



COVERNG THE PERIOD 1 JANUARY 2020 TO
30 JUNE 2020

WISEKEY

WISeKey International Holding AG Interim Report



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CEO Letter to Shareholders

Dear shareholders,

During the first 6 months of 2020 we continued making significant progress towards achieving our primary objective of building WISeKey to be a globally competitive and profitable company. That said, the COVID-19 global pandemic substantially affected our second quarter and first half 2020 operations and financial results. Our semiconductors deliveries decreased as compared to a year ago despite the higher demand for our semiconductors and cybersecurity offerings in new market segments like drones and home appliances.

COVID-19 shutdown has significantly altered the fundamentals of the semiconductors and IoT sector, including customer behavior towards developing inventories, directly affecting production by creating supply chain and market disruption, resulting in reduction of business revenues in key sectors for WISeKey such as luxury and in particularly high-end watches. Many companies around the world are facing an unclear future, as their survival is depended on potential government interventions, while others may not survive the current crisis; this difficult situation has made it impossible for us to project revenue and give guidance.

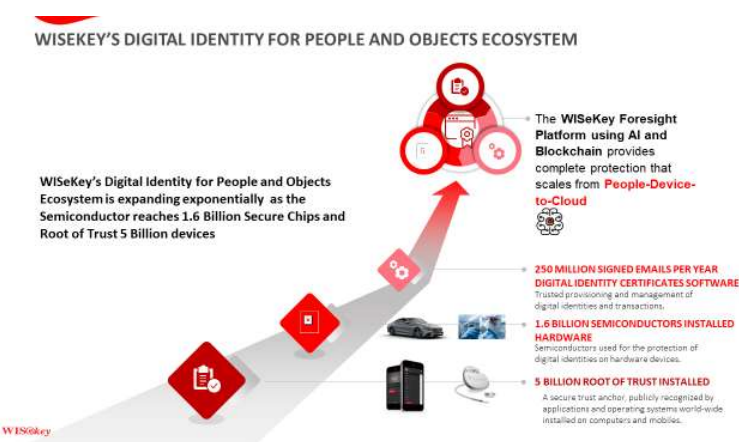
As consequence consolidated revenues for H1 2020 was \$8.0 million, a decrease of \$4.4 million (36%) in comparison of H1 2019, driven by the difficult market environment impacting the semiconductors sector as many manufacturers of product secured by WISeKey reduced their inventories (watches, routers, cars) with around 45% fewer deliveries year-on-year. This decrease was partly offset by new sales in products such as Drones and Medical products. To protect future revenue, we have made significant investments in high growth future revenue segments such as brand protection and adding new technologies to our platform such as Data, Blockchain and AI, and taking minority ownerships in startups and current market leaders of these technologies.

Despite the negative affect of COVID-19, the Group has not had to make any reductions in work force and has only requested government support for a small percentage of its employee salaries.

We announced the establishment of a Joint Venture with arago, a leading AI company in Germany to make a strategic investment that will allow us to integrate AI into our platform strengthening and bringing new sources of revenue for WISeKey. As consequence we have calibrated the business and launched a digital transformation plan of five years to face the new market environment on an industrial basis and the company is now working in line with the new plan. It is our ambition to maintain the current cash reserve level of \$16 million as operational cash and raise capital if required to fund acquisitions and strategic participations. During a time when the entire industry and in particular medium size companies face a difficult situation with uncertainty, WISeKey is well positioned to navigate these challenging times, take advantage of opportunities that arise from this situation and successfully overcome this global crisis.

Investing in our Future

I would like to highlight our continued commitment to invest in our cybersecurity / IoT/AI businesses for the future. Together with our JV partners we will be spending approximately \$30 million on capital expenditure during the next three years using signed financing facilities with Nice and Green, Crede and Long State Investment Limited to



become one of the leading providers of semiconductors, IoT and Blockchain services. The Managed WISEKey Root of Trust (“ROT”) is a major asset for growth and serves as a common trust anchor, which is recognized by all operating systems and applications to ensure authenticity, confidentiality and integrity of online transactions. With the Cryptographic ROT embedded on a device, the IoT product manufacturers can use code signing certificates and a cloud-based signature-as-a-service to secure interactions among and between objects and people.

Furthermore, I would to thank the board, management and our employees for their dedication but most importantly the sacrifices they made and continue to make during the COVID-19 crisis. I am proud of our team and their continuous commitment in making WISEKey a competitive company.

Sincerely Yours,

Carlos Moreira
Founder, Chairman and CEO of WISEKey International Holding
September 8, 2020

WISeKey Digital Transformation Plan 2020 – 2025



Four years ago, after our Swiss Listing in April 2016, we set out to build the foundation to transform WISeKey into a company that will lead our customers' digital transitions. Now, after 2 acquisitions and technology integration, we are reinventing our cybersecurity/IoT architectures designed to deliver a cost effective, simple and secure value proposition to help our customers succeed. At the same time, we continue to explore ways to expand our platform with the objective to provide solutions to some of the world's most pressing digital transformation problems.

Digital transformation is one of the key priorities of WISeKey who are developing disruptive technologies and solutions to overcome key challenges in a complex world and to unlock new growth opportunities.

The scale of impact for disruptive technology adoption on businesses has never been more apparent than now, as the technology is required and can be harnessed with unique applications to even help contain the spread of COVID-19. All of WISeKey technologies, starting from Digital Identities and Semiconductors, to cloud-based services and cybersecurity solutions, have become the lifeline of businesses irrespective of their size or industry sector.

WISeKey currently provides cybersecurity and IoT solutions to several of the world's most successful business and consumer brands. Everyday, thousands of customers use the 1.5 billion WISeKey-based chips in products that connect people, secure objects and enhance the interactions of machines with humans.

The WISeKey IoT network of interconnected systems and advances in digital certification, data analytics, artificial intelligence (AI) and ubiquitous connectivity, are the pillars of the Digital Transformation process the company has started this year. With the objective to diversify its revenue generation through unique and fully integrated market solutions, WISeKey will leverage the foundation it has been built as well as its experience, and domain expertise to evolve the overall business, culture and organization.



Our strategy is aligned to the ever-increasing needs of our customers in what addresses to the broader cybersecurity needs.

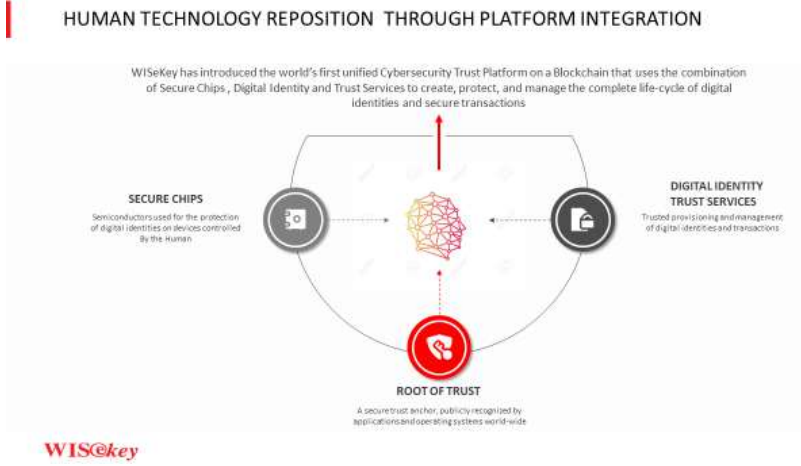
As we continue to build a highly trusted, secure platform and related solutions portfolio, there are **eight core elements in our digital transformation that we are focused on: cybersecurity, Digital Identity, IoT, mobile applications, data, cloud, blockchain and AI.**

Every investment we make and every product and service we build fits within one of these categories and constitutes the core of our digital transformation plan from 2020 to 2025.

Building upon the unique position and foundation which has been put in place, the process has started during the first half of 2020 by recruiting new senior sales management in USA, Germany, France, and Japan under the supervision of our new global Chief Revenue Officer located in USA who is in charge continuing the sales and marketing evolution and finding new ways to support the next phase of our grow strategy with more profitable ways of generating more sales and increased profitably, in less time.

To support the sales process, WISEKey’s team has been focused on:

- a) identifying the right customers and partners for our technology while leveraging existing wins to educate the sector on which they operate (e.g Drones),
- b) targeting the most mature and profitable territories,
- c) identifying the most effective sales staff,
- d) connecting with the right customers and channels, and
- e) understanding the best ways to close sales while advancing our knowledge on the best factors which can influence performance across the sales cycle.



We broadened our offerings to reach new audiences, such as bringing WISEID technology to the fight of COVID-19 with the development of spacelab editions such as WIShelter and WISETravel protecting users during the pandemic. We took collaboration to a new level with Zoom allowing our staff and customers to share webinars, conversations and content together in a digital environment.

It’s also very clear to us that with the size of our company and the strong competition in this sector, we need to cooperate with dominant platforms, as no one company can deliver the full breadth of technology solutions that customers need, at the pace the market requires and trust is becoming the essential asset that these platforms require. We believe that building strategic partnerships will be as important in driving customer value and future growth as mergers and acquisitions have been over the past decade.

Since we started our digital transformation, we announced next-generation strategic partnerships with market leaders in their fields.



With IBM Watson on AI, SAP on IoT, Microsoft on Cloud and TechAccord and Oracle on blockchain, we intend to build the infrastructure and solutions we require for our, and the world’s, digital transformation.

WISEKey’s strategic investment in arago in August 2020 will reinforce our technology and market position in the Artificial Intelligence (“AI”) space. The direct impact of ARAGO’s AI and data technology, will bring new revenue sources for WISEKey’s Digital Transformation strategy as:

1. Human knowledge is normally hard to incorporate in digital processes without UX problems. With the HIRO™ problem solving engine, the ability to capture human expertise and scale decision processes becomes available to any application built on top of the platform. This is the only way to apply experience in billion-device IoT scenarios.
2. Scaling is normally a huge effort after getting things to work. The arago micro service environment allows immediate deployment of individualized services to an auto-scaling 24/7 operating platform making specialized services scalable in no time.
3. Agile and reliable development of any business use-case depends on a stable environment. arago's API layer hides the complexity of a PB sized data processing environment from developers and customers, allows detailed rights management and ensures top performance.
4. Having a scalable data backend is the key to any data-driven business. arago's knowledge core can handle semantic, time-series and blob data at petabyte scale and has necessary compliance and security features for regulatory and enterprise operations. WISeKey's IoT business is expanded to data driven solutions immediately.

The increasing adoption of AI and IoT convergence is one of the primary factors that is driving the growth of the market. During the last five years, a rapid surge in the adoption of AI IoT cloud services has been witnessed. It is driven by its capabilities to provide enterprise wide array of resources they can utilize to scale, orchestrate, and support their operations.

Additionally, we are planning to form a Joint Venture with the name WISeAI that will be adding **secure AI cloud services from Switzerland** in cooperation with arago,



using Swiss data centers and Swiss Alps Mountain bunkers to store the personal data generated by users and enterprises. WISeKey, is the first e-security company in the world to offer decentralized Trust Models and PKI architectures. In addition, WISeKey allows data ecosystems to be federated via a unique digital identity, enabling users to interact while maintaining control of their personal data. Users have

the have the freedom to choose where their data resides and who is allowed to access it. By decoupling content from the application and digital identity itself, users will be able to use their data as currency and develop digital data dividends-based solutions as consumers have a right to know and control how their data is being used and to be able to monetize their data (www.wiseid.com).

With all of this in place, in fiscal 2020 we continue to focus on our strategic priorities and digital transformation plan as we aim to best position ourselves to drive revenue growth regardless of the current market conditions. We are excited to build on the momentum we have generated over the last 6 months and for the opportunities that lie ahead.

WISeKey is teaming with several leading partners (<https://www.wisekey.com/partners/>) for the development of an IoT Early Warning System (EWS) designed with the objective of saving lives through early detection as one of the main technology integrations to help prevent the spread of COVID-19. As a result, Cybersecurity, Internet of Things (IoT) along with artificial intelligence (AI) is already being used to help predict future outbreak areas.

Leveraging WISeKey IoT-sensors equipped with the new WIShelter app capable of measuring temperature and providing geolocation of targeted quarantines, WISeKey's technology can help mitigate the spread the coronavirus. Leveraging IoT, a network of interconnected systems, advances in digital certification, data analytics, AI and ubiquitous connectivity, WISeKey can provide an early warning system to curb the spread of infectious diseases.



In the Asia-Pacific region, China leads the way in IoT adoption (followed by Japan), and it is anticipated to spend \$254.6 billion in IoT by 2025.

The simple answer might be for enterprises, cities, and national governments to collectively create a massive global **network of sensors**. Using the network of billions of interconnected smart IoT sensors we can detect the spread of viruses by combining the anonymized digital identity with the behavior of a person. However, this would require standardization, planning and implementation on a global scale and, a special focus on privacy, to complete the EWS. Lack of security increases the risk of users' personal information being hacked while the data is collected and transmitted to the IoT device. IoT devices are connected with a consumer network, and sometimes unauthorized users might try to exploit existing security vulnerabilities, if the infrastructure is not properly secured.

EWS is a core type of data driven IoT system. The potential benefits of using a semantic-type EWS include easier sensor and data source plug-and-play, simpler, richer, and more dynamic metadata-driven data analysis and easier service interoperability and orchestration.

The IoT will live up to its promise only if the connected devices, the data they generate, the business applications that control these devices and the services around them, can be fully secured and trusted. In today's environment, where cyberattacks have become more common and increasingly sophisticated, there is an urgent need to fundamentally rethink the Security Stack for the IoT cloud. IoT-enabled services and products will generate vast amounts of data which, when well-analyzed, will be very valuable to government organizations, product manufactures, corporations and end-users. Users can take advantage of this unique solution in the market by remotely being able to uniquely identify and control an IoT Edge Device (activation/deactivation/revocation), securely provision (point to point secure update) the IoT Edge Device credentials and secure the messages in motion between Edge Devices and Business Applications.

The first phase of the ultra-low-power Bluetooth 5 secure beacon implementation was developed using WIS@key's VaultIC407, the RSL10 and N34TS108 temperature sensor from ON Semiconductor, as well as Tatwah's BLE IT-005 IP68 class Beacon. The device has an outstanding battery life, with no compromise to security. The secure

implementation allows replay attack protection, device clone protection, VaultIC absence detection, revocation capability, measurement validity check, and true temperature display.

The key to WISEKey's growth strategy is to be the ubiquitous trust engine that powers the truly secure IoT through our unique and vertically integrated solutions combining leading software and hardware capabilities and leveraging integration and interoperability with other market leading companies and solutions.

