

Annual Report **2020**

At the heart  
of innovation

# This is Sivers Semiconductors

Sivers Semiconductors AB is a leading supplier of chips and integrated modules to customers across the world.

**The Wireless business area** develops and sells RF chips and antennas for advanced 5G systems for data and telecom networks.

**The Photonics business area** develops, manufactures and sells semiconductor-based products for optical networking, optical sensors and optical wireless communication (Li-Fi).

**Sivers Semiconductors** enables a better connected and safer world by delivering the best solutions for fiber and wireless networks.

## Contents

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Year in brief	1	Sustainability	18
CEO Statement	2	The share	20
Branding	4	Corporate Governance	22
Market	6	The Board of Directors	26
Operations	10	Group Management	28
Passion for technology	14	Administrative Report	29

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# Year in brief

## January–December 2020

- Revenue amounted to SEK 96,170 M (96,355)
- Profit before depreciation and amortization (EBITDA) amounted to SEK –55,661 M (–48,322)
- Profit/loss for the period amounted to SEK –195,782 M (–75,661)
- Earnings per share amounted to SEK –1.37 (–0.59)
- Equity per share amounted to SEK 3.44 (2.19)

# 103

employees  
at the end of  
the year

## Significant events during the period

- On April 14, Siverts Semiconductors announced that the subsidiary Siverts Photonics had received a development order within Optical Sensing worth SEK 7.5 M from a new US Fortune 100 customer.
- On August 5, Siverts Semiconductors announced that the company had signed a 5G millimeter wave agreement with an estimated value of SEK 480 M.
- On September 23, Siverts Semiconductors completed a directed share issue of 6,517,805 new shares, raising proceeds of approximately SEK 200 M.

# 96.2

SEK M  
revenue

## Significant events after the end of the period

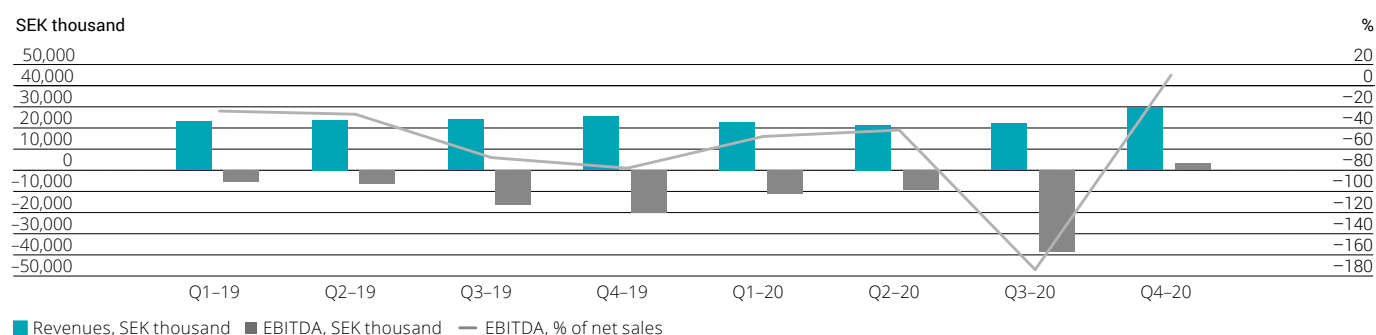
- On January 11, Pelle Wijk was appointed MD of the subsidiary Siverts Wireless.
- On January 11, Siverts Semiconductors announced that Siverts Photonics had won a new order in Optical Sensing worth approx. SEK 11 M from one of the company's established Fortune 100 customers. The order will be delivered and invoiced in the first half of 2021.
- On February 4 Siverts Semiconductors announced that Siverts Wireless had received an order for 5GmmWave IC from TMYTEK in Taiwan.

## Key performance indicators

SEK thousand	2020	2019	2018	2017 <sup>1)</sup>
Revenue	96,170	96,355	71,485	65,493
EBITDA	–55,661	–48,322	–52,589	–19,568
Profit for the period	–195,782	–75,661	–71,880	–45,617
Earnings per share before and after dilution, SEK	–1.37	–0.59	–0.63	–0.49
Equity per share, SEK	3.44	2.16	2.30	2.12

<sup>1)</sup> The comparative year 2017 has been presented in accordance with BFNAR 2012:1 ("K3") and the Annual Accounts Act.  
No translation has been made to IFRS.

## Revenues, EBITDA and EBITDA margin, per quarter





## A breakthrough year

2020 was a breakthrough year for Sivers Semiconductors in many ways. Although the world was affected by the pandemic, which restrained our growth, it has not affected our ability to win new and significant business.

2020 was the year when everyone had to shift from physical to digital meetings. Many people were concerned when the impact of the pandemic hit, no one really knew how it would end. Although our markets slowed, in April we won a development order from a new Fortune 100 customer, and in August Wireless won its largest order to date from a customer we have never met in person. These events demonstrate that the Company is poised for success in a digital world.

However, after several years of strong growth the pandemic affected our sales negatively, particularly in the second and third quarters, while sales recovered well in the fourth quarter. This was despite a more extensive second wave of the pandemic than expected in the latter part of the year. Overall, this meant that net sales remained at the same level as for 2019.

Due to good cost control, we succeeded in significantly improving EBITDA adjusted for social security expenses before staff options programs. This means that adjusted EBITDA for 2020 was SEK-27 M, compared to SEK-46 M in 2019.

### Four gamechangers

So how can I call 2020 a breakthrough year despite our lack of sales growth and with a pandemic ravaging the world? The explanation can be found in our order intake, which shows that we secured four contracts that I would characterize as gamechangers.

- The Photonics business area signed several new orders with its first Fortune 100 customer, worth a total of some SEK 25 M. Another order for approximately SEK 11 M was added in January 2021. This represents stable progress in a business

relationship that could eventually result in very substantial deliveries.

- Photonics also won a development order from a new Fortune 100 customer, also one of the world's largest tech companies. Although the order, which related to optical semiconductor lasers in sensors, was only worth SEK 7.5 M, the fact that we include two such companies in our customer base demonstrates how innovative our products are.
- Our other business area, Wireless, signed a development and delivery contract with a global semiconductor company relating to 5GmmWave technology. The customer estimates that the order is worth SEK 480 M over three years. The agreement confirmed that our 5G technology is of the very highest standard, and demonstrates the potential for large volumes.



“Our product development and other advances are the result of our employees’ high level of competencies and extensive commitment, and I want to take the opportunity to thank all our employees for their valuable efforts during the year.”

- Wireless also signed a long-term delivery agreement with an estimated value by the customer at SEK 70–100 M for our new antenna module, with 8 devices, a Lithuanian company active in wireless broadband access, where the end customer is a US wireless broadband supplier.

All these contracts are important gamechangers in their respective areas, and overall this inflow of new business marks the start of a new era in the Company's history, and hopefully offers a taste of what is to come.

### Increased interest in our technology

Another positive signal is that we increased the number of design wins with our customers that develop products based on our 5G technology from 12 at the end of 2019 to 21 at year-end 2020. In the slightly longer term, my assessment is that the pandemic has increased interest in our technology and has clarified the extent of digital demand, which may drive more initiatives aimed at infrastructure. One example can be found in the US, where the Rural Digital Opportunity Fund will pay out some USD 20 Bn between 2020 and 2030 to roll out broadband in rural areas.

Our market is also expanding as areas of use continue to increase. Wireless includes applications such as med tech, radar, satellite, connected cars and connected trains. More applications are likely to emerge.

In Photonics, we are seeing more potential applications such as driverless cars, fingerprinting, facial recognition, molecular recognition, metrology and quantum applications.

During the year, we continued to increase our competitiveness through successful product development. For example, Wireless developed a new antenna module, which is smaller, cheaper and can control an antenna in two dimensions. Photonics continued to develop its technology for sensor applications to satisfy the stringent requirements of two of the world's leading tech companies and has received several new contributions for projects in quantum solutions.

Our product development receives valuable input from our network of partners, which also helps us to reach customers all over the world. To further increase our reach, we plan to establish a joint sales office for Wireless and Photonics in the US in 2021.

### Equipped to deliver

Next on the agenda in 2021 is the transformation of development projects into volume deliveries. To achieve this, we are significantly strengthening the organization, delivery capacity and production. The new issue completed in September raised some SEK 200 M for the Company and means that we are now well equipped to finance the organizational measures.

During the year we also changed our name to Siivers Semiconductors. The name and brand change has been even more

positive than I anticipated. It has strengthened our brand and it is clear that we are now perceived as the high tech semiconductor company that we are, by customers, the stock market, partners and internally. We also continued preparations ahead of our move to Nasdaq's main list, with our sights set on listing during the first half of 2021. Ahead of the change of listing, I am delighted that the number of shareholders increased from 2,000 to over 15,000 in the year.

Our product development and other advances are the result of our employees' high level of competencies and extensive commitment, and I want to take the opportunity to thank all our employees for their valuable efforts during the year.

### 2021 – a very exciting year

I look forward to 2021 with great confidence, provided that the pandemic does not restrict us more than we are currently seeing. We will strengthen our organization, production and delivery capacity. We will continue to develop innovative and competitive products aimed at a broader spectrum of applications. We will deepen relationships with our existing customers, and simultaneously attract new customers. I am convinced that 2021 will be an exciting year in the Company's history.

**Anders Storm**

Group Chief Executive Officer

# Sivers Semiconductors

## At the heart of innovation

### From Sivers IMA to Sivers Semiconductors

Our history began over 60 years ago with an engineer who believed in microwave and millimeter wave technology. Today, Sivers Semiconductors AB is a leading innovator and supplier of millimeter-wave semiconductor and antenna technology and optical semiconductors.

At the end of 2020, Sivers IMA changed its name to Sivers Semiconductors, a name that more clearly represents the area in which the Group operates. The subsidiaries changed their names to Sivers Wireless (formerly Sivers IMA AB) and Sivers Photonics (formerly CST Global) to better reflect their respective markets.

The name change was part of a larger marketing and branding project that we worked on for a long time to clarify the common identity within the group and to further clarify and strengthen our profile towards investors and customers globally.

Our reputation for quality, reliability and speed together with increased demand for our products and know-how takes us on our transformation journey from a traditional product development company to a global sales company.

Our strengthened brand clarifies that our products are building blocks for technological innovation and they enable companies to offer faster and more reliable services than ever.

### Two business areas united in one strong logo

Sivers Wireless RF chip in the middle surrounded by Sivers Photonics laser beams stand for the innovative Sivers Semiconductors in the absolute forefront of cutting edge technology.









# Market

The Group is active on the market for products needed to upgrade data and telecommunications networks, including sensors. The sharp increase in traffic in these networks means that operators now have a substantial investment requirement, which in turn means that Sivers Semiconductors' market is significantly outgrowing traffic volumes.





The most important factor behind the rapid increase in traffic is the increased use of video. An increasing proportion of the content on the Internet consists of video, and users spend more and more time streaming video of increasingly higher image quality, which requires large bandwidth. Video traffic on mobile networks is expected to account for 77 percent of all mobile data traffic by 2026, compared to 66 percent in 2020<sup>1)</sup>.

Another important factor is the rapid expansion of very large data centers, from companies such as Google, Amazon, Microsoft and others offering cloud services. The number of large data centers is expected to increase from 338 in 2016 to 628 in 2021, and traffic within these will quadruple in the same period.

### Wireless

Traffic increases create a substantial investment requirement by telecom operators. Annual investments in millimeter wave components for 5G systems are expected to grow from USD 188 M in 2020 to USD 2,500 M in 2026.<sup>2)</sup> This means that the market for products needed to upgrade infrastructure, i.e. the

Group's market, is growing significantly faster than traffic volumes.

A high proportion of operator investments is made in the expansion of 5G, the fifth-generation mobile network. 5G uses the millimeter wave spectrum, which gives lower transmission cost and greater bandwidth. The capacity of 5G is 10–100 times greater than 4G.

In 2020 the distribution of 5G networks really took off. Ericsson estimates that by the end of 2026, 5G will cover 60 percent of the world's population, compared to 5 percent at the end of 2019.

The growth of 5G in Europe was stimulated by the European Telecom Authority, CEPT, which opened the 57–71 GHz band for unlicensed 5G throughout Europe at the start of the year.

South Korea is the country where the roll out of 5G services has proceeded the furthest. Since the launch in April 2019, growth has been dramatic. At the end of 2019, the number of 5G subscribers was 4.7 million and ended 2020 with nearly 12 million. The average data usage per subscriber was 27.3 GB at year-end 2019 and 26.6 GB at the end of 2020.<sup>3)</sup>

The expansion of wireless networks also means increased demand in fiber optics, including in data centers and in the operators' backbone networks. The market is also growing for fiber to homes (FTTH), driven by the fact that consumers want to be able to transmit high quality video and that the cost to install fiber the last stretch to homes has been reduced.

Alternatively, housing and small businesses can receive wireless broadband via Fixed Wireless Access (FWA), where the last part of the transmission to the subscriber is wireless. FWA is the first area where 5G mmWave can be used for fixed broadband connection. According to SNS Research, total operator revenue from FWA globally will increase by an average of 84 percent per year, up to more than USD 40 billion by 2025.

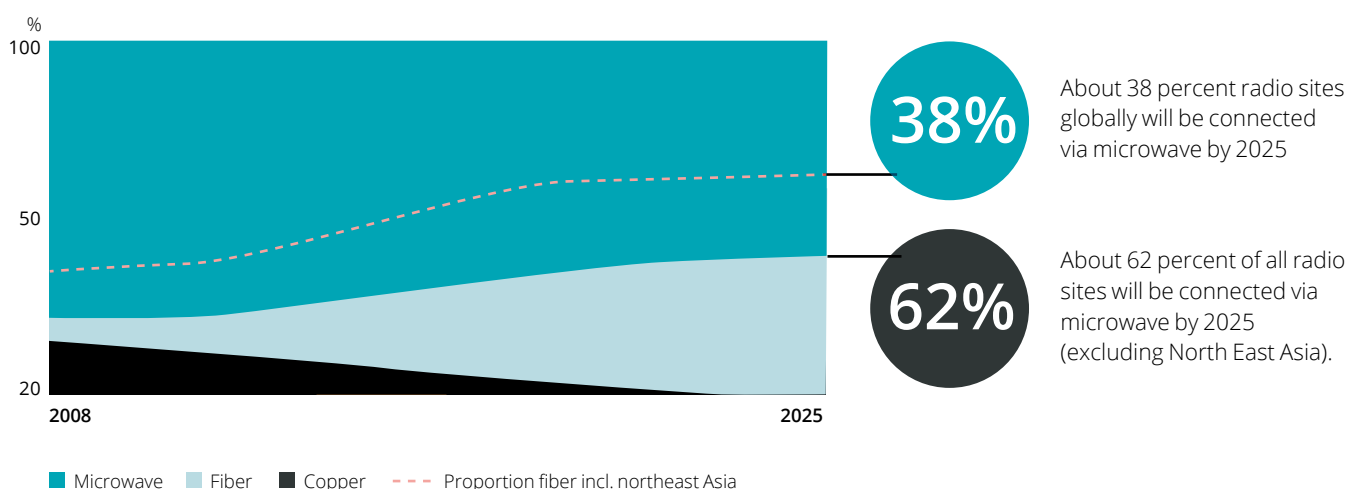
An important part of Wireless' market is system manufacturers, such as Ericsson, Nokia and Huawei, which in turn supply telecom operators such as Telia, Verizon and NTT Docomo. Another potential customer base is product companies, which develop products used in operator networks (fixed and mobile) without offering total system solutions. Examples of Sivers

<sup>1)</sup> Ericsson Mobility Report Nov 2019.

<sup>2)</sup> Market&Markets 5G infrastructure, SNS FWA 5G, Mobile experts and internal design wins and customer forecasts.

<sup>3)</sup> Tefficient Public Industry Analysis.

### Global backhaul media distribution



Source: Ericsson Microwave Outlook Report, 2020

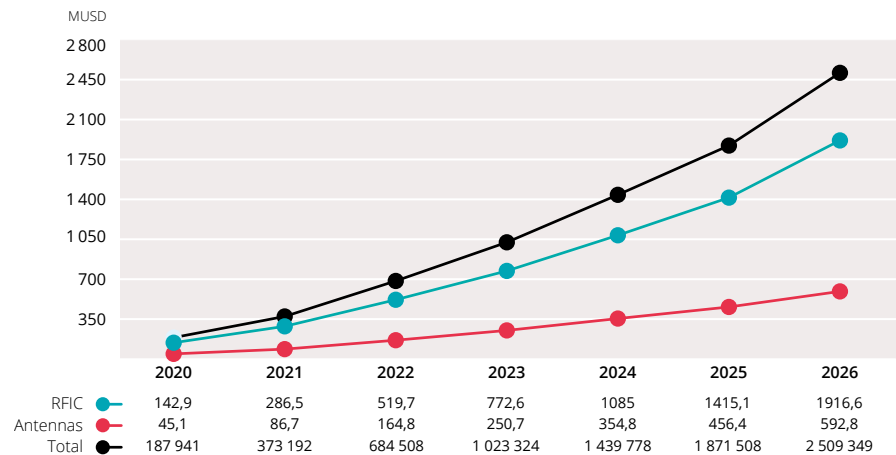
Wireless' customers that develop and sell this type of product include CCS, Cambium and 8devices. The market for wireless broadband access constitutes a specific segment, where many smaller independent WISPs (Wireless Internet Service Providers) complement the large nationwide operators. Deliveries are made directly or through partners.

At the beginning of 2020, MicroNät launched a wireless broadband network in Örnköldsvik. The British operator Ontix launched a wireless network in central London. Both of these networks include key components from Sivers Wireless.

### Photonics

Sensors is a promising growth area in both consumer and industrial electronics. Demand for optical sensor units is driven by factors including rapid technological advances in driver assisted/driverless cars, consumer biometrics, hazard and metrology, security, augmented and merged reality. The Internet of Things (IoT) is another growth area, where the number of access points to mobile networks is expected to grow by an average of 23 percent per year between 2020 and 2026. <sup>1)</sup>

Total market for millimeter wave component 5G RF 2020–2026



Source: Market & Markets 5G infrastructure, SNS FWA 5G, Mobile experts and internal design wins and customers forecast.

Photonics delivers to several Fortune 100-customers located in Silicon Valley directly or via partners. Photonics received an important follow-up order from a US Fortune 100-company relating to optical semiconductors for pre-series production, and a development order from a new Fortune 100-customer. Both these customers are some of the world's largest tech companies.

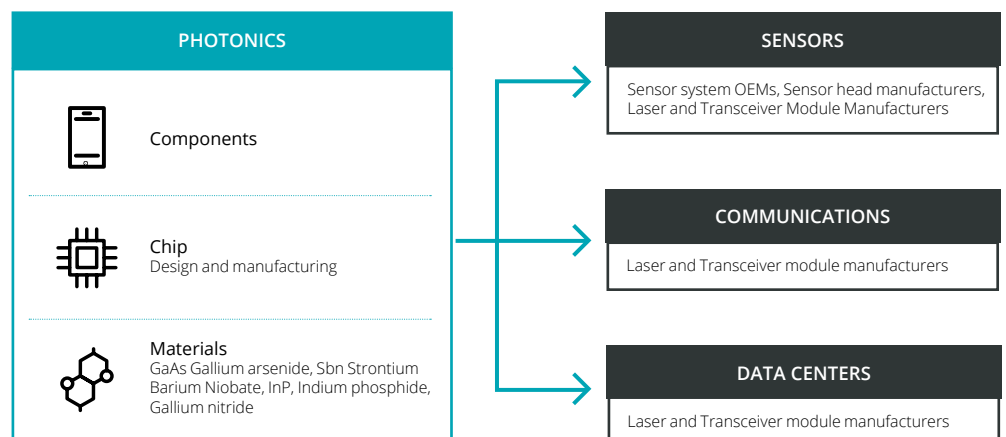
Companies that offer cloud storage solutions are another important customer group, with optical communications devices as key component. Photonics has sold a total of more than 25 million chips for fiber to the home, mainly to China and India.

<sup>1)</sup> Ericsson Mobility Report Nov 2019.

### Sivers Photonics in the value chain



The Group's photonics business area, Photonics, operates within three levels of the value chain – components, chips and materials. These products are then included in systems that Sivers Photonics' customers deliver to, for example large data centers.





## CCS Customer Case

### Metnet 60G integrated with Sivers Semiconductors 60 GHz mm Wave radio/ antenna solution



For more information: [www.sivers-semiconductors.com](http://www.sivers-semiconductors.com) and [www.ccsl.com](http://www.ccsl.com)

If possible, operators would build fiber networks everywhere; however, in some locations, this is simply not practical, or economically viable. With the Metnet 60G solution CCS assist service providers to extend the reach of their fibre assets to deliver the services wherever they are needed.

CCS Metnet 60G consists of CCS's own software integrated with Sivers Semiconductors 60 GHz mmWave radio/ antenna solution and Renesas IDT modems configured with the Blu Wireless IPR to provide gigabit connectivity to the global market. CCS has established a global relationship with ADTRAN to deliver industry-leading solutions to service providers. CCS rigorously evaluated the market and selected Sivers Semiconductors as a key technology partner when designing the integrated hardware platforms for today and tomorrow

#### Challenge

- Help operators build hybrid fibre-wireless networks delivering the lowest overall network TCO
- Address the 60 GHz market for FWA and mobile backhaul
- Design a complete best-in-class 60 GHz solution
- Reduce time to market
- Achieve scale to business and manufacturing

#### Solution

- CCS software together with Sivers Semiconductors 60 GHz mm Wave radio/antenna solution and Renesas IDT modem and Blu Wireless IPR – **Metnet 60G**
- Sales and manufacturing agreement with ADTRAN reaching hundreds of service providers across the globe

#### Result

- Maximize the full-fiber service ambition at a fraction of the cost
- Engineering project completed thanks to close collaboration between the engineering and management teams of CCS and Sivers Semiconductors
- Highest capacity per node, use of all six channels in the 57–71 GHz band, and best range performance

*"After an extensive search, we concluded that Sivers Semiconductors offered truly unique capabilities and performance that we could integrate within our hardware platform and utilise to deliver a differentiated solution – offering highest capacity per node, use of all six channels in the 57–71 GHz band, and best range performance"*

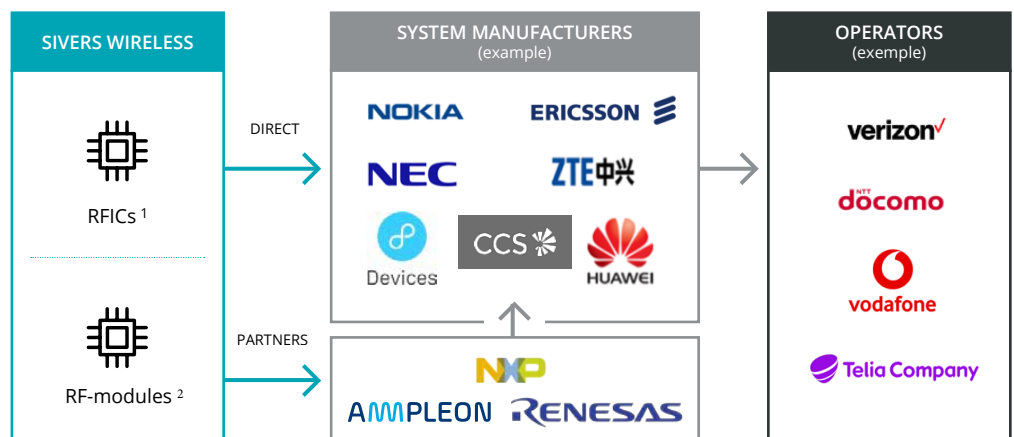
**Martin Harriman**

Executive Chairman, CCS

#### Sivers Wireless in the value chain



Within the wireless business segment, Sivers Wireless mainly delivers to system manufacturers who in turn deliver to telecom operators. Deliveries are made directly or through partners. The system manufacturers and operators mentioned above are examples of potential customers.





# Operations

Sivers Semiconductors enables a more connected and safer world by delivering market-leading solutions for sensors, and data and telecom networks. The products satisfy demand for upgrading new infrastructure driven by the explosive increase in data traffic.





# Well equipped for the ongoing technology shift

Sivers Semiconductors is an international supplier of advanced 5G systems for data- and telecommunications networks and optical products to optical fiber networks, sensors and optical wireless communication (Li-Fi). Millimeter wave technology and optical semiconductors are central to high-speed networks. The Wireless business area is fully focused on 5G, while the Photonic Business focuses on Passive Optical Networks, data centre interconnect, and sensing applications for emerging applications in mobile devices, autonomous vehicles, medical sensors and industrial.

## Increased volumes and new applications

Both business areas are therefore well equipped for the technological shift that is taking place with solutions for both wireless networks and fiber networks. The market for data centers as well as wireless and fixed broadband and sensors is growing rapidly, and the chips and components offered by the Group meet demand in all these areas.

Wireless and Photonics are facing a shift, as our customers' customers are starting to demand increased volumes and new applications are continuously emerging. The two business areas share the ability to adapt products to specific customer needs, while the focus is on infrastructure applications.





## Wireless

Millimeter wave is a key technology in 5G networks and the core of the wireless solutions Siverts Semiconductors offers. A big advantage of millimeter wave is that it enables higher data transfer rates, which enables significantly cheaper data transfer per megabyte compared to alternative technologies.

### Wireless

The reason why millimeter wave enables higher data transfer rates is that the higher frequencies offer a more accessible spectrum than is available for today's technology.

In addition, Siverts Semiconductor's chip has a number of leading features:

- We are the only manufacturer that has commercially proven that a single chip can support the full 14 GHz of frequency band now available for unlicensed 5G (57-71 GHz).
- The industry's lowest phase noise for an unlicensed 5G chip, which provides increased data transfer speed.
- Highest commercially proven power output, providing longer coverage.

### Wireless development in 2020

In 2020, Wireless signed a development and delivery agreement with an estimated future value of SEK 480 M, an important milestone for the Company. The Group's 5GmmWave technology will be included in a CPE product (Customer Premises Equipment) launched by a global semiconductor company, and will be available in large volumes from 2023 onwards. The agreement indicates the potential for substantial volumes, and confirms that the Group's 5GmmWave technology is world-leading.

Siverts Wireless had signed another long-term supply contract for the new 2D RF module with 8 devices, a Lithuanian company that offers products for wireless broadband access globally. The value of the supply contract is by the customer estimated at SEK 70–100 M for the period 2021–2024.

Examples of new applications includes the order received from Siemens Healthineers for evaluation packages and radio modules for use in medical applications requiring high data speeds. The order relates to the Chinese market and is a first

step in Siemens Healthineers' ambition to utilize unlicensed 5G technology more extensively.

