI Group are prepared in accordance with International Financial Reporting Standards (IFRSs) as endorsed by the EU. The consolidated financial statements were prepared in euro. Unless specified otherwise, all figures are rounded up or down to the nearest thousand euro in line with commercial rounding.

Changes in Accounting Policies

The accounting policies applied in the 2019 financial year generally correspond to those applied in the previous year, with the exception of the new accounting standards presented below.

Effects of New Accounting Standards Required to Be Applied in the Fiscal Year

The PSI Group applied IFRS 16 Leases for the first time. The nature and effects of the changes resulting from the initial application of this new accounting standard are described below.

IFRS 16 supersedes IAS 17 and IFRIC 4 Determining Whether an Arrangement Contains a Lease. This standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognize most leases in the balance sheet. The PSI Group does not currently act as a lessor.

For the initial application of IFRS 16 as at January 1, 2019, the PSI Group chose to use the modified retrospective approach. The comparative information therefore has not been restated.

As a result of the initial application, the properties rented by the PSI Group in particular were qualified as leases as defined by IFRS 16. Leased movable assets mainly relate to motor vehicles. Due to this classification, the respective minimum lease payments are already reported as discounted financial liabilities in the balance sheet. On the assets side of the balance sheet, the corresponding rights of use were capitalized as property, plant and equipment in the same amount as at January 1, 2019. Due to this effect, total assets increased by EUR 23 million as at January 1, 2019.

In the income statement, the minimum lease expenses are no longer directly recognized as expense in full, but instead the individual lease installments are divided into an interest and a principal component. Whereas the decreasing interest component over the term of the respective lease has a negative impact on the financial result, the accordingly steadily rising principal component is not recognized in the income statement. Instead, consolidated net profit is reduced by steady (straight-line) amortization of the capitalized right of use over the term of the respective lease. Although the sum of the steadily rising principal components is identical to the sum of the straight-line amortization amounts over the entire term of the individual lease, the excess of the straight-line amortization over the initially lower principal components has a negative impact on consolidated net profit in the initial periods of the term. For this reason, consolidated net profit was reduced accordingly when IFRS 16 was introduced in 2019.

Selected details regarding the application of IFRS 16 are provided below:

in EUR thousand	Jan. 1, 2019	Dec. 31, 2019
Rights of use from leases (net) (property, plant and equipment)	23,361	22,114
Lease liabilities	23,361	22,523

Income statement effects	Jan. 1, 2019 to Dec. 1, 2019
No longer included in rental expenses (other operating expenses)	4,273
No longer included in other operating expenses	1,038
Amortization of rights of use	–5,168
Interest component from leases	–544

The difference between the rights of use presented as at January 1, 2019, and the other financial obligations from rental and lease payments reported in the previous year primarily resulted from extension options for rental agreements, which were already included in accordance with IFRS 16 on account of their likely utilization.

The initial application of IFRS 16 also resulted in effects on the cash flow statement. In particular, outflows for the repayment of lease liabilities (EUR 4,759 thousand) and interest paid on leases (EUR 544 thousand) are now reported as cash flows from financing activities. Applying IAS 17, these items would have been reported as operating lease payments in the cash flow from operating activities.

The accounting policies in relation to rights of use from leases are shown in section B. “Non-current assets,” letter c) “Rights of use.”

The accounting policies in relation to lease liabilities are shown in section B. “Lease liabilities.”

An overview of the maturities of lease liabilities is presented in section C. “Disclosures on the consolidated balance sheet,” sub-item “Lease liabilities.”

Other financial obligations from short-term leases that do not come under IFRS 16 as a result of applying the exemption, as well as prior-year disclosures on financial obligations from leases in accordance IAS 17, are shown in section G. “Other disclosures,” sub-item “Other financial obligations from rental and lease agreements.”

IFRIC 23 “Uncertainty over Income Tax Treatments” was issued by the IASB in June 2017 and was required to be applied from January 1, 2019. It clarifies recognition and measurement in relation to uncertain income tax items. The interpretation applies to taxable profits (tax losses), tax bases, unused tax losses, unused tax credits and tax rates in cases where there is uncertainty regarding the income tax treatment in accordance with IAS 12. The PSI Group implemented its application the new standard as at the required date. The content-related amendments have already been taken into account in the income tax assessment to date and there has been no impact on the net assets or results of operations.

The IASB and the IFRS IC published further pronouncements in the year under review. The standards and pronouncements required to be applied for the first time in the fiscal year did not have any significant effects on the consolidated financial statements of the PSI Group.

Effects of New Accounting Standards That Were Not yet Required to Be Applied in the Fiscal Year

The IASB has published the following standards and interpretations that were not yet required to be applied in the 2019 fiscal year. These standards and interpretations are not being applied early by the Group:

In October 2018, the IASB published amendments regarding the definition of a business for IFRS 3 Business Combinations. These are intended to help companies determine whether a transaction is to be accounted for as a business combination or as an acquisition of assets. They specify the minimum requirements for a business (existence of input factors and a substantive process that significantly contributes to the ability to create outputs). The previously required assessment of whether market participants are capable of replacing any missing elements in this process has been removed. Additional guidance is intended to help entities assess whether an acquired business process is substantive. Furthermore, the definitions of a business have been narrowed by focusing on goods and services provided to customers. The amendments are to be applied prospectively for the first time on January 1, 2020. Earlier application is permitted. The PSI Group intends to apply the amendments as at the stipulated effective date. The amendments will affect future business combinations.

The amendments to IAS 1 (Presentation of Financial Statements) and IAS 8 (Accounting Policies, Changes in Accounting Estimates and Errors) in relation to the definition of materiality were published in October 2018. The aim of the amendment was to simplify the definition of the term “material” in all standards and to specify certain aspects of the definition. According to the new definition, information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity. The amendments are to be applied prospectively for the first time for annual periods beginning on January 1, 2020. The PSI Group intends to apply the amendments as at the stipulated effective date. The content-related amendments have already been taken into account in the materiality assessment to date. The PSI Group does not anticipate any impact on the consolidated financial statements.

The IASB and the IFRS IC have published further pronouncements, but these were not yet required to be applied in the fiscal year. These standards and pronouncements are not expected to have any significant effects on the consolidated financial statements of the PSI Group.

Significant Judgements, Estimates and Assumptions

In preparing the consolidated financial statements, the management makes judgements, estimates and assumptions that affect the amount of reported income, expenses, assets and liabilities and the associated disclosures as well as the disclosure of contingent liabilities.

In applying the Group’s accounting policies, the management did not make any significant judgements that have a significant impact on the amounts in the consolidated financial statements.

The main assumptions regarding the future and other major sources of estimation uncertainty at the end of the reporting period that entail a risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next fiscal year are described below. The Group’s assumptions and estimates are based on parameters that were available when the consolidated financial statements were prepared. However, these situations and the assumptions regarding future developments may change as a result of market trends and market conditions that are beyond the control of the Group. Such changes are not taken into account in the assumptions until they occur.

<u>Impairment of non-current assets:</u> The PSI Group tests non-current assets for impairment once a year based on the provisions of IAS 36. The impairment tests are based on the future surplus cash generated for individual assets or for groups of assets combined in cash-generating units. An asset or a cash-generating unit is impaired if its carrying amount exceeds its recoverable amount. The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use. Value in use is calculated using a discounted cash flow method. The recoverable amount depends on the discount rate used when applying the discounted cash flow method as well as on the expected future cash inflows and the growth rate used for extrapolation purposes. Significant non-current assets that are tested for impairment on an annual basis relate to the goodwill reported in the PSI Group. Further details with regard to impairment testing can be found in section C. 1 of the notes. The carrying amount of the goodwill tested for impairment amounted to EUR 54,892 thousand as at December 31, 2019 (previous year: EUR 49,417 thousand, see Non-current Assets on page 76).

Project valuation: The PSI Group recognizes revenues on the basis of estimated performance in the projects. Performance estimates are based on an estimated hourly volume and estimated costs for purchased services or on contractually agreed-upon milestones and are continuously updated. Further details on the income recognized for projects but not yet invoiced are provided in section C. 4 of the notes. Recognized partial profits amounted to EUR 16,287 thousand as at December 31, 2019 (previous year: EUR 14,166 thousand).

Deferred taxes: Deferred tax assets are recognized for all unused tax loss carryforwards and temporary differences to the extent that it is probable or there is convincing evidence that taxable income will be available for this purpose, meaning that the loss carryforwards can actually be used. To determine the amount of the deferred tax assets, the management must make an estimate based on the expected timing and amount of future taxable income and on the future tax planning strategy (timing of tax results, taking account of tax risks, etc.). As at December 31, 2019, the amount of non-capitalized tax benefits from loss carryforwards for corporation tax (including foreign companies) came to EUR 42.5 million, while those from loss carryforwards for trade tax came to EUR 28.4 million (previous year: EUR 50.6 million/EUR 34.4 million). Deferred tax assets on tax loss carryforwards from the past were capitalized for the first time in the amount of EUR 949 thousand in the fiscal year. Deferred tax assets attributable to temporary differences amounted to EUR 9,676 thousand as at December 31, 2019 (previous year: EUR 7,967 thousand), while deferred tax liabilities amounted to EUR 6,328 thousand (previous year: EUR 4,797 thousand). Further details are presented in section C. 12 of the notes.

Pensions and other post-employment benefits: The expenses from post-employment defined benefit plans and the present value of the pension liability are determined using actuarial calculations. The actuarial valuation is based on assumptions relating to discount rates, the expected retirement age, future increases in wages and salaries, mortality, and future pension increases. In view of the long-term nature of these plans, such estimates are subject to significant uncertainties. All assumptions are reviewed at the end of each reporting period. The management determines an appropriate discount rate based on the interest rates of corporate bonds that are denominated in the same currency as the post-employment benefit obligation and have a rating of at least AA from an internationally recognized rating agency. Where necessary, these interest rates are adjusted to the expected duration of the defined benefit obligation by way of extrapolation along the yield curve. The provision for pensions and similar obligations amounted to EUR 54,737 thousand as at December 31, 2019 (previous year: EUR 51,284 thousand). Further details can be found in section C. 8 of the notes.

Development costs: Development costs are capitalized using the accounting policy described on page 67, Industrial Property Rights and Licenses. Initial capitalization of the costs is based on the management's assessment that technical and commercial viability is demonstrated. For the purposes of determining the amounts to be capitalized, the management makes assumptions with regard to the amount of expected future cash flows from the project. The carrying amount of capitalized development costs amounted to EUR 1,114 thousand as at December 31, 2019 (previous year: EUR 1,499 thousand).

Principles of Consolidation

a) Subsidiaries

The financial statements of the Group comprise PSI AG and the companies it controls. The consolidated financial statements include PSI AG and its subsidiaries over which it exercises control as defined in IFRS 10. PSI AG controls an investee when it has direct or indirect power over the investee, is exposed to variable returns from the investee and has the ability to affect the investee's variable returns through its power over it.

Company acquisitions are accounted for using the acquisition method in accordance with IFRS 3. Companies acquired or sold during the fiscal year under review are included in the consolidated financial statements starting from the date of the acquisition or sale.

The excess of the cost of an acquisition over the interest in the fair value of the identifiable assets and liabilities acquired as at the date of the acquisition transaction is referred to as goodwill and recognized as an asset. The identifiable assets and liabilities recognized are measured at their fair values as at the acquisition date. Costs incurred as a result of the business combination are recognized as expenditure.

The following changes occurred in the 2019 fiscal year with regard to the fully consolidated companies:

By way of an agreement dated December 10, 2018, PSI Software AG acquired the assets and assumed the liabilities of the "PRINS and GridAgent network control software" business of BTC Business Technology Consulting AG, Oldenburg, with effect from January 1, 2019 (asset deal). The acquisition constituted a company acquisition pursuant to IFRS 3. Part 1 of the cash purchase price amounted to EUR 3,900 thousand, while part 2 was calculated based on the spin-off balance sheet. Part 1 of the purchase price was reduced by EUR 1,566 thousand to EUR 2,334 thousand as a result of the value of part 2. As part of the purchase price allocation, the fair values of the assets acquired and liabilities assumed were compared against the acquisition cost. The resulting difference is attributable to identifiable intangible assets with a limited useful life and to goodwill. The intangible assets result from the valuation of the "PRINS" software product developed internally by BTC and from a customer base. The goodwill reflects the position of the "PRINS and GridAgent network control software" on the market. Over more than 20 years, the acquired process information system (PRINS), with 140 highly regarded managers and specialists, has accomplished remarkable achievements and created modern technology.