First Half 2020 Operational Milestones:

- First Tapeout of our new 55nm CMOS Embedded Flash Secure Hardware platform, embedding a secure version of the RISCv core. This TapeOut is the first step of an R&D program which consists of developing the HW platform for WISEKey's next generation of secure Elements, as well as building an IP offer for the semiconductor companies who want to embed a secure enclave in their SoC. The choice of the RISCv architecture was dictated by cost efficiency. The implementation of a flash memory, technology already implemented in our MS600X product, will allow us to reduce the development cycles of our customers, and to ease the customization of our products.
- First Production Volumes of VaultIC405 provisioned and delivered to PARROT through our VaultiTrust platform. VaultiTrust is the platform developed and operated by WISEKey in order to provide two services to our customers: the generation of trusted data (keys, certificates, unique ID) and the provisioning of the secure elements (VaultIC) at wafer level. The uniqueness of VaultiTrust is that it takes advantage of WISEKey's government grade security certified offerings and end-to-end digital security management to generate identity keys and efficiently install them into chips. VaultiTrust's web portal complements the service by offering an easy way to configure, manage and track production. WISEKey operates FIPS 140-2 Level 3 certified Hardware Security Modules (HSM) to efficiently generate secure data. These HSM are located in a WISEKey Common Criteria EAL5+ and ISO27001 certified backed up data center and the HSM can be shared only upon customer's request.
- First prospects sampling our new NanoSealRT chips. NanoSealRT is a core part of the new NanoSeal® architecture developed by WISEKey which introduces the concept of Authentic Consumer Engagement, the combination of digital brand protection with simple to use consumer engagement options. NanoSealRT can be attached to any product to add supply-chain protection, and track and trace functions for sports apparel, cosmetics, wines & spirits, parcels, medicines and luxury goods. WISEKey's NanoSealRT is the only NFC Forum Type 5 chip for tags which offers a patent-pending authentication algorithm based on NFC Data Exchange Format (NDEF) that works with both Android and IOS 12 devices, namely more than 2 billion NFC enabled devices. Its tamper/opening detection is a plus when it comes to enriching the consumer experience. The communication with the object is simplified from the manufacturing plant to the field thanks to a powerful ISO15693 compatible interface.

First Half 2020 Financial Milestones:

- **Strong cash position:** cash and cash equivalents together with restricted cash increased to \$17.4 million at June 30, 2020, from \$16.6 million at December 31, 2019.
- **Substantially improved financial position** has paved the way for significant investments in growth initiatives and strategic partners, such as that recently announced with Arago GmbH
- **Investments in R&D:** we continue to support our R&D work with \$2.8 million invested during the year to develop new products and create business opportunities in cybersecurity, IoT, Microprocessors, Blockchain and AI.
- **Revenue of \$8.0 million:** our revenues reduced year-on-year as compared to H1 2019 due to a combination of factors, with 2019 including some one-off revenues such as the sale of the ISTANA platform to a major

car manufacturer, whilst 2020 was hit by the COVID-19 pandemic which resulted in delivery delays for several clients from H1 2020 to the second half of the year due to shutdown, whilst other deliveries were impacted by border restrictions. However, WISeKey's enhanced position as a vertically integrated Identity Management/IoT/Blockchain service provider and "razor and blade: hardware and software" revenue model, has positioned us well to take advantage of massive opportunities in the market and return to increasing revenues and improved profitability.

- **G&A Cost reductions:** the Company incurred \$2.0 million less G&A costs during the six months to June 30, 2020 as it made a conscious effort to reduce its expenditure and ensure that its cash reserves would support it through its Digital Transformation process.

Stock Price and Share Buyback Program

In early 2020, our stock price was negatively impacted by a number of factors, including:



1. an overhang created by the expiration of the lockup period of shares issued for the acquisitions of VaultIC and QuoVadis;
2. new shares issued through SEDA (Standby Equity Distribution Agreement) transactions which allowed WISeKey to obtain cash against issuance of new shares;
3. payment of Exworks loan interest in shares; and subsequently exercise of warrants at 3 CHF
4. low trading volume on the Swiss Stock Exchange for our category of stock; and,
5. Technical issues on The Nasdaq platform and a mismatch between data vendors/ trading desks and prices reflected on various trading platforms created confusion, thus trading desks were unable to execute trades of our ADS.

Despite these issues our share price somewhat has recovered in mid-2020 and the volume has increased in both SIX and NASDAQ exchanges. We still believe our current share price does not reflect WISeKey's current operational and financial performance, the value of its patents, proprietary technology, nor its growth prospects.

WiSeKey's Products and Services

WiSeKey continues to extend its leadership position in the global cybersecurity marketplace through the deployment of large-scale digital identity solutions that protect people and objects using Blockchain, Artificial Intelligence, and Internet of Things (“IoT”) technologies that respect the Human as the fulcrum of the Internet. With the combination of best-in-class secure silicon, certified software, and managed trust services, we have created Integrated Security Platforms that remove the complexities of protecting people and objects in the rapidly expanding connected world. For more information, visit www.WiSeKey.com.



WiSeKey delivers easy to use and robust security solutions to our clients who are creating innovative products that are driving the next age of digital transformation. We have an install base of over 1.5 billion microchips in virtually all IoT sectors including: connected cars, smart cities, drones, agricultural sensors, anti-counterfeiting tags, servers, computers, mobile phones, crypto tokens etc. With our **VaultIC** and recently announced **NanoSealRT** silicon at the edge of the IoT, where important decisions are being made, we play a significant role in the generation and protection of high-value authenticated Big Data that is being used for breakthrough applications like autonomous driving and predictive maintenance for industrial infrastructures.

Our platforms, trusted by the OISTE/WiSeKey Swiss based cryptographic Root of Trust (“RoT”), ensure the integrity of transactions among objects people in both physical and virtual environments. Building from this foundation, we are uniquely qualified to deliver security applications like **WiSeID** that provides individuals with enterprise-class digital asset protection in a mobile environment or our **Managed PKI** (“mPKI”) services that are built to scale with the high-volume demands of the IoT market and are ready to deploy with leading cloud platforms like AWS IoT Core.

In the complex world of cybersecurity, WISEKey cuts through the confusion of disconnected vendors, costly design teams, and architectural decisions that are riddled with security risks at every turn. When time, money, and reputation are all on the line we provide trusted solutions that allow our clients to focus on what they do best without worrying about their names being splashed across a front-page article trumpeting the latest device that was hacked and used to create a breach of consumer trust.

Recent Agreements

- **ORACLE:** WISEKey'S Blockchain Identity technology became one of Oracle's first external trusted identity providers, allowing clients to securely add data onto the Oracle Blockchain Platform using the WISEKey cryptographic key infrastructure. Based on the relation established the respective teams implemented a prototype to secure IoT infrastructures combining the technologies such as the WISEKey Secure IoT Beacon operating transactions logged into the Oracle DLT digitally signed and such prototype will be showcased to promote as a secure IoT value proposition.
- **CHINA:** WISEKey's Root of Trust accreditation by 360 Security Browsers to provide Trusted SSL Services in China reinforced its penetration in the Chinese technology market. Also, WISEKey's comprehensive partnership with Long State Investment (LSI), a leading Asian based investor, aims to further expand the reach of WISEKey in the growing Asian markets. Under the arrangement, WISEKey and LSI plan to establish a Joint Venture in Hong Kong in the first quarter of 2020 to focus on business opportunities in Asia with financed by a \$30 million facility provided by LSI during a 24-month period.
- **WISEKEY BLOCKCHAIN CENTERS OF EXCELLENCE:** In cooperation with the Blockchain Research Institute (BRI), WISEKey is creating a number of interconnected Blockchain Centers of Excellence around the world, to facilitate the rapid adaptation and on-boarding of blockchain-based solutions and foster stronger collaboration between the public, private and academic sectors. Each center purchases technologies and licenses from WISEKey.
- **PATENT PORTFOLIO:** Expansion with new IP and patents with the aggregation of 39 IoT / Semiconductors patent families (more than 200 patents in total) to its portfolio (<https://www.WISEKey.com/patents/>).
- **WECAN Group:** WISEKey creates synergies for the development of innovative solutions and brings secured identity and signature layer to existing Wecan business applications like compliance management, creating recognized standards and facilitating auditing and monitoring by regulators, and protecting the registration and protection of intellectual property of intangible assets worldwide. Wecan Tokenize (an asset tokenization platform). We jointly worked on the integration of WISEID Platform for WeCan Comply, WeCan Protect and shortly in WeCan Tokenize. WeCan Comply was selected by consortium of bank in the Canton of Geneva.
- **E.A Juffali & Brothers, SAUDI ARABIA:** Through the strategic partnership with SAT (a wholly owned company of E.A Juffali & Brothers), WISEKey will be deploying its cybersecurity services and IoT infrastructure in the Kingdom of Saudi Arabia and support its Vision 2030 economic reform plan, the Kingdom's vision for the future. WISEKey Arabia has been completely settled and we are following a business development plan we are currently involved in a certain number of promising business opportunities on different stage from the sales cycle for both public and private sector. This includes large locals value added resellers on boarded.

2020 Growth Opportunities

WISeKey and arago joined forces to create the WISeAI joint venture:

WISeAI JV is the convergence of arago's AI based Knowledge Automation and Data platform and WISeKey's Cybersecurity and IoT technologies on a join platform with the name WISeAI.com

WISeAI Integrates semiconductors, smart sensors, IoT systems, Artificial Intelligence and a data cloud to deliver to customers a unique offering to power innovation and digital transformation. Using WISeKey's cybersecurity technology and IoT network, data will be collected in HIRO where it can be processed and through automation acted upon in real time in a highly secure environment.

WISAI is the brain that will power the nervous system of the network of IoT objects operating in the WISeKey Ecosystem, which currently connects over 1.6 billion IoT devices secured with WISeKey's VaultIC. With the introduction of 5G, the ecoSystem will continue to grow at a much faster rate as 5G will enable the connection of every object, person, and machine.

WISeAI embeds AI into the core infrastructure components of the EcoSystem including Root of Trust, semiconductors, and edge computing. Specialized APIs are then used to provide interoperability between components at the device, software and platform level to optimize system and network operations.

Data processed through WISeAI is then collected and made accessible to extract value and enhance market intelligence and knowledge for customers. WISeAI also enables secure automation of actions and business decisions based on real time data and enables IoT to work independently with minimal human support, unlike the current state of the market which requires that all actions be coded in advance based on pre-defined scenarios.

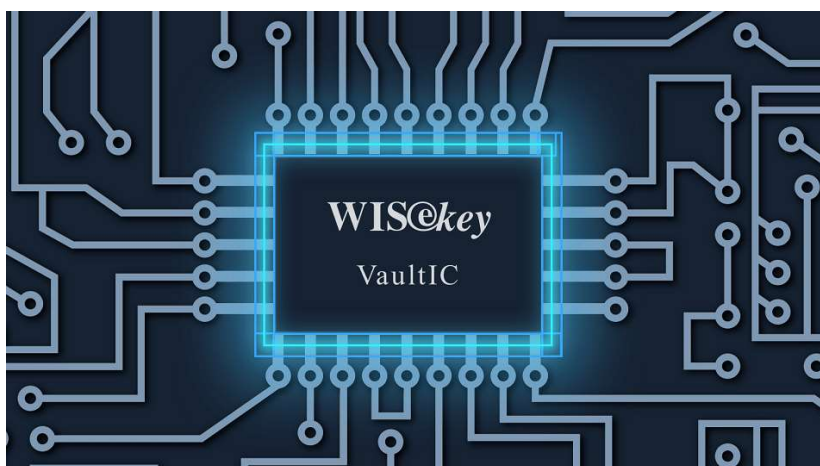
With the use of AI algorithms and predictive maintenance implemented through WISeAI, IoT devices will have the capability to dynamically determine actions to take decisions and self-program based on analytics and customer defined knowledge, resulting in lower operating and maintenance costs for providers.

IATA Relies on WISeKey for Digital Cargo Transformation:

IATA strengthens its partnership with WISeKey to secure their strategic digital cargo transformation, by adopting for production projects and integrating new stockholders such as Lufthansa and Ericsson. The implementation of the WISeKey technology enables highly secure authentication and data encryption by leveraging digital identity and Managed PKI Services, allowing the issuance of trusted digital certificates under its worldwide recognized RoT for the benefit of One Record and the entire Digital Cargo Trusted Ecosystem.

WISeKey Continues to Deliver Solutions While the Market Landscape is Shifting

The powerful portfolio of secure elements, including the long running VaultIC family is growing with the NanoSeal family added this year. NanoSeal embeds innovative features such as a one-tap Android & iOS compatible authentication algorithm, tamper/opening detection and long-range radio communication. These secure NFC tags are able to improve goods traceability and enhance direct-to-consumer digital strategies. The expanded portfolio acts as the foundation for many of WISeKey's



integrated and secure solutions empowering WISeKey to address new market verticals and most importantly to solve new business problems which keeps the solutions ahead of the turbulent markets which have been disrupted by the global pandemic.

Medical Devices:

With the disruptive changes in the health care sector, the privacy and protection of personal medical information has never been more important. Without ever going to the doctor's office, patients are increasingly using remote medical sensors to gather diagnostics for doctors. The VaultIC family of products is the foundation for our integrated solutions being integrated into these remote diagnostic sensors to secure the authenticity of the device and ensure the protection of patient data and privacy. WISeKey is seeing growth with existing customers and new opportunities.

Product Life-cycle Blockchain:

During manufacturing, the quality of the output depends on the input materials and the processes used in production. WISeKey has partnered with a leading Blockchain platform to record the key phases of manufacturing in an immutable Blockchain. The project will use secure semiconductors to guarantee the authenticity and integrity for these Blockchain transactions:

- Authentic materials verification
- Manufacturing process integrity
- Quality assurance

This integration will provide immutable traceability for manufactures to demonstrate the quality and integrity of the products that they produce and is seeing applicability across numerous market verticals.

Certifications:

Secure semiconductors that are FIPS and Common Criteria certified are often required for government regulated applications. These regulated applications include Point-of-Sale terminals, secure radios, and medical equipment. As the demand for certified devices is increasing, WISeKey has an ongoing commitment to certify our devices to the latest standards. Having certified secure semiconductors allows manufacturers to achieve certification for their regulated products.

As the Market Evolves, WISeKey has Significant Market Opportunity

Digital Transformation:

The need for our customers to find new and innovative ways to connect with their consumers and remain relevant is at the heart of the world's Digital Transformation. Our WISEAuthentic platform combined with the impressive cost and connectivity levels of the NanoSeal tags allows us to deliver a wide array of solutions that help customers to efficiently exceed their Digital Transformation goals. Brands are spending millions to research and increase their marketing in an effort to stay connected with customers and the WISEKey solutions can transform their products and goods into digital platforms which provide valuable data to the customer and help to build their consumer network. These data can be used to develop more pointed marketing campaigns, provide one-touch ordering, promote geo-location-based messaging and so much more.

Brand Protection and Consumer Engagement:

As Brands reduce their brick and mortar presence and continue to evolve their ecommerce strategies and reach, authentic products and goods coupled with innovative ways to digitally connect with their consumers and drive their brand image and loyalty have never been more important. With the advent of the NanoSeal family being integrated with our PKI and Digital Identity solutions in concert with a strong partner ecosystem, WISEKey can now fully address the digitally connected needs of Brands bringing not only certainty to the authenticity of their products and goods, but also certainty to the consumer that they can engage with the brand in a completely secure way with a simple tap of their mobile device. This achieved by taking traditionally passive and non-connected products and goods and digitally enabling them with connectivity that the consumer can leverage, allowing the Brands to further develop their digital presence and build a digital community of interconnected consumers driving revenues, consumer confidence and brand loyalty.