### Wireless in 2021

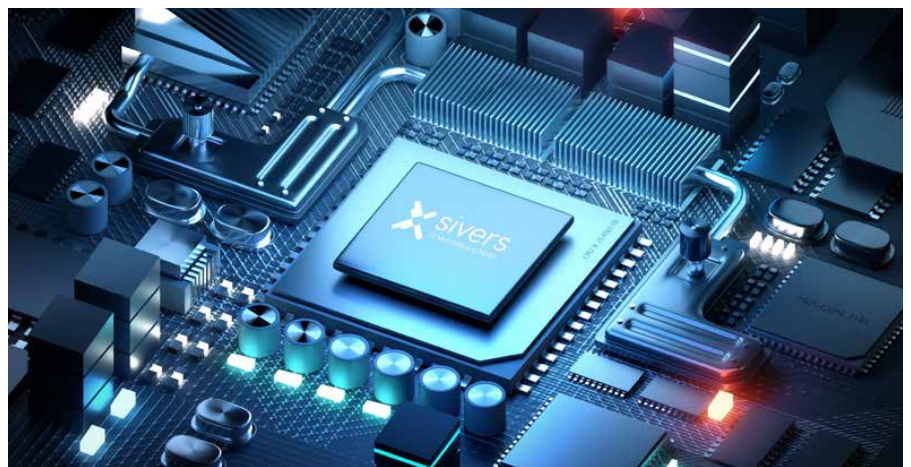
At year end 2020, the business area had 21 design wins, which means that 21 customers/partners had chosen to build their upcoming products on Siverts Semiconductors' integrated 5G circuits. These design wins are divided into four different areas: data/telecom, medical technology, defense and rail (track-to-train). In 2020 some 150 evaluation packages were also sold to customers or educational institutions that want to study our products and technology more closely.

Product development is a highly prioritized area. Of a total of 31 employees in the business area, 16 work with development. The focus of the work is based on our extensive experience in the industry, and our responsiveness to our customer's needs and requirements. Feedback from our network of partners is of considerable importance in this context. In some development projects, specific customers are involved throughout the entire journey. Development includes both chip and

modules/antennas where a chip is included. Normally, 2–3 chip projects are ongoing and up to 10 module projects run in parallel.

The Wireless business area has no in-house production and uses external partners for all production. This allows for rapid growth without necessitating major investments. At chip level, the infrastructure is in place for very large volumes without requiring investments in proprietary production, which creates the right conditions for managing expected substantial sales growth.

Deliveries are made directly to system manufacturers and other product companies, and through a strong global network of partners. In the latter case, the Group's products are included in subsystems and solutions that are developed in collaboration with partners. In addition, partners provide valuable input to the Group's product development. The network is also critical to the Group's opportunities for global marketing and reach. Important partners include world-leading manufacturers such as Ampleon, IDT, Fujikura and NXP.





# Photonics



The Photonics business area develops, manufactures and sells semiconductor-based products for optical networking, optical sensors and optical wireless communication (Li-Fi).

## Photonics

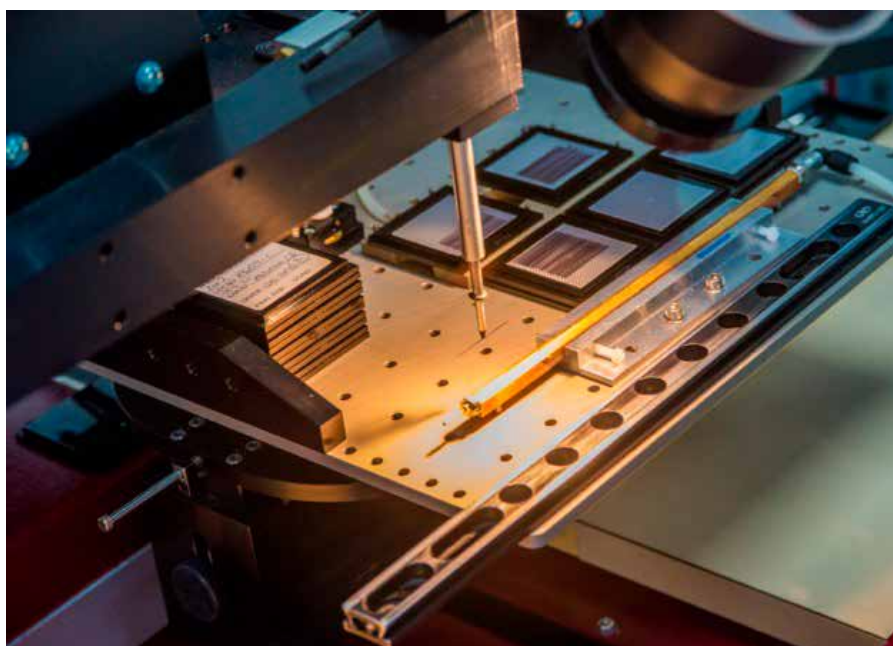
The optical communications devices are a key component of cloud storage and cloud communications; passive optical networks (PON), including fiber-to-the-home; 5G fronthaul; and Quantum technologies. The optical sensing devices enable autonomous and assisted driving vehicles; consumer biometrics; hazard and metrology; security; and augmented and merged reality applications. The optical wireless devices are critical for Li-Fi.

Silicon photonics is a rapidly growing technology where small silicon optical chips replace copper waveguide connections for light transmission. The light source is a laser chip, made from Indium Phosphide, integrated into the silicon waveguide. Photonics is a leading supplier of these indium phosphide lasers. In addition to traditional data applications, Photonics has technical knowledge and the ability to customize solutions in the field of lasers for optical sensors in a variety of applications.

## Photonics development in 2020

Photonics continued to develop its relationship with its first Fortune 100 customer during the year, and signed several new orders with this customer with a total value of some SEK 25 M. In total, this Fortune 100 customer had placed orders worth SEK 74 M at year end. Another order for approximately SEK 11 M was added in January 2021.

During the year, Photonics secured another development order from a new Fortune 100 customer. The order totaled SEK 7.5 M, and related to optical semiconductor lasers for use in sensors. The fact that two of the world's largest tech companies are included amongst Photonics' customers demonstrates the innovative and market-leading nature of the products.



Alongside a group of sector-leading operators, Photonics signed an agreement relating to the standardization of integrated photonics solutions in 2020. The agreement involves a new sector standard for continuous wave laser sources that reduces the need for complex adaptations, which makes the technology more attractive for use in cost-sensitive applications. The group include industry leaders such as Arista, Ayar Labs, imec, Intel, Lumentum, Luminous Computing, Quintessent, Sumitomo Electric, II-VI and MACOM.

## Photonics in 2021

The Photonics business area in Glasgow, Scotland, is one of few independent factories in the world that develops and manufactures custom lasers, and semiconductor optical amplifiers in chip and wafer forms. Photonics currently has expertise in

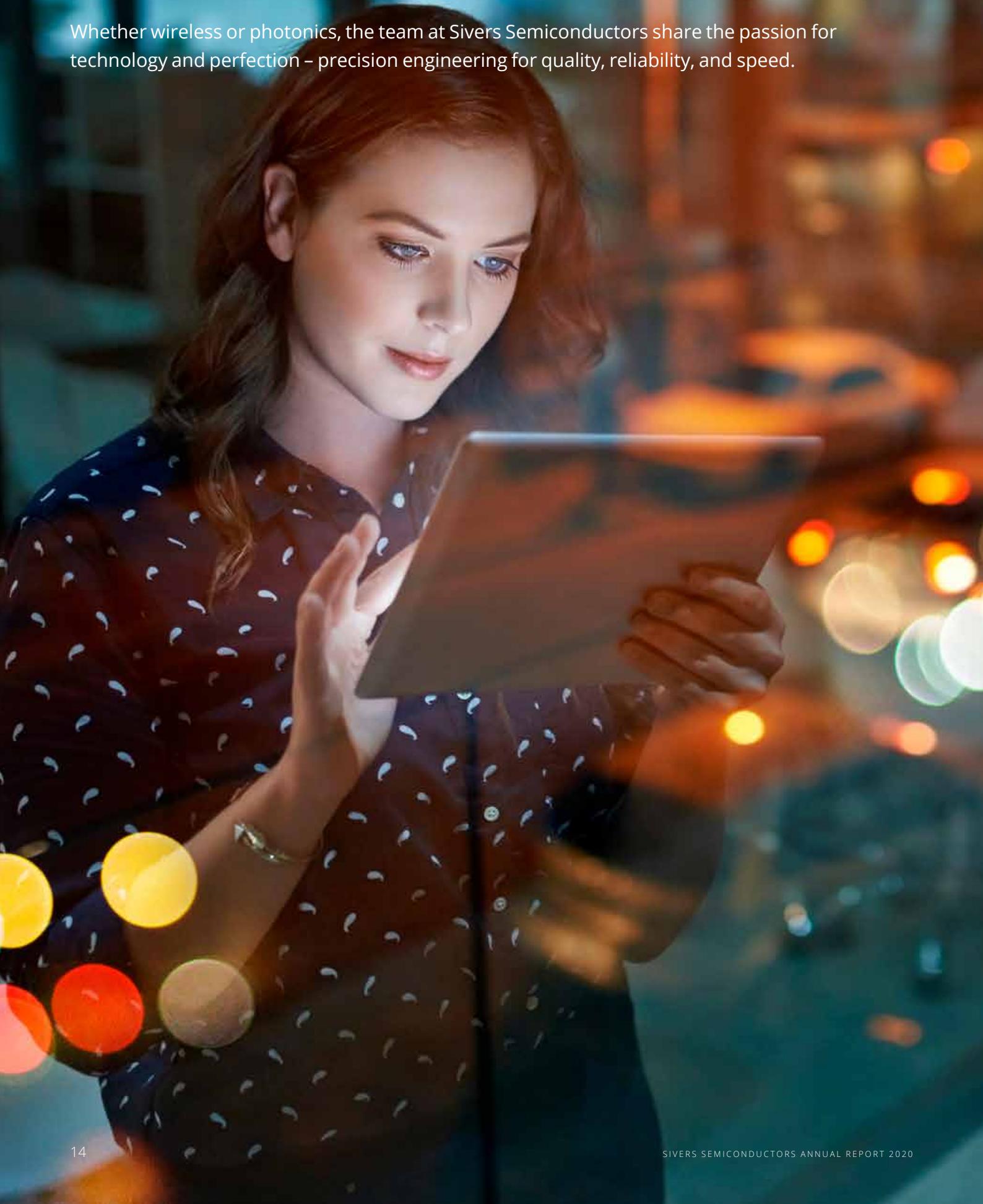
many material combinations and manufacturing processes used in the commercial manufacture of semiconductor chips for optoelectronic purposes. The factory in Glasgow is being extended, which will imply a significant increase in delivery capacity.

**For a more detailed description of the technology and products, see**

[www.sivers-semiconductors.com](http://www.sivers-semiconductors.com)

# Passion for technology

Whether wireless or photonics, the team at Sivers Semiconductors share the passion for technology and perfection – precision engineering for quality, reliability, and speed.



# Employees

The recruitment and development of competent employees is critical to Sivers Semiconductors' continued progress, and the Group places great emphasis on recruitment and skills development.

The Sivers Semiconductors Group's employees are characterized by high technical expertise. This is absolutely necessary to develop products with world-leading performance.

At year-end, the Group had 103 employees, with an age distribution as shown in the figure to the right. The relatively high average age reflects the requirement for experienced engineers. Competence is based partly on education and partly on experience. An indication of the level of education is that as many as 20 percent of the Group's employees have a doctorate. The working environment is international, and a large number of different nationalities are represented among the Group's employees.

Of the employees, 25 percent are women, which reflects the traditionally male-dominated industry.

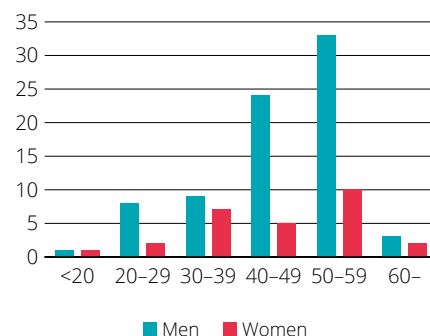
The Group strives to be an attractive employer, both as a learning organization but also as a talent developer and with the strategy of allowing employees to take part in the Group's journey as shareholders through various staff share option programs. The nature of the business provides excellent opportunities for stimulating roles at the cutting edge of technology on growing markets. The proportion of employees working with development amounted to 28 percent.

Sivers Semiconductors is a multicultural company that strives to promote equal rights and opportunities in the working life – regardless of gender, ethnicity, religion or beliefs. The reason for this is that companies characterized by diversity enjoy improved prospects of conducting good business and developing.

# 103

employees, including  
20 PhDs

Age distribution 2020-12-31



***"What I like best about working at Sivers Photonics is the diversity of projects, and that we develop a new type of technology every year. We also have a great team and excellent collaboration between different departments", Iain Eddie explains.***

Iain is Senior Device Design Engineer at Sivers Photonics in Glasgow, Scotland. He joined Photonics (then CST Global) 2006, after completing his doctorate in photonics at Glasgow University.

His work includes research projects in several areas, such as lasers and detectors. Major projects in 2020 included InP sources for integration of silicon photonics applications, development of advanced photodetector chips, and developing lasers for the world's first commercial Quantum Atomic Magnetometer – a unit that detects micro-defects in ferrous metal surfaces.

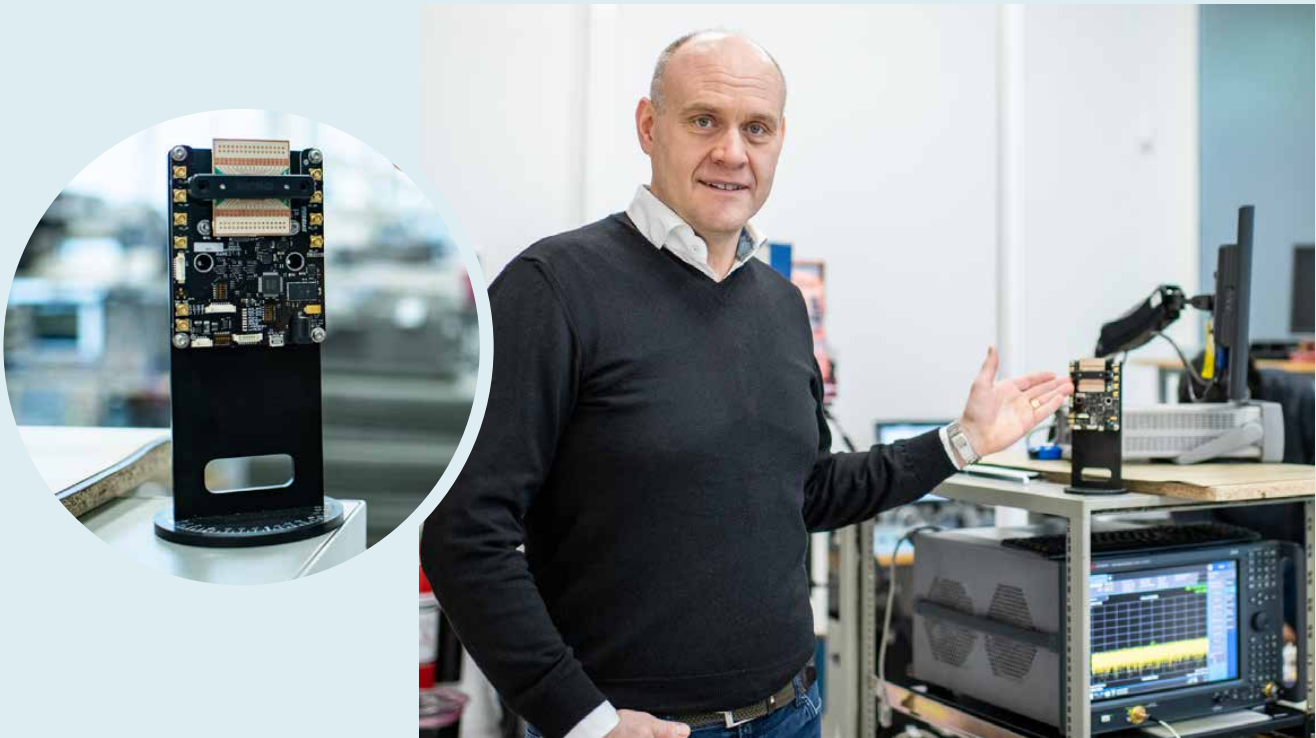
Over time, Iain's tasks have moved in the direction of project management rather than design.

***"Earlier in my career I spent most of my time designing products, while now I focus more on interacting with customers and leading the project."***



**Iain Eddie**  
Senior Device Design Engineer





## Pioneering innovation for Wireless technology

### Market leading 5G wireless chip with the highest level of integration

Sivers Wireless product development is energized by several collaborations with customers and partners. Compliance with industry standardization and regulations is highly focused.

Understanding the market and our customers' needs is central to product development. Feedback from our network of partners is of considerable importance in this context. In some development projects, specific customers are involved throughout the entire journey. Another key factor for developing the right product at the right time relates to carefully monitoring standardization and regulatory frameworks that are emerging in the sector.

Product development includes chips, modules and antennas where a chip is included. Normally, 2–3 chip projects are ongoing and several module projects in parallel. During the year, Wireless completed development of its transceiver chip which won the best industry showcase award at trade symposium IEEE RFIC 2018. This meant that the chip can now be offered for volume delivery. The equivalent chip for 5G, 28 GHz, was ready for volume production at the end of 2020. Furthermore, hardware tests were completed of a beamformer-chip for 5G, 28GHz, designed to be a cornerstone of 5G infrastructure. The difference between these two types of chip is, simply put, that beamforms only have the high frequency radio element, while a complete transceiver chip includes conversion to an IQ interface that facilitates integration for our customers. At module level, we developed a cost-efficient radio module for 57–71 GHz for use in wireless broadband for households without access to fiber.

To ensure design quality, we increased capacity for pilot studies and simulations in the year, both through software and

recruitment. Of a total of 36 employees in the business area, around half work on development.

Sivers Wireless are the only market operator to cover the entire frequency range from 57 GHz to 71GHz with a chip and an antenna solution. The transceiver chip has a high degree of integration that decreases the need for additional components, which makes the radio modules cost-effective for customers.

In 2020 we also developed the next version of the 5G chip and radio module to be included in deliveries contracted for 2022. This work engages a large proportion of our development capacity, which was also strengthened with external competencies. The new versions intended for the frequency bands 28 and 39 GHz will be even more cost efficient and adapted for high volume production.

Product development is supported by a number of collaborations with customers and partners. Both radio modules and chips require far-reaching integration in customers' products, both on the hardware and software side. Integration is facilitated by the Group's partnerships with modem suppliers such as NXP, Blu Wireless and Ampleon.

The development division will increase capacity further to include simulation in the design phase and hardware testing during 2021, through the expansion of existing facilities, by acquiring new instruments and the recruitment of new staff. This will shorten the time-to-market for new products.



## Photonics helps create industry standard

Sivers Photonics is a founding member of an elite group of companies signed up to a multi-source agreement (MSA) to define a new, industry-standard for continuous wave (CW) laser sources.

The CW-WDM MSA (Continuous-Wave Wavelength Division Multiplexing Multi-Source Agreement) was formed to standardise WDM CW sources in O-band for emerging advanced Silicon Photonics (SiPh) based optics applications that are expected to move to 8, 16, and 32 wavelengths, to support high data rate advanced optical communication and computing applications.

CW lasers are critical to the integrated photonics devices used in next-generation artificial intelligence and data-centre applications and Sivers Photonics is helping to spearhead the standardisation, along with industry leaders and household names, Arista, Ayar Labs, imec, Intel, Lumentum, Luminous Computing, Quintescent, Sumitomo Electric, II-VI and MACOM.

The goal of the MSA is to generate a set of specifications for optical power sources. Once the standard is completed, vendors can leverage a robust supply chain and suppliers have a unified, large market to sell into. This will allow developers and suppliers to leverage their strategic investments in the current generation of optical products to accelerate time to market of next generation products.

Today's high volume datacom optics defined by IEEE and ITU standards specify serial or four WDM interfaces. These standards specify single and four wavelengths for today's datacom optics. The CW-WDM MSA is different from optical communication standards groups in that it solely focuses on specifying the laser

source instead of the full communications link and is not targeted at any specific application.

Increasing the number of wavelengths, while staying in the O-band and aligning with ITU and IEEE standards, is a crucial part of the emerging ecosystem and will enable improvements in performance, efficiency, cost, and bandwidth scaling. Such higher wavelength counts are needed for emerging applications such as silicon photonics (SiPh) based high-density co-packaged optics, optical computing, and AI, and enable a leap in performance, efficiency, cost, and bandwidth scaling compared with previous technology generations.

The specification will be made available throughout the photonics industry, allowing the development of compatible products from multiple vendors, and is seen as a decisive step to enhance market growth, improve customer choice, and encourage competition.

For further information visit the CW-WDM MSA website: <https://cw-wdm.org/>



# Sustainability



Sivers Semiconductors drives some of the world's most significant technological advances. By offering the best solutions in sensors and data and wireless networks we make the connected world safer and better. This includes goal-oriented efforts to reduce our own and our customers' environmental impact, and creating more focused sustainable products and solutions.

Increased capacity in data networks is critical to the continuously accelerating digitalization. This places more stringent demands on operators such as Sivers Semiconductors, who supply key products for these systems.

## Sustainability at Sivers Semiconductors

Sivers Semiconductors' sustainability work is founded on three cornerstones:

### **Deliveries with sustainability benefits.**

Our customers' operations and services often have a significant impact on people and the environment. We want to challenge ourselves and our customers to maximize the sustainability benefits of the solutions we create together.

**Employees with sustainability competencies.** In order to create sustainability benefits, the Group has a responsibility to train our employees. The right knowledge and conditions need to be in place to provide our customers with the right advice. Many employees appreciate a sustainable employer and the opportunity to influence our customers' attitude to sustainability.

### **Responsible utilization of resources.**

Utilizing all kinds of resources responsibly and efficiently is a cornerstone of our work for more sustainable operations and delivery. Read more about our policies and other controls below.

## Controls and organization for sustainability

Sivers Semiconductors' sustainability work proceeds from the following control documents:

- Sustainability policy
- Code of Conduct
- Code of Conduct for suppliers
- HR policy

Sivers Semiconductors is primarily a value-driven company where all employees are guided by the values honesty, respect, trust and drive in their day-to-day work. In addition, Sivers Semiconductors' Code of Conduct states our positions and demands according to legislation, labor law and human rights, the environment and anti-corruption. Sivers Semiconductors places equivalent demands on our suppliers. These are expressed in the

Code of Conduct for suppliers. The HR policy is specifically focused on the Company's HR work and staff development.

Sustainability work is part of Sivers Semiconductors' business planning, management systems (Sivers IMA Management System, SIMS) and processes. Our Quality Management is certified according to ISO9001:2015, and ISO14000 forms the basis for our environmental work. The sustainability work is carried out through ordinary groups and management teams.

Sivers Semiconductors' risk analysis includes sustainability issues. The risk analysis is updated and used on an ongoing basis, and risks are followed up at Board and Group management meetings.

## Offering for a sustainable and connected world

Sivers Semiconductors develops and produces chips and modules for communications systems and sensors. In order to be competitive our products need to be fast and energy efficient. We streamline technical systems by utilizing the very best basic technology and design. Technology



that is accessible, consumes less and achieves more, makes the world more accessible, safer and greener – and contributes to our customers' and our success.

### Environmental adaptations of our offering and operations

Efficient energy use is one of the most difficult challenges the world currently faces. Here, semiconductors play a critical role. There is enormous potential for energy savings by rationalizing 5G networks – a concrete example is energy-efficient amplifiers that transmit signals. The product that Sivers Semiconductors launched during the year is approximately five times more efficient compared to the previous generation chips and uses only around one third of the effect compared to competing products. This makes our product one of the world's most efficient chips for 5G networks.

Sivers Semiconductors evaluates all operations based on the environmental impact. We develop our products' environmental performance and continuously strive to reduce our negative environmental impact, for example by applying the precautionary principle.

Sivers Semiconductors designs, develops and manufactures products and chooses its suppliers with the aim of reducing our environmental impact by:

- Using technology with optimal energy efficiency
- Reducing energy consumption when our products are used
- Reducing resources and harmful substances in products and production
- Minimizing waste, emissions and radiation
- Reusing materials
- Developing or procuring components in accordance with Sivers Semiconductors' sustainability policy. The policy ensures compliance with RoHS and REACH, and that components are free from conflict minerals.

We apply the OECD's guidelines (Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas) in order to avoid conflict minerals.

### Employees

Sivers Semiconductors employs a total of 103 (99) staff, of which 25 percent women and 75 percent men. Our employees have a high degree of competencies, solid professional and/or academic backgrounds

and represent many different nationalities. Read more about our employees on page 15.

Sivers Semiconductors' HR work proceeds from the Group's policy in the area. The policy covers the entire cycle, from selection and recruitment, through development, to termination of employment. The policy contributes to the Company's business goals and ensures that Sivers Semiconductors is, and is perceived as, an attractive employer by potential and existing employees.

**Health and safety.** Sivers Semiconductors safeguards a healthy working environment, in all respects. We carry out and continuously implement risk assessments where we review potential causes of injuries and ill health, and how these risks can be eliminated or managed through preventative and protective measures. Employee health and safety is addressed with openness and care, and includes physical and mental health.

**Employees and leadership.** Sivers Semiconductors has defined the behaviors we expect from our employees and managers.

Good employeeship is about contributing to the Company's goals and progress. Our starting point is that employees can and want to assume significant personal responsibility for carrying out their work effectively. Employees are expected to complete assignments based on their own goals and development plans, take independent initiative and assume responsibility for tasks and results, as well as treat others with respect and remain open to people's differences.

Being a leader at Sivers Semiconductors means setting a good example and encouraging personal responsibility and commitment. This includes creating conditions for employees to achieve their goals. Our leaders are expected to strive for an inclusive working environment and to create opportunities for taking responsibility, creativity and learning.

**Development and remuneration.** Sivers Semiconductors works on the basis of each individual's performance and results to pursue operations towards set goals. We proceed from the Company's strategy, clarify priorities and build our employee's motivation to contribute to the company.

Sivers Semiconductors attracts, motivates and retains employees by means including salary and benefits that are appropriate and fair. Remuneration is based on respective national legislation and collective agreements.

Individuals that contribute to the Company's success are offered to participate in value growth through employee option programs provided by Sivers Semiconductors. There are currently four programs with terms of between four and eight years. Read more about the programs on page 19.

### Human rights and social responsibility

Sivers Semiconductors' Code of Conduct determines that all operations shall be carried out with respect for human rights, employee health and safety, and the societies where we operate. The Company complies with international norms, laws and rules with regard to human rights and labor law. This includes prohibition against child and forced labor and discrimination, and respect for employees' freedom of association and the right to collective negotiations.

We promote diversity and a more even distribution between the sexes and equal opportunities. Sivers Semiconductors is a multicultural workplace and we strive for equal rights, opportunities, and obligations regardless of gender, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation or age.

Another important aspect of our culture is to support women's and men's opportunities to create a positive work-life balance.

**Human rights and procurement.** Sivers Semiconductors also takes human rights into account in its procurement. The demands made are indicated in the Code of Conduct for suppliers. For example, our products are prohibited from including conflict minerals.

### Anti-corruption

Sivers Semiconductors' success is based on long-term and trusted relationships. It is critical that all operations and business takes place with integrity and responsibility, and that we counteract all forms of corruption and illegal and unsuitable business practices. Sivers Semiconductors' stance is defined in the Company's Code of Conduct, Sustainability policy and HR policy. Employees wanting to report suspected cases of misconduct are encouraged to do so to their line manager. Cases are escalated within the organization. Alternatively, any suspect misconduct can always be reported via [whistleblower@sivers-semiconductors.com](mailto:whistleblower@sivers-semiconductors.com), a direct link to the chairman of the board.