The effects of the asset deal on the PSI Group's revenues and annual earnings cannot practically be determined, as the assets acquired and liabilities assumed have been completely integrated in the PSI Group. As at the reporting date, it is no longer possible to separate these properly from previous business areas.

By way of an agreement dated May 6, 2019, and with effect from May 1, 2019, 100% of the shares in BTC Business Technology Consulting Sp. z o.o., headquartered in Poznan (BTC Poland), were acquired. The acquisition constituted a company acquisition pursuant to IFRS 3. Part 1 of the cash purchase price amounted to EUR 730 thousand, while part 2 was calculated based on the balance sheet as at the reporting date and amounted to EUR 63 thousand. As part of the purchase price allocation, the fair values of the assets acquired and liabilities assumed were compared against the acquisition cost (cash purchase price 1 and 2: EUR 793 thousand). The resulting difference is attributable to identifiable intangible assets with a limited useful life and to goodwill. In terms of its content, this transaction is related to the purchase agreement dated December 10, 2018, with BTC Business Technology Consulting AG, Oldenburg.

In the reporting period (May 1, 2019, to December 31, 2019), the newly acquired subsidiary (BTC Poland) generated revenues of EUR 1,809 thousand (EUR 2,467 thousand in the entire calendar year 2019) and net profit of EUR 284 thousand (EUR 402 thousand for the entire calendar year 2019). If the newly acquired subsidiary had already been included in the consolidated financial statements of PSI AG as at January 1, 2019, this would have resulted in consolidated revenues of EUR 225,838 thousand and consolidated net profit of EUR 13,431 thousand.

The following overview shows the fair values of the assets acquired and the liabilities assumed as at the acquisition date:

	Agreement dated Dec. 10, 2018 Fair values after acquisition EUR thousand	Agreement dated May 6, 2019 Fair values after acquisition EUR thousand
Non-current assets		
Property, plant and equipment	280	11
Other intangible assets	672	122
Current assets		
Inventories	0	13
Trade receivables	0	314
Receivables from long-term development contracts	1,576	0
Cash and cash equivalents	0	268
Deferred income	0	75
Liabilities		
Deferred tax	0	20
Provisions	0	116
Trade payables	0	93
Other liabilities	3,665	260
Liabilities from long-term development contracts	771	0
Deferred income	24	15
Total identifiable net assets at fair value	**–1,932**	**299**
Goodwill resulting from the acquisition	4,266	494
Consideration	**2,334**	**793**

In December 2019, OOO PROGRESS, Russia, was founded as a subsidiary.

As in the previous year – with the exception of BTC Poland and OOO PROGRESS, which were included in the consolidated financial statements for the first time – PSI AG and all companies that are controlled by PSI AG were included in the consolidated financial statements.

The following changes occurred in the 2018 financial year with regard to the fully consolidated companies:

By way of an agreement dated July 25, 2018, 100% of the shares in MOVEO Software GmbH, headquartered in Potsdam, Germany, were acquired. At the time of the acquisition, the Company had assets of EUR 918 thousand and liabilities of EUR 684 thousand. Net assets (at their carrying amounts) totaled EUR 234 thousand. As part of the purchase price allocation, these net assets were compared against the acquisition cost (cash purchase price of EUR 1,500 thousand). The resulting difference is attributable to intangible assets with a limited useful life and to goodwill. The intangible assets mainly result from the valuation of the "profahr" software product developed internally by MOVEO. The goodwill particularly results from MOVEO's position as a provider of software solutions for transport companies in Germany, Austria and Switzerland and the associated professional and technological expertise.

The following overview shows the fair values of the assets acquired and the liabilities assumed as at the acquisition date:

	in EUR thousand
Non-current assets	
Property, plant and equipment	33
Other intangible assets	815
Current assets	
Receivables from long-term development contracts	165
Trade receivables	400
Other assets	39
Cash and cash equivalents	231
Liabilities	
Deferred tax liabilities	228
Trade payables	173
Other liabilities	382
Liabilities from long-term development contracts	129
Total identifiable net assets at fair value	**771**
Goodwill resulting from the acquisition	729
Consideration	**1,500**

If the newly acquired subsidiary had already been included in the consolidated financial statements of PSI AG as at January 1, 2018, this would have resulted in consolidated revenues of EUR 200,250 thousand and consolidated net income of EUR 10,523 thousand.

b) Associated Companies

An associated company as defined in IAS 28 is a company in which the PSI Group generally holds more than 20% of the voting rights and over which the Group has significant influence. Investments in associated companies are accounted for using the equity method. In accordance with the equity method, investments in an associated company are recognized in the balance sheet at acquisition cost plus changes in the Group's share of the associated company's net assets that occurred after the acquisition. The consolidated income statement includes the share of the associated company's profit or loss attributable to the Group. Changes reported directly in the associated company's equity are recognized by the Group in the amount of its share in the statement of changes in equity where appropriate. Unrealized gains and losses from transactions between the Group and the associated company are eliminated in line with the share in the associated company.

The investments in the following associated companies are measured using the equity method:

- caplog-x GmbH, Leipzig ("caplog-x"), 31.3% (previous year: 31.3%)
- OOO Gazavtomatika dispetcherskije sistemy, Moscow, Russia, 33.0% (previous year: 33.0%)

c) Consolidation Measures and Uniform Measurement Throughout the Group

The annual financial statements of the subsidiaries and associated companies included in the consolidated financial statements are based on uniform accounting standards and reporting periods/reporting dates.

Intragroup balances and transactions and resulting intragroup gains and unrealized gains and losses between consolidated companies were eliminated in full. Unrealized losses were eliminated only if the transactions did not provide evidence of an impairment of the asset transferred.

Fair Value Measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between independent market participants at the measurement date. In a fair value measurement, it is assumed that the transaction in which the asset is sold or the liability is transferred takes place either in the

- principal market for the asset or liability or
- the most advantageous market for the asset or liability if there is no principal market.

The Group must have access to the principal market or to the most advantageous market. The fair value of an asset or liability is measured using the assumptions that market participants would use when pricing the asset or liability. It is assumed that the market participants act in their economic best interest. Measurements of the fair value of a non-financial asset take account of the market participant's ability to generate economic benefits from the highest and best use of the asset or from its sale to another market participant that finds the best use for the asset. The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available for measuring the fair value. In doing so, the use of relevant observable inputs is to be maximized and the use of unobservable inputs is to be minimized.

All assets and liabilities whose fair value is determined or reported in the financial statements are classified in the fair value hierarchy described below based on the lowest-level input that is significant to the entire fair value measurement:

– Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities

– Level 2 – Valuation methods in which the lowest-level input that is significant to the entire fair value measurement is directly or indirectly observable on the market

– Level 3 – Valuation methods in which the lowest-level input that is significant to the entire fair value measurement is not observable on the market

In the case of assets and liabilities that are recognized in the financial statements on a recurring basis, the Group determines whether there have been any transfers between the levels of the hierarchy by reviewing the classification at the end of each reporting period.

Currency Translation

PSI's consolidated financial statements are prepared in euro, the functional currency and presentation currency of the Group. Each company within the Group determines its own functional currency. The items included in the respective company's financial statements are measured using this functional currency. Foreign currency transactions are initially translated at the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. Monetary assets and liabilities in foreign currencies are translated into the functional currency at the closing rate. All associated exchange differences are recognized in the net profit or loss for the period. Non-monetary items of the Group balance sheet in foreign currencies are updated at historical exchange rates.

The functional currency of the main foreign companies is generally the respective local currency. As at the end of the reporting period, the assets and liabilities of these subsidiaries are translated into the presentation currency of PSI AG (the euro) at the closing rate. For practical reasons, income and expenses are translated at the average rate in the 2019 fiscal year. The effects of using the average rate as compared to the rate on the transaction date are immaterial overall for the fiscal year and for the previous year. The exchange differences that arise on translation are recognized as a separate component of equity.

Non-current Assets

a) Intangible Assets

Intangible assets are initially measured at cost. Intangible assets are recognized if it is probable that the future economic benefits that are attributable to the asset will flow to the company and if the cost of the asset can be measured reliably. For the purposes of subsequent measurement, intangible assets are recognized at cost less accumulated amortization and accumulated impairment losses (reported under depreciation and amortization). The amortization period and the amortization method are reviewed at the end of each fiscal year.

Intangible assets comprise:

Goodwill

Goodwill from a business combination is initially measured at cost, which is calculated as the excess of the cost of the business combination over the PSI Group's interest in the fair values of the identifiable assets acquired and the identifiable liabilities and contingent liabilities assumed. After initial recognition, goodwill is measured at cost less accumulated impairment losses. Goodwill is tested for impairment at least once a year or when facts or changes in circumstances indicate that its carrying amount may have decreased. To check whether goodwill acquired in a business combination is impaired, this goodwill must be allocated to a cash-generating unit. If the recoverable amount of the cash-generating unit is lower than its carrying amount, an impairment loss must be recognized. Reversals of impairment losses are not recognized.

Industrial Property Rights and Licenses

Amounts paid to purchase industrial property rights and license rights are capitalized and subsequently amortized on a straight-line basis over their expected useful lives (three to eight years).

The acquisition cost of new software is capitalized and treated as an intangible asset, provided it does not constitute an integral part of the related hardware. Software is amortized on a straight-line basis over a period of three to five years.

Costs incurred to restore or maintain the future economic benefits that the Company had originally expected are recognized as an expense.

Research and Development Costs

Research costs are recognized as an expense in the period in which they are incurred. Development costs for an individual project are capitalized as an intangible asset only if the criteria for capitalization under IAS 38.57 are met, i.e. if the Group can demonstrate the following:

- the technical feasibility of completing the intangible asset
- the intention to complete the intangible asset and the ability to use or sell it
- how the asset will generate future economic benefits
- the availability of resources for completing the asset
- the ability to measure reliably the expenditure attributable to the intangible asset during its development

After their initial recognition, development costs are accounted for at cost less accumulated impairment losses. The amortization period generally lasts five years, beginning when the development phase is completed and as soon as the asset is available for use. The asset is amortized over the period during which future use is expected and this amortization is recognized under depreciation and amortization. During the development phase, an impairment test is performed on an annual basis.

b) Property, Plant and Equipment

Property, plant and equipment is measured at cost less any accumulated depreciation and any accumulated impairment losses. For property, plant and equipment acquired as part of business combinations, cost corresponds to the fair value at the acquisition date. If items of property, plant and equipment are sold or scrapped or if no further economic benefit is expected from their use, then the corresponding cost and accumulated depreciation are derecognized. Any realized gain or loss on disposal is reported in the consolidated income statement.

The cost of an item of property, plant and equipment comprises the purchase price including the costs necessary to bring the item into condition for its intended use. Subsequent expenses such as servicing and maintenance costs that arise after the fixed assets have started being used are recognized as an expense when incurred. If it is likely that expenses will result in the Company receiving future economic benefits in excess of the originally assessed performance of the existing asset, these expenses are capitalized as additional costs of property, plant and equipment.

Depreciation is calculated on a straight-line basis over an estimated useful life, assuming a residual carrying amount of EUR 0. The following estimated useful lives are used for the individual asset groups:

Buildings	25 to 50 years
Exterior facilities, other constructions	10 to 20 years
Computer hardware	3 to 7 years
Leasehold improvements	Based on remaining term of the lease or actual useful life if shorter
Other office equipment	5 to 13 years

The useful lives and depreciation method for property, plant and equipment are reviewed on an annual basis to ensure that the depreciation method and depreciation period are consistent with the expected pattern of economic benefits from the items of property, plant and equipment.

c) Rights of Use

The Group recognizes rights of use as at the commencement date, i.e. the date on which the underlying assets is made available for use. Rights of use are measured at cost less any accumulated amortization. The costs of rights of use include the recognized lease liabilities, the initial direct costs incurred and the lease payments made at or before the commencement date, less any lease incentives received. Rights of use are amortized on a straight-line basis over the term or the expected useful life of the leases as follows:

Properties	2 to 10 years
Moveable assets	3 to 5 years

Details of the effects from the initial application of IFRS 16 as at January 1, 2019, and as at December 31, 2019, are presented in section B. “Effects of new accounting standards required to be applied in the fiscal year.”

The accounting policies in relation to lease liabilities are shown in section B. “Lease liabilities.”

An overview of the maturities of lease liabilities is presented in section C. “Disclosures on the consolidated balance sheet,” sub-item “Lease liabilities.”