Luxury Goods:

WISEKey has enjoyed our relationships with luxury brands like Hublot, BVLGARI, and FAVRE-LEUBA for over a decade now as we provided them with exclusive engagement platforms that took advantage of our secure silicon and PKI services embedded inside of watches and VIP cards. Coupled with the new approach to Brand Protection and Consumer



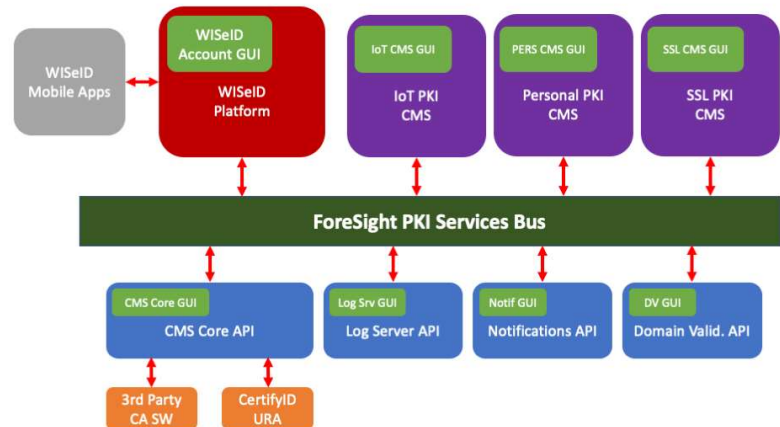
Engagement and taking advantage of our WISEAuthentic platform which has been deployed in over 1 million watches already, WISEKey provides the next generation **digital experience** in an industry where value is perceived through **tradition, heritage and craftsmanship**.

IoT:

The ever growing IoT in combination with the now explosive growth in ecommerce is driving the need for secure devices and connected products. This opportunity is across almost all market verticals with different approaches and WISEKey is perfectly positioned with their solution portfolio to address all of the business needs. From the automotive space where secure devices and secure communications are critical to the medical device world which was discussed above to home security, the confidence that devices are secure and the data is trusted is paramount to success. One more recent example is WISEKey integrated with drones to sure the device and provide the platform for traceability.

WISeKey's Foresight Platform: our combined value proposition

- **HOLISTIC APPROACH TO DIGITAL IDENTITY:** WISeKey's strength and differentiation against competition comes by our capability to provide the whole technology stack to secure the identity and interactions of people, applications and objects. The ForeSight platform brings all required technology to deliver digital identities, embed those identities securely into IoT Devices thanks to WISeKey's secure microcontrollers and secure the authentication and data of all intervenient (people, applications and objects) in these secure transactions. Platforms will continue to win as more and more companies look to add digital features to their products and WISeKey is perfectly positioned to take advantage of this market shift, thanks to its unique capability to combine secure hardware with security software and services.
- **FIRST DELIVERY; ForeSight PKI:**
As a first module of the Foresight platform, WISeKey has built a new **Cloud PKI** ("PKI") platform that can serve the needs of both traditional digital certificates (Personal or SSL certificates) and new business needs for IoT Certificates, consolidated in a single architecture of micro-services. This platform is used by WISeKey to deliver **Cloud Managed PKI** services, but it can be also deployed on-premises for customers having special needs. The ForeSight PKI platform integrates with third party Cloud services, like Amazon's AWS IoT Core.
- **CUSTOM SOLUTIONS:** WISeKey continues to evolve it's offering of customizable security solutions like **WISeArchitect**, **WISeDeveloper**, and **WISeDesign** that put over 40 years of security experience in the hands of our customers with our full support to help them build the right security solutions for their needs., Those custom solutions can be plugged into and enrich the ForeSight platform.



As one of the building blocks for the ForeSight Platform, WISeKey reinforces it's offering for Personal and Corporate Digital Identity Protection through:

- **NEW SERVICES FOR PERSONAL & CORPORATE IDENTITY:** WISeKey continues to evolve its offering for personal identity and it's launching new digital onboarding capabilities to facilitate the on-line validation of the identity and enable the issuance of advanced digital certificates valid for legally binding digital signatures. These new capabilities for remote enrollment will enable soon new B2C and B2B commercialization channels for WISeKey, like the online sale of personal identities from an eCommerce solution linked to WISeID.
- **WISeCloud, THE WISEID CLOUD SERVICES PORTFOLIO:** WISeKey continues to evolve its cloud services offering to leverage the WISeID account, and in particular to put in value the mPKI services with capabilities like **WISeID CloudSigning** to enable electronic signatures of documents into the business processes. Additionally, WISeID proposes a "Personal Encrypted Cloud" (WISeID Vault) that allows the users to keep their confidential information and documents protected in a "data safe" in their mobile devices and synchronized in a cloud storage in Switzerland.

- **WISeApps, THE WISEID MOBILE APP ECOSYSTEM:** The **WISeID** account is enhanced with mobile applications that enable specific capabilities and leverage the mPKI services. These applications, like “My WISeID” and “WISeID Vault” are already available and widely adopted. Related to the new pandemic and the technology needs that it’s triggering, WISeKey is launching two new mobile applications: WIShelter, that implements a “Health Card”, that can integrate the user health status and digitally signed documents (e.g. infection test results, vaccination proofs, etc); and WISeTravel, which combines the digital identity with the management of travel documents, carbon offsetting and health passport capabilities.

Recognitions

- ISO 27001 and ISO 9001 certifications renewal



- VaultIC 420: FIPS CMVP 140- Level2 certification

We have developed a VaultIC Secure Element version (the VaultIC 184) in accordance with the specification of Sigfox Network. The VaultIC184 is designed for encrypting the payload transmitted by a Sigfox enabled device (the edge device) through the Sigfox communication network.

The VaultIC184 is delivered with a Development Kit, containing a set of APIs thought and designed by WISeKey for facilitating the integration by the system integrators of the VaultIC184 SE into the host MCU of the edge device.

The complete solution (VaultIC184 and the APIs) were tested and certified by SIGFOX R&D lab: Sigfox Verified™ (referenced S_0003_8A25_01)

You can find a link on Sigfox website (<https://partners.sigfox.com/companies/wisekey>)

- WebTrust for Certification Authorities, Baseline Requirements and Extended Validation SSL services

Management Discussion and Analysis of Financial Condition and Results of Operations

FY 2020 Key Financial Milestones:

The key highlights of the year ended June 30, 2020 were:

- Strong cash position: cash and cash equivalents together with restricted cash increased to \$17.4 million at June 30, 2020, from \$16.6 million at December 31, 2019.
- Substantially improved financial position has paved the way for significant investments in growth initiatives and strategic partners, such as that recently announced with A.I. specialist, arago GmbH
- Investments in R&D: we continue to support our R&D work with \$2.8 million invested during the year to date to develop new products and create business opportunities in cybersecurity, IoT, Microprocessors, Blockchain and AI.
- Revenue of \$8.0 million at an improved margin of 41.4%: our revenues reduced year on year against H1 2019 due to a combination of factors, with 2019 including some one-off revenues such as that relating to the sale of the ISTANA platform to a major car manufacturer, whilst 2020 was hit by delays to deliveries as a result of the COVID-19 pandemic with several clients delaying their deliveries into H2 2020, whilst others were impacted by border restrictions. However, WISEKey's enhanced position as a vertically integrated Identity Management/IoT/Blockchain service provider and "razor and blade: hardware and software" revenue model, has positioned us well to take advantage of massive opportunities in the market and return to increasing revenues and improved profitability.
- G&A Cost reductions: the Company incurred \$2.0 million less G&A costs during the six months to June 30, 2020 as it made a conscious effort to reduce its expenditure and ensure that its cash reserves would support it through its Digital Transformation process.

Impact of the COVID-19 pandemic

The Covid-19 global pandemic had an impact upon the Group's first half results. Although initially the Group did not see a reduction in demand for its products, as the pandemic evolved and more countries around the world implemented partial or full lockdown orders, some of its clients looked to defer delivery. In particular, deliveries to clients in certain countries became impossible due to the controls imposed on imports by governments, whilst other clients in sectors such as the retail sector looked to delay their orders.

The Group did receive support from the Swiss government in the form of two long-term loans and also received funding under the Swiss partial unemployment support. The strong reserves of the Group, combined with agreements by Senior Management and the Board to defer part of their salaries, meant that the Group has not had to make any reductions in force as a result of the pandemic. Currently the Group is claiming support for a relatively small proportion of its workforce based upon the reduction in work in Geneva, whilst the remaining parts of the Group remain fully employed.

It is impossible to predict the full extent of the impact of the COVID-19 pandemic but the Group remains confident that it has sufficient cash reserves to ensure that it will be able to continue to operate for the foreseeable future.

Key Performance Metrics

A summary of the key performance metrics of the Group is set-out in the table below:

US GAAP (Million US\$)	2020	2019
Total revenue	8.0	12.5
Total gross profit	3.3	4.9
Gross Margin	41.4%	38.9%
Non-GAAP (Million US\$)	2020	2019
EBITDA from continuing operations	(6.6)	(7.2)
Adjusted EBITDA from continuing operations	(6.2)	(5.8)
Adjusted net income/(loss) attributable to WISeKey	(7.0)	(5.2)
	June 30, 2020	December 31, 2019
Total Cash and restricted cash	17.4	16.6

Liquidity and Capital Resources

Cash and cash equivalents together with restricted cash at June 30, 2020 were \$17.4 million, compared to \$16.6 million at December 31, 2019. As mentioned earlier and as discussed throughout this document, Management have taken positive action to reduce costs in the wake of the COVID-19 pandemic which has, in turn, enabled the Group to maintain a healthy cash reserve. The Group have negotiated a new facility with Nice & Green SA as well as revising existing facilities with Yorkville Advisors Global LLC to maintain the cash balance and is well placed to use its funds to support the Group through the COVID-19 pandemic, to implement its Digital Transformation plan and to make strategic investments.

The Group have reviewed their projections in detail and believe that they currently have sufficient funds to carry them through to the end of 2021. The Group continues to have funding arrangements in place with GEM LLC, Long State Investment and Yorkville Advisors Global, LLC in addition to its facility with Nice & Green SA. These facilities provide the opportunity to draw down up to CHF 136.6 million and, when combined with the net cash position following the sale of the QuoVadis Group, provide further assurance regarding the future operations of the business.

Revenues

For six months to June 30, 2020, WISEKey's total revenue from continuing operations was \$8.0 million. This compares to half-year 2019 revenue from continuing operations of \$12.5 million. The revenue from continuing operations decreased by \$4.5 million or 36% when compared to the prior period. This is mostly attributable to the following factors:

- The impact of the COVID-19 pandemic, as explained earlier, has led to a reduction of approximately \$1.1 million through deliveries delayed at the request of clients. It is expected that these deliveries will be made in the second half of 2020, and \$0.4 million has already been delivered in July.
- Our IoT activity was adversely affected by the overall downturn in the semiconductor industry worldwide, itself related to the COVID-19 pandemic. This downturn has affected all IoT and microprocessor companies with the Semiconductor Applications Forecaster from International Data Corporation forecasting a 7.2% decline in the non-memory semiconductor market.
- Some clients in the Semiconductor business have moved away from chip-based solutions as products reached the end of life and implemented software-only solutions. We have seen increases in revenue relating to some clients who had significantly reduced their demand in 2019 and we are anticipating strong demand in 2021 from certain key clients.

With the introduction of the Nanoseal family, the next-generation family of secure memory chips, we are positioning our product offering for the next technological evolutions. However, the performance of our IoT segment will remain dependent on the macro-economic factors impacting the semiconductors industry, particularly the ongoing Coronavirus pandemic and the impact this has upon the overall economy.

Revenue by region

Our operations are global in scope and we generate revenue from selling our products and services across various regions. While our operations in Europe have historically contributed the largest portion of our revenues, the revenue generated from North America shows our engagement in this region. We are also building a strategy to expand into new territories in Asia but this has been delayed as a result of the COVID-19 pandemic and the restrictions this has placed upon global travel.

Our revenue from continuing operations by geographic region for the six months ended June 30, 2020 and 2019 is set forth in the following table:

Net sales by region from continuing operations

USD'000	6 months ended June 30,			
	2020		2019	
Switzerland	143	2%	932	7%
Rest of EMEA*	2,822	35%	4,612	37%
North America	4,302	54%	5,369	43%
Asia Pacific	716	9%	1,416	11%
Latin America	41	1%	140	1%
Total Net sales from continuing operations	8,024	100%	12,469	100%

* EMEA includes Europe, Africa and the Middle-East

In Europe, the decrease in revenue is attributable to some non-recurring 2019 revenue generated from the support surrounding the sale and installation of the ISTANA platform of \$0.4 million whilst the rest of the decrease is linked to reductions in demand from our clients as they suffer from the downturn in both the wider semiconductors industry and in specific client industries, such as the luxury watch industry.

The share of revenue from clients in North America has increased at 54% in 2020 compared to 43% in 2019. However, our US portfolio has still been impacted by the downturn in the semiconductors industry. Whilst our market share with our key clients remains largely unchanged against 2019, the level of orders in the first half of 2020 was significantly reduced. In-line with the Group's Digital Transformation Plan, we anticipate our North American revenue to increase in 2021 and beyond as we invest in our North American sales team and develop our sales strategy.

Gross profit

Our gross profit from continuing operations decreased by \$1.5 million to \$3.3million (but with a gross margin increase to 41%) in the six months ended June 30, 2020 in comparison with a gross profit of \$4.9 million (gross margin of 39%) in the six months ended June 30, 2019. The slight improvement in our gross margin despite the reduction in revenues is as a result of the products that had been phased out having lower gross margins than the newer products. We anticipate the margin continuing to improve as sales will remain focused on the newer, high margin products.

Net Income

Despite the reduction in turnover, the Group's operating loss reduced by \$0.6 million or 8% to \$7.3 million in the six months ended June 30, 2020 as compared to \$7.9 million in the six months ended June 30, 2019. This was principally due to reductions in operating expenses year on year, particularly with regards to our general and administrative expenses.

(Million US\$)	6 months ended June,		Year-on-Year Variance
	2020	2019	
Net sales	8.0	12.5	-36%
Cost of sales	(4.7)	(7.6)	-38%
Gross profit	3.3	4.9	-33%
Other operating income	-	-	n/a
Research & development expenses	(2.7)	(2.6)	4%
Selling & marketing expenses	(3.0)	(3.2)	-6%
General & administrative expenses	(4.9)	(6.9)	-29%
Total operating expenses	(10.6)	(12.7)	17%
Operating income / (loss)	(7.3)	(7.9)	-8%

The WISeKey Group continues to show a relatively heavy cost structure due to its investment strategy and new and innovative lines of business, such as Blockchain, Artificial Intelligence and its Digital Transformation Program. The sections below on the operating expenses provide additional details.