# The Sivers Semiconductors Share

The Sivers Semiconductors share has been listed on Nasdaq First North Growth Market since November 30, 2017. Prior to this, the share was listed on Spotlight, formerly Aktie-torget. Market capitalization as of December 30th, 2020, amounted to SEK 4,772 million.

## Share capital

As of December 30, 2020, the share capital of Sivers Semiconductors was SEK 77.2 million. The number of shares was 154,445,647. According to the Articles of

Association, the share capital shall be a minimum of SEK 65 million and a maximum of SEK 260 million, distributed over a minimum of 130,000,000 shares and a

maximum of 520,000,000 shares. The proportion of shares available for trading (free float) at year-end was 100 percent.

## Share capital development

YEAR	Event	Number of shares		Share capital (SEK)		Subscription price per share (SEK)
		Change	Total	Change	Total	
2019	Opening balance		131,648,456		65,824,228.00	
2020	New issue	5,955,418	137,603,874	2,977,709.00	68,801,937.00	9.30
2020	New issue, Redemption of warrants	1,676,853	139,280,727	838,426.50	69,640,363.50	
2020	Offset share issues	779,696	140,060,423	389,848.00	70,030,211.50	10.77
2020	Offset share issues	555,262	140,615,685	277,631.00	70,307,842.50	22.80
2020	New issue, Redemption of warrants	895,700	141,511,385	447,850.00	70,755,692.50	
2020	New issue	6,517,805	148,029,190	3,258,902.50	74,014,595.00	30.70
2020	Exercise of convertibles	4,651,727	152,680,917	2,325,863.50	76,340,458.50	8.29
2020	New issue, Redemption of warrants	1,637,214	154,318,131	818,607.00	77,159,065.50	
2020	New issue, Redemption of warrants	127,516	154,445,647	63,758.00	77,222,823.50	

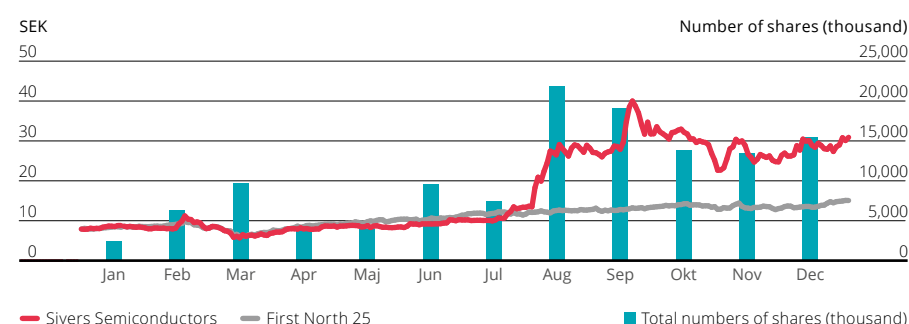
## Share price performance during the year

During the year, the Sivers Semiconductors' share increased by 291.1 percent, compared to First North 25 Index, which increased by 90.7 percent. The closing price on December 30, 2020 was SEK 30.9 per share, corresponding to market capitalization of SEK 4,772 million.

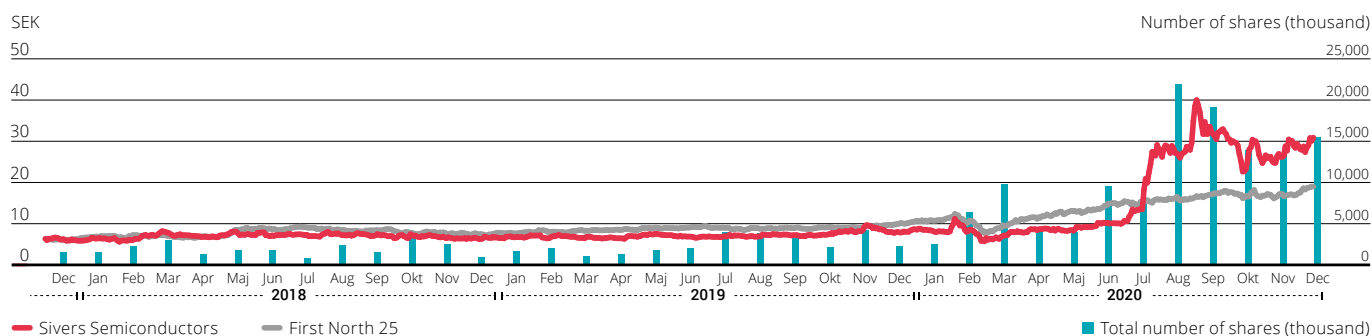
## Share turnover in the year

The average daily turnover of the Sivers Semiconductors' share was 506,143 shares. A total of 128 million shares were traded in 2020, with a total value of SEK 2,732 million. The highest closing price for the share in 2020 was SEK 40.0 on September 18, and the lowest closing price was SEK 5.7 on March 16, 2020.

## Share price performance 2020



## Share price performance Nov 30, 2017 – Dec 30, 2020



## Share ownership December 31, 2020

	No. of shares	Prop. of votes and capital, %
Erik Fällström through companies	28,503,352	18.50
Keith Halsey through companies	19,928,824	12.90
Swedbank Robur Ny Teknik	10,415,000	6.70
AMF Pension Småbolagsfond	6,402,927	4.10
Swedbank Robur		
Folksam LO Sverige	4,932,073	3.20
BNP Paribas Nordics Small Cap	2,148,000	1.40
Swedbank Robur		
Folksam LO Västfonden	2,120,000	1.40
Tredje AP-fonden	2,000,000	1.30
Tomas Duffy	1,150,000	0.70
Andrew McKee	1,113,683	0.70
Other	75,731,788	49
Total number of shares	154,445,647	100

## About the Sivers share

Exchange	Nasdaq First North Growth Market
Certified Advisor	Erik Penser Bank
Number of shares	154,445,647
Market value	4,772,370,492
Ticker	SIVE
ISIN	SE0003917798
LEI	254900UBKNY2EJ588J53
Development 2020	291.10%
Development 2020 index	90.70%
Daily turnover, number of shares	506,143

## Owners and ownership structure

At the end of the year, the ten largest shareholders controlled 49.0 percent (66.0) of the capital and votes. The total number of shareholders in Sivers Semiconductors was approximately 15,000 (2,300).

## Dividend

Sivers Semiconductors has not paid any dividends to date and has not adopted a dividend policy. The Company will continue to focus on growth, which means that available financial resources and profit are reinvested in operations to

finance the Company's long-term strategy. The Board's intention is therefore not to propose any dividend over the coming years.

## Incentive programs

Sivers Semiconductors had four staff share option programs at the end of the year. During the financial year, two earlier programs were concluded, one for the period 2012–2020 and one for the period 2016–2020. Staff share option programs still active at the end of the period are subject to the following terms:

1). 2015–2025,

2). 2020–2026,

3). 2020–2028 and 4). finally 2020–2025.

Upon full conversion of allocated staff share option programs, the number of shares will amount to 159,954,567. The total number of share options granted as of December 31, 2020 amounted to 5,504,525, (5,508,920 factor remeasured) of which 1,574,525 have been vested. For more information, see Note 30 of the Group's Annual Report.



# Corporate Governance

Corporate governance refers to the decision-making systems through which the owners, directly or indirectly, control the Company. For Sivers Semiconductors, whose business operations are largely based on future income and earnings, good corporate governance is not just a matter of having good control of its organization, but is a critical part of the core business.

Sivers Semiconductors is listed on First North, an unregulated market, but has taken the decision to apply for listing on Nasdaq's main market during the coming year. Companies whose shares are admitted to trading on a regulated market are subject to compliance with the Corporate Governance Code, and although Sivers Semiconductors is not currently governed by the Code, the Company has implemented several adaptations and decisions in order to move towards compliance with the Code.

## Annual General Meeting (AGM)

The AGM is the Company's highest decision-making body. The AGM elects the Company's Board of Directors and Auditors, adopts the accounts, decides how profits should be allocated and decides on discharge from liability for the Board and the CEO. The AGM also addresses other issues that are mandatory under the Swedish Companies Act and the Articles of Association. All shares in Sivers Semiconductors AB have the same voting rights, and there are no limitations in the Articles of Association regarding the number of votes a shareholder can exercise at the AGM.

The 2020 AGM was held on May 19 in Stockholm. The date of the AGM was published in conjunction with the Interim Report for the third quarter. Registered shareholders representing 51.5 percent of the shares and votes in the Company were present at the AGM. However, restrictions on public gatherings due to the ongoing Covid-19 pandemic meant that the Board and management did not make any presentations. A majority of the voting was carried out by postal ballot.

## Nomination Committee

During the year, the Nomination Committee comprised Joachim Cato, Chairman of the Committee and appointed by Erik Fällström through companies, Monica Åsmyr, appointed by Swedbank Robur Fonder AB, Angelica Hanson, appointed by AMF Aktiefond Småbolag, and Tomas Duffy, Chairman of Sivers Semiconductors AB.

## AGM decisions

The main resolutions of the Annual General Meeting 2020 are listed below:

Re-election of Board members Björn Norrbom, Ingrid Engström, Dag Sigurd, Tomas Duffy, Robert Green and Erik Fällström. Election of Board member Beth Topolovsky. Tomas Duffy was re-elected Chairman of the Board.

Authorization for the Board of Directors to decide, with or without departure from the shareholders' preferential rights, on a new issue of shares and/or convertibles for a maximum of 20,600,000 shares, corresponding to a dilution effect of approximately 15 percent of the share capital and votes.

The AGM authorized the Company to allocate an additional 3,600,000 staff share options under the Company's incentive program to existing and recently recruited executives in the Group. The incentive program comprises a maximum of 3,600,000 share options, corresponding to approximately 2.5 percent of the share capital and votes after dilution, based on the then number of shares in the Company. The incentive program includes performance covenants in relation to annual growth in the Group's net sales.

Deloitte was re-elected as the Company's Auditor and Zlatko Mehinagic was elected Auditor in Charge.

## Extraordinary General Meeting I

An Extraordinary General Meeting was held on 9 October. The purpose of the EGM was to authorize amendments to parts of the Articles of Association. The Board proposed a new Company name: Sivers Semiconductors AB. The decision was approved unanimously and forms part of the Company's new profiling strategy. Participation at the EGM

corresponded to 42.6 percent of the votes, mainly through postal ballots due to the ongoing pandemic.

## Extraordinary General Meeting II

On 21 January 2021, the Company held an Extraordinary General Meeting. The purpose of the EGM was to amend the composition of the Board by adding further competencies and experience relating to accounting and audit matters. Lottie Saks was elected new Board member. In connection with the EGM, Björn Norrbom and Dag Sigurd left their positions at their own request. Sivers Semiconductors' Board and management expressed their gratitude to Björn and Dag, after 21 and 12 years on the Board respectively, for their solid and invaluable work with and on behalf of Sivers Semiconductors.

Participation at the EGM corresponded to 49.5 percent of the votes, mainly in the form of postal ballots due to the ongoing pandemic.

## Work of the Board

### Boards

The Board of Directors of Sivers Semiconductors AB consists of Tomas Duffy, Chairman, and Ingrid Engström, Erik Fällström, Robert Green, Lottie Saks, Beth Topolovsky. Dag Sigurd and Björn Norrbom were also active during the financial year. Björn Norrbom and Dag Sigurd left their positions at the EGM on 21 January 2021. The Company has no deputies.

During the financial year, the Boards of the subsidiaries have been replaced by Group executives, and the Board of the subsidiary Sivers Phototonics consists of Anders Storm and William McLaughlin. The Boards of the other subsidiaries consist of CEO Anders Storm with CFO Robert Ejermark as deputy.

### Board work

The Board of Sivers Semiconductors AB discusses and makes decisions on Group-wide issues. During 2020, 7 regular, 8 extra Board meetings and 1 statutory Board meeting were held. Matters requiring in-depth analysis and discussion were prepared in the relevant committees. The Company's CFO Robert Ejermark acted as

secretary at Board meetings. Before Board meetings, members receive written documentation relating to the issues to be discussed through the Company's Board portal. On given occasions, the agenda included an item giving the Board the opportunity for discussion without representatives of management being present.

During 2020 the Board decided to establish a new committee, the Investment Committee, in addition to the previously established Audit Committee and Remuneration Committee. The Investment Committee works as a preparatory organ ahead of regular Board meetings and assists with analysis and in-depth studies relating to future investments and associated financing solutions.

The Audit Committee held regular meetings relating to quarterly reports and to conduct preparatory work ahead of the IPO as well as developing the Company's internal control function. The Remuneration Committee produced proposals

relating to staff warrants to be presented to the AGM 2021, and evaluated remuneration to senior executives.

### The Board's Rules of Procedure

The Board works in accordance with pre-determined Rules of Procedure, which include instructions on the distribution of tasks between the Board and the CEO, and financial reporting. The Rules of Procedure specify the number of regular Board meetings to be held in addition to statutory Board meetings. Furthermore, the issues to be addressed at regular Board meetings are specified. If necessary, extra Board meetings can be held by telephone or per capsulam.

### Instructions for distribution of tasks

The instructions regulate the general issues for which the Board is responsible, and which matters the CEO shall present to the Board. The instructions also state

what the CEO must accomplish as part of the Board work, reporting and ensuring compliance with the Board's rules and strategies, and that operations are conducted in an appropriate manner and that laws and regulations are followed.

### Instructions for financial reporting

The instructions for financial reporting regulate the reporting to be presented to the Board at regular Board meetings, and what other financial events are to be reported between Board meetings.

### Internal control

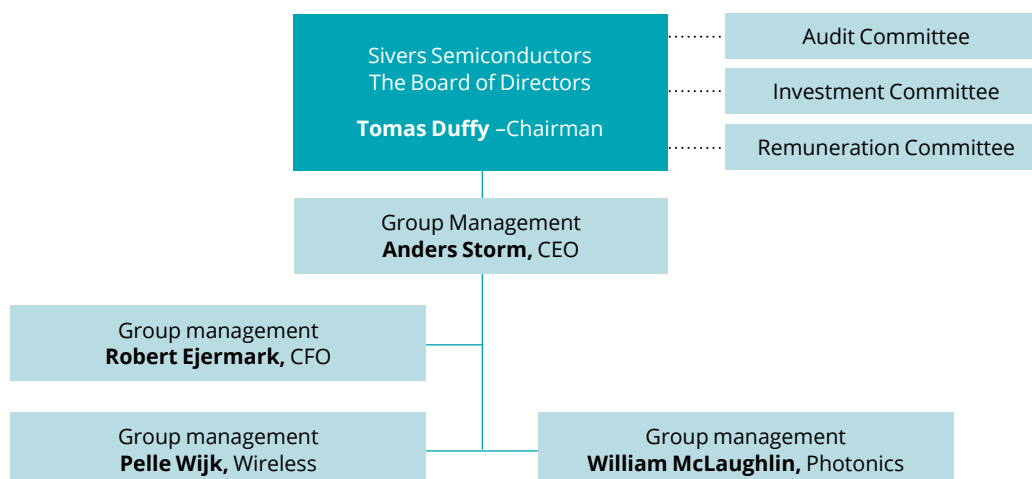
A good control environment is based on an organization with clear decision-making paths, authorizations and responsibilities and a corporate culture with shared values, as well as awareness of individual responsibility in maintaining good internal control.

## The Board in 2020

Q1	Q2	Q3	Q4
<b>Number of Board Meetings: 3</b> <ul style="list-style-type: none"> <li>Decision on remuneration to the Company's executive management</li> <li>Decision on Year-end Report 2020</li> <li>Decision to increase the Company's share capital through a directed share issue of 5,955,418 shares, as authorized by the AGM on May 22, 2019.</li> </ul>	<b>Number of Board Meetings: 5</b> <ul style="list-style-type: none"> <li>Decision on Interim Report Q1</li> <li>Review and approval of the Annual Report 2019</li> <li>Decision to add additional sales resources in Wireless</li> <li>Procurement of auditing services 2020</li> <li>Participation in the Annual General Meeting 2020</li> <li>Statutory Board meeting</li> <li>Resolution to increase the Company's share capital, through a directed share issue of 2,355,537 shares, as authorized by the AGM on May 19, 2020.</li> </ul>	<b>Number of Board Meetings: 4</b> <ul style="list-style-type: none"> <li>Decision on Interim Report Q2</li> <li>Decision to increase the Company's share capital, through a directed share issue, through and offset share issue of 779,696 shares, as authorized by the AGM on May 19, 2020.</li> <li>Decision to increase the Company's share capital, through a directed share issue, through and offset share issue of 555,262 shares, as authorized by the AGM on May 19, 2020.</li> <li>Decision to increase the Company's share capital, through a directed share issue of 6,517,805 shares.</li> <li>Choice of new partner bank</li> <li>Choice of new Company name and new Group-wide branding profile.</li> </ul>	<b>Number of Board Meetings: 3</b> <ul style="list-style-type: none"> <li>Decision on Interim Report Q3</li> <li>All-day strategy meeting focused on 2021-2023</li> <li>Business planning for 2020 and approval of the budget for 2021</li> <li>Evaluation of the Board's work in 2020</li> <li>Decision to apply for listing on Nasdaq Stockholm in 2021</li> <li>Decision to establish a local presence in the US through a subsidiary</li> <li>Decision to adopt new and revised Group-wide policies.</li> </ul>



## The Board and management of Siverts Semiconductors



Siverts Semiconductors' business areas are governed by policies, instructions and process descriptions. These documents indicate the parties responsible for specific tasks, as well as mandates and authorizations. The documents are updated annually as part of the work associated with quality control.

### Control activities

To ensure that financial reporting on each reporting occasion provides a true and fair view, the Company conducts control activities that involve all levels of the organization, including the Board, management and all other employees. Financial control of the Company's business processes include authorization of business transactions, daily account reconciliation and analytical review of the Income Statement and Balance Sheet, including follow-up of decisions made.

### Follow-up

Siverts Semiconductors' Board of Directors and management continuously monitor the effectiveness of internal control to ensure the quality of processes for

financial reporting. Siverts Semiconductors' financial situation and strategy regarding the financial position are dealt with at each Board meeting, where the Board receives detailed reports on business developments. The Board and the Audit Committee review all Interim Reports before publication.

### Group management

Siverts Semiconductors' operations are conducted in Sweden and Scotland. To ensure efficient operations, Siverts Semiconductors has a flat organization that favors local market conditions and individual companies' development phase. The subsidiaries regularly report results and outcome of operations to Group management.

The Group management consists of the CEO, CFO and the Business Unit Managers of Wireless and Photonics respectively, who are in continuous contact regarding operational matters such as monthly follow-up of results, financial position and key figures.

The CEO, also the Group's CEO, leads the work and makes decisions in

consultation with the CFO and local management for the Wireless business area. On 11 January 2021, the Company recruited Pelle Wijk to the role of new MD of Siverts Wireless. Pelle also forms part of Group management.

In 2020, the following focus areas were discussed by Group management:

- Strategy and R&D
- Sales
- Development of new products and services
- Operational efficiency & profitability improvements

Investment decisions and external financing issues are handled by Siverts Semiconductors AB's Board and committees.

### External Auditors

At the Annual General Meeting 2020, Deloitte AB was appointed auditor with Zlatko Mehinagic as Auditor in Charge. Zlatko Mehinagic is also the Auditor in Charge at companies such as Telia Sverige AB, Microsoft AB and Cygate AB. The term of office for the Company's Auditors ends at the Annual General Meeting 2021.

### Senior Executives

		Independent of:			
	Siverts Semiconductors and its senior executives	Major shareholders	Directors' fees 2020	Fees for work beyond Board duties	Attendance at Board meetings 2020
Tomas Duffy	Yes	Yes	X	X	16/16
Erik Fällström	Yes	No	X	–	14/16
Ingrid Engström	Yes	Yes	X	–	16/16
Robert Green	Yes	Yes	X	X	16/16
Dag Sigurd	Yes	Yes	X	–	15/16
Björn Norrbom	Yes	Yes	X	–	16/16
Lottie Saks	Yes	Yes	–	–	0/0
Beth Topolowsky	Yes	Yes	X	–	9/16







# The Board of Directors



**Tomas Duffy | Chairman of the Board**

**Born:** 1955

**Elected to the Board:** 2016

**Education:** Technical licentiate, Royal Institute of Technology.

**Other Board assignments:** Board member Stella Tech AB, CST Global Ltd.

**Previous Board assignments:** Chairman of the Board, Qall Telcom AB, Telia Norge. Board member, Trio AB, Telenor AB, Svenska IT-Institutet. Commitment shareholder, Sevensco KB.

**Other experience:** Business Unit Manager for large companies, Exportkreditnämnden. VP, Telia responsible for mobile & fixed line. CEO, Mannesmann International Telecom, Net Insight, Halogen AB, AU System Communication AB.

**Own and closely related persons' shareholdings on December 31, 2020:** 1,150,000 shares, 0 options.



**Erik Fällström | Member**

**Born:** 1955

**Elected to the Board:** 2016

**Education:** Stockholm School of Economics.

**Other Board assignments:** Chairman and founder, Aldridge EDC Specialty Finance Ltd. Chairman of the Board, EDC Advisors Ltd. Member, DDM Holding AG, Calor S.A., Calor GmbH, European Digital Capital Ltd., Polaris International S.A. (formerly Hoist Investments S.A), Tornado Investments S.A. (Formerly Hoist Group S.A.).

**Previous Board assignments:** Board member, Olympus S.A., Hoist Kredit AB. CST Global Ltd.

**Other experience:** Management consulting, corporate finance, venture capital and private equity.

**Own and closely related persons' shareholdings on December 31, 2020:** 28,503,352 shares, 0 options.



**Ingrid Engström | Member**

**Born:** 1958

**Elected to the Board:** 2015

**Education:** Master of Applied Psychology, Uppsala University.

**Other Board assignments:** Board member SJR in Scandinavia AB and Unibap AB. Chairman of Netlight AB and Engström Business Development.

**Previous Board assignments:** External CEO, Stockholm School of Economics Executive Education AB. Chairman of the Board, Bisnode AB, Bisnode Business Information Group AB, Springtime AB. Board member, KVB Kvarndammen Gruppen AB, Metria AB, Teracom Group AB, FIPRA Sweden AB, Hedberg & Co in Stockholm AB. External signatory, SEB AB.

**Other experience:** CEO, Vice President and other senior positions, Telia, KnowIT, Com Hem, Digital Equipment, Springtime, SEB.

**Own and closely related persons' shareholdings on December 31, 2020:** 44,000 shares, 0 options.



**Robert Green | Member**

**Born:** 1957

**Elected to the Board:** 2017

**Education:** Bachelor of Science in Physics, London University.

**Other Board assignments:** CST Global Ltd. Robert Green Consulting Ltd.

**Previous Board assignments:** Chairman of the Board and CEO, PRP Optoelectronics Ltd, Board member, Seedrs Ltd, PRP Technology Ltd, Chiers Consulting. Managing Director Imatronic Ltd.

**Other experience:** Chartered physicist and member of the Institute of Physics. Co-founder and COO, Northlight Optronics AB. VP Business Development Bookham Technology (acquired by Oclaro and now part of Lumentum Inc). Other senior positions, Corning France, Plessey Optoelectronic, Gosling Associates, STC PLC.

**Own and closely related persons' shareholdings on December 31, 2020:** 367,292 shares, 0 options.





## Beth Topolovsky | Member

**Born:** 1961

**Elected to the Board:** 2020

**Education:** BSEE, Electrical/Electronic Engineering, San Francisco State University

**Other Board assignments:** American Chamber of Commerce in Sweden, The Turnaround Management Association in Sweden.

**Other experience:** Founder and CEO of Spark Group AB, a consulting firm specialized in corporate transformation in the tech industry. Over 25 years' experience of senior positions and technical experience from Cisco Systems, Hewlett-Packard and KLA-Tencor. Co-founder and CEO of Q2 Labs AB, Chief Operating Officer positions in Transmode and Tilgin.

**Own and closely related persons' shareholdings on December 31, 2020:** 5,000 shares, 0 options.



## Dag Sigurd | Member

**Born:** 1944

**Elected to the Board:** 2008

**Education:** PhD, Technical Physics, KTH in Stockholm.

**Other Board assignments:** Board member of Qulsar Inc., Qulsar Sweden AB. Chairman of MySpace AB.

**Previous Board assignments:** Board member of Cobolt AB, Imagination Technologies AB (formerly Kisel AB), ISTOC Oy. Chairman of the Board of Mediatek Sweden AB (formerly Coresonic AB).

**Other experience:** Own business 2S Konsult AB, Investment Manager and Investment Director, Industrifonden. CEO of IMC AB. Own research in semiconductor technology. Member, IVA

**Own and closely related persons' shareholdings on December 31, 2020:** 40,000 shares, 0 options.

**Resigned 21 January 2021**



## Björn Norrbom | Member

**Born:** 1945

**Elected to the Board:** 1999

**Education:** BA in Business, Computers and Economics, Stockholm University.

**Other Board assignments:** Chairman, Colabitoil Sweden AB. Board member, Profit Software Oy, Profit Software AB, Qollaborate Technologies Sweden AB. Substitute, Grizzlykonsult AB.

**Previous Board assignments:** Miscellaneous Board assignments (including Chairman) within the Telia Group, a number of Board assignments in the tech industry. Chairman of listed and unlisted companies.

**Other experience:** Own consulting business. Advisor CapMan. Sales Director, Qatar Telecom. CEO, Telia MegaCom. CEO of Swedish subsidiary Cap Gemini. Member Management Group, DEC. IBM in specialist and management functions.

**Own and closely related persons' shareholdings on December 31, 2020:** 1,045,985 shares, 0 options.

**Resigned 21 January 2021**



## Lottie Saks | Member

**Born:** 1967

**Elected to the Board:** 1/21/2021

**Education:** Degree in Economics from Uppsala University.

**Other Board assignments:** No other assignments

**Previous Board assignments:** No previous assignments

**Other experience:** CFO and Director of Finance in a number of major companies. CFO at automotive tech company Haldex, listed on Nasdaq Stockholm, Mid Cap. Previously CFO Cint, OneMed, Telenor Connexion, within Johnson & Johnson and OMX Technology Financial Market.

**Own and closely related persons' shareholdings on December 31, 2020:** 0 shares, 0 options.

# Group Management



**Anders Storm | Group CEO**

**Born:** 1967

**Employed since:** 2015

**Nationality:** Swedish

**Education:** MSc in Computer Science, Lund University of Technology

**Experience:** COO, Sivers IMA. Leading positions, Sony Ericsson, HiQ, ABB.

**Holdings in Sivers Semiconductors AB (publ) on December 31, 2020:** 367,270 shares, 800,000 options.



**Robert Ejermark | Group CFO**

**Born:** 1964

**Employed since:** 2018

**Nationality:** Swedish

**Education:** BSc in Public Administration, Stockholm University.

MBA, Henley Management College, UK.