Other financial obligations from short-term leases that do not come under IFRS 16 as a result of applying the exemption, as well as prior-year disclosures on financial obligations from leases in accordance IAS 17, are shown in section G. “Other disclosures,” sub-item “Other financial obligations from rental and lease agreements.”

d) Impairment of Non-current, Non-financial Assets

Non-current assets are tested for impairment when facts or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In the first step of the impairment test, the recoverable amount of the asset or cash-generating unit must initially be determined. This is defined as the higher of fair value less costs to sell and value in use. Fair value less costs to sell is defined as the price that can be achieved in a sale of an asset or cash-generating unit between two knowledgeable, willing and independent business partners, less the costs to sell. The value in use of an asset or a cash-generating unit is determined by its present value in its current use on the basis of expected cash flows. No impairment of non-current assets was recognized in the 2019 and 2018 fiscal years.

Financial Assets

As at December 31, 2019, and December 31, 2018, the PSI Group only held financial assets in the form of originated loans and receivables.

Originated loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. These assets are measured at amortized cost using the effective interest method. Gains and losses are recognized in the net profit or loss for the period when the loans and receivables are derecognized or impaired.

Valuation allowances due to credit risk include a significant degree of estimates and judgements regarding individual receivables; these are based on the creditworthiness of the customer in question and on current economic developments. In general, valuation allowances are recognized on the basis of customer ratings. These are based on customer information, as well as information from external rating agencies in significant cases. They also take account of country-specific credit risks.

As in the previous year, the carrying amounts of the financial assets generally correspond to their fair values.

Lease Liabilities – Leases as Lessee

Determining whether an arrangement is or contains a lease is based on the economic substance of the arrangement and requires an assessment as to whether the fulfillment of the contractual arrangement is dependent on the use of a specific asset or assets and whether the arrangement grants a right to use the asset.

The PSI Group has mainly concluded leases for properties, vehicles and hardware (servers). The term of these leases is generally two to ten years.

At the commencement date, the Group recognizes the lease liability at the present value of the lease payments to be made over the term of the lease. The lease payments comprise fixed payments less any lease incentives to be received and variable lease payments. In calculating the present value of the lease payments, the Group uses the incremental borrowing rate from the impairment analysis of 2.30%, as the interest rate implicit in the lease cannot be readily determined. The carrying amount of the lease liabilities is also adjusted in the case of changes in the lease, the term, the lease payments or the assessment.

For short-term leases for properties and movable assets, the PSI Group applies the exemption for short-term leases as defined in IFRS 16 (i.e. leases that have a term of a maximum of twelve months from the commencement date and do not include a purchase option). These leases are recognized as expense over the term of the lease.

The exemption for leases for low-value assets is not utilized.

Details of the effects from the initial application of IFRS 16 as at January 1, 2019, and as at December 31, 2019, are presented in section B. “Effects of new accounting standards required to be applied in the fiscal year.”

The accounting policies in relation to rights of use from leases are shown in section B. “Non-current assets,” letter c) “Rights of use.”

An overview of the maturities of lease liabilities is presented in section C. “Disclosures on the consolidated balance sheet,” sub-item “Lease liabilities.”

Other financial obligations from short-term leases that do not come under IFRS 16 as a result of applying the exemption, as well as prior-year disclosures on financial obligations from leases in accordance IAS 17, are shown in section G. “Other disclosures,” sub-item “Other financial obligations from rental and lease agreements.”

Financial Liabilities

The financial liabilities reported in the PSI Group’s consolidated financial statements are recognized in the balance sheet items “Trade payables,” “Other liabilities” and “Financial liabilities” and were classified as other financial liabilities.

On initial recognition, financial liabilities are accounted for at cost, which corresponds to the fair value of the consideration given; transaction costs are also included.

Financial liabilities are no longer reported when they are repaid, i.e. when the obligations specified in the contract have been settled or cancelled or have expired.

As at December 31, 2019, the maturities of financial liabilities broke down as follows:

in EUR thousand	Payable on demand	Payable within 1 year	Payable within more than 1 year	**Total**
Trade payables	2,700	13,723	17	**16,440**
Other liabilities	735	29,515	944	**31,194**
Financial liabilities	0	1,795	0	**1,795**
	3,435	**45,033**	**961**	**49,429**

Trade payables due within one year include obligations for services that have yet to be performed under contracts in the amount of EUR 7,912 thousand (previous year: EUR 8,662 thousand).

As at December 31, 2018, the maturities of financial liabilities broke down as follows:

in EUR thousand	Payable on demand	Payable within 1 year	Payable within more than 1 year	**Total**
Trade payables	3,539	13,915	0	**17,454**
Other liabilities	887	32,435	1,610	**34,932**
Financial liabilities	0	1,112	0	**1,112**
	4,426	**47,462**	**1,610**	**53,498**

Trade payables due within one year include obligations for services that have yet to be performed in the amount of EUR 8,662 thousand.

As in the previous year, the carrying amounts of the financial liabilities generally correspond to their fair values.

Financial Risk Management Objectives and Methods

The main financial instruments used by the Company to finance its operating business consist of cash and cash equivalents, available-for-sale financial assets and current liabilities (overdrafts) and other liabilities. There are also current receivables and liabilities from long-term development contracts, which are also covered by financial risk management. The main risks result from credit and liquidity risks. The Group is exposed to currency risks as a result of its business operations and net investments in foreign subsidiaries. For significant loans issued within the Group, a sensitivity analysis in relation to exchange rates was performed in order to illustrate possible effects on the Group net result. If the EUR/MYR exchange rate had been 10% lower as at December 31, 2019, this would have resulted in a decrease in the Group net result of approximately EUR 407 thousand (previous year: EUR 407 thousand). Conversely, a 10% increase in the EUR/MYR exchange rate would have meant an increase in the Group net result of approximately EUR 407 thousand (previous year: EUR 407 thousand). Due to the low significance of interest-bearing liabilities, interest risks exist only to a limited extent.

a) Credit Risk

Credit risk, or the risk that a counterparty may fail to meet its payment obligations, is managed by using credit facilities, defining order-specific prefinancing ratios and applying monitoring procedures. The Group enters into transactions only with creditworthy third parties. A credit assessment is performed for all customers wishing to enter into transactions with the Group on a credit basis. Where appropriate, the Company obtains collateral. Because most of the PSI Group's customers are well-known major companies from the energy and utilities sector or the steel and automotive industry that have good or very good credit quality, the Board of Directors believes that the overall receivables portfolio of the PSI Group has a lower than average risk profile in comparison to other software providers. Concentrations of risk may arise with individual customers or groups of customers that are exposed to the same risk scenarios or operate in the same type of environment (same sector, same customers, same sales region, same currency, etc.). For the PSI Group, there is no significant concentration of credit risk either with an individual counterparty or with a group of counterparties with similar features. The maximum credit risk corresponds to the amount of the carrying amounts reported in the balance sheet for the financial assets from trade receivables and other assets.

The Group continuously monitors the risk of a liquidity shortage using liquidity planning tools (maturity, expected cash flows). The aim of this monitoring is to maintain a balance between continuously covering financing requirements and ensuring flexibility. In monitoring the financial balance, it is particularly important to monitor project financing. The PSI Group endeavors to maximize the prefinancing ratio (ratio of advance payments received for projects to receivables from long-term development contracts) for each project. Because there are significant differences in customers' payment history in relation to prefinancing depending on the industry in which the customers operate, the PSI Group has not made any specifications with regard to the exact amount of prefinancing. In general, a sufficient prefinancing ratio is targeted in the Group as a whole. There are no further individual targets for key figures in the area of liquidity monitoring.

b) Capital Management

The primary objective of the PSI Group's capital management is to ensure that a high credit rating and a good equity ratio are maintained so as to support business operations and maximize shareholder value.

The PSI Group manages its capital structure in line with the prevailing economic conditions. No adjustment measures or amendments to capital management goals and targets were made in the 2019 or 2018 fiscal years.

The PSI Group monitors its capital using the equity ratio on a consolidated basis.

Current Assets

a) Inventories

Inventories are measured at the lower of cost and expected net disposal proceeds less costs to be incurred.

b) Cash and Cash Equivalents

Cash and cash equivalents comprise cash on hand, fixed term deposits and demand deposits. The cash and cash equivalents reported in the Group statement of cash flows are delimited according to the above definition.

Shareholders' Equity

Shareholders' equity comprises the share capital, the capital reserve, retained earnings, treasury shares, other reserves and accumulated profit or loss.

The capital reserve includes premiums in accordance with section 150 of the German Stock Corporation Act (AktG) and offset loss carryforwards in line with resolutions on the allocation of earnings.

Retained earnings include earnings allocations in accordance with section 174 AktG.

If the PSI Group acquires treasury shares, these are deducted from shareholders' equity. The purchase, sale, issue or withdrawal of treasury shares is not recognized in profit or loss.

Other reserves include unrealized gains and losses from currency translation and actuarial gains and losses from the measurement of pension provisions.

Pension Provisions

The PSI Group has several defined benefit pension plans. In some cases, there are plan assets in the form of pension liability insurance for the defined benefit plans. The expenses for benefits granted under the defined benefit plans are calculated separately for each plan using the projected unit credit method. Actuarial gains and losses are recognized directly in other comprehensive income.

Current Liabilities and Provisions

Current liabilities mainly include provisions. A provision is reported if the PSI Group has a present (statutory, contractual or constructive) obligation due to a past event, if it is likely that the settlement of the obligation will result in an outflow of resources that represent an economic benefit and if the amount of the obligation can be estimated reliably. Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If the corresponding interest effect is material, the amount of the provision corresponds to the present value of the expenses likely to be required to settle the obligation. Where discounting is used, the increase in the provision to reflect the passage of time is recognized as borrowing costs.

Government Grants

Government grants are recognized if there is reasonable assurance that the Company will comply with the conditions attaching to it. Government grants are recognized in profit or loss as scheduled in line with the recognition of the related costs which they are intended to compensate. Grants received for the acquisition of property, plant and equipment are reported under other liabilities as deferred income that is recognized as income in line with the reported depreciation during the use of the asset in question. Income generated in connection with the grants is reported as other operating income in the consolidated income statement.

In 2019 the PSI Group received subsidies totaling EUR 1,968 thousand (previous year: EUR 906 thousand) under various subsidy programs, including programs offered by the German federal government, the State of Berlin and the European Union. As in the previous year, the subsidies granted were recognized in profit or loss and reported as a reduction of the corresponding expenses. Besides the obligation to demonstrate the amount of the expenses for which the subsidies were granted, there are no further conditions or obligations arising from the subsidy projects.

Borrowing Costs

No significant borrowing costs were incurred or capitalized as part of the production of qualifying assets in the fiscal year under review or in the previous year.

Research and Development Costs

Research and development costs amounted to EUR 23.9 million in the 2019 fiscal year (previous year: EUR 21.8 million).

Recognition of Revenues and Income

The PSI Group primarily generates its revenues from project business and from issuing licenses for the use of its own software products to end customers, both with and without customer-specific adjustments. Revenues are also generated from the sale of third-party software, hardware and services such as installation, consultancy, training and maintenance. The PSI Group recognizes revenues when control over definable goods or services is transferred to the customer, i.e. when the customer has the ability to determine the use of the transferred goods or services and primarily derives the remaining benefits from them. This is subject to the condition that there must be contract with enforceable rights and obligations and that receipt of the consideration must be probable, taking account of the customer's creditworthiness. The revenues correspond to the transaction price to which the PSI Group is expected to be entitled. Variable consideration is included in the transaction price if it is highly likely that there will not be a significant reduction in revenues once there is no longer any uncertainty in connection with the variable consideration. The amount of the variable consideration is determined either in line with the expected value method or at the most likely amount, depending on which value represents the most accurate estimate of the variable consideration. If there is a period of more than twelve months between the transfer of the goods or services and the payment date and if the financing results in a significant benefit for the customer or the PSI Group, the consideration is adjusted for the time value of money. If a contract includes multiple definable goods or services, the transaction price is allocated to the performance obligations based on the relative individual selling prices. If individual selling prices are not directly observable, the PSI Group estimates them in an appropriate amount. For each performance obligation, revenues are recognized either at a specific point in time or over a specific period.

a) Project Business

Revenues are recognized over a specific period in line with the percentage-of-completion method based on the ratio of the costs already incurred to the estimated total costs or based on contractually defined milestones. An anticipated loss from a contract is immediately recognized as an expense. Invoices are issued in accordance with the contractual conditions; the payment terms usually stipulate payment within 30 days of the invoice being issued. With the percentage-of-completion method, the estimate of the percentage of completion is particularly important; in addition, it may include estimates regarding the scope of deliveries and services required to fulfil the contractual obligations. These significant estimates comprise the estimated total costs, total estimated revenues, order risks – including technical, political and regulatory risks – and other relevant parameters. Under the percentage-of-completion method, changes in estimates may increase or reduce revenues. It must also be assessed whether the continuation of the contract in question or its termination represents the most likely scenario. For this assessment, all relevant facts and circumstances must be taken into account individually for each contract.

b) Sale of Licenses
The PSI Group recognizes its revenues on the basis of a corresponding contract as soon as the license has been delivered, the selling price is fixed or determinable, there are no significant obligations to customers and collection of the receivables is considered probable.

c) Maintenance, Other Services
Income from maintenance agreements is recognized on a straight-line basis over the term of the agreement on the basis of past experience. Income from consultancy and training services is recognized as soon as the service is performed. Income from maintenance is reported as revenues from software development and maintenance in the notes to the consolidated financial statements, together with income from project business (less merchandise/hardware for which the costs are passed on).

d) Recognition of Interest Income
Interest is recognized on a time proportion basis, taking account of the effective yield on the asset.