Analysis of operating income and expenditure

Total operating expenses from continuing operations reduced by 17% or \$2.1 million, from \$12.7 million to \$10.6 million, largely as a result of the Group's aim to reduce its overhead costs. Most of this decrease relates to the reductions made in the Group's General & Administrative expenditure being, in particular, a major reduction in our legal and professional fees and our travel expenses as a result of lower M&A activity due to the COVID-19 pandemic and the associated restrictions.

Other operating income

In 2020 our other operating income consisted of recharges for the use of our premises by OISTE (see Note 34 of our consolidated financial statement as at December 31, 2019), whilst the prior year included a gain on the liquidation of our subsidiary WISeKey Italia s.r.l \$24,000.

Research & development expenses

Our research and development ("R&D") expenses includes expenses related to the research of new technology, products and applications, as well as their development and proof of concept, and the development of further application for our new and existing products and technology, such as VaultiTrust, WISeID, and NanoSealRT. They include salaries, bonuses, pension costs, stock-based compensation, depreciation and amortization of capitalized assets, software licenses, costs of material and equipment that do not meet the criteria for capitalization, as well as any tax credit relating to R&D activities, among others.

Our R&D expenses represented respectively 26% of total operating expenses in 2020 as opposed to 21% in the six months ended June 30, 2019. Our Group being technology-driven, this reflects our engagement to act as a leader in new cybersecurity developments and future applications. The absolute expenditure on R&D increased by \$130,000 in the six months to 30 June 2020, reflecting additional resources focused on the development of the WISeTravel and WISeID applications in Geneva.

Selling & marketing expenses

Our selling & marketing ("S&M") expenses include advertising and sales promotion expenses such as salaries, bonuses, pension costs, stock-based compensation, business development consultancy services, and costs of supporting material and equipment that do not meet the criteria for capitalization, among others.

Our S&M expenses decreased by 8.5% or \$0.2 million in the six months ended June 30, 2020 compared with 2019. Of this reduction, \$51,000 is explained by the restructuring of our sales force in Europe and North America with two members of our sales team, one in North America and one in Europe, having left the Group in H2 2019 and only being replaced in late H1 2020. The remaining reductions were as a result of the restrictions caused by the COVID-19 pandemic, with a reduction of \$170,000 in travel and entertainment expenditure and a further reduction of \$157,000 in advertising and promotional spend.

The S&M expenditure is expected to increase again in H2 2020 as the Group invests in its sales team to support its return to growth and, hopefully, as the effect of the pandemic diminishes and the global economy starts to return to its prior state.

General & administrative expenses

Our general & administrative ("G&A") expenses covers all other charges necessary to run our operations and supporting functions, and include salaries, bonuses, pension costs, stock-based compensation, lease and building costs, insurance, legal, professional, accounting and auditing fees, depreciation and amortization of capitalized assets, and costs of supporting material and equipment that do not meet the criteria for capitalization, among others.

Our G&A expenses decreased by 29% or \$2.0 million in the six months ended June 30, 2020 compared with the same period in 2019. This decrease is due to a conscious effort to reduce our overhead expenditure. Our expenditure on legal and professional fees reduced by \$1,055k against the prior period reflecting the savings made following the simplification of our legal structure and the sale of QuoVadis, as well as a significant reduction in the ongoing level of external legal and consultancy spend as we bring as many of these activities in-house as is possible. Our staff costs reduced by \$233,000 due to a reduction in the number of G&A staff as well as the credits received from the Swiss government for partial unemployment claims following the COVID-19 pandemic alongside a \$120,000 reduction in travel and living costs due to the travel restrictions imposed in the first half of 2020. Board fees also reduced by \$265,000 year on year due to a one-off charge included in the prior year relating to the payment of the stock options relating to the previous years. Finally, non-income tax expenditure reduced by \$185,000 principally due to the previous year including a one-off stamp tax relating to the transfer of our French R&D team to a new legal entity as part of a strategic restructuring to create a Group R&D function based in France.

The main components of our G&A costs are detailed below:

	6 months ended June	6 months ended June
Total non-GAAP General & administrative expenses (Million US\$)	30, 2020	30, 2019
Staff-related costs	2,841	3,349
Depreciation & amortization classified under G&A	70	97
Legal & professional fees	987	2,042
Rental & general office costs	784	820
Stock based compensation classified under G&A	5	(31)
Non-income tax expense	37	222
Customer contract impairment losses	-	58
Other G&A Operating Costs	192	338
Total G&A expenses	4,916	6,895

We expect our G&A expenses to remain lower in the second half of 2020 as we continue to apply tight controls over our controllable costs in the wake of the COVID-19 pandemic. In future periods, however,

we would anticipate that these costs would increase to support our growth and strategic positioning. Anticipated costs include those relating to:

- Our expansion strategy with potential acquisitions will maintain high legal, auditing and accountancy, and other professional G&A costs;
- Employee Stock Option Plan: grants to support our staff retention strategy will impact all cost categories including G&A
- To preserve the flexibility of our local entities, many of our staff are involved in projects covering sales & marketing, R&D and general and administrative fields. Where the allocation is not straightforward, these staff have been included entirely in G&A expenses.

Non-operating income and expenses

Income and expenditure resulting from non-operating activities increased by \$369,000 in the six months ended June 30, 2020 compared with the same period in 2019. The main reason for the reduction is contained within the non-operating expenses and non-operating income.

Our non-operating income decreased by \$814,000 principally due to reduced foreign exchange gains. This was offset by a similar reduction in our foreign exchange losses of \$646,000 that forms part of the reduction in our non-operating expenses of \$184,000, with the offset being due to the aforementioned reduction in the market value of our investment in OpenLimit, a provider of certified software for electronic signatures and identities with its registered office in Baar, Switzerland, which reduced by \$434,000 in the period to June 30, 2020 compared to a small increase of \$44,000 in the prior period.

The prior year included a one-off loss of \$233,000 on the extinguishment of the ExWorks Credit Facility, incurred upon repayment of the facility. This was offset by increased interest charges and debt discount amortization resulting from the charges relating to new facilities with Yorkville LLC and Crede Capital LLC, as well as the new loan taken out with ExWorks in April 2019. These facilities created an increase in interest expenditure and amortization of debt discounts of \$184,000.

Finally, the company made a gain on derivative liabilities of 44,000 during the six months to June 30, 2020 in comparison to a loss of \$80,000 in the same period last year. This is due to changes in the valuation of the derivative based upon the share price of the Group using a binomial lattice calculation.

Our Company regularly enters into loan and convertible loan agreements to finance its operations.

Outlook for H2 2020 and beyond

We have taken several initiatives to generate new revenue sources, grow our client base, increase awareness and expand our geographic footprint.

These initiatives include:

- Strategic investment in ARAGO GmbH and the launch of a Joint Venture, WISeAI representing the convergence of ARAGO's AI based Knowledge Automation and Data platform with WISeKey's Cybersecurity and IoT technologies on a joint platform.

- Launch of new proprietary solutions, including VaultiTrust, WISeID, and NanoSealRT: offering secure digital identities for critical applications such as smart grids, cloud security, drones, smart homes, Industry 4.0, consumer engagement, personal asset protection, anti-counterfeiting, and battery protection
- Development of modular Integrated Security Platforms that meet the need for easy to deploy security solutions that can be reconfigured to solve the unique challenges of market verticals
- Establishment of several partnerships with leading players in the Identity Management/IoT/Blockchain segment, together with joint ventures in Saudi Arabia and India which will provide new revenue streams and increased diversification

Non-GAAP Financial Measures

In managing WISeKey's business on a consolidated basis, WISeKey management develops an annual operating plan, which is approved by our Board of Directors, using non-GAAP financial measures. In measuring performance against this plan, management considers the actual or potential impacts on these non-GAAP financial measures from actions taken to reduce costs with the goal of increasing our gross margin and operating margin and when assessing appropriate levels of research and development efforts. In addition, management relies upon these non-GAAP financial measures when making decisions about product spending, administrative budgets, and other operating expenses. We believe that these non-GAAP financial measures, when coupled with the GAAP results and the reconciliations to corresponding GAAP financial measures, provide a more complete understanding of the Company's results of operations and the factors and trends affecting WISeKey's business. We believe that they enable investors to perform additional comparisons of our operating results, to assess our liquidity and capital position and to analyze financial performance excluding the effect of expenses unrelated to operations, certain non-cash expenses related to acquisitions and share-based compensation expense, which may obscure trends in WISeKey's underlying performance. This information also enables investors to compare financial results between periods where certain items may vary independent of business performance and allow for greater transparency with respect to key metrics used by management.

These non-GAAP financial measures are provided in addition to, and not as a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. The presentation of these and other similar items in WISeKey's non-GAAP financial results should not be interpreted as implying that these items are non-recurring, infrequent, or unusual.

Non-GAAP to GAAP Reconciliations

<u>Financial Reconciliation of GAAP to non-GAAP Results (unaudited)</u>	6 months to June 30,	6 months to June 30,
(Million US\$)	2020	2019
Operating loss as reported	(7.3)	(7.9)
Non-GAAP adjustments:		
Depreciation expense	0.4	0.4
Amortization expense on intangibles	0.3	0.3
EBITDA	(6.6)	(7.2)
Non-GAAP adjustments:		
Stock-based compensation	0.2	0.2
M&A-related legal fees	0.2	0.5
M&A-related professional fees	-	0.7
Adjusted EBITDA	(6.2)	(5.8)

GAAP to Non-GAAP Cash and cash equivalents

(Million US\$)	As at June 30, 2020	As at December 31, 2019
Cash and cash equivalents as reported	15.4	12.1
Restricted cash, current as reported	2.0	2.5
Restricted cash, noncurrent as reported	-	2.0
Total Cash and restricted cash	17.4	16.6



WIS@key

SECURING THE IOT REVOLUTION

WISeKey International Holding AG

Half-Year Report

January – June 2020

WISeKey International Holding AG

Unaudited Interim Consolidated Financial Statements

The page numbers below refer only to the F pages of the interim report.

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1. Unaudited Consolidated Statement of Comprehensive Income / (Loss)

USD'000	Unaudited 6 months ended June 30,		Note ref.
	2020	2019	
Net sales	8,024	12,469	26
Cost of sales	<u>(4,702)</u>	<u>(7,614)</u>	
Gross profit	3,322	4,855	
Other operating income	7	38	
Research & development expenses	(2,768)	(2,639)	
Selling & marketing expenses	(2,957)	(3,233)	
General & administrative expenses	<u>(4,916)</u>	<u>(6,895)</u>	
Total operating expenses	(10,634)	(12,729)	
Operating income / (loss)	(7,312)	(7,874)	
Non-operating income	275	1,089	29
Gain / (loss) on derivative liability	44	(80)	6/22
Gain / (loss) on debt extinguishment	-	(233)	22
Interest and amortization of debt discount	(239)	(143)	22
Non-operating expenses	<u>(1,651)</u>	<u>(1,835)</u>	30
Income / (loss) from continuing operations before income tax expense	(8,883)	(9,076)	
Income tax (expense)/recovery	<u>(2)</u>	<u>(1)</u>	
Income/ (loss) from continuing operations, net	(8,885)	(9,077)	
Discontinued operations:			28
Net sales from discontinued operations	-	1,934	
Cost of sales from discontinued operations	-	(791)	
Total operating and non-operating expenses from discontinued operations	-	(1,801)	
Income tax (expense)/recovery from discontinued operations	-	42	
Gain on disposal of a business, net of tax on disposal	-	31,100	
Income / (loss) on discontinued operations	-	30,484	
Net income / (loss)	(8,885)	21,407	
Less: Net income / (loss) attributable to noncontrolling interests	<u>(187)</u>	<u>(361)</u>	
Net income / (loss) attributable to WISEKey International Holding AG	(8,698)	21,768	
Earnings per share			
Earnings from continuing operations per share - Basic	(0.23)	(0.26)	32
Earnings from continuing operations per share - Diluted	(0.23)	(0.26)	32
Earnings from discontinued operations per share - Basic	-	0.86	32
Earnings from discontinued operations per share - Diluted	-	0.83	32
Earning per share attributable to WISEKey International Holding AG			
Basic	(0.22)	0.61	32
Diluted	(0.22)	0.60	32

USD'000	Unaudited 6 months ended June 30,		Note ref.
	2020	2019	
Other comprehensive income / (loss), net of tax:			
Foreign currency translation adjustments	571	(95)	
Net gain arising during period	204	108	
Other comprehensive income / (loss)	775	13	
Comprehensive income / (loss)	(8,110)	21,420	
Other comprehensive income / (loss) attributable to noncontrolling interests	(15)	(5)	
Other comprehensive income / (loss) attributable to WISeKey International Holding AG	790	18	
Comprehensive income / (loss) attributable to noncontrolling interests	(202)	(366)	
Comprehensive income / (loss) attributable to WISeKey International Holding AG	(7,908)	21,786	

The accompanying notes are an integral part of these consolidated financial statements.

2. Unaudited Consolidated Balance Sheet

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019	Note ref.
ASSETS			
Current assets			
Cash and cash equivalents	15,408	12,121	7
Restricted cash, current	2,001	2,525	8
Accounts receivable, net of allowance for doubtful accounts	2,683	3,770	9
Notes receivable from related parties	1	-	
Inventories	2,652	2,787	10
Contract assets	-	15	
Prepaid expenses	811	690	
Deferred charges, current	631	207	
Other current assets	1,012	1,469	11
Total current assets	25,199	23,584	
Noncurrent assets			
Restricted cash, noncurrent	-	2,000	8
Notes receivable, noncurrent	29	23	
Equity securities, at fair value	321	756	12
Deferred income tax assets	2	6	
Deferred tax credits	647	2,488	13
Property, plant and equipment net of accumulated depreciation	1,491	1,801	14
Intangible assets, net of accumulated amortization	304	600	15
Finance lease right-of-use assets	263	289	
Operating lease right-of-use assets	2,579	2,780	16
Goodwill	8,317	8,317	17
Deferred charges, noncurrent	171	30	
Equity securities, at cost	7,000	7,000	18
Other noncurrent assets	161	230	
Total noncurrent assets	21,285	26,320	
TOTAL ASSETS	46,484	49,904	
LIABILITIES			
Current Liabilities			
Accounts payable	10,744	10,713	19
Notes payable	4,107	4,104	20
Convertible note payable, current	3,073	3,226	22
Deferred revenue, current	44	89	26
Current portion of obligations under finance lease liabilities	108	103	16
Current portion of obligations under operating lease liabilities	591	556	16
Income tax payable	1	11	
Derivative liabilities	-	44	6
Other current liabilities	1,017	1,304	21
Total current liabilities	19,685	20,150	
Noncurrent liabilities			
Bonds, mortgages, convertible note payable and other long-term debt	604	-	
Deferred revenue, noncurrent	34	10	26
Finance lease liabilities, noncurrent	118	169	16
Operating lease liabilities, noncurrent	1,988	2,223	16
Employee benefit plan obligation	6,825	6,880	23
Other deferred tax liabilities	26	25	
Other noncurrent liabilities	8	3	
Total noncurrent liabilities	9,603	9,310	
TOTAL LIABILITIES	29,288	29,460	

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019	Note ref.
Commitments and contingent liabilities			24
SHAREHOLDERS' EQUITY			
Common stock - Class A	400	400	25
CHF 0.01 par value			
Authorized - 40,021,988 and 40,021,988 shares			
Issued and outstanding - 40,021,988 and 40,021,988 shares			
Common stock - Class B	1,776	1,475	25
CHF 0.05 par value			
Authorized - 50,426,719 and 41,066,298			
Issued - 34,617,813 and 28,824,086			
Outstanding - 31,812,269 and 27,621,895			
Share subscription in progress	2	6	
Treasury stock, at cost (2,805,544 and 1,202,191 shares held)	(217)	(1,288)	25
Additional paid-in capital	215,531	212,036	
Accumulated other comprehensive income / (loss)	(663)	(1,453)	
Accumulated deficit	(197,860)	(189,161)	
Total shareholders' equity (deficit) attributable to WISeKey shareholders	18,969	22,015	
Noncontrolling interests in consolidated subsidiaries	(1,773)	(1,571)	
Total shareholders' equity	17,196	20,444	
TOTAL LIABILITIES AND EQUITY	46,484	49,904	

The accompanying notes are an integral part of these consolidated financial statements.