**Experience:** Telia, Unisource Mobile, RSL COM. Own business as interim consultant.

**Holdings in Sivers Semiconductors AB (publ) on December 31, 2020:** 10,000 shares, 575,000 options.



**William McLaughlin | MD Sivers Photonics**

**Born:** 1969

**Employed since:** 2019

**Nationality:** British, UK

**Education:** BEng (Hons) Electronics and Engineering

University of Glasgow. MSc Product design and Manufacturing University of West Scotland.

**Experience:** SmartKem, Global Foundries, Teledyne e2V, Motorola, Silecs

**Holdings in Sivers Semiconductors AB (publ) on December 31, 2020:** 50,000 shares, 625,000 options.



**Pelle Wijk | MD Sivers Wireless**

**Born:** 1971

**Employed since:** 2021

**Nationality:** Swedish

**Education:** M.Sc. Engineering Physics, Uppsala University

**Experience:** Imagination Technologies, Kisel Microelectronics, SiRF Technology, Ericsson.

**Holdings in Sivers Semiconductors AB (publ) on December 31, 2020:** 0 shares, 0 options.

# Contents

Directors' Report	30
<b>Group</b>	
Income Statement	36
Balance Sheet	37
Statement of Changes in Equity	38
Cash Flow Statement	39
Notes	40
<b>Parent Company</b>	
Income Statement	62
Balance Sheet	63
Statement of Changes in Equity	64
Cash Flow Statement	65
Notes	66
<b>Auditor's Report</b>	72
<b>Annual General Meeting</b>	74



# Directors' Report

The Board of Directors and CEO of Sivers Semiconductors AB (publ), hereby submit the Annual Report and Consolidated Financial Statements for the financial year 1/1/2020-12/31/2020.

## Operations

Sivers Semiconductors AB (publ), corporate identity number 556383-9348, is the Parent Company of wholly-owned subsidiaries Sivers Wireless AB, Sivers Photonics Ltd and Trebax AB. The operations are mainly conducted in the two companies Sivers Wireless AB and Sivers Photonics Ltd. Sivers Wireless's head office is located in Kista, Stockholm. The Company also has a development site in Gothenburg. Sivers Photonics's headquarter and factory are located in Glasgow, Scotland.

The Sivers Group develops, manufactures and sells chips, components, modules and subsystems based on advanced semiconductor technology for 5G millimeter wave networks, and optical semiconductors for fiber networks, wireless optical networks and sensors. Millimeter wave technology and optical semiconductors are central to high-speed networks. The Wireless business area is fully focused on 5G, while the Photonics business area focuses on passive optical fiber networks (PONs), wireless optical networks and sensors.

## Significant events

### Technology

On February 25, Sivers Wireless launched its new 5G mmWave System Test Platform. The platform includes phased-array antenna modules for both licensed and unlicensed 5G-NR-band and the platform Xilinx Radio Frequency System-on-Chip (RFSoc) ZCU111. The platform includes a framework for modem simulation with Matlab that enables evaluation of radio performance with real 5G NR wave forms.

On March 3, Sivers Photonics announced that the Company will extend its silicon photonics portfolio in collaboration with the Company's research and innovation partner, imec. The shared technology is expected to encourage demand for silicon photonics in cost-sensitive applications such as optical interconnect for data centers, optical sensors, cloud services etc.

On September 30, Sivers Wireless launched a unique 60 GHz module, BFM06009 with two-dimensional (2D) electronic steering, known as beamforming. The module covers the entire license-free bandwidth on 14 GHz (57–71 GHz). The unique 2D module enables both horizontal and vertical radio wave steering and helps customers to differentiate their 60 GHz access products in the unlicensed 5G band, at the same time as the module meets the requirements for large-scale production without sacrificing competitive performance.

### New partnerships and agreements

Following a successful design-win with Cambium Networks towards the end of 2018, in February 2020 Cambium Networks decided to integrate the Sivers Semiconductors TRX BF02 chip in its wireless network equipment to enable delivery of multi-gigabit

speeds in the 24–29.5 GHz frequency band (licensed 5G). The Sivers Wireless TRX BF02 chip is a radio solution for 5G with very high integration, including electronic steering of antenna lobes, power amplifiers, low noise amplifiers (LNA) and up and down converter chips. The high degree of integration is unique on the market and creates a cost-effective solution for systems suppliers with fewer components. The component can be used in small cells / Access Points (AP), which are usually fitted to radio masts or lamp posts, and in Customer Premises Equipment (CPE) installed on buildings, which simplifies system integration and roll-out. Delivery started in the second half of 2020.

In February 2020, Sivers Wireless launched a new leading edge product, Dual Quad Beamformer IC (BFIC), for use in several 5G applications. The BFIC is the result of a joint development project with Ampleon Netherlands B.V (Ampleon) and Sivers Wireless, where the high-performance characteristics supports time division duplex (TDD) and the 5G-NR bands n257 and n258 for 24.25–29.5 GHz.

On June 24, Sivers Photonics announced that it is a founding member of an industry-leading group of companies signed up to a multi-source agreement (MSA), to standardize integrated photonics devices. The agreement will define a new industry standard for continuous wave laser sources.

### New orders and sales

On April 14, Sivers Photonics announced that they had received a development order worth SEK 7.5 million from a US Fortune 100 customer. The order was for the supply of photonic semiconductor devices within the optical sensing market. It was delivered and invoiced during 2020.

On June 12, Sivers Photonics announced that it had received a new order worth some SEK 20.7 M from one of the company's established Fortune 100 customers. The orders include several parallel projects relating to the design, development and delivery of semiconductor laser components for applications in advanced optical sensing. These orders are additional to existing framework orders from last year, and were delivered and invoiced in 2020.

On August 5, Sivers Wireless announced that the company has signed a combined development and delivery agreement with a global high technology company listed on the New York Stock Exchange (NYSE). The parties will offer a joint 5G millimeter wave solution based on Sivers Wireless' coming generation of 5G millimeter wave technology. In the first three years of commercial implementation, Sivers Semiconductors estimates the total value of the deal to be worth some SEK 480 million. The agreement includes development of a 5G module that will be included in Customer Premises Equipment (CPE) – a product for wireless 5G broadband for homes and businesses. The product is expected to be launched commercially in large volumes from 2023. The estimated value of some SEK 480 M in the first three years of commercial implementation is based on forecast volumes from the customer. The agreement does not include a commitment to any precise pre-determined delivery volumes.

On October 12, Sivers Photonics announced an order worth some SEK 4 M for a new project from one of the company's established Fortune 100 customers. The order encompasses the design, development and delivery of prototypes for semiconductor components for advanced optical sensing. This order was additional to existing framework orders from the previous year, and was delivered and invoiced in 2020. Overall, this Fortune 100 customer has now placed orders totaling SEK 74 M with Photonics since October 2018.

On November 3, Sivers Wireless announced that it had won its first order for an evaluation kit from Siemens Healthineers, with the aim of using Sivers Semiconductors' 60 GHz technology in medical applications requiring high data rates on the Chinese market. The order includes evaluation kits and radio modules for use in medical applications requiring data rates of several gigabits per second. The order was received through Sivers Wireless' Chinese distributor, Matrix Electronics, and Sivers delivered the order in 2020. In 2021, the Company will work in close collaboration with Siemens Healthineers and Matrix Electronics to ensure a successful product launch. The order is the first step in Siemens Healthineers' ambition to utilize unlicensed 5G technology more extensively.

On December 7, Sivers Wireless signed a long-term supply contract for the new 2D RF module, BFM06009, with 8 devices, a Lithuanian company that offers products for wireless broadband access globally. The value of the supply contract for the first four years is estimated at SEK 70–100 M and is based on estimated volumes from 8 devices.

On December 29 Sivers Wireless announced its first order from India, from Astra Microwave Products Ltd which is based in Hyderabad, through its local distributor Doppler Electronics Pvt Ltd for Dual Quad Beamformer IC-chips (BFIC). BFICs are used in 5G applications, for example. BFICs are used to connect to two quad antenna connections with two sets of multiple (4) RX/TX channels with integrated RX/TX-RF switches. The product supports both horizontal and vertical polarized MIMO and has a unique set of digital functions that enable simple integration.

## Equity

On February 19, Sivers Semiconductors AB completed a directed new issue of 5,955,418 shares (corresponding to some 4.5 percent of the number of outstanding shares and votes in the Company). The subscription price was SEK 9.0 per share. The new issue raised some SEK 54 M before issue expenses for the Company.

On July 28 and August 13, Sivers Semiconductors completed offset share issues totaling SEK 21 M. The debt redeemed against shares in the company related to operating credits of SEK 20 M, including unpaid interest raised in 2019. A total of 1,334,958 new shares were issued.

On September 28, a directed new issue of 6,517,805 shares was completed (corresponding to some 4.4 percent of the number of outstanding shares and votes in the Company). The

subscription price was SEK 30.70 per share. The directed new issue raised some SEK 200 M before issue expenses for Sivers Semiconductors.

On October 22 2020, the debentures issued in December 2017 were converted to shares on Ampleon's request. In total, 4,651,727 new shares were issued.

In the full year 2020, the Company completed a number of share issues against employee stock options. A total of 4,337,283 shares were issued and the Company raised SEK 20 M.

## Other significant events in 2020

In October 2020, Sivers Photonics was awarded an EU grant of SEK 4.7 M to develop Quantum Gallium Nitride (Q-GaN) lasers for application in quantum recognition and specialized telecom solutions. The project is financed by the European R&D initiative Eurostars and is worth a total of SEK 9.9 M, divided between Sivers Photonics and the project partner TopGaN Ltd of Poland.

In October 2020, Sivers Photonics was awarded a SEK 3.1 M grant for its part in the MAG-V project aimed at developing the world's first commercial Quantum Atomic Magnetometer. The grant was approved by Innovate UK. In December 2020, Sivers Photonics received a further grant from Innovative UK totaling SEK 3.6 M. This grant was awarded for the Company's participation in the SPIDAR project which develops quantum based LiDAR systems for assisted and driverless vehicle applications.

On October 9, Sivers IMA Holding AB changed its name to Sivers Semiconductors AB. In connection with the name change, the subsidiaries' names were also changed to Sivers Wireless (formerly Sivers IMA AB) and Sivers Photonics (formerly CST Global). The name changes are part of an ongoing brand review.

During the year, the Sivers Semiconductors Group received Covid-19 support totaling some SEK 3.3 M. The support was recognized in Other operating income. During the year, support totaling SEK 4.9 M was recognized in Other operating income.

On 23 December, the Group's CEO Anders Storm was awarded Presenter of the Year by Financial Hearings in the Micro Cap category.

## Comments on operations, results of operations and financial position

For the period January-December, revenue totaled SEK 96.170 M (96,355), a change of 0% compared to the same period last year. Photonics' revenue increased by SEK 2.055 M, while Wireless revenue decreased by SEK 2.240 M.

EBITDA was SEK -55.661 M (-48.322), a decrease of SEK 7.339 M. The decrease in EBITDA for the period January-December was due to increased provisions and social security expenses for stock option programs year-on-year. For the full year 2020, the cost totaled SEK -28.704 M (-1.436), of which SEK 15.739 M has been paid out and SEK 0.584 M will be paid shortly. Sivers Semiconductors has the mandate to issue warrants to cover social security expenses for the options, which the Group intends to do in 2021.

Excluding the effect of the employee stock options, EBITDA improved by SEK 19.929 M. This improvement was mainly due to decreased costs in Photonics. Internal investments eliminated external product steps in Photonics' operations (generating savings of some SEK 12 M), while price increases and lower raw materials costs created a more favorable product mix in 2020 compared to 2019.

External costs also decreased for the Group as a whole, due to a more restrictive budget including savings implemented as a result of Covid-19.

SEK thousand	Jan-Dec 2020	Jan-Dec 2019
Revenue	96,170	96,355
EBITDA <sup>1)</sup>	-55,661	-48,322

<sup>1)</sup> EBITDA is calculated as profit before financial items, tax and amortization, depreciation and impairment.

### Depreciation, amortization and impairment

Profit in the period January-December was affected by SEK -30.049 M (-29.702) in depreciation, amortization and impairment according to plan of which SEK -5.684 M (-6.841) related to depreciation of equipment, tools and installations, SEK -19.456 M (-18.101) to depreciation, amortization and impairment of previous years' capitalized development expenses and SEK -4.909 M (-4.760) related to depreciation of right-of-use assets in leasing contracts.

### Financial items

Financial items for the full year 2020 increased significantly, from SEK -8.990 M to SEK -119.744 M, an increase of SEK 110.754 M. The increase was due to the higher market value of embedded derivatives in convertible debentures with Ampleon, as the value of the conversion right increased at a pace with the share price. For the full year 2020, the valuation effect was SEK 111.018 M. On October 1, Ampleon called for conversion of the debentures, and the options were converted to shares on October 22, 2020. Upon conversion, the convertible debenture and the derivative debt were both included in equity.

The profit effect of the embedded derivative does not affect current or future cash flows. The substantial negative impact on financial items is an accounting effect resulting from IFRS 9, as the variable conversion price of the derivative (due to the contractual fixed USD/SEK rate), is recognized at fair value.

Financial income relates to reversals of previously recognized exchange rate losses related to the convertible debentures. These have been reversed because the holder chose to convert the debt to shares instead of receiving repayment.

### Taxes

The Group receives tax credits for research and development costs in Scotland. During the fourth quarter 2020, SEK 3.515 M was recorded as tax income in expected tax credits for the financial year 2020.

### Operating profit/loss and profit/loss for the year

Operating profit/loss for January - December 2020 was SEK -85.710 M (-78.024). The decrease was mainly attributable to increased personnel costs compared to the previous year, due to increased costs and provisions for social security expenses for employee stock options.

Profit/loss for the year was SEK -195.782 M (-75.661). The large decrease was due to the negative revaluation of the embedded derivative in the convertible debentures that was included in the Balance Sheet as of 31 December 2019. For further explanations, see "Financial items".

### Liquidity, cash flow and financing

On December 31, 2020 the Group's cash and cash equivalents amounted to SEK 249.448 M (52.228).

In February 2020, the group completed a directed new issue, which raised SEK 53.599 M, before issue expenses of SEK 2.380 M. The Group completed another new share issue on September 28, raising SEK 200.097 M. The issue expenses for this new share issue amounted to SEK 3.502 M.

In March 2020, employee stock options were redeemed under incentives programs established in 2015 and 2017. A total of 1,676,853 shares were issued. This raised SEK 7.838 M for the Group in proceeds from newly issued shares.

In September 2020, options were redeemed (under programs authorized in 2014, 2015 and 2017) against 895,700 shares, raising SEK 4.212 M for the Group. In October and December 2020, further options were redeemed equivalent to a total of 1,764,730 shares (based on programs decided in 2010, 2015 and 2017). This raised SEK 7.952 M for the Group.

On July 28 and August 13, Sivers Semiconductors completed offset share issues totaling SEK 21.057 M.

The debt redeemed against shares in the company related to operating credits of SEK 20.000 M, including unpaid interest raised in 2019. A total of 1,334,958 new shares were issued.

In September 2020, Sivers Wireless AB raised a loan of SEK 20 M from Nordea. The loan has a term of 5 years and interest, paid quarterly, is set at Stibor+2.8%. The loan is amortized quarterly at SEK 1 M. In connection with the loan with Nordea being raised, the Group terminated an existing overdraft facility of SEK 2.500 M with SEB.

### Five-year summary, Group

SEK thousand	2020	2019	2018	2017 <sup>2)</sup>	2016 <sup>2)</sup>
Revenue	96,170	96,355	71,485	65,493	18,224
Operating profit/loss	-85,710	-78,024	-69,845	-51,346	-25,937
Profit before tax	-201,351	-87,014	-79,497	-52,061	-25,913
Total assets	647,186	424,268	379,749	348,161	67,156
Equity/assets ratio	82%	68%	72%	57%	83%
Average number of employees	101	97	100	90	32

<sup>2)</sup> The comparative years 2017 and 2016 have been presented in accordance with BFNAR 2012:1 ("K3") and the Annual Accounts Act. No translation has been made to IFRS.



In the third quarter 2020, the Group received tax credits relating to research and development, generating a positive cash flow of some SEK 9.173 M.

On October 22 2020, the debentures issued in December 2017 were converted to shares on Ampleon's request. In total, 4,651,727 new shares were issued.

### Investments

The Sivers Semiconductors Group's total investments in the period January – December amounted to SEK 39.528 M (52.076) and related to intellectual property rights for underlying capitalized development expenses of SEK 37.215 M (43.287) and acquisitions of property, plant and equipment of SEK 2.313 M (8.789). The investment in capitalized development expenses is attributable to the development of new product generations. Investments in capitalized development expenses decreased year-on-year, because the Group had fewer projects in the development phase during the year.

### Equity

As of December 31, 2020, Group equity amounted to SEK 531.925 M (288.533). Share capital totaled SEK 77,222,823.5 (65,824,228).

### Employees

As of December 31, 2020, the Sivers Semiconductor Group had 103 (99) employees, excluding consultants.

### Significant risks and uncertainties

The Sivers Semiconductor Group's operations, financial position and results of operations are potentially affected by a number of risks and uncertainties. These risks may adversely affect the Group's operations, profit and financial position.

The risk factors described below are not ranked by importance, nor do they constitute a comprehensive description of all the risks the Group faces.

#### Market risk

The Group is active globally with customers in many different parts of the world. This exposes the Group to risks such as deteriorated trade policy conditions, changes to regulatory frameworks between countries, limited protection for intellectual property rights, varying accounting standards, tax systems and changing payment terms. The Group is active on a market that is expected to experience continued growth and positive earnings potential over the coming years. However, there is a risk that market developments could become unfavorable for the Group due to changes in the macroeconomic environment, new regulatory frameworks, limited protection for intellectual property rights or other unforeseen factors.

A significant proportion of the Group's revenue is derived from customers in the US. Geopolitical disputes between the US, China and Europe may disrupt customers' procurement processes, which could, in turn, have an adverse impact on the Group.

#### Technology development risk

The market on which the Group operates is continuously developing according to customer needs and behavior. There is a risk that

technological progress does not correspond to the Group's, its customers' or market expectations. This may, in turn, lead to market launches being delayed or canceled for part of or entire product categories, with the resulting absence of revenue and/or increased development expenses. There is also a risk that the Group is not successful in finding the technical solutions required for commercial launch, or that these goals are not achieved within a reasonable time frame, with potential ensuing negative consequences for the Group's operations, profit and financial position.

The Sivers Semiconductors Group has a strong research and development focus. There are established processes for project management and follow-up to ensure future profitability. The projects involve experienced collaboration partners with contact networks that help speed up market launch. The Sivers Semiconductors Group also works hard on targeted recruitment to attract competent staff. Collaborations with universities and other institutions provide a good recruitment pipeline.

### Competition

The Sivers Semiconductors Group operates on a competitive market. There is a risk that extensive investments in product development in the same area by one or more competitors could adversely affect Group development and sales. There is also a risk that competing methods and products may prove more effective, secure or cost-efficient than those developed by the Sivers Semiconductors Group. The Group's competitors may also be able to access increased capacity for manufacturing, marketing and distribution.

The Group's products are technologically complex. The Group has extensive experience of the design and manufacture of these products, which confers a competitive advantage as the products cannot be easily replicated. The Group's focus on collaborations with major partners also allows it to launch new products quickly and win more market share.

### Dependency on suppliers, producers and partners

The Group is dependent on its partners, producers and subcontractors to operate on the market. There is a risk that one or more of these partners, suppliers and producers could become unwilling to continue an agreed collaboration with Group companies, or that suppliers or producers could become unable to fully satisfy the Group's quality requirements. These factors may adversely affect the Group's operations, profit and financial position.

The Sivers Semiconductors Group works intensively to retain its existing collaborations and to sign collaboration or supply agreements to counteract this risk.

### Dependence on customers

The Sivers Semiconductors Group has one customer that represents more than 10% of total Group sales. In the event that this customer were to decrease or cease purchasing the Group's products, this could have a negative impact on Group sales for a shorter or longer period which, in turn, would have a negative impact on the Group's operations, profit and financial position. The Group focuses sharply on customer satisfaction and quality testing of the products it delivers. The Group is currently in a growth phase, with an existing and potential customer base that could generate increased sales in future. The Group continuously

seeks to broaden its customer base to reduce dependence on a limited number of customers.

### Price risk

The Group's operations are dependent on certain highly complex inputs. The Group cannot control all factors that affect the pricing of the input goods on which the Group depends. There is a risk that the Group will not always have access to the quantity of necessary input goods to complete the production that the Group has been contracted for, which may adversely affect the Group's operations, profit and financial position.

### Dependency on key personnel

The Group's organization consists of employees with significant business and technological expertise. Board members, senior executives and other key personnel have competence of major significance to the Group and its operations. The Siverts Semiconductors Group's ability to recruit and retain such individuals is dependent on a number of factors, some of which lie outside the Group's control, including labor market competition. The loss of a Board member, member of management or other key personnel could imply the loss of important competences, that pre-determined goals are not met, or have an adverse impact on the Group's business strategy. If existing key personnel were to leave the Group, or if Siverts Semiconductors would be unable to recruit or retain qualified and experienced members of management, this would have a significant negative impact on the Group's operations, profit and financial position.

### Intellectual property rights

The Siverts Semiconductors Group has intellectual property rights of significant value. This means that there is a risk that the Group is exposed to information theft, for example in connection with data incursions. In order to protect intellectual property rights, the Group enters confidentiality undertakings with counterparties and signs agreements to protect intellectual property rights before sensitive information is shared. The Group has also introduced controls aimed at preventing data incursions and IP theft.

### Brexit

On 31 January 2020, the UK left the EU, followed by a transition period until 31 December 2020. In 2021, new agreements apply to the UK's relationship with the EU, and the UK is also negotiating new agreements with other countries. The UK's exit from the European Union, Brexit, affects the conditions applying to the Group's subsidiary Siverts Photonics, which is based in Scotland.

Because a large part of Photonics' customer base is located outside Europe, the primary risk associated with sales is considered to be Brexit-related USD exchange rate effects. A proportion of Photonics' input goods are imported from European countries, although most are not subject to customs duty on imports from third-party countries. Some of Photonics' staff are citizens of other EU countries, although the subsidiary has not experienced any problems retaining these employees post-Brexit.

### Covid-19

It has now been more than a year since Covid-19 spread around the world and changed how society operates. In the first quarter 2020, Siverts Semiconductors saw signs of slightly lower demand,

although sales recovered in the second half year. The pandemic has complicated field testing for some of the Group's end customers, which could delay roll-out of end customers' products in the short term. For the Siverts Semiconductors Group, this could imply some delays to potential volume sales to these customers, but in the longer term the Group has not seen any impact on underlying demand.

In a modern society, the Internet is a cornerstone of all functions, including home offices and the healthcare system. The Siverts Semiconductors Group's products are important hardware components that enable increased bandwidth and thereby improves the technology that enables modern society to function. This means that the Group has excellent prospects of becoming a successful market operator by playing a part in the global preventative management of the current crisis and similar situations in future.

### Share price risk

Siverts Semiconductors AB has employee stock options that entitle holders to acquire shares in the Company. The provision for social security expenses is valued at market value as of the reporting date, and the payment to the Swedish Tax Authority upon allocation of options is calculated on the basis of market value of the shares allocated, which is linked to the share price. If the share price increases by SEK 10, the provision for social security expenses increases by approximately SEK 14 M.

Under the employee stock option programs, Siverts Semiconductors has a mandate to issue warrants to cover the cashflow risk associated with social security expenses for the options.

### Financial risks

The Siverts Group is exposed to financial risks such as exchange rate risk, interest rate risk, credit risk and liquidity risk. The Group's financial risk is managed by the Board and management, which continuously monitor and evaluate risk. The Board focuses sharply on liquidity risk, as the Group is in a growth phase. Management presents detailed cash flow forecasts and the Board implements measures such as new issues and borrowing to ensure sufficient liquidity is in place.

The Group is exposed to exchange rate risk, mainly linked to USD and GBP, as a large proportion of sales are made in USD while purchasing is mainly denominated in GBP and SEK. Because the Group's largest subsidiary, Siverts Photonics Ltd, is based in the UK, the Group is subject to GBP/SEK translation exposure. More information about financial risk and risk management can be found in Note 33 Financial instruments.

### Research and Development

Research and development is a key part of Group operations and is carried out in Kista and Gothenburg in Sweden and Glasgow in the UK. The development process shadows the Group's project model, which is ISO9000:2015 certified and has been refined over a number of years.

During the year, SEK 37.215 M (43.287) in project development expenses was capitalized. Research and development expenses that have not been capitalized amounted to SEK 21.739 (27.842).

### Expected future progress

The market for sensors, and wireless and fixed broadband, is expanding rapidly and the chips and components the Group offers and develops satisfy demand in these areas. The Sivers Semiconductors Group's subsidiaries are well equipped for the technological shift that is underway, through its solutions for sensors, wireless networks and fiber networks. This means that the Group faces positive prospects of continuing to grow and generate profit in future.

### Parent Company

The sharp increase in the Parent Company's financial expenses for the full year 2020 was due to the increased market value of the embedded derivative in the convertible debentures totaling SEK 111.018 M.

In the period January–December 2020, and in addition to the information outlined above, Parent Company profit was also affected by impairment of a shareholder contribution paid to the subsidiary Sivers Wireless AB. Shareholder contributions for the full year 2020 totaled SEK 65 M, of which SEK 55 M were made in the fourth quarter 2020.

### The share and ownership structure

Sivers Semiconductor's share capital was divided over 154,445,647 shares with a quotient value of SEK 0.50 as of December 31, 2020. All shares are of the same series and have equal rights to the vote and profit in the Company. Since November 30 2017, the share trades on Nasdaq First North Growth Market under the ticker SIVE, ISIN code SE0003917798 and LEI code 254900UBKNY2EJ588J53.

As of December 31 2020, Sivers Semiconductors AB (public) had three owners, each of which directly and indirectly held shares corresponding to five percent or more of the votes and capital in the company. In total, Sivers Semiconductors had approximately 15,000 shareholders. The largest owners are Erik Fällström (18.5%) and Keith Halsey (12.9%).

### Proposed appropriation of earnings (SEK thousand)

The following funds are at the disposal of the Annual General Meeting

Share premium reserve	904,565
Retained earnings	–155,430
Profit/loss for the year	–200,027
<b>Total</b>	<b>549,108</b>

The Board of Directors proposes that the following funds are carried forward:

**549,108**

With regard to the Parent Company's and Group's results of operations and financial position, please refer to the Financial Statements and Notes below. All amounts are in SEK thousand unless otherwise indicated.