Income Taxes

Current tax assets and liabilities for the current and prior periods are to be measured at the amount expected to be recovered from or paid to the taxation authorities. This amount is calculated based on the tax rates and tax laws of the reporting period.

Deferred taxes are accounted for using the liability method for all temporary differences as at the end of the reporting period between the carrying amount of an asset or liability in the balance sheet and its tax base. Deferred tax liabilities are recognized for all taxable temporary differences with the exception of:

– deferred tax liabilities from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and does not affect the accounting profit for the period or the taxable profit at the time of the transaction

– the deferred tax liability from taxable temporary differences relating to investments in subsidiaries, associated companies and interests in joint ventures that cannot be recognized if the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future

Deferred tax assets are recognized for all deductible temporary differences, unused tax loss carryforwards and unused tax credits to the extent that it is probable or there is convincing evidence that taxable income will be available against which the deductible temporary differences and the unused tax loss carryforwards and tax credits can be offset, with the exception of:

– deferred tax assets from deductible temporary differences arising from the initial recognition of an asset or liability in a transaction that is not a business combination and does not affect the accounting profit for the period or the taxable profit at the time of the transaction

– deferred tax assets from deductible temporary differences relating to investments in subsidiaries, associated companies and interests in joint ventures. These can be recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and sufficient taxable profit will be available against which the temporary differences can be utilized

The carrying amount of the deferred tax assets is reviewed at the end of each reporting period and written down to the extent that it is no longer probable that sufficient taxable profit will be available against which the deferred tax asset can be at least partially offset. Unrecognized deferred tax assets are reviewed at the end of each reporting period and recognized to the extent that it has become probable or convincing evidence has emerged that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realized or the liability is settled. This is done based on the tax rates (and tax laws) that are applicable or have been announced and will soon be applicable as at the end of the reporting period. Income taxes relating to items recognized directly in equity are recognized in equity and not in the consolidated income statement.

Deferred tax assets and deferred tax liabilities are offset against one another if they relate to income taxes of the same taxable entity levied by the same taxation authority and if it is not possible to offset the deferred taxes against one another.

Sales Tax

Revenues, expenses and assets are recognized net of sales tax, except in the following cases:

- If the sales tax incurred when purchasing assets or services cannot be claimed from the taxation authority, the sales tax is recognized as part of the cost of the asset or as part of the expenses
- Receivables and liabilities are recognized including the associated amount of sales tax

The amount of sales tax reimbursed by or paid to the taxation authority is recognized in the consolidated balance sheet under receivables or liabilities.

Segment Reporting

a) Business Segments
The PSI Group is divided into two main business areas:

- Energy Management
- Production Management

Financial information on the business segments and geographical segments is presented in section F. of the notes and on pages 54/55.

b) Transactions Between Business Segments
Transfers between business segments are included in section F. of the notes and on pages 54/55.

C. Disclosures on the Consolidated Balance Sheet

Non-current Assets

1 Intangible Assets and Property, Plant and Equipment

With regard to the development of non-current assets in the fiscal years that ended on December 31, 2019, and on December 31, 2018, please refer to the attached information on the development of intangible assets, property, plant and equipment, and amortization and depreciation recognized in the fiscal year (Development of Fixed Assets on pages 56/57).

Goodwill

As at December 31, 2019, and December 31, 2018, the PSI Group performed an impairment test with regard to goodwill. For determining the value in use, the impairment test takes account of the following units with the attributable carrying amounts for goodwill. In the Energy Management segment, goodwill of EUR 29,785 thousand is reported as at the end of the reporting period (previous year: EUR 24,996 thousand). Of this amount, EUR 22,257 thousand (previous year: EUR 17,467 thousand) was attributable to the Electrical Energy unit. The carrying amounts of the other units in this segment, none of which were significant individually, totaled EUR 7,529 thousand (previous year: EUR 7,529 thousand). In the Production Management segment, goodwill of EUR 25,107 thousand is reported as at the end of the reporting period (previous year: EUR 24,421 thousand). Of this amount, EUR 22,533 thousand (previous year: EUR 22,341 thousand) was attributable to the Metals Group unit. The carrying amounts of the other units in this segment, none of which were significant individually, totaled EUR 2,574 thousand (previous year: EUR 2,080 thousand).

The impairment test is based on cash flow projections for the individual cash-generating units and expectations with regard to the market development (growth rates in the relevant market segment, ratio of software project income to maintenance income, hourly and daily rates for employees, average personnel expenses, higher margins for sales of hardware and third-party licenses). The four-year planning period reflects the long-term corporate planning. The cash flows recognized were derived from past information. The cash flows are adjusted by means of discounts to take account of current economic conditions. An increase in the operating margin of between 1.10% and 4.16% each year (previous year: between 1.00% and 4.50%) is planned in the budgets for subsequent years. The assumptions made by the management with regard to the general trend for business development in the software industry correspond to the expectations of industry experts and market observers.

Discount rates of 5.44% to 8.52% after taxes (previous year: 6.00% to 9.75%) and 6.29% to 11.16% before taxes (previous year: 7.50% to 12.50%) were applied. The adjustment of the interest rate compared to the previous year reflects the current economic conditions in each case (development of the real economy and financing conditions). Cash flows arising after the three-year period are extrapolated using a growth rate of 1.10% to 4.16% (previous year: 1.00% to 4.50%).

In the view of the management, only a change in the interest rates applied in determining the value in use of the cash-generating units could currently reasonably be expected to result in the carrying amount of the cash-generating unit significantly exceeding its recoverable amount and an adjustment of the interest rates would not give rise to any further changes in parameters (ceteris paribus). For example, an assumed increase of 2 percentage points in the interest rate used for discounting would – both for the Electrical Energy Group and for the Metals Group – result in possible impairment of EUR 0 thousand (previous year: EUR 0 thousand). The level of the interest rate used for discounting at which no impairment would occur is 29.0 percentage points (Electrical Energy Group) and 13.0 percentage points (Metals Group).

The table below shows the underlying assumptions that were applied in the impairment tests of the groups of cash-generating units to which significant goodwill has been allocated:

in %	Long-term growth rate	Discount factor after taxes
Electrical Energy Group	1.81 (previous year: 1.97)	5.44 to 6.67 (previous year: 6.00 to 7.60)
Metals Group	2.56 (previous year: 2.57)	5.44 to 8.52 (previous year: 6.00 to 9.75)

Current Assets

2 Inventories

in EUR thousand	2019	2018
Third-party hardware and licenses	8,451	6,771
Advance payments to subcontractors	2,161	1,941
	10,612	**8,712**

3 Net Trade Receivables

in EUR thousand	2019	2018
Gross trade receivables	41,669	37,350
Specific loan loss allowances	–3,214	–2,943
	38,455	**34,407**

Trade receivables are not interest-bearing and are due within 0 to 90 days. The specific loan loss allowances recognized developed as follows:

in EUR thousand	2019	2018
As at January 1	2,943	3,106
Allocation to expenses	865	359
Reversal in income	–594	–522
As at December 31	**3,214**	**2,943**

As at December 31, the maturity structure of trade receivables was as follows:

in EUR thousand	2019	2018
Neither past due nor impaired	**28,871**	**21,980**
Past due (after impairment)		
< 30 days	5,988	5,575
30–60 days	1,071	1,651
60–90 days	358	738
90–120 days	142	741
> 120 days*	2,025	3,722
	9,584	**12,427**
As at December 31	**38,455**	**34,407**

* Thereof paid by February 21, 2020: EUR 117 thousand (previous year: EUR 293 thousand)

Due to the prevailing customer structure in the Energy and Production segments and a high degree of individualized products, PSI AG considers the expected general default risks for trade receivables to be immaterial. The impairment recognized relates to project-specific loan loss allowances.

4 Receivables and Liabilities from Long-term Development Contracts

Receivables in accordance with the percentage-of-completion method arise when revenues are recognized but cannot yet be invoiced according to the contractual conditions. These amounts are recognized on the basis of various performance criteria such as the achievement of specified milestones, the ratio of planned costs to accrued costs, the completion of specified units or the completion of the contract. This item of the balance sheet comprises directly attributable costs (personnel expenses and purchased services) as well as an appropriate portion of general overhead costs and profit shares.

The receivables measured according to the percentage-of-completion method/contract assets include the following components:

in EUR thousand	2019	2018
Costs incurred	103,429	88,882
Share of profits	16,287	14,166
Contract revenues	119,716	103,048
Advance payments received	–96,203	–85,212
Thereof offset against contract revenues	–78,991	–68,681
Receivables from long-term development contracts	40,725	34,367
Liabilities from long-term development contracts	17,212	16,531

Liabilities from long-term development contracts comprise advance payments received that exceed the corresponding receivables from long-term development contracts (contract liabilities).

Receivables from long-term development contracts in the amount of EUR 40,725 thousand (previous year: EUR 34,367 thousand) were neither past due nor impaired as at December 31 of the respective year.

With regard to the development contracts work accepted, there are warranty obligations in the ordinary course of business.

5 Other Assets

in EUR thousand	2019	2018
Receivables from tax credits	2,947	2,937
Prepaid expenses	2,151	1,531
Loans to associated companies and external parties	359	357
Advance payments	1,296	255
Subsidies	357	180
Miscellaneous	752	462
	7,862	**5,722**

The prepaid expenses chiefly include accrued prepayments for maintenance and will be recognized as expenses within one year with the exception of EUR 561 thousand.

(No specific impairment allowance was recognized for other assets; there are no past-due or impaired receivables.

6 Cash and Cash Equivalents

in EUR thousand	2019	2018
Bank balances	37,237	42,517
Fixed-term deposits	1,398	2,039
Cash in hand	21	23
	38,656	**44,579**

The fixed-term deposits and bank balances are not past due; specific valuation allowances are not required.

7 Equity

With regard to the development of equity, please refer to the statement of changes in Group equity (pages 54/55).

a) Share Capital

The fully paid-in share capital entered in the commercial register amounts to EUR 40,185,256.96 (previous year: EUR 40,185,256.96) and is divided into registered shares representing a pro rata amount of the share capital of EUR 2.56 per share.

b) Contingent Capital and Authorized Capital

By way of resolution of the Annual General Meeting on May 16, 2017, the Board of Directors of the Company was authorized to issue convertible and warrant-linked bonds as well as profit-sharing rights and/or income bonds (or combinations of these instruments) on one or more occasions, with the option of disapplying subscription rights in each case, until May 15, 2022.

To fulfil any rights exercised in the above context, a new “Contingent Capital 2017” was created at the Annual General Meeting on May 16, 2017. Under the Contingent Capital 2017, the Company’s share capital is contingently increased by up to EUR 8,035,840.00, divided into 3,139,000 shares.

The contingent capital from an authorization from May 7, 2013 (CC 2013) was replaced by the new Contingent Capital 2017.

By way of resolution of the Annual General Meeting on May 16, 2019, new authorized capital (AC 2019) was created. The Board of Directors was authorized, with the approval of the Supervisory Board, to increase the Company’s share capital on one or more occasions by a total of up to EUR 8,035,840.00 by issuing new registered shares in exchange for cash or contributions in kind in the period until May 15, 2024. The authorized capital created at the Annual General Meeting on May 12, 2015 was revoked.

Authorized capital and contingent capital break down as follows:

in EUR thousand	2019	2018
Authorized capital (AC)		
– AC 2019 (until May 15, 2024)	8,036	0
– AC 2015 (until May 11, 2020)	0	8,036
	8,036	**8,036**
Contingent capital (CC)		
– CC 2017 (until May 15, 2022)	8,036	8,036
	8,036	**8,036**
	16,072	**16,072**

c) Capital Reserves

The capital reserve includes the premium from capital increases. The costs attributable to issuing equity instruments were deducted directly from equity as a negative premium, taking account of tax effects.

d) Reserve for Treasury Shares

16,452 shares were repurchased in the fiscal year (previous year: 25,000). A total of 18,994 treasury shares (previous year: 42,276) were transferred as part of an employee share program. As at December 31, 2019, the number of treasury shares came to 17,528 (previous year: 20,070).