3. Unaudited Consolidated Statements of Changes in Shareholders' Equity

USD'000	Number of common shares				Common Share Capital			Treasury Shares	Additional paid-in capital	Share subscription in progress	Accumulated deficit	Accumulated other comprehensive income / (loss)	Total stockholders' equity	Non controlling interests	Total equity
	Class A	Class B	Class A	Class B	Class A	Class B	Total share capital								
As at December 31, 2019	40,021,988	28,824,086	400	1,475	1,875	(1,288)	212,036	6	(189,161)	(1,453)	22,015	(1,571)	20,444		
Common stock issued ¹	-	3,378,788	-	178	178	-	-	-	-	-	178	-	178		
Options exercised	-	2,414,939	-	123	123	-	-	-	-	-	123	-	123		
Stock-based compensation	-	-	-	-	-	-	171	(5)	-	-	167	-	167		
Changes in treasury shares	-	-	-	-	-	(159)	-	-	-	-	(159)	-	(159)		
Yorkville SEDA	-	-	-	-	-	1,150	(726)	-	-	-	424	-	424		
Crede convertible loan	-	-	-	-	-	487	668	-	-	-	1,155	-	1,155		
LSI convertible loan	-	-	-	-	-	20	1,567	-	-	-	1,587	-	1,587		
Nice & Green loan	-	-	-	-	-	13	1,815	-	-	-	1,828	-	1,828		
Share buyback program	-	-	-	-	-	(441)	-	-	-	-	(441)	-	(441)		
Net loss	-	-	-	-	-	-	-	-	(8,698)	-	(8,698)	(187)	(8,885)		
Other comprehensive income / (loss)	-	-	-	-	-	-	-	-	-	790	790	(15)	775		
As at June 30, 2020	40,021,988	34,617,813	400	1,776	2,176	(217)	215,531	1	(197,860)	(663)	18,969	(1,773)	17,196		

The accompanying notes are an integral part of these consolidated financial statements.

4. Unaudited Consolidated Statements of Cash Flows

USD'000	Unaudited 6 months ended June 30,	
	2020	2019
Cash Flows from operating activities:		
Net Income (loss)	(8,885)	21,407
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation of property, plant & equipment	430	396
Amortization of intangible assets	302	270
Interest and amortization of debt discount	239	184
Loss / (gain) on derivative liability	(44)	80
Loss on debt extinguishment	-	1,326
Stock-based compensation	154	163
Bad debt expense	-	58
Inventory obsolescence impairment	(1)	293
Deferred tax asset write-off	-	-
Income tax expense / (recovery) net of cash paid	2	(39)
Release of provision	11	-
Other non cash expenses /(income)		
Expenses settled in equity	-	11
Gain on disposal of a business	-	(31,100)
Other	434	(32)
Unrealized and non cash foreign currency transactions	331	20
Changes in operating assets and liabilities, net of effects of businesses acquired		
Decrease (increase) in accounts receivables	1,088	(77)
Decrease (increase) in inventories	135	(77)
Decrease (increase) in other current assets, net	(75)	119
Decrease (increase) in deferred research & development tax credits, net	1,841	(550)
Decrease (increase) in other noncurrent assets, net	69	1
Increase (decrease) in accounts payable	30	(340)
Increase (decrease) in deferred revenue, current	(45)	637
Increase (decrease) in income taxes payable	(10)	(370)
Increase (decrease) in other current liabilities	(287)	(850)
Increase (decrease) in deferred revenue, noncurrent	24	-
Increase (decrease) in defined benefit pension liability	122	3
Increase (decrease) in other noncurrent liabilities	6	2,530
Net cash provided by (used in) operating activities	(4,129)	(5,937)
Cash Flows from investing activities:		
Sale / (acquisition) of equity securities	-	(4,000)
Sale / (acquisition) of property, plant and equipment	(22)	(69)
Sale of a business, net of cash and cash equivalents divested	-	40,919
Net cash provided by (used in) investing activities	(22)	36,850

USD'000	Unaudited 6 months ended June 30,	
	2020	2019
Cash Flows from financing activities:		
Proceeds from options exercises	103	3,412
Proceeds from issuance of Common Stock	1,516	-
Proceeds from convertible loan issuance	3,631	2,860
Proceeds from debt	572	4,030
Repayments of debt	(803)	(25,969)
Payments of debt issue costs	-	(2,755)
Repurchase of treasury shares	(600)	(536)
Net cash provided by (used in) financing activities	4,419	(18,958)
Effect of exchange rate changes on cash and cash equivalents	495	80
Cash and cash equivalents		
Net increase (decrease) during the period	763	12,035
Balance, beginning of period	16,646	11,154
Balance, end of period	17,409	23,189
Reconciliation to balance sheet		
Cash and cash equivalents from continuing operations	15,408	18,357
Restricted cash, current from continuing operations	2,001	2,832
Restricted cash, noncurrent from continuing operations	-	2,000
Cash and cash equivalents from discontinued operations	-	-
Balance, end of period	17,409	23,189
Supplemental cash flow information		
Cash paid for interest, net of amounts capitalized	220	384
Cash paid for incomes taxes	-	2
Noncash conversion of convertible loans into common stock	1,229	618
Restricted cash received for share subscription in progress	2	1
Purchase of equity securities	-	4,000
ROU assets obtained from finance lease	-	-
ROU assets obtained from operating lease	43	1,756

The accompanying notes are an integral part of these consolidated financial statements.

5. Notes to the Unaudited Consolidated Financial Statements

Note 1. The Group

WISeKey International Holding AG (the “**Company**”), together with its consolidated subsidiaries (“**WISeKey**” or “**the Group**” or “**the WISeKey Group**”), has its headquarters in Switzerland. WISeKey International Holding AG, the ultimate parent of the WISeKey Group, was incorporated in November 2015 and is listed on the Swiss Stock Exchange, SIX SAG with the valor symbol “WIHN” since March 2016 and on the NASDAQ Capital Market exchange with the valor symbol “WKEY” since December 2019.

The Group develops, markets, hosts and supports a range of solutions that enable the secure digital identification of people, content and objects, by generating digital identities that enable its clients to monetize their existing user bases and at the same time, expand its own eco-system. WISeKey generates digital identities from its current products and services in Cybersecurity Services, IoT (internet of Things), Digital Brand Management and Mobile Security.

The Group leads a carefully planned vertical integration strategy through acquisitions of companies in the industry. The strategic objective is to provide integrated services to its customers and also achieve cross-selling and synergies across WISeKey. Through this vertical integration strategy, the Group anticipates being able to generate profits in the near future.

Note 2. Future Operations

The Group experienced a loss from operations in this reporting period. Although the WISeKey Group does anticipate being able to generate profits in the near future, this cannot be predicted with any certainty. The accompanying consolidated financial statements have been prepared assuming that the Group will continue as a going concern.

The Group incurred a net operating loss of USD 7.3 million and had positive working capital of USD 3.7 million as at June 30, 2020. Based on the Group’s cash projections for the next 12 months to September 30, 2021, it has sufficient cash reserves to fund its operations and financial commitments. Historically, the Group has been dependent on equity financing to augment the operating cash flow to cover its cash requirements. Any additional equity financing may be dilutive to shareholders.

In the year 2019, the Group secured two loans: (a) a Convertible Loan Agreement (the “Yorkville Convertible Loan”) with YA II PN, Ltd. a fund managed by Yorkville Advisors Global, LLC (“Yorkville”) for an amount of USD 3.5 million, with an interest rate of 6% per annum, repayable by August 01, 2020 in monthly instalments starting August 01 2019 either in cash or in WIHN class B Shares, and (b) a credit agreement between WISeCoin AG and ExWorks in an amount of USD 4 million, repayable by April 04, 2020, with an annual interest rate of 10%, secured with the shares of WISeCoin AG whereby ExWorks has an option to convert principal repayment, interest charges and fees into WISeSecurity Tokens issued by WISeCoin AG. As at June 30, 2020, the ExWorks loan had not been repaid and the outstanding borrowings were USD 4,030,000, meaning that the loan is past due under the terms of the credit agreement with ExWorks (see Note 22 for further details.) WISeCoin AG has so far not issued any WISeSecurity Tokens.

In the six months to June 30, 2020, WISeKey signed a new convertible loan agreement with Yorkville for a total amount of USD 4 million repayable in monthly instalments starting March 30, 2020 in cash or, at Yorkville’s election, in class B shares. The new convertible loan agreement bears an interest rate of 6% per annum payable monthly in arrears and matures on April 30, 2021. This new agreement replaces the existing Yorkville Convertible Loan signed on June 27, 2019. The remaining balance of USD 2.3 million under the Yorkville Convertible Loan was rolled over into the new agreement, which means that the loan generated a net cash inflow of USD 1.7 million.

These loans demonstrate the availability of lenders to support the WISeKey Group in its activities and development. See Note 22 for detail on these loans.

On January 19, 2016, the Group entered into a Share Subscription Facility (the “**Share Subscription Facility**”, the “**GEM Facility**”) with GEM LLC (Global Equity Markets, “**GEM**”) which is a CHF 60.0 million facility over 5 years (expiring on January 19, 2021) and allows the Group to draw down funds at its option in exchange for newly issued or existing WIHN class B shares (see Note 22 for detail). The mechanics of the facility allow us to draw down an amount in a range related to the trading volume and price of the WIHN class B share trading on the SIX Swiss Stock Exchange. The drawdown amount is based on 90% of the average closing price of the last 15 trading days multiplied by 1,000% of the average volume of the last 15 trading days. GEM can then elect to purchase between 50% and 200% of this figure. In the six months to June 30, 2020, WISeKey made no drawdowns under the GEM Facility. Therefore, as at June 30, 2020, the outstanding facility available remained CHF 56.1 million.

On February 08, 2018 the Group entered into a Standby Equity Distribution Agreement (“**SEDA**”) with a fund managed by Yorkville (see Note 22 for detail). Pursuant to the SEDA, Yorkville commits to provide equity financing to WISeKey in the aggregate amount of up to CHF 50.0 million in exchange for newly issued or existing Class B Shares over a three-year period, extended to March 31, 2023 in March 2020. Provided that a sufficient number of Class B Shares is provided as security to Yorkville, WISeKey has the right to make drawdowns under the SEDA, at its discretion, by requesting Yorkville to subscribe for (if the Class B Shares are issued out of authorized share capital) or purchase (if the Class B Shares are delivered out of treasury) Class B Shares worth up to CHF 5.0 million by drawdown, subject to certain exceptions and limitations. In the year 2018, WISeKey made four drawdowns under the SEDA Facility, for a total amount of CHF 1.7 million. In the year 2019, WISeKey made five drawdowns for a total amount of CHF 1.1 million.

In the six months to June 30, 2020, WISeKey made two drawdowns for a total amount of CHF 0.5 million. As at June 30, 2020, the outstanding equity financing available was CHF 46.6 million.

On December 16, 2019, WISeKey entered into a Convertible Term Loan Facility Agreement (the “**LSI Convertible Facility**”) with Long State Investment Limited (“**LSI**”), a Hong Kong-based investment company, to borrow up to CHF 30.0 million (see Note 22 for detail.) Under the terms

of the LSI Convertible Facility, WISEKey will be able to drawdown individual term loans of up to CHF 500,000 or, if so agreed between the parties, up to CHF 2.5 million at an interest rate of 1.5% p.a., up to an aggregate amount of CHF 30 million over a commitment period of 24 months. LSI will have the right to convert a drawdown tranche into existing or newly issued WIHN class B shares or, if so agreed among the parties and permitted by law, into American Depositary Shares (“ADSs”) representing WIHN class B shares, within a period of 21 SIX trading days after each individual drawdown at 95% of the higher of (i) the then prevailing market rate and (ii) the minimum conversion price of CHF 1.80. Any term loan not converted by LSI initially will automatically convert into WIHN class B shares, or (to the extent permissible under applicable securities laws) ADSs, 20 SIX trading days before the expiration of the commitment period at the applicable conversion price. Under certain circumstances, interest payments may be “paid in kind” by capitalizing such interest and adding to it the aggregate principal balance of the loan outstanding. As at June 30, 2020, the Group has made no drawdowns under the facility and so the outstanding facility available was CHF 30.0 million.

On May 18, 2020, the Group entered into an Agreement for the Issuance and Subscription of Convertible Notes (the “**Nice & Green Facility**”) with Nice & Green SA (see Note 22 for detail.) Pursuant to the Nice & Green Facility, Nice & Green SA commits to subscribe for up to CHF 10.0 million of Convertible Notes over a two-year period. The Nice & Green Facility allows the Group to subscribe for funds based upon 60% of the traded volume of the WIHN class B share on the SIX Swiss Stock Exchange over the five SIX Swiss Exchange trading days preceding the subscription date. Nice & Green then provides the funding in exchange for Convertible Notes which are exchangeable for newly issued or existing WIHN Class B shares at Nice & Green’s request. In the six months to June 30, 2020, WISEKey made one drawdown for a total amount of CHF 1.9 million. As at June 30, 2020, the outstanding facility available was CHF 8.1 million.

The GEM Facility, the Nice & Green facility and the SEDA will be used as a safeguard should there be any additional cash requirements beyond those included in the Group’s projected requirements.

Based on the foregoing, Management believe it is correct to present these figures on a going concern basis.

Note 3. Basis of Presentation

The consolidated financial statements are prepared in United States dollars (“**USD**”) on the basis of generally accepted accounting principles in the United States of America (“**US GAAP**”).

The accompanying unaudited interim consolidated financial statements have been prepared by management in accordance with ASC 270 Interim Reporting and, as a consequence, do not include all information and footnotes required by US GAAP and should, therefore, be read in conjunction with the Group’s consolidated financial statements for the year ended December 31, 2019 included in the Annual Report 2019.

These statements do include all normal recurring adjustments which the Group believes necessary for a fair presentation of the statements.

The interim results of operations are not necessarily indicative of the results to be expected for the full year ended December 31, 2020.