# Group Income Statement

SEK thousand	Note	2020	2019
Revenue	4	96,170	96,355
Other operating income		9,099	10,259
Capitalized work on own account		37,215	43,287
Raw materials and consumables		-26,333	-39,997
Other external expenses	7	-62,819	-79,559
Personnel costs	6	-108,994	-78,667
Depreciation, amortization and impairment of fixed assets and intangible assets		-30,049	-29,702
<b>Operating profit/loss</b>		<b>-85,710</b>	<b>-78,024</b>
<b>Profit/loss from financial items</b>			
Financial income	8	4,103	-
Financial expenses	8	-119,744	-8,990
<b>Profit/loss before tax</b>		<b>-201,351</b>	<b>-87,014</b>
Income tax	9	5,569	11,353
<b>Profit/loss for the year</b>		<b>-195,782</b>	<b>-75,661</b>
Attributable to:			
Parent Company shareholders		-195,782	-75,661
<b>Earnings per share (SEK)</b>			
Before dilution	10	-1.37	-0.59
After dilution	10	-1.37	-0.59

# Consolidated Statement of Comprehensive Income

SEK thousand	Note	2020	2019
<b>Profit/loss for the year</b>		<b>-195,782</b>	<b>-75,661</b>
<b>Other comprehensive income</b>			
<b>Items to be reclassified to profit and loss</b>			
Exchange rate differences from translation of foreign operations		-5,974	4,559
<b>Total comprehensive income for the year</b>		<b>-201,756</b>	<b>-71,102</b>
Attributable to:			
Parent Company shareholders		-201,756	-71,102

# Group Balance Sheet

ASSETS, SEK thousands	Note	31 Dec 2020	31 Dec 2019
<b>Fixed assets</b>			
Goodwill	11	134,812	134,812
Other intangible assets	11	147,553	131,548
Property, plant and equipment	12,13	61,372	57,739
<b>Total non-current assets</b>		<b>343,737</b>	<b>324,099</b>
<b>Current assets</b>			
Inventories	15	14,776	9,836
Accounts receivable	16	19,460	19,084
Current tax receivables		3,326	7,329
Other receivables	17	4,079	4,843
Prepaid expenses and accrued income	18	12,360	6,850
Cash and cash equivalents	28	249,448	52,228
<b>Total current assets</b>		<b>303,450</b>	<b>100,170</b>
<b>Total assets</b>		<b>647,186</b>	<b>424,268</b>
<b>EQUITY AND LIABILITIES, SEK thousands</b>	<b>Note</b>	<b>31 Dec 2020</b>	<b>31 Dec 2019</b>
Share capital	19	77,223	65,824
Other contributed capital	19	904,565	473,598
Translation reserve	19	142	6,116
Retained earnings including profit/loss for the year		-450,004	-257,005
Equity attributable to Parent Company shareholders		531,925	288,533
<b>Total equity</b>		<b>531,925</b>	<b>288,533</b>
<b>Non-current liabilities</b>			
Bank borrowing	20	15,000	-
Deferred tax	23	126	168
Provisions	24	17,177	4,797
Leasing liabilities	25	22,166	11,301
Other non-current liabilities		7,702	11,825
<b>Total non-current liabilities</b>		<b>62,172</b>	<b>28,091</b>
<b>Current liabilities</b>			
Bank borrowing	20	4,000	-
Convertible debentures	21	-	39,538
Accounts payable		14,246	13,902
Leasing liabilities	25	3,975	3,811
Other liabilities	26	8,721	31,153
Accrued expenses and deferred income	27	22,148	19,241
<b>Total current liabilities</b>		<b>53,090</b>	<b>107,645</b>
<b>Total liabilities</b>		<b>115,261</b>	<b>135,736</b>
<b>Total equity and liabilities</b>		<b>647,186</b>	<b>424,268</b>

# Consolidated Statement of Changes in Equity

SEK thousand	Share capital	Other contributed capital	Translation reserve	Retained earnings including profit/loss for the year	Total equity attributable to Parent Company shareholders	Total equity
<b>Opening balance Jan 1, 2019</b>	59,223	395,720	1,557	-182,998	273,502	273,502
Profit/loss for the year				-75,661	-75,661	-75,661
Total other comprehensive income			4,559		4,559	4,559
<b>Total comprehensive income</b>	<b>59,223</b>	<b>395,720</b>	<b>6,116</b>	<b>-258,659</b>	<b>202,400</b>	<b>202,400</b>
<b>Transactions with shareholders:</b>						
New issue	5,922	75,806			81,728	81,728
Issue expenses		-3,882			-3,882	-3,882
New issue, redemption of warrants	659	5,799			6,458	6,458
New issue, redemption of employee stock options	20	155			175	175
Settlement, warrants						
Share-based compensation				1,654	1,654	1,654
<b>Total transactions with shareholders</b>	<b>6,601</b>	<b>77,878</b>		<b>1,654</b>	<b>86,133</b>	<b>86,133</b>
<b>Closing balance Dec 31, 2019</b>	<b>65,824</b>	<b>473,598</b>	<b>6,116</b>	<b>-257,005</b>	<b>288,533</b>	<b>288,533</b>

SEK thousand	Share capital	Other contributed capital	Translation reserve	Retained earnings including profit/loss for the year	Total equity attributable to Parent Company shareholders	Total equity
<b>Opening balance Jan 1, 2020</b>	65,824	473,598	6,116	-257,005	288,533	288,533
Profit/loss for the year				-195,782	-195,782	-195,782
Total other comprehensive income			-5,974		-5,974	-5,974
<b>Total comprehensive income</b>	<b>65,824</b>	<b>473,598</b>	<b>142</b>	<b>-452,787</b>	<b>86,777</b>	<b>86,777</b>
<b>Transactions with shareholders:</b>						
New issue	6,237	247,459			253,695	253,695
Issue expenses		-5,881			-5,881	-5,881
Issue for redemption of employee stock options	2,169	17,834			20,002	20,002
New issue, loan conversion	667	20,390			21,057	21,057
New issue, redemption of convertible debenture	2,326	151,166			153,492	153,492
Share-based compensation				2,783	2,783	2,783
<b>Total transactions with shareholders</b>	<b>11,399</b>	<b>430,967</b>		<b>2,783</b>	<b>445,149</b>	<b>445,149</b>
<b>Closing balance Dec 31, 2020</b>	<b>77,223</b>	<b>904,565</b>	<b>142</b>	<b>-450,004</b>	<b>531,925</b>	<b>531,925</b>



# Group Cash Flow Statement

	Note	2020	2019
<b>Operating profit/loss</b>	28	<b>-85,710</b>	<b>-78,024</b>
Adjustments for non-cash items			
Depreciation, amortization and impairment		30,049	29,702
Inventory impairment		309	2,717
Changes in provisions		28,704	1,436
Other		4,218	2,435
Interest paid		-4,265	-3,713
Paid tax		9,173	10,708
<b>Cash flow from operating activities before change in working capital</b>		<b>-17,522</b>	<b>-34,739</b>
<b>Cash flow from change in working capital</b>			
Decrease(-)/Increase(+) in Inventories		-5,414	2,163
Decrease(-)/increase(+) in operating receivables		-8,714	3,201
Increase(+)/decrease(-) in operating liabilities		-8,417	-13,070
<b>Cash flow from operating activities</b>		<b>-40,067</b>	<b>-42,446</b>
<b>Investment activities</b>			
Acquisition of property, plant and equipment		-2,313	-8,789
Acquisition of intangible assets		-37,215	-43,287
Sales of property, plant and equipment		30	97
<b>Cash flow from investment activities</b>		<b>-39,498</b>	<b>-51,979</b>
<b>Financing activities</b>			
Borrowings		20,000	20,000
Amortization of loan		-1,000	-
New hire purchase loans		-	5,703
Amortization of lease debt and hire purchase loans		-7,263	-6,423
New issue		273,698	88,360
Issue expenses		-5,881	-3,882
<b>Cash flow from financing activities</b>		<b>279,553</b>	<b>103,758</b>
<b>Cash flow for the year</b>		<b>199,988</b>	<b>9,333</b>
<b>Cash and cash equivalents at the beginning of the year</b>		<b>52,228</b>	<b>42,410</b>
Exchange rate difference in cash and cash equivalents		-2,767	486
<b>Cash and cash equivalents at the end of the year</b>		<b>249,448</b>	<b>52,228</b>

# Notes for the Group

## Note 1 | General information

Sivers Semiconductors AB, corporate identity number 556383-9348 is a limited company with its registered office in Kista, Stockholm, Sweden.

Sivers Semiconductors and its subsidiaries ("the Group") develops, manufactures and sells chips, components, modules and subsystems based on advanced, proprietary semiconductor technology in microwave, millimeter-wave and optical semiconductors. The Group structure is presented in more detail under Note 14.

The Financial Statements are presented in SEK thousands (SEK 000).

## Note 2 | Accounting principles

### Basis of accounting

The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS Standards), as adopted by the European Union (EU), and interpretations by IFRS Interpretations Committee (IFRIC). The Group also applies the Annual Accounts Act and the Swedish Financial Reporting Board's recommendations RFR 1, Supplementary Accounting Rules for Groups.

The Financial Statements have been prepared on the basis of historical cost, except for the revaluation of certain financial instruments measured at fair value at the end of each reporting period, as explained in the accounting policies below.

### Basis of consolidation

The Consolidated Financial Statements incorporate the Company and entities controlled by it (subsidiaries) as of December 31 each year. Control is achieved when the Group has the power over the investee, is exposed to, or has rights to, variable returns from its involvement with the investee and has the power to affect its returns.

Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary. Specifically, the results of subsidiaries acquired or disposed of during the year are included in profit or loss from the date the Company gains control until the date when the Company ceases to control the subsidiary.

Where necessary, adjustments are made to the Financial Statements of subsidiaries to bring the accounting policies used into line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between the members of the Group are eliminated on consolidation.

### Business combinations

The acquirer in a business combination is the party who achieves control over the other party. When the legal acquirer is identified as the acquired party, a reverse acquisition has occurred. When the subsidiary Sivers Photonics Ltd was acquired in 2017, the acquisition was reversed. This means that Sivers Semiconductors AB with subsidiaries was identified as the acquired party.

Acquisitions of businesses are accounted for using the acquisition method. Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date

amounts of the identifiable assets acquired and the liabilities assumed.

### Goodwill

Goodwill is initially recognized and measured as set out above.

Goodwill is not amortized but is reviewed for impairment at least annually. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or groups of cash-generating units) expected to benefit from the synergies of the combination. Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognized for goodwill is not reversed in a subsequent period.

### Revenue recognition

The Group recognizes revenue from the following major sources:

- Hardware sales
- Development projects (Also referred to as Non Recurrent Engineering "NRE")
- Support contracts

Revenue is measured based on the consideration to which the Group expects to be entitled in a contract with a customer in exchange for the transfer of goods or services excluding sales tax. The Group recognizes revenue when it transfers control of a product or service to a customer.

### Hardware sales

Within the Wireless segment, the Group sell chips, components, modules and subsystems based on advanced technology for 5G millimeter-wave networks. Within the Photonics segment, the Group sells semiconductor lasers and other semiconductors based optical products.

For some of the hardware products, mainly within the Wireless business, revenue is recognized at a point in time. This point in time normally occurs when the control over the goods are transferred to the customer, which is equivalent to the time of delivery (in accordance with the shipment terms for the specific contract). A receivable is recognized by the Group when goods are delivered to the customer, as this represents the point in time at which the right to consideration becomes unconditional, as only the passage of time is required before payment is due. Production tests are performed before products are sent to the customers.

Revenue is recognized with deductions for estimated volume discounts, and revenue is only recognized to the extent it is very likely that a significant deduction will not occur. Discounts are normally agreed for a predetermined quantity and the deduction amount is calculated based on this quantity. If there is no pre-determined quantity, the discounts are estimated based on historical data.

Within the Photonics segment, the Group also sells hardware products that are manufactured based on specifications from the customer. Such hardware products include wafers and chips. Revenue from these hardware products is recognized over time, based on completion. Completion is normally measured with an output method

based on work completed on the basis of a task specification. Completion normally corresponds to the billing date. When that is not the case, a receivable is recognized when completion exceeds billing and a liability is recognized when billing exceeds completion.

### Development/NRE-projects

Wireless and Photonics include contracts referred to as "NRE"-contracts. Such contracts are development projects where the Group customizes the technology in hardware products to match customer requirements or to develop new products. The aim is to sell the customized/new products in volume once the development project is completed. Should this occur, revenue from volume sales of the products will be allocated to the hardware category.

Considerations for NRE contracts are recognized over time, based on completion. Completion is normally measured with an input method based on costs incurred. A contract asset is recognized when sales exceed billing and a contract liability is recognized when billing exceeds sales.

### Support contracts

Wireless also sells support for the company's hardware products to facilitate for customers to adapt the technology to their products. Support agreements allow customers to embed the Sivers' functionality in their products, which can then be sold on to end customers. The support contracts have a fixed term and fixed consideration, and revenue is recognized on a straight line basis over the service period. The consideration is recognized as a contract liability when the sale occurs and dissolved on a straight line basis over the service period.

### Leasing

#### The Group as lessee

The Group assesses whether a contract constitutes or contains a lease, at inception of the contract. The Group recognizes a right-of-use asset and the corresponding lease liability with respect to all lease contracts where it is the lessee.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses its incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise:

- fixed lease payments (including in substance fixed payments), less any lease incentives;
- variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- amounts expected to be paid by the lessee under residual value guarantees, amounts expected from residual value guarantees provided by the lessor to the lessee, closely-related parties of the lessee or third parties not attributable to the lessor and that is deemed to be financially capable of fulfilling the contractual obligations,
- the exercise price of call options, if the lessee is reasonably certain that the option will be exercised; and
- payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is presented as a separate line in the Group's Statement of Financial Position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a call option, in which case the lease liability is

remeasured by discounting the revised lease payments using a revised discount rate.

- the lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using the initial discount rate (unless the lease payments change is due to a change in a variable interest rate, in which case a revised discount rate is used).
- a lease contract is modified, and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. These are subsequently measured at accumulated cost less accumulated depreciation and impairment losses.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the accumulated cost of the right-of-use asset reflects that the Group expects to exercise a call option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

Right-of-use assets are presented on the same line in the Group's Statement of Financial Position as they would have been classified into if they were owned by the Group.

The Group applies IAS 36 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in the 'Property, Plant and Equipment' policy.

As a practical expedient, IFRS 16 permits a lessee not to separate non-lease components, and instead account for any lease and associated non-lease components as a single arrangement. The Group has used this practical expedient.

### Sale- & leaseback

Property, plant and equipment that the Group sells and then leases back is recognized as a sale if the transaction satisfies the requirements for revenue in IFRS 15. If that is not the case, the asset continues to be accounted for as property, plant and equipment and the revenue from the finance company is recognized as a financial liability.

### Foreign currency

In preparing the Financial Statements of individual companies, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing on the dates of the transactions. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currency are translated at the rates prevailing at the date when fair value was determined. Non-monetary items measured at cost in foreign currency are not translated.

Exchange differences are recognized in profit or loss in the period in which they arise except for:

- exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur in the foreseeable future (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the net investment.

For the purpose of presenting the Consolidated Financial Statement, the assets and liabilities of the Group's foreign operations are translated at the exchange rate prevailing on the reporting date. Income



and expense items are translated at the exchange rates at the date of transactions, unless exchange rates fluctuate significantly during that period, in which case the average exchange rates for the period are used. Exchange rate differences, if any, are recognized in other comprehensive income and accumulated in foreign currency translation reserve (attributed to non-controlling interests as appropriate).

On the disposal of foreign operations (i.e. a disposal of the Group's entire interest in a foreign operation), all exchange rate differences accumulated in foreign currency translation reserves in respect of that operation and that are attributable to the Parent Company owners are reclassified to profit or loss.

### Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attached to them and that the grants will be received.

Government grants are recognized in profit or loss under the line item "other operating income" on a systematic basis over the periods in which the Group recognizes as expenses the related costs the grants are intended to cover.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs, are recognized in profit or loss in the period in which they become receivable.

Government grants relating to the acquisition of property, plant and equipment are treated as deferred income and released to profit or loss over the expected useful lives of the assets concerned.

### Retirement and severance pay costs

Payments to defined-contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

Pension plans that encompass multiple employers are recognized as defined-contribution, if there is insufficient information to recognize the plan as defined-benefit. Currently, the Group only has retirement benefit plans that are recognized as defined-contribution plans.

### Short-term and long-term employee benefits

A liability is recognized for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognized in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date.

### Taxes

The income tax expense represents the sum of the tax currently payable and deferred tax.

#### Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in profit or loss because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

#### Deferred tax

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amount of assets and liabilities in the Financial Statements and the corresponding tax bases used in the computation of taxable profit and is accounted for using the liability method. Deferred tax liabilities are generally recognized for all taxable temporary differences and deferred tax assets are recognized to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilized. Deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences arising on investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled, or the asset is realized based on tax laws and rates that have been enacted or substantively enacted at the reporting date.

#### Deferred tax assets and liabilities

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

#### Current tax and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

#### Property, plant and equipment

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment loss.

Depreciation is recognized so as to write off the cost or valuation of assets less their residual values over their useful lives, using the straight line method, on the following bases:

Equipment, tools and installations	5–10 years
Computers	3 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. The gain or loss arising on the disposal or retirement of an asset is determined as the difference between sales revenue and book value of the asset and is recognized in profit or loss.

### **Internally-generated intangible assets – research and development expenses**

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following conditions have been demonstrated:

- the technical feasibility of completing development of the intangible assets for use or sale;
- the intention to complete the intangible assets for use or sale;
- the ability to use or sell the intangible assets;
- how the intangible assets will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible assets; and
- the ability to reliably measure expenditure attributable to intangible assets during development.

The accumulated cost for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible assets first meet the recognition criteria listed above. Where no internally generated intangible asset can be recognized, development expenses are recognized in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses.

Amortizations are commenced when the asset is put in use, and the amortization expense is recognized on a straight-line basis over the asset's useful life. At present, the useful life of intangible assets is 5 years.

### **Impairment of property, plant and equipment and intangible assets excluding goodwill**

At each reporting date, the Group reviews the carrying amounts of its property, plant and equipment and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Intangible assets with an indefinite useful life are tested for impairment at least annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

### **Inventories**

Inventories are stated at the lower of cost and net realizable value. Accumulated cost of inventories comprises all costs for purchasing, manufacture and other costs incurred in bringing the goods to their present location and condition. Net realizable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

### **Financial instruments**

Financial assets and financial liabilities are recognized in the Group's Statement of Financial Position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to a financial instrument measured at amortized cost are added or deducted from the value of the instrument on initial recognition. Transaction costs directly attributable to the acquisition of financial instruments at fair value through profit or loss are recognized immediately in profit or loss.

### **Financial assets**

All recognized financial assets are measured subsequently in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

### **Classification of financial assets**

Financial assets that meet the following conditions are measured subsequently at amortized cost:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets that meet the following conditions are measured subsequently at fair value through other comprehensive income:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

By default, all other financial assets are measured subsequently at fair value through profit or loss.

The Group has accounts receivable, other short-term assets, contract assets and cash that are recognized at amortized cost after deductions for impairments. Currently, the Group does not have any financial instruments that are measured at fair value through other comprehensive income.

### **Impairment of financial assets**

The Group recognizes a loss allowance for expected credit losses on investments in debt instruments measured at amortized cost. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognizes lifetime ECL for trade receivables and contract assets, in line with the simplified model. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to debtors, general economic conditions and an assessment of current and forecast factors at the reporting date, including the time value of money where applicable.

For all other financial instruments, the Group recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of

lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Group considers a breach of financial covenants by the debtor or information produced internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors to be indications that financial assets are generally not recoverable.

### **Derecognition of financial assets**

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

### **Financial liabilities and equity**

#### **Classification as debt or equity**

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

#### **Financial liabilities**

All financial liabilities are measured subsequently at amortized cost using the effective interest method or at fair value through profit or loss.

#### **Financial liabilities at fair value through profit or loss**

Financial liabilities are classified at fair value through profit or loss when the financial liability is (i) contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) it is designated as a liability valued at fair value through profit or loss on the initial reporting date.

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative

Financial liabilities at fair value through profit or loss are measured at fair value, with any gains or losses arising on changes in fair value recognized in profit or loss.

#### **Financial liabilities measured at amortized cost**

Financial liabilities that are not (i) contingent consideration of an acquirer in a business combination, (ii) held-for-trading, or (iii) designated at fair value through profit or loss, are measured subsequently at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial asset or financial liability and of recognizing interest income or interest expense in profit or loss in the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including transaction costs and all other premiums or discounts through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortized cost of a financial liability.

The group has convertible debentures, accounts payable, accrued expenses and other short term liabilities that are measured at amortized cost.

### **Derecognition of financial liabilities**

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid is recognized in profit or loss.

### **Derivative financial instruments**

Initial recognition of derivatives is at fair value at the date a derivative contract is entered into and derivatives are subsequently remeasured at fair value at each reporting date. The resulting profit or loss is recognized in profit or loss immediately, since the Group does not apply hedge accounting.

Derivatives are not offset in the Financial Statements unless the Group has both legal right and intention to offset. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

### **Embedded derivatives**

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. Derivatives embedded in hybrid contracts with a financial asset host within the scope of IFRS 9 are not separated.

Derivatives embedded in hybrid contracts with hosts that are not financial assets within the scope of IFRS 9 are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contract is not measured at fair value through profit or loss. A separate embedded derivative is presented in the same way as a separate derivative.

### **Provisions**

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle that obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

### **Share-based compensation**

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. The fair value excludes the effect of non-market-based vesting conditions.

The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of the number of equity instruments that will eventually vest. At each reporting date, the Group remeasures its estimate of the number of equity instruments expected to vest as a result of the effect of non-market-based vesting conditions. The impact of the revision of the original



estimates, if any, is recognized in profit or loss such that the accumulated cost reflects the revised estimate, with a corresponding adjustment of equity.

#### **New and revised standards**

None of the revised IFRS standards or new interpretations that became effective in 2020 will have any effect on the Group's profit, cash flow and financial position.

#### **New and revised standards that have not yet become effective**

The Group assesses that none of the revised IFRS standards or new interpretations that have not yet become effective will have any material effect on the Group's profit, cash flow and financial position.

Phase 2 of the amendments to IFRS 9, IFRS 7 etc. relate to the interest rate benchmark rate reform from 1 January 2021. In summary, the amendments enable companies to reflect the effects of transitioning from benchmark interest rates such as "STIBOR" to other benchmark rates without giving rise to accounting effects that would not provide useful information to users of financial statements. The Group is mainly affected by the interest rate reform in relation to exposure to "IBOR" in external borrowing. Although exposure to IBOR is limited to new borrowing of SEK 19,000 thousand, the Company monitors the effect of the amendments.

### **Note 3 | Key estimates and judgments**

When preparing the Financial Statements in accordance with the Group's accounting policies, as described in Note 2, management is required to make judgments that have a material impact on reported amounts and makes estimates and assumptions about reported values of assets and liabilities that are not directly available from other sources. Estimates and assumptions are based on historical experience and other factors judged to be relevant. Actual outcomes may differ from these estimates.

The estimates and the underlying assumptions are evaluated on a continuous basis. Changes to these estimates are reported in the period the estimate was changed if the change affects only that period, or in the period the change occurs and future periods if the change affects both the period when the change occurs and future periods.

Management assesses that the following areas that involve estimates and judgments are most critical to the Group:

#### **Valuation of intangible assets**

The Silvers Semiconductors Group has a significant proportion of assets relating to goodwill and capitalized development expenses included in the Statements of Financial Position. The Group tests assets for impairment annually for each cash-generating unit where the recoverable amount is determined on the basis of value-in-use. In order to estimate the value-in-use, certain estimates have been made regarding future cash flows, growth rate, investment plans and discount rate.

For capitalized development expenses, individual assessments are also made for each project with regard to products expected to generate future economic benefits.

The Group's procedure for impairment testing of intangible assets is described in Note 11.

#### **Recognition of capitalized development expenses**

In accordance with the Group's Accounting principles as described in Note 2, development expenses are reported as an asset from the time the intangible assets satisfy the criteria for capitalization. This includes judgments regarding whether it is likely that the asset will be able to generate future economic benefits and judgments relating to useful life. At present, the estimated useful life for a majority of the Group's intangible assets is a maximum of 5 years, although this may be reassessed.

#### **Revenue recognition**

Some of Silvers Semiconductors Group revenue is derived from hardware sales and NRE contracts that are recognized over time. The rate of completion is measured either according to an output method based on work completed, or an input method based on actual expenditure. The methods require estimates of the allocation of revenue to specific production stages, or estimates of total project expenses.

## Note 4 | Revenue from customer contracts

The Group receives revenue from customer contracts against the transfer of goods and services at a point in time and over time respectively from the following major revenue streams. This corresponds to revenue information for each reportable operating segment in accordance with IFRS 8 (see Note 5). Transaction amounts for remaining

performance commitments for agreements with a term of more than 12 month totaled SEK 2,505 M (0) as of the reporting date. The Group applies the relief rule, which means that agreements with remaining performance obligations for 12 months are not included in this amount.

Breakdown of revenue	2020			2019		
	Wireless	Photonics	Total	Wireless	Photonics	Total
<b>Revenue type</b>						
Hardware	14,580	13,166	27,746	21,848	27,337	49,185
Development project / NRE	6,501	60,316	66,816	1,733	44,090	45,823
Support & Other	1,608	–	1,608	1,347	–	1,347
<b>Total</b>	<b>22,688</b>	<b>73,482</b>	<b>96,170</b>	<b>24,928</b>	<b>71,427</b>	<b>96,355</b>
<b>Recognition</b>						
At a point in time	14,580	1,444	16,023	21,848	5,047	26,895
Over time	8,108	72,039	80,147	3,079	66,380	69,460
<b>Total</b>	<b>22,688</b>	<b>73,482</b>	<b>96,170</b>	<b>24,928</b>	<b>71,427</b>	<b>96,355</b>
<b>Geographical market</b>						
North America	1,863	61,586	63,449	6,216	56,941	63,156
Europe	17,124	7,667	24,791	15,824	9,674	25,499
Asia	3,701	4,229	7,930	2,888	4,812	7,700
<b>Total</b>	<b>22,688</b>	<b>73,482</b>	<b>96,170</b>	<b>24,928</b>	<b>71,427</b>	<b>96,355</b>

## Note 5 | Operating segments

The information reported to the Group CEO (the highest decision-making body) as supporting documentation for decisions regarding the allocation of resources and evaluation of the segments' results of operations has been broken down into two operational areas – Wireless and Photonics. These areas comprise operations in the subsidiary Sivers Wireless AB and Sivers Photonics Ltd. Accordingly, the Group's reportable operating segments in accordance with IFRS 8 are as follows:

### Wireless

The Wireless business area develops, manufactures and sells chips, components, modules and subsystems based on advanced 5G millimeter wave technology. The products are mainly delivered to systems manufacturers, who in turn deliver them to telecommunication operators. Deliveries are made directly or through partners.

### Photonics

The Photonics business area develops, designs, manufactures and sells III-V compound semiconductor laser devices for optical communication, optical sensing/sensors and optical wireless networks. Optical communications devices are a key component of cloud storage and cloud communications in areas such as Passive Optical Networks (PON) and Quantum technologies. The business area delivers to several Fortune 100 customers located in Silicon Valley directly or via partners.