Under the employee share program, employees of the PSI Group can purchase treasury shares in PSI AG. Such share purchases are made at normal market conditions. This does not result in any significant expense for the company overall.

e) Other Reserves

Other reserves break down as follows:

in EUR thousand	**2019**	2018
Reserve for exchange differences	–1,309	–2,013
Actuarial losses	–30,469	–25,849
Deferred tax	9,521	8,143
	–22,257	**–19,719**

The deferred tax resulted from actuarial losses.

f) Dividends

The Annual General Meeting approved the Board of Directors' proposal for the appropriation of net profit for 2018. Based on this resolution, a dividend of EUR 3,918,697.25 was distributed for the 2018 financial year. This corresponds to EUR 0.25 per entitled share. In the previous year, a dividend of EUR 3,596,054.60 was distributed.

Non-current Liabilities

8 Pension Provisions

Pension provisions are recognized for obligations (old-age pensions, disability benefits, widows' and orphans' pensions) from future entitlements and from current benefits to eligible current and former employees of the PSI Group and their surviving dependents.

In the PSI Group, there are three different models of defined benefit pension commitments that grant retirement benefits to employees depending on their length of service at the Company and their remuneration before the start of the pension. On December 5, 2006, the Board of Directors of PSI AG and the Group Works Council concluded a Group works agreement governing the Company pension plans and compensation payments within the PSI AG Group, which covers all existing models of defined benefit pension commitments. As a Group works agreement, the agreement between the Board of Directors of PSI AG and the Group Works Council thus superseded the existing individual agreements.

The content of this agreement concerns the modification of the existing retirement benefit plans:

- The vested rights of the majority of employees as at December 31, 2006, were frozen as a fixed amount. This freezing means that the acquired entitlement to an old-age pension does not rise beyond the level reached as at December 31, 2006, neither as a result of future service nor due to future salary increases.
- As compensation for the loss of future increases in the Company pension (increases in entitlements), either steadily increasing contributions are paid into a provident fund with pension liability insurance until the end of the employment relationship, or at the latest until the employee reaches a certain age limit, or the employees are granted an increase in the gross cash compensation in the form of a steadily increasing annual lump sum payment. These compensation amounts are calculated in accordance with actuarial principles.
- In calculating the compensation amounts, the first step is to determine what constant annual premium would have to be paid to a notional insurer if this insurer had to continue paying the retirement benefits under the previous pension plans with no changes. In the first year, the amount of the compensation payment to the employees

corresponds to 70% of the constant annual premium of a notional insurer calculated in this way, and subsequently it is increased by a constant percentage each year. If an employee leaves the Company early and the contributions paid into the provident fund have not yet reached 100% of the employee's compensation entitlement, the PSI Group is not required to pay the difference to the employee.

As part of the transfer of undertakings of BTC Business Technology Consulting AG (BTC AG) as at January 1, 2019, in accordance with section 613a of the German Civil Code (BGB), the BTC pension scheme for fund-based pension commitments ("VO fDZ") and the BTC pension scheme for deferred compensation ("VO fDZ EU") were transferred to PSI AG.

The content of the "VO fDZ" scheme is as follows:

– According to the provisions of the "VO fDZ," a retirement pension, an early retirement pension, a reduced earning capacity pension and a spouse's and orphan's pension are granted after retirement. Instead of a lifelong employee pension, the company may grant the employee a lump-sum benefit at the employee's request. The pension is set up as a securities-linked defined benefit scheme under which annual contributions are posted to a capital account for the employees and invested on the capital market via a contractual trust arrangement (CTA).

– The respective retirement benefit results from the pension capital formed for the individual employee being annuitized when the conditions for the pension arise. The pension capital results from the sum of the annual pension expenses and the investment income generated on them. The nominal payments are guaranteed as the minimum pension capital to be annuitized.

– In the event of the death of a beneficiary, the spouse's benefit is also determined by annuitizing the existing pension capacity and amounts to 60% of the pension benefit if this was already being paid. The full orphan's pension is equivalent to 20% of the spouse's pension, while the half-orphan's pension is equivalent to 2%.

– The ongoing retirement benefits are increased by 1% per year.

The content of the "VO fDZ EU" scheme is as follows:

– The provisions applicable to deferred compensation and to the pension rights on this basis arise from the "VO fDZ." Here, the employee's deferred compensation takes the place of the pension expenses and may be increased by the employer top-up, which is equivalent to 20% of the deferred compensation amount.

The amount of the pension obligation (present value of the pension commitments) was calculated using actuarial methods based on the following assumptions:

in %	**2019**	2018
Discount factor		
Germany	0.90	1.70
Austria	0.50	1.80
Salary trend		
Germany	0.00/1.30[1]	0.00/1.30[1]
Austria	2.75	2.75
Pension trend		
Germany	1.50	1.50
Austria	0.00	0.00
Staff turnover		
Germany	0.00	0.00/4.50[2]
Austria	0.00	0.00

Mortality tables used:	
Germany	RT Heubeck 2018 G (previous year: RT Heubeck 2018 G)
Austria	AVÖ 2018-P (previous year: AVÖ 2018-P)

[1] A portion of the pension commitments was superseded on December 31, 2006. For this portion, salary trends are not relevant to calculating the obligation.
[2] A portion of the pension commitments was superseded on December 31, 2006. For this portion, staff turnover assumptions are not relevant with regard to calculating the obligation.

The salary trend comprises anticipated future salary increases that are estimated on an annual basis depending on factors such as inflation and length of service at the Company.

As at December 31, 2019, the standard retirement age under the statutory pension scheme was used when calculating the German pension obligation (previous year: 65 years and 5 months as the age at the expiry of financing based on statistics on retirement ages in the PSI Group). For calculating the severance provision in Austria, the APG 04 (Austrian General Pension Act) applies.

Expenses for retirement benefits break down as follows:

in EUR thousand	2019	2018
Service cost reported under personnel expenses	22	25
Interest expense reported under net interest	842	832
Expenses for retirement benefits	**864**	**857**

The following overview shows the development of the net amount of the provision:

in EUR thousand	2019	2018
Present value of defined benefit obligation	69,945	63,703
Plan assets	–15,208	–12,419
Pension liability	**54,737**	**51,284**

The following overview shows the development of the present value of the defined benefit obligation:

in EUR thousand	2019	2018
Pension liability, start of period	63,703	62,118
Gains/(losses) on remeasurement recognized in other comprehensive income		
– From changes in demographic assumptions	–649	1,469
– From changes in financial assumptions	5,671	78
– Empirical adjustments	–402	187
Benefits paid	–2,031	–1,847
Current service cost	22	25
Interest cost	842	832
Present value of insured defined benefit obligation	2,789	841
Pension liability, end of period	**69,945**	**63,703**

The following overview shows the development of the present value of the plan assets:

in EUR thousand	2019	2018
Present value of plan assets, start of period	12,419	11,578
Change in plan assets	2,789	841
Present value	**15,208**	**12,419**

The table below shows a quantitative sensitivity analysis of the key assumptions as at December 31, 2019:

Assumption	**Interest rate sensitivity**		**Pension trend sensitivity**	
Scenario	Increase of 0.2%	Decrease of 0.2%	Increase of 0.2%	Decrease of 0.2%
Effects on the defined benefit obligation (in EUR thousand)	–1,450	1,514	1,059	–1,027

As at December 31, 2018, the quantitative sensitivity analysis broke down as follows:

Assumption	**Interest rate sensitivity**		**Pension trend sensitivity**	
Scenario	Increase of 0.2%	Decrease of 0.2%	Increase of 0.2%	Decrease of 0.2%
Effects on the defined benefit obligation (in EUR thousand)	–1,359	1,342	1,046	–1,086

The above sensitivity analysis was performed using a method that extrapolates the effect of realistic changes in the key assumptions as at the end of the reporting period on the defined benefit obligation.

The average term of the defined benefit obligation as at the end of the reporting period is shown below.

Years	2019	2018
Germany	14.66	13.14
Austria	5.30	5.70

The table below shows the expected payout structure from working capital for the coming years:

in EUR thousand	2019	2018
Pension payments made	2,031	1,847
Expected pension payments:		
2020	2,082	2,152
2021	2,154	2,236
2022	2,240	2,326
2023	2,313	2,344
2024	2,318	N/A
Another 5 years	11,796	12,060

The pension payments for the 2019 fiscal year that were expected in the previous year amounted to EUR 2,058 thousand.

9 Lease Liabilities

As at December 31, 2019, the maturities of lease liabilities (discounted) broke down as follows:

in EUR thousand	Properties	Moveable assets	**Total**
Due in 2020	4,575	1,031	**5,606**
Due in 2021–2025	8,555	1,164	**9,719**
Due in subsequent years	7,198	0	**7,198**
Total	**20,328**	**2,195**	**22,523**

The leases in accordance with IFRS 16 mainly relate to properties. Due to the relatively low incremental borrowing rate to be applied, the difference between discounted and undiscounted can be regarded as immaterial overall.

Details of the effects from the initial application of IFRS 16 as at January 1, 2019, and as at December 31, 2019, are presented in section B. "Effects of new accounting standards required to be applied in the fiscal year."

The accounting policies in relation to rights of use from leases are shown in section B. "Non-current assets," letter c) "Rights of use."

The accounting policies in relation to lease liabilities are shown in section B. "Lease liabilities."

Other financial obligations from short-term leases that do not come under IFRS 16 as a result of applying the exemption, as well as prior-year disclosures on financial obligations from leases in accordance IAS 17, are shown in section G. "Other disclosures," sub-item "Other financial obligations from rental and lease agreements."

Current Liabilities and Provisions

10 Financial Liabilities

The financial liabilities of EUR 1,112 thousand (previous year: EUR 1,795 thousand) consist of liabilities from overdrafts.

The PSI Group uses short-term, floating-rate overdrafts for financing purposes. The financial liabilities are repaid on a monthly basis and bear interest at a rate of between 2.73% and 3.25%. No special collateral is provided. Continuous refinancing of current financial liabilities is targeted. The fair values of the financial liabilities correspond to their carrying amounts. As at December 31, 2019, the PSI Group had undrawn borrowing facilities from overdrafts in the amount of EUR 21,997 thousand (previous year: EUR 23,565 thousand).

Expenses for interest from overdrafts amounted to EUR 111 thousand in the 2019 fiscal year (previous year: EUR 75 thousand).

11 Other Liabilities

in EUR thousand	2019	2018
Personnel-related liabilities	19,051	16,517
Taxes payable – EUR 4,852 thousand in wage tax and sales tax (previous year: EUR 5,351 thousand) – EUR 644 thousand in income tax (previous year: EUR 1,254 thousand)	5,496	6,605
Deferred income	5,042	3,948
Outstanding goods purchases	1,609	1,738
Debtors with credit balances	708	112
Social security liabilities	176	384
Miscellaneous	2,850	1,890
	34,932	**31,194**

Personnel-related liabilities mainly include obligations for vacation entitlements, overtime and special payments. The deferred income (primarily prepaid maintenance income) will affect profit or loss within one year, with the exception of EUR 1,496 thousand (previous year: EUR 187 thousand) that will affect profit or loss after more than one year.

12 Deferred Taxes/Income Taxes

German trade tax is levied on the taxable profit of the German Group companies, which is calculated by deducting certain income that is not subject to trade tax and adding certain expenses that are not deductible for trade tax purposes. The effective trade tax rate depends on the municipality in which the respective German Group company operates. As in the previous year, the average trade tax rate in 2019 was approximately 15%. A corporation tax rate of 15% applied in the 2018 and 2019 financial years. In addition to corporation tax, a solidarity surcharge of 5.5% is levied on the corporation tax determined. This therefore results in an effective tax rate of 29.83% (previous year: 29.83%) for the calculation of current income taxes for the 2019 fiscal year.