Except as indicated in the notes below, there have been no other material changes in the information disclosed in the notes to the consolidated financial statements included in the Group’s Annual Report 2019 for the year ended December 31, 2019.

Note 4. Summary of Significant Accounting Policies

Recent Accounting Pronouncements

Adoption of new FASB Accounting Standard in the current year – Prior-Year Financial Statements not restated:

In 2020, the Group adopted ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies the disclosure requirements on fair value measurements in Topic 820 as follows:

The following disclosure requirements were removed from Topic 820:

- The amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy; The policy for timing of transfers between levels;
- The valuation processes for Level 3 fair value measurements;

The following disclosure requirements were added to Topic 820:

- The changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period; and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) in lieu of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements. There was no material impact on the Group’s disclosures in 2020 upon adoption of the new standard.

As of January 1, 2020, the Group adopted Accounting Standards Update ASU 2016-13, Financial Instruments - Credit Losses, which requires the measurement of expected lifetime credit losses, rather than incurred losses, for financial instruments held at the reporting date based on historical experience, current conditions and reasonable forecasts. There was no material impact on the Group’s results upon adoption of the standard.

The Group also adopted ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments, Codification improvements, which clarifies and improves areas of guidance related to the recently issued standards on credit losses, hedging, and recognition and measurement of financial instruments to ASU 2016-01, 2016-13 & 2017-12. Since issuance of these standards, the FASB has identified areas that need clarification and correction, resulting in changes similar to those issues under its ongoing Codification improvements.

There was no material impact on the Group’s results of operations in 2020 upon adoption of the new standard.

New FASB Accounting Standard to be adopted in the future:

In August 2018, The FASB issued ASU 2018-14, Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): *Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans*.

Summary: ASU 2018-14 applies to all employers that sponsor defined benefit pension or other postretirement plans. The amendments modify the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans.

ASU 2018-14 deletes the following disclosure requirements:

The amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year; the amount and timing of plan assets expected to be returned to the employer; related party disclosures about the amount of future annual benefits covered by insurance and annuity contracts and significant transactions between the employer or related parties and the plan.

For public entities, the effects of a one-percentage-point change in assumed health care cost trend rates on the (a) aggregate of the service and interest cost components of net periodic benefit costs and (b) benefit obligation for postretirement health care benefits.

ASU 2018-14 adds/clarifies disclosure requirements related to the following:

The weighted-average interest crediting rates for cash balance plans and other plans with promised interest crediting rates; An explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period; The projected benefit obligation (PBO) and fair value of plan assets for plans with PBOs in excess of plan assets; The accumulated benefit obligation (ABO) and fair value of plan assets for plans with ABOs in excess of plan assets.

Effective Date: The amendments are effective for fiscal years ending after December 15, 2020 for public business entities. Early adoption is permitted. The Group expects to adopt all of the aforementioned guidance when effective. Management does not expect the aforementioned guidance to have an impact on its consolidated financial statements, other than the required changes in disclosures.

In December 2019, The FASB issued Accounting Standards Update (ASU) no 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes (the ASU), as part as part of its overall simplification initiative to reduce costs and complexity of applying accounting standards while maintaining or improving the usefulness of the information provided to users of financial statements. The FASB's amendments primarily impact ASC 740, Income Taxes, and may impact both interim and annual reporting periods.

It eliminates the need for an organization to analyze whether the following apply in a given period:

- Exception to the incremental approach for intraperiod tax allocation;
- Exceptions to accounting for basis differences when there are ownership changes in foreign investments; and
- Exception in interim period income tax accounting for year-to-date losses that exceed anticipated losses.

The ASU also improves financial statement preparers' application of income tax-related guidance and simplifies GAAP for:

- Franchise taxes that are partially based on income;
- Transactions with a government that result in a step up in the tax basis of goodwill;
- Separate financial statements of legal entities that are not subject to tax; and
- Enacted changes in tax laws in interim periods.

Effective Date: The amendments related to ASU 2019-12 are effective for public business entities for annual reporting periods beginning after December 15, 2020, and interim periods within those reporting periods. Early adoption is permitted in any interim or annual period, with any adjustments reflected as of the beginning of the fiscal year of adoption.

The Company expects to adopt all of the aforementioned guidance when effective. Management is assessing the impact of the aforementioned guidance on its consolidated financial statements but does not expect it to have a material impact.

Note 5. Concentration of Credit Risks

Financial instruments that are potentially subject to credit risk consist primarily of cash and cash equivalents and trade accounts receivable. Our cash is held with large financial institutions. Management believes that the financial institutions that hold our investments are financially sound and accordingly, are subject to minimal credit risk. Deposits held with banks may exceed the amount of insurance provided on such deposits.

The Group sells to large, international customers and, as a result, may maintain individually significant trade accounts receivable balances with such customers during the year. We generally do not require collateral on trade accounts receivable.

Summarized below are the clients whose revenue or trade accounts receivable balances were 10% or higher than the respective total consolidated net sales and trade accounts receivable balance for the 6 months to June 30, 2020 and 2019, and as at June 30, 2020 and December 31, 2019, respectively:

	Revenue concentration (% of total net sales)		Receivables concentration (% of total accounts receivable)	
	6 months ended June 30, 2020 (unaudited)	6 months ended June 30, 2019 (unaudited)	As at June 30, 2020 (unaudited)	As at December 31, 2019
IoT operating segment				
Multinational electronics contract manufacturing company	17%	12%	14%	19%
International luxury watch company	0%	5%	8%	13%
International packaging solutions, technology and chips	13%	12%	7%	0%
International equipment and software manufacturer	4%	10%	6%	11%

Note 6. Fair value measurements

ASC 820 establishes a three-tier fair value hierarchy for measuring financial instruments, which prioritizes the inputs used in measuring fair value. These tiers include:

- Level 1, defined as observable inputs such as quoted prices in active markets;
- Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and
- Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

USD'000	As at June 30, 2020		As at December 31, 2019		Fair value level	Note ref.
	Carrying amount	Fair value	Carrying amount	Fair value		
<i>Nonrecurring fair value measurements</i>						
Accounts receivable	2,683	2,683	3,770	3,770	3	9
Notes receivable from related parties	1	1	-	-	3	
Notes receivable, noncurrent	29	29	23	23	3	
Equity securities, at cost	7,000	7,000	7,000	7,000	3	18
Accounts payable	10,744	10,744	10,713	10,713	3	19
Notes payable	4,107	4,107	4,104	4,104	3	20
Convertible note payable, current	3,073	3,073	3,226	3,226	3	22
Convertible note payable, noncurrent	-	-	-	-	3	22
<i>Recurring fair value measurements</i>						
Equity securities, at fair value	321	321	756	756	1	12
Derivative liabilities, current	-	-	44	44	3	6

In addition to the methods and assumptions we use to record the fair value of financial instruments as discussed in the Fair Value Measurements section above, we used the following methods and assumptions to estimate the fair value of our financial instruments:

- Accounts receivable – carrying amount approximated fair value due to their short-term nature.
- Notes receivable from related parties – carrying amount approximated fair value due to their short-term nature.
- Notes receivable, noncurrent- carrying amount approximated fair value.
- Equity securities, at cost - no readily determinable fair value, measured at cost minus impairment
- Accounts payable – carrying amount approximated fair value due to their short-term nature.
- Notes payable – carrying amount approximated fair value.
- Convertible note payable current and noncurrent- carrying amount approximated fair value.
- Equity securities, at fair value - fair value remeasured as at reporting period.
- Derivative liabilities, current - fair value remeasured as at reporting

Derivative liabilities

In 2020, the Group held one derivative instrument which was measured at estimated fair value on a recurring basis and linked to the embedded conversion option in the Yorkville Convertible Loan signed on March 04, 2020 (see Note 22).

The convertible note has a maturity date of April 30, 2021. It contains a conversion option into WIHN Class B shares at the election of the holder, which may be exercised at each monthly repayment date, covering any amount outstanding (principal and/or interests) that may be settled. The exercise price is set at CHF 3.00 with antidilution provision adjustments as further described in Note 22.

In line with ASU 2014-16, the convertible note was assessed as a hybrid instrument, being a debt instrument with an equity-linked component (the conversion option). Per ASC 815-10, the embedded conversion option met the definition of a derivative and was accounted for separately. The hosting debt instrument was recorded using the residual method.

The derivative component (the conversion option) was fair valued using a binomial lattice model, building in quoted market prices of WIHN class B shares, and inputs such as time value of money, volatility, and risk-free interest rates. It was valued at inception at USD nil. The derivative component will be revalued at fair value at each reporting date in line with ASC 815-15-30-1.

As at June 30, 2020, the full principal amount was still outstanding and no conversion rights had been exercised. The derivative components was measured at fair value at the reporting date at USD nil. Therefore, for the six months to June 30, 2020, a gain on the derivative of USD 43,655 was recorded in the income statement. Debt discount amortization of USD 30,652 was recorded for the period between the inception of the Yorkville Convertible Loan (March 04, 2020) and the period end (June 30, 2020).

Derivative liabilities	USD'000
Balance as at December 31, 2019	44
Fair value of the derivative instrument (conversion option)	-
Gain on derivative recognized as a separate line in the statement of loss	(44)
Balance as at June 30, 2020	-

Note 7. Cash and cash equivalents

Cash consists of deposits held at major banks.

Note 8. Restricted cash

Restricted cash as at June 30, 2020 is made up of:

- USD 2 million of the consideration for the sale of QuoVadis which is held in an escrow account, and to be fully released on January 16, 2021 (see Note 28 for further details), and
- A balance of USD 984 on the liquidity account funded by WISEKey in relation to the ADR buy-back scheme operated by a US bank on behalf of WISEKey. This was paused on May 15, 2020.

Note 9. Accounts receivable

The breakdown of the accounts receivable balance is detailed below:

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Trade accounts receivable	2,632	3,643
Allowance for doubtful accounts	(35)	(25)
Accounts receivable from other related parties	71	119
Other accounts receivable	14	33
Total accounts receivable net of allowance for doubtful accounts	2,682	3,770

The accounts receivable from other related parties consist of balances with OISTE & Wei Wang as further detailed in Note 34.

Note 10. Inventories

Inventories consisted of the following:

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Raw materials	898	636
Work in progress	1,754	2,151
Total inventories	2,652	2,787

Note 11. Other current assets

Other current assets consisted of the following:

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Value-Added Tax receivable	886	1,449
Advanced payment to suppliers	113	7
Deposits, current	10	9
Other current assets	4	4
Total other current assets	1,013	1,469

Note 12. Equity securities, at fair value

On March 29, 2017, the Group announced that the respective boards of directors of WISEKey and OpenLimit Holding AG (DE: O5H) ("OpenLimit") had decided that discussions in relation to a possible merger transaction between WISEKey and OpenLimit as previously announced on 25 July 2016 were not being further pursued. The then current interim financing provided by WISEKey to OpenLimit in a principal amount of EUR 750,000 was, in accordance with applicable terms of a convertible loan agreement, converted into OpenLimit Shares issued by OpenLimit out of its existing authorized share capital. The conversion price was set at 95% of the volume weighted average price ("VWAP") of the OpenLimit shares traded on XETRA as reported by the XETRA for the ten trading days immediately preceding and including March 29, 2017. WISEKey had received 2,200,000 newly issued fully fungible listed OpenLimit Shares representing – post issuance of these new shares – an 8.4% stake in OpenLimit on an issued share basis. The conversion price was EUR 0.3409. The equity securities were fair valued at market price on the date of the transaction to USD 846,561.

As at June 30, 2020, the fair value was recalculated using the closing market price on the XETRA of EUR 0.13 (USD 0.1461) and amounted to USD 321,310. The difference of USD 434,492 from the fair value at December 31, 2019 (USD 755,802) was accounted for in the income statement as a non-operational loss in the 6 months to June 30, 2020.

Note 13. Deferred tax credits

Deferred tax assets consisted of the following:

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Deferred research & development tax credits	645	2,487
Deferred other tax credits	2	1
Total deferred tax credits	647	2,488

WISeKey Semiconductors SAS and WISeCoin France R&D Lab SAS are eligible for Research tax credits provided by the French government. As of June 30, 2020, and December 31, 2019, the receivable balance in respect of these Research tax credits was respectively of USD 277,289 and USD 1,934,539 for WISeKey Semiconductors SAS, and USD 368,126 and USD 552,067 for WISeCoin France R&D Lab SAS. The credit is deductible from the entity's income tax charge for the year or payable in cash the following year, whichever event occurs first. It is shown under noncurrent deferred tax assets in line with ASU 2015-17.

Note 14. Property, plant and equipment

Property, plant and equipment, net consisted of the following.

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Machinery & equipment	3,907	4,029
Office equipment and furniture	2,749	2,505
Computer equipment and licences	1,100	1,069
Total property, plant and equipment gross	7,756	7,603
<i>Accumulated depreciation for:</i>		
Machinery & equipment	(2,835)	(2,508)
Office equipment and furniture	(2,369)	(2,270)
Computer equipment and licences	(1,061)	(1,024)
Total accumulated depreciation	(6,265)	(5,802)
Total property, plant and equipment from continuing operations, net	1,491	1,801
Depreciation charge from continuing operations for the 6 months to June 30,	430	821

No depreciation expense was recorded in cost of sales on the face of the income statement for the years 2020 and 2019.

Note 15. Intangible assets

Intangible assets, net consisted of the following.

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Trademarks	133	130
Patents	2,281	2,281
License agreements	10,962	10,758
Other intangibles	6,268	6,152
Total intangible assets gross	19,644	19,321
<i>Accumulated amortization for:</i>		
Trademarks	(133)	(129)
Patents	(1,982)	(1,683)
License agreements	(10,957)	(10,757)
Other intangibles	(6,268)	(6,152)
Total accumulated amortization	(19,340)	(18,721)
Total intangible assets from continuing operations, net	304	600
Amortization charge from continuing operations for the 6 months to June 30,	302	534

Future amortization charges are detailed below:

Future estimated aggregate amortization expense from continuing operations		USD'000
Year		
	2020	304
Total intangible assets, net		304

Note 16. Leases

WISeKey has historically entered into a number of lease arrangements under which it is the lessee. WISeKey holds one finance lease, eight operating leases and four short-term leases. The finance lease is for equipment in the Company's IT Data Center, two of the operating leases are for photocopiers, one of the short-term leases is for a vehicle, whilst all the remaining leases relate to premises. We do not sublease. All of our operating leases include multiple optional renewal periods.

We have elected the short-term lease practical expedient related to leases of various premises and equipment. We have elected the practical expedients related to lease classification of leases that commenced before the effective date of ASC 842.

During the six months ended June 30, 2020 and 2019, we recognized rent expense associated with our leases as follows:

USD'000	Unaudited 6 months ended June 30	
	2020	2019
<i>Finance lease cost:</i>		
Amortization of right-of-use assets	32	-
Interest on lease liabilities	6	-
<i>Operating lease cost:</i>		
Fixed rent expense	293	270
Short-term lease cost	18	57
Net lease cost	349	327
Lease cost - Cost of sales	-	-
Lease cost - General & administrative expenses	349	327
Net lease cost	349	327

During the six months ended June 30, 2020 and 2019, we had the following cash and non-cash activities associated with our leases:

USD'000	As at June 30,
	2020
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from finance leases	57
Operating cash flows from operating leases	301
Financing cash flows from finance leases	-
Non-cash investing and financing activities :	
Net lease cost	349
<i>Additions to ROU assets obtained from:</i>	
New finance lease liabilities	-
New operating lease liabilities	43

*In line with the new standard ASC 842 "Leases" and its transition guidance, we considered all leases as new leases in 2019.