### Segment revenue and profit

The following represents an analysis of Group revenue and profit by reportable operating segment:

2020, SEK thousand	Wireless	Photonics	Group wide	Total
<b>Revenue</b>				
External revenue	22,688	73,482	–	96,170
Revenue from other segments	–	–	–	–
<b>Total revenue</b>	<b>22,688</b>	<b>73,482</b>	<b>–</b>	<b>96,170</b>
<b>Profit</b>				
EBITDA	–37,875	399	–18,185	–55,661
Depreciation, amortization and impairment			–30,049	–30,049
Financial income			4,103	4,103
Financial expenses			–119,744	–119,744
Profit before tax	–37,875	399	–163,875	–201,351
Income tax	–	–	5,569	5,569
<b>Profit after tax</b>	<b>–37,875</b>	<b>399</b>	<b>–158,306</b>	<b>–195,782</b>

2019, SEK thousands	Wireless	Photonics	Group wide	Total
<b>Revenue</b>				
External revenue	24,928	71,427	–	96,355
Revenue from other segments	–	–	–	–
<b>Total revenue</b>	<b>24,928</b>	<b>71,427</b>	<b>–</b>	<b>96,355</b>
<b>Profit</b>				
EBITDA	–13,483	–22,610	–12,229	–48,322
Depreciation, amortization and impairment			–29,702	–29,702
Financial income			–	–
Financial expenses			–8,990	–8,990
Profit before tax	–13,483	–22,610	–50,921	–87,014
Income tax			11,353	11,353
<b>Profit after tax</b>	<b>–13,483</b>	<b>–22,610</b>	<b>–39,568</b>	<b>–75,661</b>

The accounting principles for the reportable operating segments correspond to the Group's accounting principles as described in Note 2. Segment profit comprises profit for each operating segment without allocation of depreciation and amortization, financial items, tax, group-wide administration expenses, including remuneration to management, profit / loss on financial instruments and financing costs (in addition to intra-group lending). This is the benchmark criterion reported to the Group CEO as supporting information for decisions on the allocation of resources to segments and for evaluating results of operations.

#### Revenue from goods and services

Group revenue from goods and services are described in Note 4.

#### Geographical information

Group revenue from external customers and information about the operating segments' assets (property, plant and equipment excluding financial instruments, deferred tax assets and other financial assets) by geographical location are described below:

SEK thousand	Revenue from external customers		Property, plant and equipment	
	2020	2,019	31 Dec 2020	31 Dec 2019
USA	63,449	63,156	–	–
United Kingdom	3,195	6,882	64,784	63,080
China	5,436	4,573	–	–
Ireland	5,221	4,564	–	–
Norway	3,915	4,400	–	–
Italy	82	2,756	–	–
The Netherlands	44	1,945	–	–
Japan	868	1,653	–	–
Sweden	449	910	278,952	261,019
France	3,812	–	–	–
Hungary	3,380	–	–	–
Rest of world	6,321	5,515	–	–
<b>Total</b>	<b>96,170</b>	<b>96,355</b>	<b>343,737</b>	<b>324,099</b>

#### Information about major customers

Of Photonics' revenue, SEK 35.238 M (19.574) derived from sales to the Group's largest customer. In 2019, approximately SEK 11.538 M comprised sales to the Group's second largest customer (in 2020 sales to this customer totaled SEK 2.720 M). No other individual customers contributed 10% or more to Group revenue in 2020 or 2019.



## Note 6 | Remuneration to employees

### Number of employees

Average number of employees	2020			2019		
	Women	Men	Total	Women	Men	Total
<b>Parent Company</b>						
Sweden	1	2	3	1	2	3
<b>Total Parent Company</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Subsidiaries</b>						
Sweden	7	27	34	4	24	28
Scotland	18	46	64	20	46	66
Total in Subsidiaries	25	73	98	24	70	94
<b>Total, Group</b>	<b>26</b>	<b>75</b>	<b>101</b>	<b>25</b>	<b>72</b>	<b>97</b>

### Board members and other senior executives

	Parent Company		Group	
	2020	2019	2020	2019
<b>Women</b>				
The Board	2	1	2	1
Other senior executives	–	–	–	–
<b>Men</b>				
The Board	5	5	5	5
Other senior executives	2	2	3	3
<b>Total</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>9</b>

### Salaries and other remuneration

Expenses for remuneration to employees	2020	2019
<b>Parent Company</b>		
Salaries and other remuneration	6,790	6,800
Social security expenses	8,148	2,204
Pension costs	656	963
<b>Subsidiaries</b>		
Salary and other remuneration	56,512	52,053
Social security expenses	26,937	10,886
Pension costs	7,785	5,215
<i>Total salary and remuneration, Group</i>	<i>63,303</i>	<i>58,853</i>
<i>Total social security expenses, Group</i>	<i>35,085</i>	<i>13,090</i>
<i>Total pension costs, Group</i>	<i>8,441</i>	<i>6,178</i>
<b>Total, Group</b>	<b>106,828</b>	<b>78,121</b>
Share-based remuneration (Note 30)	2,783	1,682
Remuneration after termination of employment	–	1,504

Remuneration to senior executives	2020	2019
<b>Parent Company</b>		
Salary and other remuneration to senior executives	6,088	5,757
of which bonuses etc. to senior executives	389	523
Salary and remuneration to other employees	706	1,043
<b>Total salary and remuneration, Parent Company</b>	<b>6,794</b>	<b>6,800</b>
<b>Group</b>		
Salary and other remuneration to senior executives	10,076	8,658
of which bonuses etc. to senior executives	690	764
Salary and remuneration to other employees	53,227	50,195
<b>Total salary and remuneration, Group</b>	<b>63,303</b>	<b>58,853</b>

### Remuneration to senior executives

Fees to the Chairman and members of the Board are payable in accordance with the decision of the shareholders' meeting. Remuneration to the Group's senior executives is presented below. Senior executives encompass the Board, the CEO, CFO and the CEOs of the various subsidiaries.

Remuneration to senior executives 2020	Basic salary/ fees	Variable remuneration	Share-based compensation*	Other remuneration	Pension costs	Total
Tomas Duffy, Chairman of the Board	750	–	–	309	–	1,059
Ingrid Engström	350	–	–	–	–	350
Björn Norrbom	350	–	–	–	–	350
Dag Sigurd	350	–	–	–	–	350
Robert Green	350	–	–	460	–	810
Erik Fällström	–	–	–	–	–	–
Beth Topolowsky	225	–	–	–	–	225
Anders Storm, CEO	1,560	275	290	–	418	2,544
Other senior executives (3)	4,486	414	675	–	389	5,964
<b>Total remuneration to senior executives</b>	<b>8,421</b>	<b>690</b>	<b>965</b>	<b>770</b>	<b>807</b>	<b>11,652</b>

Remuneration to senior executives 2019	Basic salary/ fees	Variable remuneration	Share-based compensation*	Other remuneration	Pension costs	Total
Tomas Duffy, Chairman of the Board	750	–	–	345	–	1,095
Ingrid Engström	350	–	–	–	–	350
Björn Norrbom	350	–	–	–	–	350
Dag Sigurd	350	–	–	–	–	350
Robert Green	350	–	–	–	–	350
Erik Fällström	–	–	–	–	–	–
Anders Storm, CEO	1,522	401	113	–	337	2,373
Other senior executives (3)	3,905	363	204	–	503	4,975
<b>Total Remuneration to senior executives</b>	<b>7,577</b>	<b>764</b>	<b>317</b>	<b>345</b>	<b>840</b>	<b>9,843</b>

The Annual General Meeting 2020 decided that Board members who carry out assignments in addition to regular Board work are entitled to receive reasonable compensation for this. In 2020, Tomas Duffy assisted the company with the integration of the subsidiary Siverts Photonics Ltd, acquired in May 2017. Remuneration for this work amounted to SEK 309,000 (345,000). The work was completed in 2020 and the Chairman will not provide any further consultations to the subsidiary.

In 2020, Robert Green received remuneration from the subsidiary Siverts Photonics for consultations relating to new business strategies. Remuneration amounted to SEK 460,000 and was paid from the subsidiary. Robert Green will not provide any further consultations in his capacity as boardmember.

The increase in social security expenses in 2020 compared to 2019 relates to social security expenses for employee stock option programs that have increased as a result of the increased market value of options.

\*Share-based remuneration relates to costs for employee stock option programs calculated in accordance with IFRS 2.

### Pensions

The pensionable age of the CEO and other senior executives is 65 and pension premiums correspond to the ITP plan (occupational pension). There were no other pension obligations to senior executives.

### Severance pay

In the event of notice of termination of employment by the CEO, a notice period of six months shall apply, where severance pay and contractual benefits are payable. In the event of notice of termination of employment by the Company, severance pay corresponding to 9 months' salary is payable.

## Note 7 | Other external expenses

### Remuneration to auditors

SEK thousand	2020	2,019
Deloitte AB		
Audit fees	571	910
Audit work in addition to auditing assignments	180	210
Tax consultancy	–	60
Other services	50	298
BDO Ltd		
Audit fees	310	–
<b>Total</b>	<b>1,111</b>	<b>1,478</b>

Audit activities in addition to Audit assignments in 2020 relate to a pre-audit ahead of the planned move to Nasdaq's main list.

In 2020, BDO performed the audit of the subsidiary Siverts Photonics.

**Note 8 | Financial items**

SEK thousand	2020	2,019
<b>Financial income</b>		
Exchange rate gains	4,103	–
<b>SEK thousand</b>	<b>2020</b>	<b>2019</b>
<b>Financial expenses</b>		
Interest expenses, loans and credit	2,360	3,136
Interest on convertible debentures	1,558	1,923
Interest expenses on leasing liabilities and hire-purchase liabilities	2,026	1,590
Value adjustment of embedded derivatives in convertible debentures	112,569	1,419
Exchange rate losses	1,231	922
<b>Total</b>	<b>119,744</b>	<b>8,990</b>

**Note 9 | Income tax**

SEK thousand	2020	2019
<b>Current tax:</b>		
Current year	3,539	7,243
Tax attributable to prior years	1,987	4,068
	<b>5,527</b>	<b>11,311</b>
<b>Deferred tax (See Note 23)</b>		
Origin and reversal of temporary differences	42	42
<b>Total</b>	<b>5,569</b>	<b>11,353</b>

Current tax rate is 21.4% (21.4%).

Tax in other jurisdictions is calculated at the applicable tax rate in the relevant jurisdiction.

Current tax comprises tax credits for research and development expenses in Scotland. Tax attributable to prior years relates to actual outcomes (after completed tax return) compared to estimated amounts for the previous year.

Tax expense for the year can be offset against profit before tax for the year as follows:

SEK thousand	2020	2019
Profit before tax	–195,782	–87,014
Swedish tax rate of 21.4%	41,897	18,621
Tax effect from non-deductible expenses/non taxable revenue	–91	–1,207
Tax effect from embedded derivatives	–23,980	–
Tax Credit R&D <sup>1)</sup>	5,527	11,311
Change in unrecognized deferred tax assets	–17,418	–16,360
Deviating tax rate in foreign subsidiaries	–366	–1,013
<b>Total Current tax recognized</b>	<b>5,569</b>	<b>11,353</b>

<sup>1)</sup> The Group receives tax credits for research and development expenses in Scotland. These are calculated on the basis of specific rules in accordance with tax legislation in Scotland and are reported as a separate item above, as the method for calculating tax credit does not have a direct relationship with the presentation in the Statements of Comprehensive Income. The amount indicated above refers to tax credits for the current year and tax credits attributable to previous years

**Note 10 | Earnings per share**

Calculations of earnings per share before and after dilution are based on the following data:

SEK thousand	2020	2,019
<b>Profit</b>		
Earnings attributable to Parent Company shareholders when calculating earnings per share before and after dilution	–195,782	–75,661
<b>Number of shares</b>		
Weighted average of ordinary shares when calculating earnings per share before dilution	142,821,263	127,478,159
<b>Earnings per share</b>		
Earnings per share before and after dilution	–1.37	–0.59

The denominator used in calculating earnings per share before and after dilution has been adjusted to reflect the bonus issue element of the new issues in 2019 and 2020.

During 2020, the Group had convertible debentures and employee stock options that can give rise to dilution effects. As the Group is currently loss making, dilution improves earnings per share. Accordingly, the earnings figure is the same before and after dilution.

**Note 11 | Goodwill and other intangible assets****Goodwill****Book value, SEK thousands**

as of December 31, 2020	134,812
as of December 31, 2019	134,812

Book value of goodwill was allocated to cash-generating units as follows:

SEK thousand	31 Dec 2020	31 Dec 2019
Wireless	134,812	134,812
Photonics	–	–

Recognized goodwill was derived from the acquisition of Silvers Photonics Ltd in May 2017. The transaction constituted a reverse acquisition, i.e. Silvers Semiconductors AB was deemed to be the acquired company. Accordingly, estimated goodwill has been allocated to the Wireless segment, which is deemed to constitute a cash-generating unit.

**Other intangible assets****Capitalized development expenses, SEK thousand**

<b>Accumulated cost</b>	
<b>As of January 1, 2019</b>	<b>133,532</b>
Exchange rate differences	1,931
Addition, internal development	43,287
Reclassification	909
<b>as of December 31, 2019</b>	<b>179,659</b>
Exchange rate differences	–3,112
Addition, internal development	37,215
<b>as of December 31, 2020</b>	<b>213,763</b>



### Capitalized development expenses, SEK thousand

#### Accumulated depreciation, amortization and impairment

<b>As of January 1, 2019</b>	<b>-29,498</b>
Exchange rate differences	-512
Amortization for the year	-11,890
Impairments losses for the year	-6,211
<b>as of December 31, 2019</b>	<b>-48,111</b>
Exchange rate differences	1,357
Amortization for the year	-19,456
Impairments losses for the year	-
<b>as of December 31, 2020</b>	<b>-66,210</b>

#### Recognized value

as of December 31, 2020	147,553
as of December 31, 2019	131,548

The investment in capitalized development expenses is attributable to the development of new product generations. The useful life is 5 years and amortization begins when the product has been completed to a degree where it is ready for mass production.

%	31 Dec 2020		31 Dec 2019	
	Wireless	Photonics	Wireless	Photonics
Discount rate	9.7	11.9	11.4	13.1
Constant growth rate	3.0	3.0	3.0	3.0

### Sensitivity analysis

The Group has carried out a sensitivity analysis of impairment testing to changes in material assumptions used to determine recoverable amounts for the respective cash-generating units. Management assesses that a reasonable change in material assumptions forming the basis for recoverable amounts would not result in recognized amounts exceeding recoverable amounts for Wireless or Photonics.

### Impairment of capitalized development expenses

Capitalized development expenses consist of several development projects in the Group. Individual impairment testing is also carried out for these, when there is indication that impairment may be required. There was no impairment of assets in the year on the basis of these tests (impairment totaled SEK 6.211 M in 2019).

### Impairment testing

The Group carries out impairment testing of goodwill and other intangible assets annually, or whenever there is an indication that goodwill or other intangible assets may require impairment. Impairment testing is carried out to calculate the recoverable amount per cash-generating unit, which are the Group's two operating segments. The recoverable amount is determined on the basis of a calculation of value-in-use through cash flow forecasts for a five year period that has been approved by management. Present value of future cash flows is calculated using the discount rate before tax. Impairment testing is as of the reporting date. For the coming 3 years, the Company uses budgets that have been produced by management and authorized by the Board. General growth forecasts are then applied, with consideration given to anticipated market growth.

The forecast of future cash flows includes assumptions about the Group's sales growth, operating margin, working capital and investment requirement.

Cash flows beyond the 5-year horizon have been extrapolated at a constant growth rate of 3% (3%). The constant growth rate does not exceed the estimated long-term growth rate for 5G or Photonics' markets.

## Note 12 | Property, plant and equipment

### Equipment, tools and installations, SEK thousand

#### Accumulated cost

<b>As of January 1, 2019</b>	<b>64,555</b>
Investments	8,789
Sales	-21
Exchange rate differences	3,425
<b>December 31, 2019</b>	<b>76,748</b>
Investments	2,313
Sales	-80
Exchange rate differences	-5,206
<b>December 31, 2020</b>	<b>73,775</b>

#### Accumulated depreciation, amortization and impairment

<b>As of January 1, 2019</b>	<b>-26,368</b>
Depreciation	-6,841
Sales	21
Exchange rate differences	-584
<b>as of December 31, 2019</b>	<b>-33,772</b>
Depreciation	-5,684
Sales	38
Exchange rate differences	1,564
<b>as of December 31, 2020</b>	<b>-37,854</b>

#### Recognized value

as of December 31, 2020	35,923
as of December 31, 2019	42,977

Property, plant and equipment includes the items presented in this Note, and right-of-use assets for lease contracts presented in Note 13.

## Note 13 | Leasing (the Group as lessee)

### Rights of use asset

Book value	Buildings & land	Machinery & equipment	Vehicles	Total
<b>As of January 1, 2019</b>	<b>11,815</b>	<b>2,570</b>	<b>376</b>	<b>14,762</b>
Additional right-of-use assets	11,414	1,253	256	12,922
Depreciation and amortization	-2,903	-1,621	-236	-4,760
Exchange rate differences	128	41	25	194
<b>as of December 31, 2019</b>	<b>11,815</b>	<b>2,570</b>	<b>376</b>	<b>14,762</b>
Additional right-of-use assets	14,285	1,632	294	16,211
Changes to agreements*	458	-100	-65	293
Depreciation	-3,158	-1,558	-193	-4,909
Exchange rate differences	-843	-28	-37	-907
<b>as of December 31, 2020</b>	<b>22,558</b>	<b>2,516</b>	<b>375</b>	<b>25,449</b>

\*Changes to agreements relates to agreements that have been extended or terminated early

### The Group's leasing activities

The Group leases buildings for office premises and production, machinery/equipment for production and development operations, and a number of vehicles. The leasing periods are normally 3–5 years for machinery, fixtures & equipment and vehicles. In 2020, the Group entered into lease contracts in Photonics for new production and office premises, which comprises additional right-of-use assets under Buildings and land above. For these contracts, the leasing period is 10 years, including an option to terminate the agreement in 2025 at the earliest.

The Group has two significant rental contracts for buildings and land relating to premises in Kista and Glasgow. The agreement relating to premises in Kista includes extension options for 3-year periods, of which one period has been included in the estimated value of right-of-use assets at an amount corresponding to liabilities. The agreement in Glasgow has been assigned an estimated useful life of 10 years.

A maturity analysis for leasing liabilities is presented in Note 25.

control over the assets is not transferred to the financier. Accordingly, the assets are recognized as property, plant and equipment (see Note 12) and the debt comprises a hire purchase loan under other non-current liabilities and other current liabilities respectively. The value of the assets in these sale- and leaseback agreements amounted to SEK 15.2 M as of December 31, 2020 (2019-12-31: SEK 18.1 M.)

### Amounts recognized in profit and loss SEK thousand

	2020	2,019
Depreciation and amortization of right-of-use assets	-4,909	-4,760
Interest expense, leasing liabilities	-729	-730

Total cash outflow for lease contracts amounted to SEK 5,270 M (4,891).

Property, plant and equipment includes the items presented in Note 12, and right-of-use assets for lease contracts presented in this note.

SEK thousand	2020	2019
Property, plant and equipment (Note 12)	35,923	42,977
Right-of-use assets	25,449	14,762
<b>Total</b>	<b>61,372</b>	<b>57,739</b>

### Sale- and leaseback

The Group is also party to sale- and leaseback agreements in Photonics, where the Group acquires assets that are sold to an external financier. The Group then leases back the asset from the financier and buys it back at residual value at the end of the leasing term. These agreements are recognized as if a sale had not taken place, because

## Note 14 | Subsidiaries

Information about the composition of the Group at the end of the reporting period is provided below:

Main activity	Registered office	Number of wholly-owned subsidiaries	
		31 Dec 2020	31 Dec 2019
Develops, designs, manufactures and sells III-V compound semiconductor laser devices for optical communications, optical sensing/sensors and optical wireless networks.	Scotland	1	1
Develops, manufactures and sells chips, components, modules and subsystems based on advanced 5G millimeter wave technology.	Sweden	2	2

More information about the Group's subsidiaries is presented in Note 6 of the Parent Company Annual Report.

## Note 15 | Inventories

SEK thousand	31 Dec 2020	31 Dec 2019
Raw materials and consumables	7,848	5,335
Work in progress/finished goods	6,928	4,501
<b>Total</b>	<b>14,776</b>	<b>9,836</b>

The Group's products undergo several development stages as part of the production process. Customers can buy products at different stages in the process depending on intended use. It is not possible to determine in advance which products will be sold as found and which will require further development. Therefore, the information above has been broken down into input goods relating to purchased materials, and products/finished goods relating to products where development has started.

In 2020, inventories have been impaired to net sales value at a total amount of SEK 0.309 M (SEK 2.717 M).

The cost of inventories recognized as an expense for the year totaled SEK 15.129 M (17.371).

## Note 16 | Accounts receivable

SEK thousand	31 Dec 2020	31 Dec 2019
Accounts receivable	19,738	19,996
Loss provision	-277	-912
<b>Total</b>	<b>19,460</b>	<b>19,084</b>

### Accounts receivable

The Group's credit terms are 30-45 days. No interest is applied to outstanding customer receivables.

The Group values provisions at an amount corresponding to expected credit losses for the remaining maturity. Expected credit losses for customer receivables are calculated on the basis of a provision matrix based on historical experience and analysis of customers' financial position, adjusted for customer-specific factors, general economic conditions in the customer's sector and an assessment of the current situation and the forecast as of the reporting date.

There have been no changes in calculation methods or significant assumptions in the reporting period.

The Group derecognizes accounts receivable when there is information that indicates that a customer is in serious financial difficulty and there is no reasonable expectation of recovery, for example when a customer has entered into liquidation or initiated bankruptcy proceedings, or when accounts receivable are more than two years' overdue, whichever is sooner.

The following table presents an age analysis of the Group's accounts receivable.

SEK thousand	Accounts receivable - number of days overdue						Total
	Not over-due	<30	31- 60	61- 90	91- 120	>120	
31 Dec 2020	9,375	5,760	2,076	1,066	633	828	19,738
31 Dec 2019	9,605	6,375	1,384	451	100	2,082	19,996

The Group has historically experienced very few credit losses. However, some of the Group's customers have a pattern of paying invoices late, which has given rise to a significant proportion of overdue accounts receivable in previous years. The Group actively pursues timely payment of outstanding invoices and frequently follows up unpaid customer invoices to determine the reason and collect overdue amounts.

The following table illustrates changes in the Group's credit loss reserve and other bad and doubtful debt. The Group's provision matrix for expected credit losses produced negligible amounts, and therefore no general provision was made.

SEK thousand	2020	2,019
<b>Opening balance</b>	<b>-912</b>	<b>-180</b>
Provision for the year	-	-710
Reversals	586	-
Exchange rate differences	49	-22
<b>Closing balance</b>	<b>-277</b>	<b>-912</b>

## Note 17 | Other receivables

SEK thousand	31 Dec 2020	31 Dec 2019
Preliminary tax paid	1,177	1,177
VAT receivables	2,885	3,007
Balance on tax account	-	157
Other	17	503
<b>Total</b>	<b>4,079</b>	<b>4,843</b>

## Note 18 | Prepaid expenses and accrued income

SEK thousand	31 Dec 2020	31 Dec 2019
Prepaid license expenses	2,108	2,506
Prepaid insurance	345	337
Prepaid interest	246	258
Prepaid fixtures & equipment	4,049	-
Prepaid input goods	817	-
Accrued government grants	1,327	1,366
Other prepaid expenses	566	651
<b>Total</b>	<b>9,459</b>	<b>5,118</b>

### Contract assets

SEK thousand	31 Dec 2020	31 Dec 2019
NRE/Development project	2,901	1,732
	<b>2,901</b>	<b>1,732</b>
Of which short-term proportion	2,901	1,732

Contract assets comprise a NRE agreement that commenced in the year. Payment for the NRE agreement falls due according to milestones defined in the agreements.

The Group's contract assets relate to work carried out. Amounts that were previously recognized as contract assets have been reclassified to accounts receivable at the date when the amount is invoiced to the customer.

The credit loss reserve for contract assets is negligible. There was no significant increase in credit risk with this counterparty.



## Note 19 | Equity

Number of shares	31 Dec 2020	31 Dec 2019
Decided number of shares:		
Ordinary shares of SEK 0.50 each	154,445,647	131,648,456
<b>Issued and fully paid-up shares:</b>		
As of January 1, ordinary shares of 0,50 SEK each	131,648,456	118,445,825
Directed new issues	12,473,223	11,844,582
New issues, loan conversion	1,334,958	–
New issue, conversion of convertible debentures	4,651,727	–
New issue, redemption of warrants	–	1,318,049
Issue for redemption of employee stock options	4,337,283	40,000
<b>As of December 31 ordinary shares of SEK 0.50 each</b>	<b>154,445,647</b>	<b>131,648,456</b>

All shares are the same series and confer equal rights to votes and profit in the company.

In 2020, the Parent Company completed directed new issues on two occasions, and redeemed employee stock options under the 2010, 2014, 2015 and 2017 incentive programs. The Company raised a total of SEK 273.698 M (88.360) in liquid funds from these new issues. Issue expenses totaled SEK 5.881 M (3.882).

### Specification of other contributed capital

SEK thousand	31 Dec 2020	31 Dec 2019
Share premium reserve from new issue	932,421	495,573
Transaction expenses from new issue	–27,856	–21,975
<b>Total</b>	<b>904,565</b>	<b>473,598</b>

### Specification of translation reserve

SEK thousand	31 Dec 2020	31 Dec 2019
Value as of January 1	6,116	1,557
Exchange rate differences from translation of net assets in foreign operations	–5,974	4,559
December 31	142	6,116

## Note 20 | Borrowing

SEK thousand	31 Dec 2020	31 Dec 2019
<b>Borrowing at amortized cost</b>		
Borrowing from credit institutions	–	20,838
Bank borrowing	19,000	–
<b>Total borrowing</b>	<b>19,000</b>	<b>20,838</b>
Long-term	15,000	–
Short-term	4,000	20,838

### Borrowing from credit institutions

As of 31 December 2019, borrowing from credit institutions related to loans from external creditors (not closely related parties). In 2020, the Company completed offset issues where these loans, including capitalized interest, were converted to shares in the Parent Company.

### Bank borrowing

In 2020, the subsidiary Siverts Wireless AB raised a loan of SEK 20 M from Nordea. The loan has a term of 5 years and interest, paid quarterly, is set at Stibor+2.8%. The loan is amortized quarterly at SEK 1 M. In connection with raising the loan with Nordea, the Group terminated an existing overdraft facility of SEK 2.5 M with SEB.

## Note 21 | Convertible debentures

Convertible debentures were issued on December 22, 2017 in multiples of USD 10,000 at a total value of USD 4,000,000. The convertible debenture holder owns the right to convert debt and accrued interest into new shares in the Parent Company at a fixed price of SEK 8.29 per share after conversion at the SEK/USD exchange rate 8.426. If conversion does not occur, the prevailing exchange rate is applied. The debentures have a maturity of 3 years with a coupon of 5%.

The convertible debentures have been reported as a financial liability valued at amortized cost, while the option to convert the debt to shares has been reported as an embedded derivative at fair value.

On October 1, 2020, the holder called for conversion of the debentures, and the options were converted to shares on October 22, 2020.