Income tax expense for the current fiscal year breaks down as follows:

in EUR thousand	**2019**	2018
Current tax expense		
Current year	–1,947	–1,936
Deferred tax expense		
Intangible assets	46	106
Long-term development contracts	–738	–598
Inventories	27	0
Partial retirement and anniversary bonus provisions	38	24
Trade receivables	–137	325
Pension provisions	–661	–320
Project-related provisions	26	–499
Other provisions	128	–88
Fixed assets	–116	–197
Leases	122	0
Use of tax loss carryforwards	949	0
Deferred income	85	–755
	–231	–2,002
Income tax expense	**–2,178**	**–3,938**

The following overview shows a reconciliation of tax expense/income:

in EUR thousand	**2019**	2018
Earnings before taxes	16,440	14,523
Theoretical income tax expense (29.83%; previous year: 29.83%)	–4,904	–4,332
Non-capitalization of tax losses	–434	–771
Non-deductible operating expenses and trade tax additions	–360	–319
Use of non-capitalized tax loss carryforwards	1,620	1,537
Use of tax loss carryforwards	949	0
Effects from tax rate differences in foreign countries	444	500
Tax expense for previous years	45	–257
Tax-exempt foreign income	500	43
Write-downs on equity investments/securities	–8	–123
Miscellaneous	–30	–216
Current tax expense	**–2,178**	**3,938**

The PSI Group has the following tax loss carryforwards:

in EUR million	**2019**	2018
Loss carryforward for trade tax in Germany	31.3	35.7*
Loss carryforward for corporation tax in Germany	33.1	37.2*
Loss carryforwards for foreign countries	12.8	13.4

The loss carryforwards in Germany do not expire.

*) The disclosures on loss carryforwards in Germany take account of the fact that the acquisition that occurred in the 2009 fiscal year and the allocation of a total of 28.60% of the voting rights in the Company by Kajo Neukirchen GmbH, Eschborn, since January 1, 2009, resulted in the loss of 25.65% of the eligible tax loss carryforwards. In May 2017, the German Federal Constitutional Court declared the underlying law to be unconstitutional based on an order for reference submitted by the Hamburg Fiscal Court. As a result of this judgement, the legislators were required to draw up new regulations for loss deduction for corporations in compliance with the constitution by no later than December 31, 2018, with retroactive effect from January 1, 2008. On November 23, 2018, the Bundesrat (German Federal Council) gave its approval to the 2018 German Annual Tax Act and the previous regulation on pro rata forfeiture of losses was definitively removed. The loss carryforwards are therefore preserved.

The deferred taxes reported in the PSI Group break down as follows:

in EUR thousand	2019	2018
Deferred tax		
Use of tax loss carryforwards	949	0
Pension provisions	8,284	7,567
Intangible assets	–686	–797
Goodwill amortization with impact on tax	–555	–470
Partial retirement and anniversary bonus provisions	101	63
Project-related provisions	601	575
Receivables from long-term development contracts	–5,744	–5,006
Fixed assets	–318	–202
Leases	122	0
Trade receivables	2,744	2,881
Other provisions	244	162
Deferred income	–1,510	–1,595
Miscellaneous	65	–8
	4,297	**3,170**
As at January 1, net	3,170	4,883
Tax expense recognized in the reporting period	–231	–2,002
From acquisitions	-20	0
Tax income/(expense) recognized in other comprehensive income in the reporting period	1,378	289
As at December 31, net	**4,297**	**3,170**
Amounts recognized in balance sheet		
Deferred tax assets	10,625	7,967
Deferred tax liabilities	–6,328	–4,797

D. Disclosures on the Consolidated Income Statement

The consolidated income statement is prepared using the nature of expense method.

13 Sales

in EUR thousand	2019	2018
Software development	109,753	101,363
Maintenance	75,524	63,533
Licenses	18,568	15,890
Merchandise	21,335	18,370
	225,180	**199,156**

14 Other Operating Income

in EUR thousand	2019	2018
Income from reversal of provisions	3,447	2,026
Income from currency translation	1,038	999
Non-cash remuneration	954	887
Income from written-off receivables	25	322
Miscellaneous	1,137	1,668
	6,601	**5,902**

15 Cost of Materials

in EUR thousand	2019	2018
Cost of purchased services	17,519	15,833
Cost of purchased goods	14,740	13,086
	32,259	**28,919**

16 Personnel Expenses

in EUR thousand	2019	2018
Wages and salaries	115,844	102,837
Social security contributions	21,951	18,442
	137,795	**121,279**

Personnel expenses include expenses for payments to private pension institutions of EUR 614 thousand (previous year: EUR 561 thousand) and payments to state pension funds of EUR 7,363 thousand (previous year: EUR 6,262 thousand) in connection with defined contribution pension commitments.

17 Other Operating Expenses

in EUR thousand	**2019**	2018
Travel costs	7,413	6,555
Rental, leasing of real estate including ancillary costs	3,715	6,910
Project-related expenses	1,717	3,285
Advertising and marketing activities	4,670	4,190
Lease costs for moveable assets	1,150	1,944
Data line, IT and telephone costs	3,999	3,104
Legal and consulting costs	2,318	2,023
Miscellaneous	8,708	6,788
	33,690	**34,799**

18 Financial Result

in EUR thousand	**2019**	2018
Financial income	579	329
Financial expenses (thereof from IFRS 16: EUR 544 thousand, previous year: EUR 0 thousand)	–1,632	–1,390
Net income from associated companies	288	134
	–765	**–927**

19 Earnings per Share

In accordance with IAS 33, basic earnings per share are calculated by dividing the Group net result or loss by the weighted number of shares.

	2019	2018
Net profit or loss for the period (EUR thousand)	14,262	10,585
Weighted number of shares (thousands)	15,671	15,670
Basic/diluted earnings per share (EUR per share)	**0.91**	**0.68**

To calculate diluted earnings per share, the net profit attributable to ordinary shareholders and the weighted average number of shares outstanding are adjusted for the effects of all dilutive potential ordinary shares that could arise as a result of subscription rights being exercised.

E. Disclosures on the Cash Flow Statement

The reported cash and cash equivalents are not subject to any restrictions on their availability due to third parties. During the year under review, a dividend of 25 euro cents per share (previous year: 23 euro cents per share) was distributed to the shareholders for the 2018 fiscal year. The breakdown of cash and cash equivalents is shown in the table under C. 6. Overdraft liabilities were not included in cash and cash equivalents.

F. Disclosures on Segment Reporting

The PSI Group has two main segments that are reportable and applies IFRS 8 “Segment Reporting.” This standard includes regulations on the disclosure of information on business areas and geographical segments.

Description of the Segments

- Energy Management: Intelligent solutions for utility companies in the electricity, gas, oil and water sectors. The focus here is on reliable and cost-effective solutions for grid management and for trade and distribution in liberalized energy markets.
- Production Management: Software products and individual solutions for production planning, particularly tasks relating to production control and efficient logistics. The focus is on optimizing the use of resources and increasing quality and cost-effectiveness.

Reconciliation

Revenues from transactions with other segments are grouped in the “Reconciliation” column. Revenues between business segments amounted to EUR 13,001 thousand as at December 31, 2019 (previous year: EUR 11,568 thousand). Certain expenses are not allocated to the individual segments. The result from reconciliation amounts to EUR –1,568 thousand (previous year: EUR –1,455 thousand).

Additional Geographical Disclosures

In the 2019 fiscal year, the PSI Group generated revenues of EUR 132.8 million (previous year: EUR 115.7 million) in Germany and revenues of EUR 92.4 million (previous year: EUR 83.5 million) in foreign countries. Non-current assets of EUR 38,357 thousand (previous year: EUR 35,689 thousand) are attributable to foreign countries.

G. Other Disclosures

Other Financial Obligations and Contingent Liabilities

Rental Agreements and Leases – PSI Group as Lessee

Properties, cars, office equipment, data processing systems and other equipment were rented under leases. The PSI Group applies the exemption for short-term leases under IFRS 16 to its short-term leases for properties and movable assets. This covers leases with a term of a maximum of twelve months from the commencement date. These expenses are reported under other operating expenses. The table below shows the rental and lease fees incurred in the reporting year and the previous year:

in EUR thousand	**2020**	2019	2018
Properties	185	872	4,350
Moveable assets	32	432	1,019
Total	**217**	**1,304**	**5,369**

The data for the previous year are not comparable with the data for the reporting year, as IFRS 16 was not yet applied in 2018.

Details of the effects from the initial application of IFRS 16 as at January 1, 2019, and as at December 31, 2019, are presented in section B. “Effects of new accounting standards required to be applied in the fiscal year.”

The accounting policies in relation to rights of use from leases are shown in section B. “Non-current assets,” letter c) “Rights of use.”

The accounting policies in relation to lease liabilities are shown in section B. “Lease liabilities.”

An overview of the maturities of lease liabilities is presented in section C. “Disclosures on the consolidated balance sheet,” sub-item “Lease liabilities.”

As at December 31, 2018, these and other rental agreements and leases resulted in the following rent and lease payments:

in EUR thousand	Rent payments	Lease payments	Maintenance	Obligation from committed loans	**Total**
2019	3,888	1,208	368	3,900	9,364
2020	3,394	709	70	0	4,173
2021	2,895	302	1	0	3,198
2022	1,479	65	1	0	1,545
2023	737	17	0	0	754
2024 and subsequently	1,344	8	0	0	1,352
Total	**13,737**	**2,309**	**440**	**3,900**	**20,386**

Bill of Exchange Guarantees

Bill of exchange guarantees of EUR 44,385 thousand (previous year: EUR 39,981 thousand) were assumed for the PSI Group by various insurance companies and banks as at the end of the reporting period. The table below shows the undiscounted maximum amount for which PSI AG was liable at the end of the reporting period:

in EUR thousand	**2019**	2018
Advance payment guarantee	31,569	29,059
Contract performance guarantee	6,757	6,124
Warranty guarantee	3,774	3,739
Rent guarantee	1,039	1,014
Miscellaneous	1,116	0
Bid guarantee	130	45
Total	**44,385**	**39,981**

Employees

The average number of employees in the PSI Group in the fiscal year under review was 1,961 (previous year: 1,745). The workforce breaks down by function as follows:

	2019	2018
Software development	1,613	1,407
Administration	191	188
Sales	157	150
Total	**1,961**	**1,745**

Equity Statement

	Equity interest in %	Shareholders' equity[1] Dec. 31, 2019 in EUR thousand	Annual net profit[1] 2019 in EUR thousand
PSI Automotive & Industry GmbH, Berlin	100	9,307	636
PSI GridConnect GmbH, Karlsruhe	100	501	0[2]
PSI Metals GmbH, Düsseldorf	100	5,163	0[2]
PSI Transcom GmbH, Berlin	100	16,809	–7,220
PSI Logistics GmbH, Berlin	100	–64	1,258
PSI Energy Markets GmbH, Hanover	100	1,330	0[2]
PSI Mines&Roads GmbH, Berlin	100	–1,961	–258
PSI FLS Fuzzy Logik & Neuro Systeme GmbH, Dortmund	100	378	0[2]
PSI Metals Non Ferrous GmbH, Aachen	100	1,005	0[2]
MOVEO Software GmbH, Potsdam	100	482	186
PSI Information Technology (Shanghai) Co. Ltd., Shanghai, China	100	–63	129[3]
PSI METALS NORTH AMERICA Inc., Pittsburgh, U.S.	100	1,243	894
PSI AG für Produkte und Systeme der Informationstechnologie, Wil, Switzerland	100	1,663	438
PSI Polska Sp. z o.o., Poznan, Poland	100	2,143	1,613[3]
PSI SMARTGRID Sp. z o.o., Poznan, Poland	100	502	284[3]
PSI Automotive & Industry Austria GmbH, Leonding, Austria	100	1,431	224
OOO 'PSI', Moskau, Russia	100	–823	986
PSI Incontrol Sdn. Bhd., Selangor, Malaysia	100	9,505	722[3]
PSI Incontrol Private Limited, Chennai, India	100	–11	–8[3]
Incontrol Tech for Shares, Salmabad, Bahrain	100	974	–73[3]
Incontrol Tech (Thailand) Ltd., Bangkok, Thailand	100	–2,139	–678[3]
Incontrol Tech Holdings (Thailand) Ltd., Bangkok, Thailand	100	–622	–3[3]
PSI Metals Austria GmbH, Graz, Austria	100	6,099	1,435
PSI METALS INDIA PRIVATE LIMITED, Kolkata, India	100	162	–5[3]
PSI Metals Belgium NV, Brussels, Belgium	100	1,983	1,398
PSI Metals Brazil Ltda, Rio de Janeiro, Brasil	100	1,065	883
Time-steps AG, Affoltern am Albis, Switzerland	100	117	–228
PSI Metals UK Ltd., Watford, United Kingdom	100	2,884	335
PSIAG Scandinavia AB, Karlstad, Sweden	100	77	53
OOO OREKHsoft, Moskau, Russia	49	136	23
OOO PROGRESS, Moskau, Russia	49	174	–10
OOO Gazavtomatika dispetcherskije sistemy, Moskau, Russia	33	61	31[4]
caplog-x GmbH, Leipzig	31.3	2,046	921[4]

[1] Values according to legal and local accounting regulations before consolidation bookings
[2] Profit-pooling contracts
[3] Values according to IFRS before consolidation bookings
[4] Values as of December 31, 2018, as values as of December 31, 2019, were not available at the date of the financial statements

Auditor's fees
The following fees were incurred in the fiscal year for services performed by the auditor:

in EUR thousand	**2019**	2018
Auditing services	182	183
Tax consultancy services	381	268
Total	**563**	**451**

Audit fees comprise the audit of the annual financial statements of PSI AG and the audit of the consolidated financial statements of PSI AG.