As at June 30, 2020, future minimum annual lease payments were as follows:

Year	USD'000 Operating	USD'000 Short-term	USD'000 Finance	USD'000 Total
2020	302	3	59	364
2021	561	-	117	678
2022	372	-	59	431
2023	294	-	-	294
2024 and beyond	1,338	-	-	1,338
Total future minimum operating and short-term lease payments	2,867	3	235	3,105
Less effects of discounting	(288)	-	(9)	(297)
Less effects of practical expedient	-	(3)	-	(3)
Lease liabilities recognized	2,579	-	226	2,805

In line with ASU 2018-11, future minimum lease payments under legacy ASC 840 are disclosed in the table below:

Year	USD'000
2020	364
2021	678
2022	431
2023	294
2024 and beyond	1,338
Total future minimum operating and short-term lease payments	3,105
Less effects of discounting	(300)
Lease liabilities recognized	2,805

As of June 30, 2020, the weighted-average remaining lease term for all operating leases is 6.9 years and 2.0 years for our finance lease.

For our finance lease, the implicit rate was calculated as 5.17%. For our operating leases and because we generally do not have access to the rate implicit in the lease, we utilize our incremental borrowing rate as the discount rate. The weighted average discount rate associated with operating leases as of June 30, 2020, is 3.0%.

Note 17. Goodwill

We test goodwill for impairment annually on October 1 or as and when indicators of impairment arise. After a review of the incoming orders and order backlog, we performed an annual impairment test as at October 1, 2019. As at December 31, 2019, the fair value of the net assets of the reporting unit concerned by goodwill was superior to the carrying value of the net assets and goodwill allocated. After October 1, 2019, there were no impairment indicators identified triggering a new impairment test. Therefore, no impairment loss was recorded in the six months to June 30, 2020.

USD'000	IoT Segment
Goodwill balance as at December 31, 2019	8,317
Goodwill acquired during the year	-
Impairment losses	-
As a June 30, 2020	
Goodwill	8,317
Accumulated impairment losses	-
Goodwill balance as at June 30, 2020	8,317

Note 18. Equity securities, at cost

On September 27, 2018 WISEKey purchased a warrant agreement in Tarmin Inc. from ExWorks as part of the eleventh amendment of the ExWorks Credit Agreement (see Note 22). As a result, WISEKey entered into a warrant agreement (the "Tarmin Warrant") with Tarmin Inc. ("Tarmin"), a private Delaware company, leader in data & software defined infrastructure to acquire 22% of common stock deemed outstanding at the time of exercise. The warrant may be exercised in parts or in full, at an exercise price of USD 0.01 per share at nominal value USD 0.0001. The purchase price of the Tarmin Warrant was USD 7,000,000, of which USD 3,000,000 was paid in cash on October 05, 2018 and the remaining USD 4,000,000 was paid on April 08, 2019.

The Tarmin Warrant was assessed as an equity investment without a readily determinable fair value and we elected the measurement at cost less impairment, adjusted for observable price changes for identical or similar investments of the same issuer as permitted by ASU 2016-01. As such, the Tarmin Warrant was initially recognized on the balance sheet at USD 7,000,000.

As at June 30, 2020, we performed a qualitative assessment to consider potential impairment indicators and did not identify impairment indicators. Therefore, no impairment loss was recorded in the six months to June 30, 2020. We also made reasonable efforts to identify any observable transactions of identical or similar investments of Tarmin, but did not identify any transaction requiring an adjustment to the carrying value of the Tarmin Warrant as at June 30, 2020. Therefore, the carrying value of the Tarmin Warrant as at June 30, 2020 was USD 7,000,000.

Note 19. Accounts payable

The current accounts payable consisted of the following.

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Trade creditors	5,416	5,482
Factors or other financial institutions for borrowings	(25)	888
Accounts payable to Board Members	8	117
Accounts payable to other related parties	182	2
Accounts payable to underwriters, promoters, and employees	3,317	2,229
Other accounts payable	1,846	1,995
Total accounts payable	10,744	10,713

Accounts payable to Board Members are made up of accrued board fees. See Note 34 for details.

Accounts payable to other related parties is made up of a CHF 172,320 (USD 181,972) payable balance to OISTE foundation. See Note 34 for details.

Accounts payable to employees consist primarily of holiday, bonus and 13th month accruals across WISEKey.

Other accounts payable are mostly amounts due or accrued for professional services (e.g. legal, accountancy, and audit services) and accruals of social charges in relation to the accrued liability to employees.

Note 20. Notes payable

Notes payable consisted of the following

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Short-term loan	4,030	4,021
Short-term loan from shareholders	77	82
Total notes payable	4,107	4,103

As at June 30, 2020, the current notes payable balance was made up of:

- a USD 4,030,000 short-term loan with ExWorks. See detail in Note 22.
- short-term loans from the non-controlling shareholders of WISEKey SAARC for a total amount of USD 76,693 at closing rate (USD 82,268 as at December 31, 2019). These loans do not bear interests.

The weighted-average interest rate on current notes payable, excluding loans from shareholders at 0%, was respectively 10% per annum as at June 30, 2020 and December 31, 2019.

Note 21. Other current liabilities

Other current liabilities consisted of the following:

USD'000	As at June 30, 2020 (unaudited)	As at December 31, 2019
Value-Added Tax payable	365	706
Other tax payable	83	65
Customer contract liability, current	291	255
Other current liabilities	278	278
Total other current liabilities	1,017	1,304

Note 22. Loans and line of credit

Share Subscription Facility with GEM LLC

On January 19, 2016 the Group entered into a Share Subscription Facility (“the **GEM Facility**”) with GEM LLC, (Global Equity Markets, “**GEM**”), which is a CHF 60 million facility over five years and allows the Group to draw down funds at its option in exchange for newly issued or existing WIHN class B shares. The mechanics of the facility allow us to draw down an amount in a range related to the trading volume and price of the WIHN class B share trading on the Swiss SIX Stock Exchange. The drawdown amount is based on 90% of the average closing price of the last 15 trading days multiplied by 1,000% of the average volume of the last 15 trading days. GEM can then elect to purchase between 50% and 200% of this figure.

In 2017, WISEKey made three drawdowns for a total of CHF 3,905,355 in exchange for a total of 825,000 WIHN class B shares issued out of authorized share capital.

There were no drawdowns made in 2018, in 2019 or in the six months to June 30, 2020.

Therefore, as at June 30, 2020 the outstanding facility available is CHF 56,094,645.

Standby Equity Distribution Agreement with YA II PN, Ltd.

On February 08, 2018 WISEKey entered into a Standby Equity Distribution Agreement with a fund managed by Yorkville Advisors Global, LLC. Under the terms of the SEDA as amended, Yorkville has committed to provide WISEKey, upon a drawdown request by WISEKey, up to CHF 50,000,000 in equity financing over a three-year period ending March 01, 2021, extended to March 2023 in March 2020. Provided that a sufficient number of Class B Shares is provided as security to Yorkville, WISEKey has the right to make drawdowns under the SEDA, at its discretion, by requesting Yorkville to subscribe for (if the Class B Shares are issued out of authorized share capital) or purchase (if the Class B Shares are delivered out of treasury) Class B Shares worth up to CHF 5,000,000 by drawdown, subject to certain exceptions and limitations (including the exception that a drawdown request by WISEKey shall in no event cause the aggregate number of Class B Shares held by Yorkville to meet or exceed 4.99% of the total number of shares registered with the commercial register of the Canton of Zug). The purchase price will be 93% of the relevant market price at the time of the drawdown, determined by reference to a five-day trading period following the draw down request by WISEKey.

The instrument was assessed under ASC 815 as an equity instrument. WISEKey paid a one-time commitment fee of CHF 500,000 (USD 524,231 at historical rate) on April 24, 2018 in 100,000 WIHN Class B Shares. In line with ASU 2015-15 the commitment fee was capitalized as deferred charges to be amortized over the duration of the contract as a reduction of equity.

In 2018, WISEKey made 4 drawdowns for a total of CHF 1,749,992 (USD 1,755,378 at historical rate) in exchange for a total of 540,539 WIHN class B shares issued out of authorized share capital or treasury share capital.

In 2019, WISEKey made the following drawdowns:

- On January 08, 2019 one drawdown for CHF 250,000 (USD 245,125 at historical rate) in exchange for 97,125 WIHN class B shares issued out of treasury share capital.
- On August 15, 2019 one drawdown for CHF 250,000 (USD 256,187 at historical rate) in exchange for 120,250 WIHN class B shares issued out of treasury share capital.
- On September 17, 2019 one drawdown for CHF 199,999 (USD 202,520 at historical rate) in exchange for 84,281 WIHN class B shares issued out of treasury share capital.
- On October 10, 2019 one drawdown for CHF 249,999 (USD 249,999 at historical rate) in exchange for 111,012 WIHN class B shares issued out of treasury share capital.
- On November 07, 2019 one drawdown for CHF 157,933 (USD 157,933 at historical rate) in exchange for 78,146 WIHN class B shares issued out of treasury share capital.

The amortization charge for the capitalized fee recognized in APIC amounted to USD 183,631 for the year to December 31, 2019 and the remaining deferred charge balance was USD 214,322 made up of USD 184,134 current and USD 30,188 noncurrent.

As at December 31, 2019 the outstanding equity financing available was CHF 47,142,077.

In 2020, WISEKey made the following drawdowns:

- On April 16, 2020 one drawdown for CHF 250,000 (USD 259,250 at historical rate) in exchange for 306,372 WIHN class B shares issued out of treasury share capital.
- On May 15, 2020 one drawdown for CHF 249,433 (USD 256,417 at historical rate) in exchange for 343,572 WIHN class B shares issued out of treasury share capital.

The amortization charge for the capitalized fee recognized in APIC amounted to USD 91,564 for the 6 months to June 30, 2020 and the remaining deferred charge balance was USD 122,758 which was all current.

As at June 30, 2020 the outstanding equity financing available was CHF 46,642,644 (USD 49,255,285.)

Facility and Convertible Loan Agreement with YA II PN, Ltd.

On September 28, 2018 WISEKey entered a facility and convertible loan agreement with Yorkville to borrow USD 3,500,000 repayable by May 01, 2019 in monthly cash instalments starting in November 2018. The loan bears an interest rate of 4% per annum payable monthly in arrears. A fee of USD 140,000 and debt issuance costs of USD 20,000 paid at inception.

The debt instrument was assessed as a term debt. A discount of USD 160,000 was recorded at inception and will be amortized using the effective interest method over the life of the debt.

On June 27, 2019, WISEKey entered into a Convertible Loan Agreement with Yorkville to borrow USD 3,500,000 repayable by August 01, 2020 in monthly instalments starting in August 01, 2019 either in cash or, at the sole election of Yorkville, in newly issued or existing WIHN class B Shares. The loan bears an interest rate of 6% per annum payable monthly in arrears. Total fees of USD 160,000 were paid at inception. The conversion option into existing or newly issued WIHN Class B shares is exercisable at the election of Yorkville and may be exercised at each monthly repayment date, covering any amount outstanding, be it principal and/or accrued interests. The initial exercise price is set at CHF 3.00 per WIHN class B Share but may be adjusted as a result of specific events so as to prevent any dissolution effect. The events triggering anti-dilution adjustments are: (a) increase of capital by means of capitalization of reserves, profits or premiums by distribution of WIHN Shares, or division or consolidation of WIHN Shares, (b) issue of WIHN shares or other securities by way of conferring subscription or purchase rights, (c) spin-offs and capital distributions other than dividends, and (d) dividends.

At the date of inception of the Yorkville Convertible Loan, on June 27, 2019, an unpaid balance of USD 500,000 remained on the Yorkville Loan. There was no unamortized debt discount on the Yorkville Loan as it was amortized in accordance with the planned repayment schedule, i.e. by May 01, 2019.

In line with ASC 470-50, we compared the present value of the new debt (the Yorkville Convertible Loan) to the present value of the old debt (the Yorkville Loan) using the net method and concluded that the difference was below the 10% threshold. Therefore the Yorkville Convertible Loan was analyzed as a debt modification and accounted for under ASC 470-50-40-14.

In line with ASU 2014-16, the convertible note was assessed as a hybrid instrument, being a debt instrument with an equity-linked component (the conversion option). Per ASC 815-10, the embedded conversion option met the definition of a derivative and was accounted for separately, thereby creating a debt discount.

The derivative liability component (the conversion option) was fair valued using a binomial lattice model, building in quoted market prices of WIHN class B shares, and inputs such as time value of money, volatility, and risk-free interest rates. It was valued at inception at USD 257,435, and was allocated between current and noncurrent on a prorata temporis basis according to the monthly repayment schedule. The derivative component will be revalued at fair value at each reporting date in line with ASC 815-15-30-1.

On the date of the agreement, WISEKey signed an option agreement granting Yorkville the option to acquire up to 500,000 WIHN class B shares at an exercise price of CHF 3.00, exercisable between June 27, 2019 and June 27, 2022. In order to prevent any dilution effect, the exercise price may be adjusted as a result of the same specific events listed above as adjustments to the conversion price of the principal amount. In line with ASC 470-20-25-2, the proceeds from the convertible debt with a detachable warrant was allocated to the two elements based on the relative fair values of the debt instrument net of the warrant and the embedded conversion separated out on the one side, and the warrant at time of issuance on the other side. The option agreement was assessed as an equity instrument and was fair valued at grant for an amount of USD 373,574 using the Black-Scholes model and the market price of WIHN class B shares on the date of grant, June 27, 2019, of CH 2.35. The fair value of the debt was calculated using the discounted cash flow method as USD 3,635,638. Applying the relative fair value method per ASC 470-20-25-2, the recognition of the option agreement created a debt discount on the debt host in the amount of USD 326,126, and the credit entry was booked in APIC.

As a result of the above accounting entries, the total debt discount recorded at inception was USD 743,561, made up of USD 160,000 fees to Yorkville, USD 257,435 from the bifurcation of the embedded conversion option into derivative liabilities, and USD 326,126 from the recognition of the warrant agreement.

As at December 31, 2019, WISEKey had repaid USD 1,162,607 and the principal amount outstanding was USD 2,337,393 with an unamortized debt discount of USD 275,296.

On March 04, 2020, WISEKey entered into the new Yorkville Convertible Loan, a Convertible Loan Agreement with Yorkville to borrow USD 4,000,000 repayable by April 30, 2020 in monthly instalments starting on March 31, 2020 either in cash or in WIHN class B Shares. The loan bears an interest rate of 6% per annum payable monthly in arrears. Total fees of USD 68,000 will be paid in monthly instalments over the life of the loan.