The convertible debentures have changed as follows:

SEK thousand	
Debt element at issue date	28,277
Interest charged (applied effective interest rate)	4,652
Capitalized interest	5,634
Conversion of debt to shares	–38,563
Recognized amount of debt element as of December 2020	–

The conversion option (embedded derivatives) was reported under other current liabilities (see Note 26). Upon conversion, the convertible debenture and the derivative debt were both included in equity. Exchange rate losses previously reported under the convertible debenture were reversed to profit, because a fixed conversion rate is applied to the conversion of shares.

**Note 22 | Derivative instruments**

SEK thousand	31 Dec 2020	31 Dec 2019
<b>Derivative instruments financial liabilities</b>		
Embedded derivatives valued at fair value:		
<b>Conversion option in convertible debentures</b>	–	3,911
<b>Total</b>	<b>–</b>	<b>3,911</b>

In October 2020, the convertible debentures were converted to shares (for more information see Note 21). As a result, the embedded derivative included in the Balance Sheet as of 31 December 2019 has been reposted to equity.

**Note 23 | Deferred tax**

Deferred tax assets and deferred tax liabilities are reported net only where there is a legal right to offset current tax assets against current tax liabilities, and the deferred tax receivables and deferred tax liabilities derive from tax levied by the same tax authority and are intended to offset current tax liabilities and tax receivables through a net payment. The following presentation illustrates deferred tax assets and deferred tax liabilities reported in the Statement of Financial Position:

SEK thousand	31 Dec 2020	31 Dec 2019
Deferred tax liabilities	126	168
Deferred tax asset	–	–
<b>Total</b>	<b>126</b>	<b>168</b>

As of the end of the reporting period, the Group had unutilized tax loss carry-forwards amounting to SEK 347.382 M (265.783) that can be utilized against future tax surpluses. No deferred tax receivable was recognized for the deficits as there is uncertainty about whether and when these will be realized against future surpluses.

**Note 24 | Provisions**

SEK thousand	31 Dec 2020	31 Dec 2019
Social security expenses for employee stock options	17,177	4,797
	<b>17,177</b>	<b>4,797</b>
Short-term	–	–
Long-term	17,177	4,797
<b>Total</b>	<b>17,177</b>	<b>4,797</b>

SEK thousand	Social security expenses, employee stock options	Total
<b>As of January 1, 2019</b>	<b>3,411</b>	<b>3,411</b>
Additional provision for the year	1,436	1,436
Utilized in the year	–50	–50
<b>as of December 31, 2019</b>	<b>4,797</b>	<b>4,797</b>
<b>As of January 1, 2020</b>	<b>4,797</b>	<b>4,797</b>
Additional provision for the year	28,704	28,704
Utilized in the year	–16,324	–16,324
<b>as of December 31, 2020</b>	<b>17,177</b>	<b>17,177</b>

Additional provisions relate to provisions for social security expenses for vested employee stock options, and revaluation of provisions made in previous years. In 2020, provisions increased significantly as a result of the Parent Company's increased share price.

**Note 25 | Leasing liabilities**

SEK thousand	31 Dec 2020	31 Dec 2019
<b>Maturity analysis</b>		
Year 1	4,719	4,348
Year 2	4,068	2,652
Year 3	3,912	1,790
Year 4	3,829	1,767
Year 5	3,711	1,802
More than 5 years	10,555	4,669
<b>Total</b>	<b>30,794</b>	<b>17,029</b>
<b>Classified as:</b>		
Non-current liabilities	22,166	11,301
Current liabilities	3,975	3,811
<b>Total</b>	<b>26,141</b>	<b>15,112</b>

**Note 26 | Other liabilities**

SEK thousand	31 Dec 2020	31 Dec 2019
PAYE tax & fees	5,606	3,143
Short-term loans (Note 20)	–	20,838
Embedded derivatives	–	3,911
Hire purchase loans ("sale- & lease-back")	3,087	3,113
Other	28	148
<b>Total</b>	<b>8,721</b>	<b>31,153</b>

**Note 27 | Accrued expenses and prepaid income**

SEK thousand	31 Dec 2020	31 Dec 2019
Prepaid government grants	1,656	1,763
Accrued holiday pay and social security expenses	5,007	5,509
Other personnel related expenses	5,737	3,169
Accrued consultancy costs	4,772	2,426
Accrued accounting and audit fees	511	665
Other accrued expenses	1,985	960
<b>Total</b>	<b>19,668</b>	<b>14,492</b>

**Contract liabilities**

SEK thousand	31 Dec 2020	31 Dec 2019
Hardware sales (i)	–	1,318
Development project/NRE (ii)	1,914	2,711
Support (iii)	565	719
<b>Total</b>	<b>2,480</b>	<b>4,749</b>
Short-term	2,480	4,749
Long-term	–	–

- (i) For hardware sales, revenue is recognized when control over the products has been transferred to the customer, which corresponds to the date of delivery of the goods. The Group is party to some agreements where initial performance obligations are carried out when payment is received, but before the delivery date. This means that payment is recognized as a contract liability until the hardware has been delivered.
- (ii) The Group's NRE agreements are invoiced in accordance with milestones defined in the contracts. Revenue is recognized at a pace with completion. When invoicing exceeds percentage of completion, a contract liability is reported.
- (iii) Revenue attributable to support services is recognized over time even if the customer pays for all services in a lump sum at the start of the contract. Contract liabilities are recognized as revenue relating to maintenance at the date of the initial sales transaction and is dissolved over the service period.

The following tables indicate the proportion of recognized revenue in the year that is attributable to outstanding debt at the beginning of the period for contract liabilities. No revenue was recognized in the year attributable to obligations met in previous years.

SEK thousand	31 Dec 2020	31 Dec 2019
Hardware sales (i)	1,318	1,548
Development project/NRE	2,711	–
Support	719	383
<b>Total</b>	<b>4,749</b>	<b>1,931</b>

**Note 28 | Notes, Cash Flow Statement****Cash and cash equivalents**

SEK thousand	31 Dec 2020	31 Dec 2019
Cash and cash equivalents	249,448	52,228
<b>Total</b>	<b>249,448</b>	<b>52,228</b>

Cash and cash equivalents consist of cash and short-term bank balances with a term of 3 months or less. The recognized value of these assets approximately corresponds to fair value. Cash and cash equivalents at the end of the reporting period as indicated in the Consolidated Statement of Cash Flow can be reconciled with the Statement of Financial Position above.

**Transactions not involving payment**

Acquisitions of buildings, fixtures & equipment and vehicles totaling SEK 16.122 M (12.922) were financed via new leasing contracts in the year.

**Changes in liabilities attributable to financing activities**

The following table shows changes in Group liabilities attributable to financing activities, which includes changes attributable to cash flow and changes not influencing cash flow. Liabilities attributable to financing activities are liabilities for which cash flows have been classified, or for which future cash flows will be classified, as cash flows from financing activities in the Cash Flow Statement.

SEK thousand	January 1, 2019	Cash flow from financing	Transactions not involving payment			December 31, 2019
			Exchange rate changes	Capitalized interest	New leasing contracts	
Convertible debentures (Note 21)	34,626	–	1,438	3,474	–	39,538
Leasing liabilities (Note 25)	6,155	–4,161	196	–	12,922	15,112
Hire purchase loans (Note 33)	7,044	3,441	817	–	–	11,302
Short-term loans (Note 20)	–	20,000	–	838	–	20,838
<b>Total liabilities from financing activities</b>	<b>47,825</b>	<b>19,280</b>	<b>2,451</b>	<b>4,312</b>	<b>12,922</b>	<b>86,790</b>

SEK thousand	January 1, 2020	Cash flow from financing	Transactions not involving payment			Conversion of debt to shares	December 31, 2020
			Exchange rate changes	Capitalized interest	New leasing contracts		
Convertible debentures (Note 21)	39,538	–	–4,103	3,128	–	–38,563	–
Leasing liabilities (Note 25)	15,112	–4,187	–906	–	16,122	–	26,141
Hire purchase loans (Note 33)	11,302	–3,076	–793	–	–	–	7,433
Short-term loans (Note 20)	20,838	–	–	219	–	–21,057	–
Bank borrowing (Note 20)	–	19,000	–	–	–	–	19,000
<b>Total liabilities from financing activities</b>	<b>86,790</b>	<b>11,737</b>	<b>–5,802</b>	<b>3,347</b>	<b>16,122</b>	<b>–59,620</b>	<b>52,574</b>



## Note 29 | Pledged assets and contingent liabilities

SEK thousand	31 Dec 2020	31 Dec 2019
Pledged assets		
Chattel mortgages	20,000	2,900
Pledged assets for sale- and leaseback agreements	15,200	18,100
<b>Total</b>	<b>35,200</b>	<b>21,000</b>

Pledged assets for sale- & leaseback agreements relates to equipment that has been repurchased from the finance company. The equipment is reported under property, plant and equipment and the value of pledged assets corresponds to book value on the reporting date.

## Note 30 | Share-based compensation

### Employee stock option programs

Sivers Semiconductors had four employee stock option programs at the end of the year. During the financial year, two earlier programs were concluded, one with the term 2012–2020 and one with the term 2016–2020.

Warrants programs still active at the end of the period are subject to the following terms: 1). 2015–2025, 2). 2020–2026, 3). 2022–2028 and finally 4) 2020–2025.

Upon full conversion of allocated employee stock option programs, the number of shares will amount to 159,954,567. The total number of outstanding employee stock options granted as of December 31, 2020 amounted to 5,504,525, (5,508,920 after factor conversion) of which 1,574,525 have been vested.

The Extraordinary General Meeting on November 9, 2015, authorized a new incentive program, P03, for a total of 1,800,000 employee stock options. Of these, 439,525 (after factor conversion) have been vested. In order to ensure the fulfillment of the commitment and to secure cash flow, 2,400,000 warrants were issued under the program.

The Extraordinary General Meeting on May 30, 2017, authorized a new incentive program, P04, for a total of 5,650,000 employee stock options. Of these, 5,028,912 were allocated in previous years. 3,489,862 warrants were exercised in 2020. Of warrants exercised in the year, 2,334,862 related to warrants previously issued within the framework of this program, previously issued warrants to Photonics employees have been replaced by redemption and issuance of so-called EMI options under local jurisdiction (UK). In order to ensure the fulfillment of the commitment and to secure cash flow, 7,425,000 options were issued.

The AGM on May 22, 2019 authorized a new employee stock option program, P05, encompassing a total of 1,700,000 employee stock options, of which 550,000 were allocated at year end. No warrants under this program were vested at the end of the period.

The AGM on Wednesday, May 20, 2020, authorized a new employee stock option program, P06, for a total of 3,600,000 employee stock options, of which 2,710,000 have been allocated. The final number of employee stock options that each participant is entitled to exercise is dependent on the degree of completion of performance obligations for the Group. The performance obligation is based on average annual growth in Group net sales for the financial years 2020, 2021 and 2022. No warrants under this program were vested at the end of the period.

A summary of allocated warrants under the programs is presented below.

31 Dec 2020	Outstanding at the beginning of the period	Allocated in the period	Forfeited in the period	Redeemed in the period	Expired in the period	Outstanding at the end of the period	Redeemable at the end of the period	Outstanding at the end of the period (after factor conversion)
PO1	586,500	–	–	229,546	356,954	–	–	–
PO2	67,500	–	–	40,000	27,500	–	–	–
PO3	1,003,000	–	40,000	550,475	–	439,525	439,525	443,920
PO4	5,335,537	–	40,675	3,489,862	–	1,805,000	1,135,000	1,805,000
PO5	530,000	20,000	–	–	–	550,000	–	550,000
PO6	–	2,710,000	–	–	–	2,710,000	–	2,710,000
	<b>7,549,537</b>	<b>2,730,000</b>	<b>80,675</b>	<b>4,309,883</b>	<b>384,454</b>	<b>5,504,525</b>	<b>1,574,525</b>	<b>5,508,920</b>

31 Dec 2019	Outstanding at the beginning of the period	Allocated in the period	Forfeited in the period	Redeemed in the period	Expired in the period	Outstanding at the end of the period	Redeemable at the end of the period	Outstanding at the end of the period (after factor conversion)
PO1	586,500	–	–	–	–	586,500	586,500	662,745
PO2	67,500	–	–	–	–	67,500	67,500	72,900
PO3	1,735,000	–	665,000	40,000	–	1,030,000	1,030,000	1,040,300
PO4	5,235,537	100,000	–	–	–	5,335,537	2,355,537	5,335,537
PO5	–	530,000	–	–	–	530,000	–	530,000
	<b>7,624,537</b>	<b>630,000</b>	<b>665,000</b>	<b>40,000</b>	<b>–</b>	<b>7,549,537</b>	<b>4,039,537</b>	<b>7,641,482</b>

The weighted average price as of the exercise date for warrants in the period was SEK 4.61. As of December 31, 2020, outstanding options had a weighted average exercise price of SEK 20.50. Remaining maturity by employee stock option program is distributed as follow:

SEK thousand	Interval, exercise price	Remaining maturity, warrants program	Weighted average remaining maturity, months
PO3	4.04– 5.60	2024–12–31	38.3
PO4	4.70–9.58	2026–06–30	60.9
PO5	9.38–10.23	2028–06–30	78.3
PO6	34.78	2025–09–30	57.8

In 2020, a total of 4,309,833 employee stock options (4,348,429 after factor conversion) were redeemed for new shares. The average exercise price was SEK 4.61 per share. 2,730,000 options were allocated in the year and 384,454 warrants expired because the term ended, and 80,675 options were forfeited because the relevant employees left the Group.

In accordance with the Company's policy for allocation and exercise of employee stock options, allocation is conditional on the participant remaining in employment with the Group upon exercise of warrants that confer the right to acquire shares in Sivers Semiconductors AB at a price corresponding to 130% of the average volume-weighted price paid for the Company's share on Nasdaq First North or other market place during the ten days of trading immediately prior to the date of allocation of the options.

In 2020, the Group issued warrants with an estimated fair value of SEK 19.038 M on the allocation date. In 2019, the Group issued warrants with an estimated fair value of SEK 1.166 M on the allocation date.

Fair value on the allocation date is calculated according to the Black-Scholes model.

SEK thousand	31 Dec 2020		31 Dec 2019	
	Number of options	Weighted average exercise price (SEK)	Number of options	Weighted average exercise price (SEK)
Outstanding at the beginning of the year	7,549,537	5.37	7,624,537	4.96
Allocated in the year	2,730,000	34.60	630,000	9.43
Forfeited in the year	80,675	4.37	665,000	4.54
Redeemed in the year	4,309,883	4.61	40,000	4.36
Expired in the year	384,454	4.58	0	–
Outstanding at the end of the year	5,504,525	20.50	7,549,537	5.37
Redeemable at the end of the year	1,574,525	4.61	4,039,537	4.58

SEK thousand	2,020	2,019
Weighted average share price	SEK 26.75	SEK 7.2
Weighted average exercise price	SEK 34.78	SEK 9.5
Expected volatility	52%	42%
Option term	3 years	5 years
Risk free interest	–0.35%	0.5%
Expected dividend	–	–

Expected volatility is calculated on the basis of The Group's historical share price volatility (2.5 years). In 2020 and 2019, the Group recognized costs of SEK 31.487 M and SEK 3.118 M (including social security expenses) relating to employee stock option programs. All outstanding employee stock option programs are settled with equity instruments.

## Not 31 | Pension commitments

### Pension plans

The Group has defined-contribution pension plans and pension plans encompassing multiple employers (ITP 2 plan).

For salaried employees in Sweden, the ITP 2 plan's defined-benefit pension commitments for retirement and family pension (alternatively family pension) are secured through insurance with Alecta. In accordance with a statement by the Swedish Financial Reporting Board, UFR 10 Reporting of pension plan ITP 2 financed through insurance with Alecta, this constitutes a defined-benefit plan for multiple employers. For the financial year 2019, the Company has not had access to the information required to report its share of commitments under the plan, plan assets and expenses, which means that it has not been possible to recognize the plan as a defined-benefit plan. The ITP 2 pension plan which is secured through insurance with Alecta has therefore been reported as a defined-contribution plan. The premium for the defined-benefit retirement pension and family pension is calculated on an individual basis and is dependent on factors including salary, previously accrued pension and expected remaining period of employment. Payments for ITP 2 insurance with Alecta are expected to amount to SEK 4.6 M (3.7) in the coming reporting period.

The Group's share of aggregate payments to the plan, and the Group's share of the total number of active members in the plan, amount to 0.01151% and 0.00555% respectively (2019: 0.01609% and 0.00529% respectively). The collective consolidation level comprises the market value of Alecta's assets as a percentage of insurance commitments calculated in accordance with Alecta's actuarial methods and assumptions, which do not correspond to IAS 19. The collective consolidation level is normally permitted to fluctuate between 125% and 175%. In order to increase the rate of consolidation if it is considered too low, measures may include increasing the agreed subscription price, and extending existing benefits. If the consolidation level exceeds 150 percent, premiums may be reduced. At the end of 2020, Alecta's surplus in the form of the collective consolidation level amounted to 148% (148).

Premiums to Alecta are determined on the basis of assumptions regarding interest rates, life span, operating costs and yield tax, and are calculated so that payment of a constant premium at the date of pensionable age is sufficient to cover the target benefit in its entirety, which is based on the insured party's current pensionable salary, should then have been earned.

There is no established regulatory framework for how potential deficits should be managed, although in the first instance, losses shall be covered by Alecta's collective consolidation capital, which therefore does not increase costs through higher agreed premiums. There is also no regulatory framework governing the distribution of potential surpluses or deficits on termination of the plan, or in the event of a company leaving the plan.

Payment to the defined-contribution pension plans and Alecta are reported as a cost when the employees have carried out the services conferring the right to payments. The pension cost for the year is indicated in Note 6.

## Not 32 | Prepaid earnings – government grants

SEK thousand	31 Dec 2020	31 Dec 2019
Short-term	1,656	1,763
Long-term	3,555	3,636
<b>Total</b>	<b>5,211</b>	<b>5,399</b>

Prepaid income for government grants arises when the Group receives grants, but has not yet generated the expenses the grants are intended to cover.

## Note 33 | Financial instrument

### (a) Classes and categories of financial instruments at fair value

The following table provides information about:

- classes of financial instruments based on characteristics;
- financial instruments at book value;
- financial instruments valued at fair value (except when fair value of financial instruments approximately corresponds to fair value); and
- fair value hierarchy for financial assets and financial liabilities

Fair value hierarchy levels 1 to 3 based on degree of observable fair value:

- **Level 1** valuation at fair value constitutes listed prices (unadjusted) on active markets for identical assets or liabilities the Company has access to on the valuation date;
- **Level 2** valuation at fair value is derived from input data other than listed prices included in Level 1 that are observable for the asset or liability, whether directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- **Level 3** valuation at fair value of the asset or liability are those derived from valuation techniques that include input data that is not based on observable market data (non-observable input data).

31 Dec 2020 SEK thousand	Fair value	Level	Amortized cost	Total
<b>Financial assets</b>				
Cash and cash equivalents (Note 28)	–		249,448	249,448
Accounts receivable (Note 16)	–		19,460	19,460
Contract Asset (Note 18)	–		2,901	2,901
<b>Financial liabilities</b>				
Bank borrowing (Note 20)	–		19,000	19,000
Hire purchase loans	–		7,433	7,433
Accounts payable	–		14,246	14,246
Other liabilities (i)	–		7,297	7,297

31 Dec 2019 SEK thousand	Fair value	Level	Amortized cost	Total
<b>Financial assets</b>				
Cash and cash equivalents (Note 28)	–		52,228	52,228
Accounts receivable (Note 16)	–		19,084	19,084
Contract Asset (Note 18)	–		1,732	1,732
<b>Financial liabilities</b>				
Borrowing from credit institutions (Note 20)	–		20,838	20,838
Convertible debentures (Note 21)	–		39,538	39,538
Derivative instruments (Note 22)	3,911	2	–	3,911
Hire purchase loans	–		11,302	11,302
Accounts payable	–		13,902	13,902
Other liabilities (i)	–		4,050	4,050

- ii) Other liabilities above include other liabilities in the Balance Sheet that comprise financial instruments valued at amortized cost, see Notes 26 and 27.

All exchange rate gains are derived from financial instruments at amortized cost. All interest expenses relate to financial liabilities at amortized cost and other financial expenses are from financial instruments at amortized cost with the exception of the value change of the embedded derivative which is from a financial liabilities measured at fair value through profit or loss.

### Fair value

For all financial assets and liabilities recognized at amortized cost above, book value represents an approximation of fair value. The loans are assigned interest rates that have been judged to materially correspond to prevailing market interest rates. Therefore, information about fair value and the level of fair value has not been provided for these instruments.

The Group's derivatives included in the Balance Sheet as of 31 December 2019 are valued at fair value through profit and loss. Embedded derivatives, which were incorporated in the convertible debentures, were valued on the basis of observable input data relating to exchange rates and share price at the end of the reporting period and share price volatility.

### Financial risks

Because the Group is in the development phase, and does not have satisfactory earnings ability to cover costs of operations through sales revenue, the liquidity risk, i.e. the risk of not being able to fulfill payment obligations as a result of insufficient liquidity, is significant. The Group is also exposed to exchange rate risks as a large proportion of revenue, costs, assets and liabilities are denominated in foreign currency.

Furthermore, the Group is exposed to credit risk, i.e. the risk of a counterparty being unable to meet its obligations, through the Group's financial assets. The Group is also exposed to interest rate risk as the bank loans raised in 2020 are at variable rate.

Group management monitors and evaluates financial risk continuously and reports to the Board which makes decisions regarding measures to manage these risks. Financial risk management takes place in accordance with the Group's finance policy and risk management policy.

### Liquidity risk management

The Board is responsible for the Groups management of liquidity risk. The Group manages liquidity risk by continuously monitoring long- and short-term forecasts and actual cash flow by matching maturity profiles of financial assets and liabilities. Group management produces forecasts ahead of each Board meeting to support decision making. Short-term outflows are managed using liquid funds.

### Exposure to liquidity risk

The following tables describe the Group's remaining contractual maturity of financial liabilities with contractual payment terms (other than derivatives), and liabilities that are classified as leasing liabilities and valued in accordance with IFRS 16. The tables have been prepared on the basis of unutilized cash flow of financial liabilities based on the earliest due date when the Group may become liable to make a payment (including extension options). For leasing liabilities, extension options that the Group expects to be utilized have also been included.

SEK thousand	Up to 1 month	1– 3 months	Between 3 months and 1 year (i)	1– 2 years	2– 5 years	5+ years	Total	Carrying amount
<b>December 31, 2020</b>								
Accounts payable and other liabilities	12,184	5,236	4,123				21,543	21,543
Leasing liabilities	398	786	3,535	4,068	11,452	10,555	30,794	26,141
Hire purchase loans	325	650	2,827	2,947	1,911		8,659	7,433
Variable-interest financial instruments (nominal)		1,000	3,000	4,000	11,000		19,000	19,000
Interest on fixed income instruments		132	361	381	359		1,233	
<b>Total</b>	<b>12,907</b>	<b>7,804</b>	<b>13,845</b>	<b>11,396</b>	<b>24,722</b>	<b>10,555</b>	<b>81,228</b>	<b>74,117</b>
<b>December 31, 2019</b>								
Accounts payable and other liabilities	11,136	4,780	2,036				17,952	17,952
Leasing liabilities	700	525	3,251	4,546	11,039	15,398	35,459	15,112
Hire purchase loans	358	716	3,221	4,188	5,351		13,833	11,302
Fixed-interest financial instruments (nominal)			57,268				57,268	60,375
Interest on fixed income instruments		1,850	6,587				8,437	
<b>Total</b>	<b>12,193</b>	<b>7,871</b>	<b>72,363</b>	<b>8,733</b>	<b>16,391</b>	<b>15,398</b>	<b>132,949</b>	<b>104,741</b>

In 2020, loans to creditors (totaling SEK 21.057 M) and the convertible debenture (totaling SEK 38.563 M) were converted to shares.

#### Exchange rate risk

The Group is party to transactions denominated in foreign currency and is thereby exposed to exchange rate fluctuations.

The Group is mainly exposed to GBP and USD. For Photonics, a majority of expenses are denominated in GBP, while a large proportion of revenue is in USD. Wireless has a high proportion of revenue denominated in USD and goods purchases in EUR, while a high proportion of expenses (personnel expenses and other expenses) are in SEK.

#### Exchange rate exposure in net sales and operating expenses

Group sales and operating expenses divided over GBP, USD and EUR are as follows:

SEK thousand	Revenue		Operating expenses (i)	
	31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019
GBP	20,662	19,723	–92,891	–108,040
USD	70,429	66,910	–7,566	–14,592
EUR	1,026	5,105	–8,280	–14,299

(i) Operating expenses include raw materials and consumables, other external expenses, personnel expenses and amortization, depreciation and impairment losses for property, plant and equipment and intangible assets.

#### Currency sensitivity analysis

Based on the Company's revenue-, cost- and currency-structure, a general strengthening of the GBP against the SEK of 10% would affect operating profit by some SEK –6.6 M (–7.5). A general strengthening of the USD against the SEK would affect operating profit by SEK +6.3 M (+5.2).

#### Exchange rate exposure in monetary assets and liabilities

Book value of the Group's monetary assets and liabilities denominated in foreign currency as of the reporting date are as follows:

SEK thousand	Liabilities		Assets	
	31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019
GBP	18,012	19,639	12,760	7,736
USD	2,630	40,683	43,632	24,891
EUR	2,022	3,221	675	1,776
Other	–	242	–	–



### Exchange rate sensitivity analysis

The following table describes the Group's sensitivity to an increase in the relevant exchange rates against the SEK of 10%. The sensitivity analysis only includes outstanding items denominated in foreign currency and adjusts translation at year end for a 10% change in exchange rates. The sensitivity analysis includes external borrowing and loans to the Group's foreign operations where loans have been issued in a currency other than the lender's or borrower's reporting currency.

A positive amount below indicates an increase in profit and shareholders' equity given a 10% increase in the exchange rate against the SEK.

SEK M	GBP impact		USD impact	
	31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019
Income Statement	0.0	0.1	4.1	-1.6
Equity (translation effect)	7.0	6.1	-	-

### Credit risk management

New customers are submitted to credit checks before being able to make credit purchases from the Group. Customers are then assigned a credit limit based on the credit checks. When new customers have an insufficient credit rating, the Group requests advance payment to avoid the risk of default.

There are also monitoring processes in place to ensure follow-up measures for recovering bad debt. Furthermore, the Group reviews recoverable amounts for each customer receivable and debt investment on an individual basis at the end of the reporting period to ensure that sufficient provisions have been made for non-recoverable amounts.

The overall credit risk for accounts receivable and contract assets has therefore been judged to be low. The Group has historically experienced few customer losses due to default. The Group's provision matrix for expected credit losses in contract assets and accounts receivable produced negligible amounts, and therefore no general provision was made.

Credit risk for liquid funds is limited because the counterparties are banks with high credit ratings awarded by international credit rating institutes. The Group's provision model for expected credit losses in cash and cash equivalents resulted in negligible amounts.

### Interest rate risk

The Group has a loan totaling SEK 19 M (0) at variable interest of STI-BOR+2.8%. The loan was raised in 2020 and is amortized over five years. In relation to the size of the loan, and expectations relating to future interest rates, this is not considered to constitute a material risk to the Group.

### The Group's asset management

The Group defines assets as shareholders' equity. The Group manages its assets to ensure continued growth of the Group's operations and capacity for rapid expansion. This overall strategy remains unchanged on 2019.