Related Party Disclosures
Parties are considered to be related if they have the ability to control the PSI Group or exercise significant influence over its financial and operating policies. In determining whether related parties of the PSI Group exercise significant influence over its financial and operating policies, the existence of fiduciary relationships was taken into account as well as existing control relationships.

Related Companies
The affiliated companies included in the Group financial statements are to be regarded as related companies. In addition, the associated companies caplog-x GmbH and OOO Gazavtomatika dispetcherskije sistemy are to be regarded as related companies. There are no other related companies.

Related Persons
The members of the Board of Directors and the Supervisory Board are to be regarded as related persons.

Transactions with Related Parties
There are transactions between PSI AG and its subsidiaries in the context of supplies and services, cash management, central administrative services and personnel provision; these are eliminated on consolidation. There are transactions between PSI AG and the associated companies in the context of supplies and services and the granting of loans.

Besides the employment contracts with the members of the Board of Directors and the expense allowances for the Supervisory Board, there were no business transactions between the related persons and the PSI Group in 2019 or in 2018.

Supervisory Board

The following persons were members of the Supervisory Board in the 2019 fiscal year:

Name	Profession	Domicile	Membership of Supervisory Boards of other companies
Karsten Trippel (Chairman)	Businessman	Grossbottwar	1. Berlina AG für Anlagewerte, Berlin (Chairman) 2. Preussische Vermögensverwaltungs AG, Berlin 3. Riebeck-Brauerei von 1862 AG, Wuppertal (Chairman) 4. Ost-West Beteiligungs- und Grundstücksverwaltungs-AG, Cologne (Deputy Chairman) 5. Fleischerei-Bedarf Aktiengesellschaft von 1923, Coburg (Chairman)
Prof. Dr.-Ing. Ulrich Wilhelm Jaroni (Deputy Chairman)	Engineering graduate	Aschau	None
Andreas Böwing	Lawyer	Herten	Thyssengas GmbH, Dortmund
Prof. Dr. Uwe Hack	Professor of International Finance and Accounting	Metzingen	None
Elena Günzler (employee representative)	Mathematics graduate	Berlin	None
Uwe Seidel (employee representative)	Chemistry graduate	Duisburg	None

Remuneration of Board of Directors and Supervisory Board

Remuneration totaling EUR 1,550 thousand (previous year: EUR 1,779 thousand) was granted to the Board of Directors of PSI AG for the 2019 fiscal year. EUR 292 thousand (previous year: EUR 392 thousand) of this total remuneration related to long-term remuneration.

Pension provisions of EUR 643 thousand (previous year: EUR 629 thousand) are reported for former Board of Directors members. Besides pension payments to former members of the governing bodies in the amount of EUR 56 thousand (previous year: EUR 56 thousand), no other benefits were paid in the 2019 fiscal year.

The Supervisory Board received remuneration of EUR 298 thousand (previous year: EUR 304 thousand) in the year under review.

Individualized information on the remuneration of the Board of Directors and the Supervisory Board is presented in the remuneration report, which forms part of the combined Group management report.

Events After the End of the Reporting Period

No significant events occurred after the balance sheet date.

Disclosures on the German Corporate Governance Code

PSI AG issued the statements required in accordance with section 161 of the German Stock Corporation Act on December 5, 2019. They are permanently available to the shareholders in the investor relations section of PSI AG's website **(www.psi.de).**

Berlin, March 16, 2020

Dr. Harald Schrimpf (CEO)	Harald Fuchs

REMUNERATION REPORT

This report is based on the recommendations of the German Corporate Governance Code (GCGC) and the requirements of the German Commercial Code (HGB), German accounting standards and International Financial Reporting Standards (IFRSs).

Remuneration of the Supervisory Board

In accordance with the resolution of the Annual General Meeting on May 16, 2017, the current remuneration of the Supervisory Board members consists of basic remuneration and a component that is dependent on attendance of meetings. The annual basic remuneration amounts to EUR 60,000 plus sales tax for the Chairman of the Supervisory Board, EUR 45,000 plus sales tax for the Deputy Chairman and EUR 30,000 plus sales tax for each other member of the Supervisory Board. In addition, remuneration is paid in the amount of EUR 7,000 for the committee chairman and EUR 4,000 for the other committee members for each position on a Supervisory Board committee. This does not apply if the committee member or committee chairman is the Chairman or Deputy Chairman of the Supervisory Board.

The component that is dependent on attendance of meetings amounts to EUR 1,000 per meeting for each Supervisory Board member. In total, the Supervisory Board received remuneration of EUR 298,000 in the 2019 fiscal year, which breaks down as follows:

in EUR thousand	**2019**	2018
Andreas Böwing	43	44
Elena Günzler	43	44
Prof. Dr. Uwe Hack	46	47
Prof. Dr. Ulrich Wilhelm Jaroni	54	55
Uwe Seidel	43	44
Karsten Trippel	69	70
	298	**304**

Remuneration of the Members of the Board of Directors

The remuneration system for the Board of Directors at PSI is aimed at providing an incentive for successful and sustainable corporate governance. Both intrinsically and also by way of the incentive system, the members of the Board of Directors are motivated to have a long-term commitment to the company and to develop and implement a permanently successful and robust corporate strategy. For this reason, a significant portion of the total remuneration is dependent on the long-term performance of the PSI share. Other remuneration targets are based on the annual increase in the company's profits. Special achievements are to be rewarded appropriately, while missed targets lead to a significant reduction in remuneration. The remuneration is intended to be attractive in comparison to the competition in order to attract and retain outstanding managers at our Company.

The system and amount of remuneration for the Board of Directors are defined and regularly reviewed by the full Supervisory Board at the suggestion of the Personnel Committee of the Supervisory Board. The appropriateness of the amount of remuneration is reviewed by the Supervisory Board on an annual basis. The following criteria are taken into account in this context: the economic situation, the Company's success and future prospects, the tasks and performance of the individual members of the Board of Directors, and the typical level of remuneration in view of the external comparative environment and the Company's internal remuneration structure. The ratio of the remuneration of the Board of Directors to that of the top management and the workforce is also taken into account, both as a whole and over time. The basic components of the remuneration system for the members of the Board of Directors that has been in place since the 2010 fiscal year have repeatedly been presented verbally at the Annual General Meetings and were approved by the Annual General Meeting on May 16, 2019. It consists of the following remuneration components: basic remuneration, variable remuneration (annual bonus) and long-term remuneration (target agreement over a three-year period). In addition, the Company can also pay each member of the Board of Directors a voluntary annual recognition bonus that is capped at a certain amount. However, there is no legal entitlement to this bonus even if it is repeatedly paid. No voluntary recognition bonus has been paid since 2005.

In the 2019 fiscal year, the remuneration system for the Board of Directors consisted of the following components:

Non-performance-related Components

Basic Remuneration

The basic remuneration is paid out as a monthly salary. It amounts to EUR 450,000 per year for the Chairman of the Board of Directors, Dr. Harald Schrimpf, and EUR 302,281 per year for Mr. Harald Fuchs.

Fringe Benefits

Each member of the Board of Directors is provided with a leased vehicle for business and personal use for the duration of his or her actual term of office. A Board member may choose to do without this company car, in which case his or her basic remuneration increases. Other fringe benefits include various types of insurance such as statutory contributions to health and long-term care insurance and a professional liability insurance policy that is taken out by the company for its executive bodies.

Performance-related Components

Variable Remuneration (Annual Bonus)

Variable remuneration (the annual bonus) is based on the Company's business performance in the past financial year. 50% of the annual bonus depends on the Group net result (IFRS), 25% depends on key figures for PSI's transformation into an international software product and SaaS cloud provider, and 25% depends on other strategic targets. Corresponding targets are also applied for senior executives, in addition to other employees, in order to achieve a consistent target system at the company. If the results fall significantly short of the targets, the variable remuneration may not be paid out at all (0%). The bonus is capped at 200%.

The annual bonus is paid entirely in cash.

Long-term Remuneration

The long-term performance-related remuneration is based on a target agreement over a three-year period. The most recent long-term target agreement was concluded for the period from January 2019 to December 2021. Two targets were agreed for this: first, the EBIT return as a percentage of consolidated revenues, and second, the development of the total return on the PSI share compared to the TecDAX. Pro rata provisions are recognized each year, and the remuneration is not paid until after the end of the three-year period. If the results fall significantly short of the targets, the long-term remuneration may not be paid out at all (0%). The long-term remuneration is capped at 200%.

The long-term remuneration is paid entirely in cash. For reasons of simplicity, there is no stock option program.

Even though there is no stock option program, both members of the Board of Directors hold shares in the Company. The exact number of shares held by the Board of Directors is shown below.

Pension Commitments

There are no pension commitments for the current members of the Board of Directors.

Commitments in Connection with the Termination of Employment on the Board of Directors

In the event of premature termination of employment on the Board of Directors by mutual agreement and without good cause, the contracts of the members of the Board of Directors stipulate a compensation payment that is limited to a maximum amount of two times the annual remuneration and does not remunerate more than the remaining term of the employment contract (severance payment cap). The amount of the compensation payment is calculated based on the basic remuneration and the performance-related variable remuneration (annual bonus), the non-cash fringe benefits and the pro rata long-term remuneration.

In the event of a change of control that results in a significant change in the position of the individual member of the Board of Directors – for example, due to a change in the company's strategy or a change in the Board member's field of activity – the Board member has the right to terminate his or her employment contract. A change of control occurs, for example, if one shareholder or multiple shareholders acting jointly acquire 25% or 30% of the voting rights in PSI Software AG and exercise a controlling influence, if PSI Software AG becomes a dependent company as a result of concluding an intercompany agreement as defined in section 291 of the German Stock Corporation Act (AktG) or if it is merged with another company. If the Board member exercises this termination right, he or she is entitled to a severance payment for the remaining term of his or her contract. In addition to the basic remuneration and the target amount for the annual bonus, the calculation of the annual remuneration also includes an annual tranche of the long-term remuneration. To generally reflect discounting and other earnings, compensation or severance payments are reduced by 5% or 25% respectively.

Secondary Activities of Members of the Board of Directors

Decisions on whether to approve secondary activities of members of the Board of Directors, particularly supervisory board mandates outside the Group, are made by the Supervisory Board. The performance of mandates at Group companies is considered to be compensated by the contractual remuneration for members of the Board of Directors. In the year under review, the members of the Board of Directors did not perform any secondary activities that required approval.

Remuneration of the Members of the Board of Directors for the 2019 Fiscal Year

In the context of the annual financial statements, the Supervisory Board determined the level of target achievement for the variable remuneration (bonus) and the long-term remuneration.

Total Remuneration

Based on the above stipulations of the Supervisory Board, total remuneration of the Board of Directors for the 2019 fiscal year amounted to EUR 1.6 million (previous year: EUR 1.8 million). EUR 0.3 million (previous year: EUR 0.4 million) of this total remuneration related to long-term remuneration. A detailed, individualized presentation of the remuneration for the 2019 fiscal year is provided below:

in EUR thousand	**2019**	2018
Fixed remuneration		
Harald Fuchs	315	315
Dr. Harald Schrimpf	463	422
	778	**737**
Variable remuneration		
Harald Fuchs	120	175
Dr. Harald Schrimpf	360	475
	480	**650**
Long-term remuneration		
Harald Fuchs	125	168
Dr. Harald Schrimpf	167	224
	292	**392**
Total remuneration		
Harald Fuchs	560	658
Dr. Harald Schrimpf	990	1,121
	1,550	**1,779**

On December 31, 2019, the members of the Board of Directors and the Supervisory Board held the following numbers of PSI shares:

No. of Shares	**2019**	2018
Board of Directors		
Harald Fuchs	7,023	7,023
Dr. Harald Schrimpf	62,000	67,000
Supervisory Board		
Andreas Böwing	0	0
Elena Günzler	1,962	1,905
Prof. Dr. Uwe Hack	600	600
Prof. Dr. Ulrich Wilhelm Jaroni	0	0
Uwe Seidel	433	415
Karsten Trippel	111,322	111,322

In 2019, four share transactions were executed by members of the executive bodies and were published on PSI's website under Directors' Dealings.

RESPONSIBILITY STATEMENT

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 Group's net assets, financial position and results of operations and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Berlin, March 16, 2020

PSI Software AG

The Board of Directors

Dr. Harald Schrimpf

Harald Fuchs

INDEPENDENT AUDITOR’S REPORT

To PSI Software AG

Report on the Audit of the Consolidated Financial Statements and of the Group Management Report

Opinions

We have audited the consolidated financial statements of PSI Software AG, Berlin, and its subsidiaries (the Group), which comprise the consolidated balance sheet as of December 31, 2019, consolidated income statement, consolidated comprehensive income statement, consolidated statement of changes in equity and consolidated cash flow statement for the fiscal year from January 1 to December 31, 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the Group management report of PSI Software AG for the fiscal year from January 1 to December 31, 2019. In accordance with the German legal requirements, we have not audited the content of the group statement on corporate governance included under the heading “Transparent and responsible corporate governance” in the “Sustainability and CSR” section of the Group management report, the declaration on the German Corporate Governance Code included under the heading “Transparent and responsible corporate governance” in the “Sustainability and CSR” section of the Group management report, or the non-financial statement included under the heading “Non-financial statement” in the “Sustainability and CSR” section of the Group management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB [“Handelsgesetzbuch”: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2019, and of its financial performance for the fiscal year from January 1 to December 31, 2019, and
- the accompanying Group management report as a whole provides an appropriate view of the Group’s position. In all material respects, this Group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the Group management report does not cover the content of the group statement on corporate governance, the non-financial statement or the declaration on the German Corporate Governance Code referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the Group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the Group management report in accordance with Sec. 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 Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the “Auditor’s responsibilities for the audit of the consolidated financial statements and of the Group management report” section of our auditor’s report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 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 opinions on the consolidated financial statements and on the Group management report.

Key Audit Matters for the Audit of the Consolidated Financial Statements

Key audit matters are such matters that, in our professional judgement, were the most significant 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 opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

1. Project-Related Revenues Recognition

Reasons Why the Matter Was Determined to Be a Key Audit Matter

The revenues recognized in the 2019 fiscal year chiefly stems from selling software products and solutions as well as rendering associated services. Revenues mainly results from project and license business and is recognized in line with the transfer of the significant risks and rewards of ownership of the goods to the customer. In addition, the business activities include downstream conclusion of maintenance agreements, which are recognized on a pro rata basis over the term of the agreement.

We consider the recognition of revenues from project business to be a complex matter on account of the high degree of individualization and the large number of different contractual agreements in the project business of the PSI Group's two segments as well as the extensive effects of project-related revenues recognition on disclosures of assets and liabilities as well as income and expense items. The complexity associated with an increased risk of accounting misstatements means that we identified project-related revenues recognition as one of the key audit matters.

Auditor's Response

During our audit, we assessed the accounting and valuation principles applied for the recognition of project-related revenues in the PSI Group's consolidated financial statements using the criteria defined in IFRS 15. Our audit approach focused in particular on the question of whether the recognition of revenues over time was appropriate. In particular, we examined the existence of an enforceable legal right and the possibility for alternative use of the contractual service relationships. In addition, we examined which different types of services were included in the contracts and whether these could be differentiated and thus accounted for separately. We analyzed the processes implemented by the executive directors of the PSI Group as well as the accounting and valuation principles applied for the recognition of project-related revenue. We also tested the effectiveness of the controls of the significant group entities regarding this revenues recognition as well as the correct calculation of estimates.

In addition, we analyzed project revenues recognition by comparing the contractual agreements with the requirements of the current revenues recognition standards for construction contracts by inspecting agreements, project documents such as correspondence with customers, and evidence of hours booked.

We examined the calculation of revenues allocation for transactions that have not yet been completed using analytical audit procedures as well as an analysis of the contractual bases and the effectiveness of the controls implemented in this area.

Our audit procedures did not lead to any reservations relating to revenues recognition.

Reference to Related Disclosures

Disclosures on the accounting and valuation principles applied for revenues are contained in section B "Presentation of accounting policies and financial risk management method" under "Significant judgements, estimates and assumptions" and "Recognition of revenues and income" of the notes to the consolidated financial statements.

Information about the breakdown of revenues can be found in the "Disclosures on the consolidated income statement" section under D. 13 "Revenues" of the notes to the consolidated financial statements. Additional information is included in the "Disclosures on the consolidated balance sheet" section under C. 3 "Net trade receivables"; C. 4 "Receivables from long-term development contracts" of the notes to the consolidated financial statements.

2. Goodwill Impairment Test

Reasons Why the Matter Was Determined to Be a Key Audit Matter

Goodwill that makes up roughly 22% of total assets is reported under "Intangible assets" in the consolidated financial statements of the PSI Group. Goodwill is subject to an annual impairment test as of December 31 in order to determine any need to recognize an impairment loss. The impairment test is based on complex models covering multiple periods that use estimates based on judgement by the Board of Directors. The result of this impairment test is highly dependent on the executive directors' estimate of future cash flows and the respective discount rates used.

Against the background of the complexity and the judgement exercised during valuation, the goodwill impairment test was a key audit matter.

Auditor's Response

During our audit, we verified the procedure for performing impairment tests in terms of compliance with the requirements for an impairment test as defined by IAS 36 "Impairment of Assets" with the help of internal valuation experts. In this context, we analyzed the planning process, discussed the significant assumptions made in the current multi-annual planning with the executive directors, and compared this with the earnings and cash flows realized in the past. If we identified any significant differences, we examined the disclosures and evidence provided by the executive directors. In our assessment of the results of the impairment tests, we compared the general and industry-specific market expectations with the market models for the expected cash inflows and examined any differences. Based on our knowledge that even relatively small changes in the discount rates used can at times have significant effects on the amount of the business value calculated or the recoverable amount, we analyzed the parameters used to determine the discount rates and verified them in terms of the requirements of IAS 36.

We also performed sensitivity analyses in order to estimate any potential impairment risk associated with a reasonably possible change in one of the significant assumptions used in the valuation.

Our audit procedures did not lead to any reservations relating to the goodwill impairment test.

Reference to Related Disclosures

Disclosures on the accounting and valuation principles applied for goodwill are contained in section B "Presentation of accounting policies and financial risk management method" under "Significant judgements, estimates and assumptions," "Goodwill" and "Impairment of non-current, non-financial assets" of the notes to the consolidated financial statements.

Information about the breakdown of goodwill and the impairment test can be found in the "Disclosures on the consolidated balance sheet" section under C. 1 "Intangible assets and property, plant and equipment" of the notes to the consolidated financial statements.

Other Information

The Supervisory Board is responsible for the report of the Supervisory Board. In all other respects, the executive directors are responsible for the other information.

The other information comprises:

- the Group statement on corporate governance contained under “Transparent and responsible corporate governance” in the “Sustainability and CSR” section of the Group management report
- the declaration on the German Corporate Governance Code contained under “Transparent and responsible corporate governance” in the “Sustainability and CSR” section of the Group management report
- the non-financial statement contained under “Non-financial statement” in the “Sustainability and CSR” section of the Group management report
- the responsibility statement and the report of the Supervisory Board
- the other parts of the annual report expected to be provided to us after the date of the auditor’s report, with the exception of the audited consolidated financial statements and Group management report as well as our independent auditor’s report

Our opinions on the consolidated financial statements and on the Group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the Group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors 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 executive directors are responsible for assessing the Group’s ability to continue as a going concern. They also have the responsibility 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 executive directors are responsible for the preparation of the Group 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 executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a Group 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 Group management report.

The Supervisory Board is responsible for overseeing the Group’s financial reporting process for the preparation of the consolidated financial statements and of the Group management report.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Group 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 Group 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 the 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 opinions on the consolidated financial statements and on the Group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (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 taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgement and maintain professional skepticism throughout the audit. In addition, we:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the Group 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 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 (systems) relevant to the audit of the Group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors’ 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 Group management report or, if such disclosures are inadequate, to modify our respective 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 in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the Group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the Group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group’s position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the Group management report. On the basis of sufficient appropriate audit evidence, we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these

assumptions. We do not express a separate opinion on the 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 communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information Pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the Annual General Meeting on May 16, 2019. We were engaged by the Supervisory Board on October 1, 2019. We have been the group auditor of PSI Software AG (formerly: PSI Aktiengesellschaft für Produkte und Systeme der Informationstechnologie) without interruption since fiscal year 1998.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Martin Hofmann.

Berlin, March 20, 2020

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Hofmann	Beckers
German Public Auditor	German Public Auditor

PSI Multi-year Overview

in EUR million	**2019**	2018	2017	2016	2015
Order situation					
New orders	236	217	190	182	195
Order backlog	142	139	128	129	129
Income statement					
Revenues	225.2	199.2	186.1	176.9	183.7
thereof Energy Management***	115.8	99.7	91.6**	69.2	67.2
thereof Production Management***	109.4	99.5	94.5**	84.2	86.4
thereof Infrastructure Management***				23.5	30.1
Export share in %	41.0	41.9	43.7	45.2	49.3
License revenues	18.6	15.9	12.1	13.6	13.2
License share in %	8.3	8.0	6.5	7.7	7.2
R&D expenses	24.0	22.0	18.5	16.8	19.5
R&D ratio in %	10.7	11.0	9.9	9.5	10.6
Operating result (EBIT)	17.2	15.5	13.4	11.8	11.1
EBIT margin in %	7.6	7.8	7.2	6.7	6.0
Earnings before taxes (EBT)	16.4	14.5	12.5	11.2	9.4
Group net result	14.3	10.6	9.5	8.6	7.5
Return on sales in %	6.3	5.3	5.1	4.9	4.1
Cash flow					
Cash flow from operating activities	12.5	19.0	1.2	13.3	14.0
Cash flow from investing activities	–8.7	–7.4	–4.1	–2.9	–2.2
Cash flow from financing activities	–10.2	–4.8	–1.1	–6.7	–2.1
Investments*	11.2	7.8	4.4	3.2	2.9
Balance sheet					
Shareholders' equity	94.5	86.6	80.3	75.3	73.2
Equity ratio in %	38.0	41.5	41.4	37.8	36.7
Return on equity in %	15.1	12.2	11.8	11.4	10.2
Total assets	248.8	208.7	194.0	199.4	199.5
Share					
Earnings per share in EUR	0.91	0.68	0.61	0.55	0.48
Closing price at end of year in EUR	20.80	15.65	18.51	12.20	12.90
Market capitalisation on December 31	326.5	245.7	290.6	191.5	202.5
Employees					
Number of employees on December 31	1,984	1,787	1,665	1,619	1,650
Personnel expenses	137.8	121.3	112.3	109.3	106.8

* Company acquisitions, intangible assets, property, plant and equipment
** Adjusted
*** Change in segment reporting from 2017 onward

PSI Quarterly Overview for 2019

in EUR million	Q1	Q2	Q3	Q4
Order situation				
New orders	97	45	40	54
Order backlog	184	171	156	142
Income statement				
Revenues	52.0	54.6	53.1	65.5
thereof Energy Management	25.3	27.9	27.8	34.8
thereof Production Management	26.7	26.7	25.3	30.7
Operating result (EBIT)	3.0	3.5	4.0	6.7
EBIT margin in %	5.7	6.5	7.5	10.3
Earnings before taxes (EBT)	2.7	3.3	3.8	6.6
Group net result	2.0	2.4	2.8	7.1
Return on sales in %	3.8	4.4	5.3	10.8
Share				
Earnings per share in EUR	0.13	0.15	0.18	0.45
Closing price at end of quarter in EUR	16.90	17.85	18.75	20.80
Employees				
Number of employees at end of quarter	1,931	1,947	1,981	1,984
Personnel expenses	34.4	34.6	32.6	36.2

Financial Calendar for 2020

Publication of annual results	March 24, 2020
Analyst conference	March 24, 2020
Report on first quarter	April 28, 2020
Annual General Meeting	May 14, 2020
Report on first half of year	July 28, 2020
Report on third quarter	October 30, 2020
German Equity Forum analyst conference	November 16 to 18, 2020

The PSI Share

Stock exchange segment	Prime Standard
Stock exchange symbol	PSAN
Securities identification number (WKN)	A0Z1JH
ISIN	DE000A0Z1JH9

Your Investor Relations Contact

"In 2019, we not only celebrated our fiftieth anniversary, but also showed that PSI is fit for the future with record new orders, revenues and earnings. With our solutions for efficient use of energy and raw materials, we contribute to climate protection and sustainable business now and in the future."

Karsten Pierschke
Head of Investor Relations and
Corporate Communications

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We would be glad to add your name to our shareholder information mailing list. Please also get in touch if you would like a copy of the PSI AG Financial statements. For the latest investor news, please visit our website at **www.psi.de/en/psi-investor-relations/.**

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