Because the Group is in a growth phase, and does not yet have the ability to cover its costs exclusively through sales revenue, the Group has raised new capital through share issues. The Board continuously monitors liquid funds in relation to coming payments and the Group's investment requirement to ensure maximum growth and determines, following authorization by the shareholders' meeting, whether further capital should be raised.

The Board also continuously monitors other potential capital sources, such as borrowing, and enters into agreements when it is considered advantageous to do so from a risk and cost perspective.

The Group is not subject to any external capital requirements.

### Note 34 | Events after the reporting period

On January 11, Pelle Wijk was appointed CEO of the subsidiary Siverson Wireless Sweden.

On January 11, Siverson Photonics announced a new order in optical sensing worth some SEK 11.0 M from one of the company's established Fortune 100 customers. The order will be delivered and invoiced in the first half of 2021.

On January 21, Lottie Saks was appointed new Board member in Siverson Semiconductors AB.

On 4 February, Siverson Wireless announced that they had received an order for the IC component from TMYTEK in Taiwan, a company that provides millimeter wave solutions in 5G and satellite communication. This new order opens up new opportunities on the Asian market, even if the order is of minor value at the current stage.

On March 30, Siverson Wireless AB announced that they had received two volume orders totaling SEK 7.0 M. The orders apply to RFICs that will be used in both licensed and unlicensed 5G products and will be delivered during the first and second quarters of 2021.

### Note 35 | Transactions with related parties

Intra-group transactions between the Company and its subsidiaries classed as closely-related parties have been eliminated in the consolidated accounts and are not included in this note.

### Remuneration to key senior executives

Remuneration to management, which represents the Group's key senior executives, and remuneration to the Board is presented in Note 6 Remuneration to employees.

## Parent Company Income Statement

SEK thousand	Note	2020	2019
Revenue	2	7,614	8,993
Other external expenses	3	-9,760	-11,232
Personnel costs	4	-16,154	-10,024
<b>Operating profit/loss</b>		<b>-18,300</b>	<b>-12,263</b>
<b>Profit from financial items</b>			
Other interest income and similar items		8,432	6,857
Financial expenses and similar items		-190,158	-43,269
		<b>-200,027</b>	<b>-48,674</b>
<b>Profit/loss before tax</b>			
Income tax	5	-	-
<b>Profit/loss for the year</b>		<b>-200,027</b>	<b>-48,674</b>

## Parent Company Statement of Comprehensive Income

SEK thousand	Note	2020	2019
<b>Profit/loss for the year</b>		<b>-200,027</b>	<b>-48,674</b>
<b>Other comprehensive income</b>		<b>-</b>	<b>-</b>
<b>Total comprehensive income for the year</b>		<b>200,027</b>	<b>-48,674</b>

# Parent Company Balance Sheet

ASSETS	Note	31 Dec 2020	31 Dec 2019
<b>Property, plant and equipment</b>			
Financial non-current assets			
Shares in Group companies	6	226,839	226,839
Receivables from Group companies	7	185,653	171,440
<b>Total financial non-current assets</b>		<b>412,492</b>	<b>398,279</b>
<b>Total non-current assets</b>		<b>412,492</b>	<b>398,279</b>
<b>Current assets</b>			
Current receivables			
Receivables from Group companies	7	7,926	10,020
Other receivables	8	25	14
Prepaid expenses and accrued income	9	288	285
<b>Total current receivables</b>		<b>8,239</b>	<b>10,319</b>
Cash and cash equivalents	10	215,858	44,389
<b>Total current assets</b>		<b>224,097</b>	<b>54,708</b>
<b>Total assets</b>		<b>636,589</b>	<b>452,987</b>
<b>EQUITY AND LIABILITIES</b>	<b>Note</b>	<b>31 Dec 2020</b>	<b>31 Dec 2019</b>
Share capital	11	77,223	65,824
Share premium reserve		904,565	473,598
Retained earnings including profit/loss for the year		-355,457	-158,213
<b>Total equity</b>		<b>626,331</b>	<b>381,209</b>
<b>Provisions</b>			
Provisions	12	6,542	4,797
<b>Total provisions</b>		<b>6,542</b>	<b>4,797</b>
<b>Current liabilities</b>			
Convertible debentures	13	-	39,538
Accounts payable		472	681
Other liabilities	15	162	25,397
Accrued expenses and deferred income	16	3,083	1,366
<b>Total current liabilities</b>		<b>3,717</b>	<b>66,982</b>
<b>Total liabilities</b>		<b>10,259</b>	<b>71,779</b>
<b>Total equity and liabilities</b>		<b>636,589</b>	<b>452,987</b>

# Parent Company Statement of Changes in Equity

SEK thousand	Share capital	Share premium reserve	Retained earnings including profit/loss for the year	Total equity
<b>Opening balance Jan 1, 2019</b>	<b>59,223</b>	<b>395,720</b>	<b>-111,193</b>	<b>343,751</b>
New issue	5,922	75,806		81,728
Issue costs		-3,882		-3,882
New issue, redemption of warrants	659	5,799		6,458
Issue for redemption of employee stock options	20	155		175
Share-based compensation			1,654	1,654
Warrants				
Profit/loss for the year			-48,674	-48,674
<b>Closing balance Dec 31, 2019</b>	<b>65,824</b>	<b>473,598</b>	<b>-158,213</b>	<b>381,209</b>

SEK thousand	Share capital	Share premium reserve	Retained earnings including profit/loss for the year	Total equity
<b>Opening balance Jan 1, 2020</b>	<b>65,824</b>	<b>473,598</b>	<b>-158,213</b>	<b>381,209</b>
New issue	6,237	247,459		253,695
Issue costs		-5,881		-5,881
Issue for redemption of employee stock options	2,169	17,834		20,002
New issue, loan conversion	667	20,390		21,057
New issue, redemption of convertible debenture	2,326	151,166		153,492
Share-based compensation			2,783	2,783
Profit/loss for the year			-200,027	-200,027
<b>Closing balance Dec 31, 2020</b>	<b>77,223</b>	<b>904,565</b>	<b>-355,457</b>	<b>626,331</b>



# Parent Company Cash Flow Statement

ASSETS	Note	2,020	2019
Operating profit/loss	17	-18,300	-12,263
Adjustments for non-cash items		403	6,226
Interest received		-	-
Interest paid		-1,850	-1,627
Income tax paid		-	-
<b>Cash flow from operating activities before change in working capital</b>		<b>-19,747</b>	<b>-7,664</b>
<b>Cash flow from change in working capital</b>			
Decrease(-)/increase(+) in operating receivables		852	-15,899
Increase/decrease(-) in operating liabilities		-3,317	617
<b>Cash flow from operating activities</b>		<b>-22,212</b>	<b>-22,946</b>
<b>Investment activities</b>			
Loans to subsidiaries - New		-75,599	-85,122
Loans to subsidiaries - Amortization		1,464	8,865
<b>Cash flow from investing activities</b>		<b>-74,135</b>	<b>-76,257</b>
<b>Financing activities</b>			
Borrowing		-	20,000
New issue		273,697	88,360
Issue expenses		-5,881	-3,882
<b>Cash flow from financing activities</b>		<b>267,816</b>	<b>104,478</b>
<b>Cash flow for the year</b>		<b>171,469</b>	<b>5,275</b>
<b>Cash and cash equivalents at the beginning of the year</b>		<b>44,389</b>	<b>39,114</b>
<b>Cash and cash equivalents at the end of the year</b>		<b>215,858</b>	<b>44,389</b>

# Notes, Parent Company

## Note 1 | Accounting principles

The financial statements of the Parent Company have been prepared in accordance with the Swedish Annual Accounts Act and the Swedish Financial Reporting Board RFR 2 "Supplementary Accounting Rules for Legal entities". According to RFR 2, the Parent Company shall apply all International Financial Reporting Standards, as approved by the EU, to the extent possible within the limits set out in the Swedish Annual Accounts Act.

The Financial Statements have been prepared on the basis of historical cost, except for the revaluation of financial instruments that are measured at fair value at the end of each reporting period.

The parent company's accounting principles are the same as the group's (which are described in Note 2 to the group's annual report), except for the areas mentioned below.

### Shares in Group companies

Shares in Group companies are recognized at historical cost with deductions for impairment.

### Revenue

Parent Company revenue consists of management fees from the subsidiaries. These are recognized over time, as the services are performed. Revenue is calculated and allocated to subsidiaries based on the extent to which they use the Parent Company's services.

### Financial instruments

The Parent Company provides long-term intra-group lending. The model for calculating provisions for expected credit losses proceeds from the probability of default based on the Group companies' credit rating, expected losses upon default and exposure at the time of default. The model measures a loss allowance for receivables at an amount equal to 12-month ECL. If the credit risk has increased significantly since initial recognition, lifetime ECL is recognized. The Parent Company has elected to apply the exemption for low credit risk, where low credit risk is approximated on the basis of an internal credit rating determined to be equal to the investment grade.

## Note 2 | Revenue

Parent Company revenue consists of intra-Group management fees invoiced to subsidiaries in its entirety.

### Information about intra-Group purchases and sales

SEK thousand	2020	2019
Sales	7,614	8,993
Purchases	–	–

## Note 3 | Remuneration to Auditors

SEK thousand	2020	2019
Deloitte AB		
Audit fees	200	145
Audit work in addition to auditing assignments	180	130
Tax consultancy	–	60
Other services	50	298
<b>Total</b>	<b>430</b>	<b>633</b>

## Note 4 | Personnel costs

SEK thousand	2020	2019
Salary and other remuneration	6,790	6,800
Social security expenses	8,148	2,204
Pension costs	656	963
<b>Total</b>	<b>15,594</b>	<b>9,967</b>

See Note 6 for the Group for information about the average number of employees, salary and remuneration and distribution between women and men.

## Note 5 | Income tax

SEK thousand	2020	2019
Current tax	–	–
Deferred tax	–	–
<b>Total</b>	<b>–</b>	<b>–</b>

### Reconciliation of tax expense for the year

SEK thousand	2020	2019
<b>Profit before tax</b>	<b>–200,027</b>	<b>–48,674</b>
Tax calculated according to the Swedish tax rate of 21.4%	42,806	10,416
Tax effect from non-deductible expenses/non taxable revenue	–5,186	–7,799
Tax effect from embedded derivatives	–23,980	–
Change in unrecognized deferred tax assets	–13,640	–2,617
<b>Tax for the year - recognized</b>	<b>–</b>	<b>–</b>

## Note 6 | Shares in Group companies

SEK thousand	31 Dec 2020	31 Dec 2019
<b>Accumulated cost</b>		
Opening balance, accumulated cost as of January 1	360,082	325,082
Shareholder contributions paid	65,000	35,000
<b>Closing balance, accumulated cost</b>	<b>425,082</b>	<b>360,082</b>
<b>Impairment losses</b>		
Opening balance, accumulated impairment losses as of January 1	-133,243	-98,243
Impairments losses for the year	-65,000	-35,000
<b>Closing balance, accumulated impairment losses</b>	<b>-198,243</b>	<b>-133,243</b>
<b>Carrying amount</b>	<b>226,839</b>	<b>226,839</b>

Company name	Corporate identity number	Registered office	Share of capital <sup>1)</sup>	No. of shares
Sivers Photonics Ltd	SC211759	Glasgow	100%	51,919,160
Sivers Wireless AB	556063-7331	Kista	100%	7,120,659
Trebax AB	556661-8400	Gothenburg	100%	1,000

### Carrying amount

<sup>1)</sup> Share of capital corresponds to share of votes.

Company name	31 Dec 2020	31 Dec 2019
Sivers Photonics Ltd	190,154	190,154
Sivers Wireless AB	30,865	30,865
Trebax AB	-	-
<b>Carrying amount</b>	<b>226,839</b>	<b>226,839</b>

## Note 7 | Group company receivables

SEK thousand	31 Dec 2020	31 Dec 2019
<b>Accumulated cost</b>		
Opening balance, accumulated cost as of January 1	181,460	121,484
Additional receivables	79,061	104,865
Loss provision	-478	-1,024
Settled receivables	-66,464	-43,865
<b>Closing balance, accumulated cost</b>	<b>193,579</b>	<b>181,460</b>
<b>Impairment losses</b>		
Opening balance, accumulated impairment losses as of January 1	-	-
Impairments losses for the year	-	-
<b>Closing balance, accumulated impairment losses</b>	<b>-</b>	<b>-</b>
<b>Carrying amount</b>	<b>193,579</b>	<b>181,460</b>
<b>Book value of non-current receivables with Group companies</b>	<b>185,653</b>	<b>171,440</b>
<b>Book value of current receivables with Group companies</b>	<b>7,926</b>	<b>10,020</b>
<b>Total</b>	<b>193,579</b>	<b>181,460</b>

Of additional receivables, SEK 75.599 M (85.122) relates to loans to subsidiaries. The remainder relates to capitalized interest, receivable management fees and receivables relating to employee stock options that have not yet been settled. Group receivables in the year were settled at SEK 66.464 M (43.865), of which SEK 1.464 M (8.865) relates to repayments from subsidiaries and the remainder shareholder contributions settled through offset of Group receivables.

The Parent Company issues credit to its subsidiaries on an ongoing basis as these are in a growth phase and unable to cover their liquidity requirement exclusively through revenue at this stage. The Group has carried out impairment testing including cash flow forecasts (see Note 11 to the Annual Report for the Group) and assesses that the repayment ability is satisfactory.

### Loss provisions relating to receivables with Group companies

The model for calculating provisions for expected credit losses proceeds from the probability of default based on the Group companies' credit rating, expected losses upon default and exposure at the time of default. The model measures loss provisions for receivables at an amount equal to 12-month ECL. Counterparty credit risk has not increased significantly during the year.

The following table illustrates changes in loss allowances for receivables with Group companies:

SEK thousand	2020	2019
Opening balance loss provisions, as of January 1	3,139	2,115
Net increase in loss allowances relating to new receivables with Group companies recognized in the current year	478	1,024
<b>Total recognized loss allowances as of December 31</b>	<b>3,617</b>	<b>3,139</b>

## Note 8 | Other receivables

SEK thousand	31 Dec 2020	31 Dec 2019
VAT receivables	25	-
Balance on tax account	-	14
<b>Total</b>	<b>25</b>	<b>14</b>

## Note 9 | Prepaid expenses and accrued income

SEK thousand	31 Dec 2020	31 Dec 2019
Prepaid insurance	97	51
Other prepaid expenses	191	234
<b>Total</b>	<b>288</b>	<b>285</b>

## Note 10 | Cash and cash equivalents

SEK thousand	31 Dec 2020	31 Dec 2019
Bank balances	215,858	44,389
<b>Carrying amount</b>	<b>215,858</b>	<b>44,389</b>

## Not 11 | Share capital

Share capital comprises the following number of shares and quotient value:

SEK thousand	31 Dec 2020	31 Dec 2019
Number of shares	154,445,647	131,648,456
Quotient value, SEK	0.50	0.50
<b>Carrying amount</b>	<b>77,222,824</b>	<b>65,824,228</b>

All shares are of the same series and confer equal rights to votes and profit in the company.

## Note 12 | Provisions

SEK thousand	31 Dec 2020	31 Dec 2019
Social security expenses for employee stock options	6,542	4,797
	<b>6,542</b>	<b>4,797</b>
Short-term	–	–
Long-term	6,542	4,797
	<b>6,542</b>	<b>4,797</b>

SEK thousand	Social security expenses, employee stock options	Total
<b>As of January 1, 2019</b>	<b>3,411</b>	<b>3,411</b>
Additional provision for the year	1,436	1,436
Utilized in the year	–50	–50
<b>as of December 31, 2019</b>	<b>4,797</b>	<b>4,797</b>
<b>As of January 1, 2020</b>	<b>4,797</b>	<b>4,797</b>
Additional provision for the year	6,085	6,085
Utilized in the year	–	–
Reclassification	–4,340	–4,340
<b>as of December 31, 2020</b>	<b>6,542</b>	<b>6,542</b>

## Note 13 | Convertible debentures

Convertible debentures were issued on December 22, 2017 in multiples of USD 10,000 at a total value of USD 4,000,000. The convertible debenture holder owns the right to convert debt and accrued interest into new shares in the Parent Company at a fixed price of SEK 8.29 per share after the translation of SEK/USD at an exchange rate of 8.4260. If conversion does not occur, the prevailing exchange rate is applied. The debentures have a maturity of 3 years with a coupon of 5%.

The convertible debentures have been reported as a financial liability valued at amortized cost, while the option to convert the debt to shares has been reported as an embedded derivative at fair value.

On October 1, the holder called for conversion of the debentures, and the options were converted to shares on October 22, 2020.

The convertible debentures have changed as follows:

SEK thousand	
Debt element at issue date	28,277
Interest charged (applied effective interest rate)	4,652
Capitalized interest	5,634
Conversion of debt to shares	–38,563
Recognized amount of debt element as of December 2020	–

The conversion option (embedded derivative) was recognized under other current liabilities (see Note 14). Upon conversion, the convertible debenture and the derivative debt were both included in equity. Exchange rate losses previously reported under the convertible debenture were reversed to profit, because a fixed conversion rate is applied to the conversion of shares.

## Note 14 | Derivative instruments

SEK thousand	31 Dec 2020	31 Dec 2019
<b>Derivative instruments financial liabilities</b>		
Embedded derivatives	–	3,911
<b>Total</b>	<b>–</b>	<b>3,911</b>

## Note 15 | Other liabilities

SEK thousand	31 Dec 2020	31 Dec 2019
PAYE tax & fees	162	622
Short-term loans	–	20,838
Embedded derivatives	–	3,911
Other	–	26
<b>Total</b>	<b>162</b>	<b>25,397</b>

## Note 16 | Accrued expenses and prepaid income

SEK thousand	31 Dec 2020	31 Dec 2019
Accrued holiday pay and social security expenses	1,081	724
Other personnel-related expenses	574	405
Accrued consultancy costs	1,294	120
Accrued accounting and audit fees	135	117
<b>Total</b>	<b>3,083</b>	<b>1,366</b>



## Note 17 | Notes, Cash Flow Statement

### Cash and cash equivalents

SEK thousand	31 Dec 2020	31 Dec 2019
Cash and cash equivalents	215,858	44,389
<b>Total</b>	<b>215,858</b>	<b>44,389</b>

Cash and bank balances comprise cash and current bank balances with a maturity of 3 months or less, less outstanding committed credit facilities. The recognized value of these assets approximately corresponds to fair value. Cash and cash equivalents at the end of the reporting period as indicated in the Cash Flow Statement can be reconciled with the Statement of Financial Position above.

### Changes in liabilities attributable to financing activities

The following table shows changes in the Parent Company liabilities attributable to financing activities, which includes changes attributable to cash flow and changes not influencing cash flow. Liabilities attributable to financing activities are liabilities for which cash flows have been classified, or for which future cash flows will be classified, as cash flows from financing activities in the Cash Flow Statement.

SEK thousand	January 1, 2019	Cash flow from financing	Transactions not involving payment		December 31, 2019
			Exchange rate fluctuations	Capitalized interest	
Convertible debentures (Note 13)	34,626	–	1,438	3,474	39,538
Short-term loans (Note 15)	–	20,000	–	838	20,838
<b>Total liabilities from financing activities</b>	<b>34,626</b>	<b>20,000</b>	<b>1,438</b>	<b>4,312</b>	<b>60,376</b>

SEK thousand	January 1, 2020	Cash flow from financing	Transactions not involving payment			December 31, 2020
			Exchange rate fluctuations	Capitalized interest	Conversion of debt to shares	
Convertible debentures (Note 13)	39,538	–	–4,103	3,128	–38,563	–
Short-term loans (Note 15)	20,838	–	–	219	–21,057	–
<b>Total liabilities from financing activities</b>	<b>60,376</b>	<b>–</b>	<b>–4,103</b>	<b>3,347</b>	<b>–59,620</b>	<b>–</b>

**Note 18 | Financial instrument**

The Parent Company's financial instruments are presented below. For a description of financial risks, see Note 33 in the Annual Report of the Group.

31 Dec 2020 SEK thousand	Fair value	Level	Amortized cost	Total
<b>Financial assets</b>				
Cash and cash equivalents (Note 10)	–		215,858	215,858
Group receivables (Note 7)	–		193,579	193,579
<b>Financial liabilities</b>				
Accounts payable	–		472	472
Other liabilities (i)	–		1,429	1,429

31 Dec 2019 SEK thousand	Fair value	Level	Amortized cost	Total
<b>Financial assets</b>				
Cash and cash equivalents (Note 10)	–		44,389	44,389
Group receivables (Note 7)	–		181,460	181,460
<b>Financial assets</b>				
Borrowing from credit institutions (Note 15)	–		20,800	20,800
Convertible debentures (Note 13)	–		39,538	39,538
Derivative instruments (Note 14)	3,911	2	–	3,911
Accounts payable	–		681	681
Other liabilities (i)	–		237	237

(i) Other liabilities above include other liabilities in the Balance Sheet that comprise financial instruments valued at amortized cost in Notes 15 and 16.

**Fair value**

For all financial assets and liabilities recognized at amortized cost above, recognized amounts represent an approximation of fair value. The convertible debentures and hire purchase loans (from previous years) were subject to fixed interest, which were judged to essentially correspond to market interest rates. Therefore, information about fair value and the level of fair value has not been provided for these instruments.

The Parent Company's derivative instruments are valued at fair value in the Income Statement. Embedded derivatives, which are incorporated in the convertible debentures, are valued on the basis of observable input data relating to exchange rates and share price at the end of the reporting period and share price volatility.

**Note 19 | Pledged assets and contingent liabilities**

SEK thousand	31 Dec 2020	31 Dec 2019
<b>Contingent liabilities</b>		
Guarantee commitments for subsidiaries	28,268	15,451
<b>Total</b>	<b>28,268</b>	<b>15,451</b>

Guarantee commitments for subsidiaries relate to guarantee commitments entered into by the Parent Company on behalf of its subsidiaries. The commitments relate to outstanding payments in the event that the subsidiaries become unable to make contractual payments.

**Note 20 | Transactions with related parties**

Transactions between the Parent Company and its subsidiaries, which are closely-related parties of the Parent Company, relate to management fees invoiced to subsidiaries, intra-group borrowing and interest on intra-group borrowing. Intra-group sales are specified in Note 2 and intra-group borrowing in Note 7. Intra-group interest income amounted to SEK 4.328 M (3.539) in the financial year.

Remuneration to management, i.e. the Group's key senior executives, and remuneration to the Board, is presented in Note 6 of the Annual Report of the Group.

**Note 21 | Events after the reporting period**

On January 21, Lottie Saks was elected new Board member in Silvers Semiconductors AB.

**Note 22 | Proposed appropriation of earnings**

The following funds are at the disposal of the Annual General Meeting:

SEK	2020
Share premium reserve	904,565
Retained earnings	–155,430
Profit/loss for the year	–200,027
<b>Total</b>	<b>549,108</b>
The Board proposes that the accumulated loss is carried forward	<b>549,108</b>

The Annual Report and Consolidated Financial Statements have been approved for publication by the Board of Directors on April 22, 2021. The Consolidated Income Statement and Balance Sheet and the Parent Company Income Statement and Balance Sheet are subject to authorization by the AGM on May 20, 2021.

The Board and CEO hereby confirm that the Annual Report has been prepared in accordance with the Annual Accounts Act and RFR 2 Accounting for Legal Entities, and that it presents a fair view of the Company's financial position and results of operations, and that the Administration Report provides a fair view of the progress of the

Company's operations, financial position and results of operations, and describes material risks and uncertainties that the Company faces. The Board and CEO hereby confirm that the Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS), in the form adopted by the EU, and provide a fair view of the Group's financial position and results of operations, and that the Group's Administration Report provides a fair summary of progress for the Group's operations, financial position and results of operations and outlines the material risks and uncertainties the companies included in the Group face.

Kista, Sweden, April 22, 2021

Tomas Duffy  
Chairman of the Board

Anders Storm  
CEO

Ingrid Engström  
Board member

Erik Fällström  
Board member

Robert Green  
Board member

Lottie Saks  
Board member

Beth Topolovsky  
Board Member

Our Audit Report was submitted on April 23, 2021  
Deloitte AB

Zlatko Mehinagic  
Authorized Public Accountant

# Auditor's Report

To the Annual General Meeting of the shareholders of  
Sivers Semiconductors AB (publ) corporate identity number 556383-9348

## Report on the annual accounts and consolidated accounts Opinions

We have audited the annual accounts and consolidated accounts of Sivers Semiconductors AB (publ) for the financial year 2020-01-01 - 2020-12-31. The annual accounts and consolidated accounts of the company are included on pages 30–71 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2020 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2020 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and the group.

## Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

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

## Other Information than the annual accounts and consolidated accounts

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises are included on pages 1-29 but does not include the annual accounts, consolidated accounts and our auditor's report thereon.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

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

## Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

## Auditor's responsibility

Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts and consolidated accounts, 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 the company's internal control relevant to our audit in order to design audit procedures that are



appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the Managing Director.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts. We also draw a conclusion, based on the audit evidence obtained, as to whether any material uncertainty exists related to events or conditions that may cast significant doubt on the company's and the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual accounts and consolidated accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts and consolidated accounts. 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 a company and a group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the annual accounts and consolidated accounts, including the disclosures, and whether the annual accounts and consolidated accounts represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated accounts. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

## Report on other legal and regulatory requirements

### Opinions

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of Sivers Semiconductors AB (publ) for the financial year 2020-01-01 - 2020-12-31 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit to be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

### Basis for Opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

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

## Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the administration of the company's affairs. This includes among other things continuous assessment of the company's and the group's financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfill the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

### Auditor's responsibility

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional scepticism throughout the audit. The examination of the administration and the proposed appropriations of the company's profit or loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the company's situation. We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss we examined whether the proposal is in accordance with the Companies Act.

Stockholm, Sweden, April 23, 2021  
Deloitte AB

Zlatko Mehinagic  
Authorized Public Accountant

# Annual General Meeting 2021

Sivers Semiconductors AB's Annual General Meeting will be held on Thursday May 20, 2021 at 4 p.m. adjacent to the Company's offices at Torshamnsgatan 48, Kista, Stockholm, Sweden.

## Participation

Shareholders wishing to attend the meeting shall:

- be included in the share register kept by Euroclear Sweden AB on Tuesday, May 11, 2021
- report their intention to attend the AGM to the company by no later than Wednesday May 19, 2021

## Registration

Registration is to be made no later than Wednesday May 19, 2021 by post to Sivers Semiconductors AB, Box 1274, 164 29 Kista or by e-mail [info@sivers-semiconductors.com](mailto:info@sivers-semiconductors.com). When registering, the name, personal identity number / corporate identity number, daytime telephone number, number of shares held and any attending assistants should be stated.

## Nominee-registered shares

Shareholders whose shares are nominee registered must, in addition to the notification of their intention to participate in the meeting, be temporarily included in the share register under their own name (voting rights registration) to participate in the meeting. In order for this registration to be effective on Tuesday, May 11, 2021, shareholders should contact their bank or nominee well in advance.

## Proposed dividend

The Board of Directors proposes that no dividend be paid.