The conversion option into newly issued or existing WIHN Class B shares is exercisable at the election of Yorkville and may be exercised at each monthly repayment date, covering any amount outstanding, be it principal and/or accrued interests. The initial exercise price is set at CHF 3.00 per WIHN class B Share but may be adjusted as a result of specific events so as to prevent any dilution effect. The events triggering anti-dilution adjustments are: (a) increase of capital by means of capitalization of reserves, profits or premiums by distribution of WIHN Shares, or division or consolidation of WIHN Shares, (b) issue of WIHN shares or other securities by way of conferring subscription or purchase rights, (c) spin-offs and capital distributions other than dividends, and (d) dividends.

At the date of inception of the new Yorkville Convertible Loan, on March 04, 2020, an unpaid balance of USD 2,300,000 remained on the Yorkville Loan. There was an unamortized debt discount of USD 104,469 on the old Yorkville Loan.

In line with ASC 470-50, we compared the present value of the new debt (the Yorkville Convertible Loan) to the present value of the old debt (the Yorkville Loan) using the net method and concluded that the difference was below the 10% threshold. Therefore the Yorkville Convertible Loan was analyzed as a debt modification and accounted for under ASC 470-50-40-14.

In line with ASU 2014-16, the convertible note was assessed as a hybrid instrument, being a debt instrument with an equity-linked component (the conversion option). Per ASC 815-10, the embedded conversion option met the definition of a derivative and was accounted for separately, thereby creating a debt discount.

The derivative liability component (the conversion option) was fair valued using a binomial lattice model, building in quoted market prices of WIHN class B shares, and inputs such as time value of money, volatility, and risk-free interest rates. It was valued at inception at USD nil. The derivative component will be revalued at fair value at each reporting date in line with ASC 815-15-30-1 and will be allocated between current and noncurrent on a prorata temporis basis according to the monthly repayment schedule.

As at June 30, 2020, WISEKey had repaid USD 765,667 and the principal amount outstanding was USD 3,234,333 with an unamortized debt discount of USD 161,817, and no conversion rights had been exercised. The derivative component was measured at fair value at the reporting date at USD nil. Therefore, for the six months to June 30, 2020, WISEKey recorded in the income statement, a net loss on derivative of USD 43,655.

For the six months to June 30, 2020, the Group recorded in the income statement a net debt discount amortization expense of USD 201,476.

Convertible Loan with Crede CG III, Ltd

On September 28, 2018 the Group entered into a Convertible Loan Agreement with Crede CG III, Ltd for an amount of USD 3,000,000. The funds were made available on October 31, 2018. The loan bears a 10% p.a. interest rate, payable in arrears on a quarterly basis starting December 31, 2018, and is repayable in WIHN class B Shares any time between November 30, 2018 and the maturity date of September 28, 2020, at Crede's election. Accrued interests are payable, at WISEKey's sole election, either in cash or in WIHN class B Shares. The conversion price applicable to the prepayment of the principal amount or accrued interest is calculated as 93% of the average of the two lowest daily volume-weighted average prices quoted on the SIX Stock Exchange during the 10 Trading Days immediately preceding the relevant conversion date or interest payment date respectively, disregarding any day on which Crede (or its Affiliates or related party) has effected any trade, converted into USD at the exchange rate reported by Bloomberg on the relevant conversion date or interest payment date. As at December 31, 2018 the full amount of USD 3 million remained outstanding and accrued interest of USD 50,833 were recognized in the income statement.

Due to Crede's option to convert the loan in part or in full at any time before maturity, the Crede Convertible Loan was assessed as a share-settled debt instrument with an embedded put option. Because the value that Crede will receive at settlement does not vary with the value of the shares, the settlement provision is not considered a conversion option. We assessed the put option under ASC 815 and concluded that it is clearly and closely related to its debt host and therefore did not require bifurcation. Per ASC 480-10-25, the Crede Convertible Loan was accounted for as a liability measured at fair value using the discounted cash flow method at inception.

On the date of the agreement, WISEKey signed an option agreement granting Crede the option to acquire up to 408,247 WIHN class B shares at an exercise price of CHF 3.84, exercisable between October 31, 2018 and October 29, 2021. Per the option agreement's term, the date of grant under US GAAP is October 29, 2018. In line with ASC 470-20-25-2, the proceeds from the convertible debt with a detachable warrant was allocated to the two elements based on the relative fair values of the debt instrument without the warrant and of the warrant at time of issuance. The option agreement was assessed as an equity instrument and was fair valued at grant for an amount of USD 408,056 using the Black-Scholes model and the market price of WIHN class B shares on the date of grant, October 29, 2018, of CH 3.06. The fair value of the debt was calculated using the discounted cash flow method as USD 2,920,556. Applying the relative fair value method per ASC 470-20-25-2, the recognition of the option agreement created a debt discount on the debt host in the amount of USD 367,771, and the credit entry was booked in APIC.

In 2019, Crede issued six exercise notices, resulting in the following conversions:

- On January 03, 2019 for 30,000 WHIN class B shares delivered on January 08, 2019 for a conversion of USD 73,559.
- On January 15, 2019 for 100,000 WHIN class B shares delivered on January 17, 2019 for a conversion of USD 265,099.
- On February 19, 2019 for 100,000 WHIN class B shares delivered on February 26, 2019 for a conversion of USD 279,525.
- On June 24, 2019 for 100,000 WHIN class B shares delivered on July 01, 2019 for a conversion of USD 208,755.
- On September 03, 2019 for 300,000 WHIN class B shares delivered on September 09, 2019 for a conversion of USD 640,934.
- On December 03, 2019 for 150,000 WHIN class B shares delivered on December 09, 2019 for a conversion of USD 303,228.

As at December 31, 2019, the principal amount outstanding was USD 1,228,899, and the unamortized debt discount USD 64,971.

In line with ASC 470-20-50-5, as at December 31, 2019, the amount by which the instrument's if-converted value exceeds its principal amount is USD 318,270.

In the 6 months to June, 2020, Crede issued three exercise notices, resulting in the following conversions:

- On January 09, 2020 for 150,000 WHIN class B shares delivered on January 14, 2020 for a conversion of USD 259,436.
- On April 03, 2020 for 200,428 WHIN class B shares delivered on April 06, 2020 for a conversion of USD 152,490.
- On June 15, 2020 for 970,555 WHIN class B shares delivered on June 15, 2020 for a conversion of USD 816,974.

As at June 30, 2020, the principal amount outstanding was nil (\$0). For the six months to June 30, 2020, the Group recorded a net debt discount amortization expense in the income statement of USD 29,055.

Credit Agreement with ExWorks Capital Fund I, L.P

On April 04, 2019 WISECoin AG ("**WISECoin**"), an affiliate of the Company, signed a credit agreement with ExWorks. Under this credit agreement, WISECoin was granted a USD 4,000,000 term loan and may add up to USD 80,000 accrued interest to the loan principal, hence a maximum loan amount of USD 4,080,000. The loan bears an interest rate of 10% p.a. payable monthly in arrears. The maturity date of the arrangement is April 04, 2020 therefore all outstanding balances are classified as current liabilities in the balance sheet. ExWorks can elect to have part of or all of the principal loan amount and interests paid either in cash or in WISECoin Security Tokens (the "**WCN Token**") as may be issued by WISECoin from time to time. As at June 30, 2019, the conversion price is set at CHF 12.42 per WCN Token based on a non-legally binding term sheet. As at June 30, 2020, WISECoin has not issued any WCN Tokens.

Under the terms of the credit agreement, WISECoin is required to not enter into agreements that would result in liens on property, assets or controlled subsidiaries, in indebtedness other than the exceptions listed in the credit agreement, in mergers, consolidations, organizational

changes except with an affiliate, contingent and third party liabilities, any substantial change in the nature of its business, restricted payments, insider transactions, certain debt payments, certain agreements, negative pledge, asset transfer other than sale of assets in the ordinary course of business, or holding or acquiring shares and/or quotas in another person other than WISECoin R&D. Furthermore, WISECoin is required to maintain its existence, pay all taxes and other liabilities.

Borrowings under the line of credit are secured by first ranking security interests on all material assets and personal property of WISECoin, and a pledge over the shares in WISECoin representing 90% of the capital held by the Company. Under certain circumstances, additional security may be granted over the intellectual property rights of WISECoin and WISECoin R&D, and the shares held by WISECoin in WISECoin R&D.

Total debt issue costs of USD 160,000 were recorded as debt discount and amortized over the duration of the loan. An unamortized debt discount of USD 8,657 remained as at December 31, 2019.

As at December 31, 2019, outstanding borrowings were USD 4,030,129.

In the six months to June 30, 2020, WISEKey recorded a total debt amortization charge of USD 8,657 and the debt discount was fully amortized as at June 30, 2020.

As at June 30, 2020, the loan had not been repaid and the outstanding borrowings were USD 4,030,000, meaning that the loan is past due under the terms of the credit agreement with ExWorks. The Company is currently in negotiation with ExWorks regarding a potential sale of its investment in Tarmin, a Company in which ExWorks is also a significant shareholder. It is the view of the management of the Company that the sale of the investment in Tarmin and the repayment of the credit agreement are codependent and therefore the loan will be repaid at such time as the investment is sold. ExWorks continue to charge interest on the loan at the rate of 10% p.a. and has not launched any formal recovery proceedings as of the date of this report.

Credit Agreement with Long State Investment Limited

On December 16, 2019, WISEKey entered into a Convertible Term Loan Facility Agreement (the “**LSI Convertible Facility**”) with Long State Investment Limited (“**LSI**”), a Hong Kong-based investment company, to borrow up to CHF 30 million. Under the terms of the LSI Convertible Facility, WISEKey will be able to drawdown individual term loans of up to CHF 500,000 or, if so agreed between the parties, up to CHF 2.5 million at an interest rate of 1.5% p.a., up to an aggregate amount of CHF 30 million over a commitment period of 24 months. LSI will have the right to convert a drawdown tranche into WIHN class B shares or, if so agreed among the parties and permitted by law, into American Depositary Shares (“**ADSs**”) representing WIHN class B shares, within a period of 21 SIX Swiss Exchange trading days after each individual drawdown at 95% of the higher of (i) the then prevailing market rate and (ii) the minimum conversion price of CHF 1.80. Any term loan not converted by LSI initially will automatically convert into WIHN class B shares, or ADSs, 20 SIX Swiss Exchange trading days before the expiration of the commitment period at the applicable conversion price. Under certain circumstances, interest payments may be “paid in kind” by capitalizing such interest and adding to it the aggregate principal balance of the loan outstanding.

Under the arrangement, WISEKey and LSI originally planned to establish a joint venture in Hong Kong in the first quarter of 2020 to focus on business opportunities in Asia. Due to the COVID-19 pandemic, this has been delayed although the memorandum of understanding executed between WISEKey and LSI to that effect remains in place.

Due to LSI’s option to convert the loan in part at each drawdown before maturity, the LSI Convertible Facility was assessed as a debt instrument with an embedded put option. We assessed the put option under ASC 815 and concluded that it is clearly and closely related to its debt host and therefore did not require bifurcation. Per ASC 480-10-25, the LSI Convertible Facility will be accounted for as a liability measured at cost for each term loan (corresponding to each drawdown).

As at December 31, 2019, debt issue costs corresponding to CHF 22,230 in legal fees were recorded as a deferred asset by WISEKey to execute the LSI Convertible Facility. Also, per the terms of the LSI Convertible Facility, WISEKey owed LSI a CHF 10,000 expense allowance and a commitment fee payable in 400,000 WIHN class B shares, which were settled in January 2020. The debt issue costs and commitment fee were recorded as a debt discount proportionately to each drawdown. As at June 30, 2020, WISEKey had not yet drawn down on the LSI Convertible Facility, therefore, in application of ASC 340-10-S99-1, WISEKey accounted for the debt issue costs of USD 679,445 as a deferred asset to be amortized on a straight-line basis over the access period of the LSI Convertible Facility.

As at December 31, 2019 the outstanding LSI Convertible Facility available was CHF 30 million.

As at June 30, 2020 the outstanding LSI Convertible Facility available was CHF 30.0 million (USD 31.7 million.)

Credit Agreement with Nice & Green SA

On May 18, 2020, the Group entered into an Agreement for the Issuance and Subscription of Convertible Notes (the “**Nice & Green Facility**”) with Nice & Green SA. Pursuant to the Nice & Green Facility, Nice & Green SA commits to subscribe for up to CHF 10.0 million of Convertible Notes over a two-year period. The Nice & Green Facility allows the Company to subscribe for funds based upon 60% of the traded volume of the WIHN class B share on the SIX Swiss Stock Exchange over the 5 trading days preceding the subscription date. Nice & Green then provides the funding in exchange for Convertible Notes which are exchangeable for WIHN Class B shares at Nice & Green’s request. In the six months to June 30, 2020, WISEKey made one drawdown for a total amount of CHF 1.9 million. As at June 30, 2020, the outstanding facility available was CHF 8.1 million.

Due to Nice & Green’s option to convert the loan in part at any time before maturity, and as there is no limit on the number of shares to be delivered, the Nice & Green Facility was assessed as a debt instrument with an embedded put option. We assessed the put option under ASC 815 and concluded that it is clearly and closely related to its debt host and therefore did not require bifurcation. Per ASC 480-10-25, the Nice & Green Facility will be accounted for as a liability measured at cost for each term loan (corresponding to each drawdown).

As at June 30, 2020, debt issue costs corresponding to CHF 34,436 in legal fees were recorded in the income statement by WISEKey to execute the Nice & Green Facility. Also, per the terms of the Nice & Green Facility, WISEKey pays to Nice & Green a commitment fee of 5% of the amount of each subscription, payable in cash. The commitment fee will be recorded as a debt discount proportionately to each drawdown.

During the six months to June 30, 2020, the Group made one subscription under the terms of the agreement as follows:

- On June 17, 2020 for CHF 1,931,355 (USD 2,029,927 at historical rate.)

During the six months to June 30, 2020, Nice & Green issued one conversion notice, resulting in the following conversions:

- On June 18, 2020 for 2,313,000 WHIN class B shares delivered on June 18, 2020 for a conversion of CHF 1,931,355 (USD 2,030,992 at historical rate.)

During the six months to June 30, 2020, no debt discount charge was amortized to the income statement and commitment fees of CHF 96,568 (USD 101,977) were booked to the capital accounts as per ASC 470-02-40-4. There was no unamortized debt discount outstanding at June 30, 2020.

As at June 30, 2020 the outstanding LSI Convertible Facility available was CHF 8,068,645 (USD 8,520,602).

Loan Agreement with UBS SA

On March 26, 2020, two members of the Group entered into Agreements to borrow funds under the Swiss Government supported COVID-19 Credit Facility (the "**Covid loans**") with UBS SA. Under the terms of the Agreement, UBS has lent such Group members a total of CHF 571,500 (USD 594,879 at historical rate.) The loan is repayable in full on March 30, 2025, being the fifth anniversary of the date of deposit of the funds by UBS, although UBS reserves the right to implement instalments before this date. The interest rate is determined by Swiss COVID-19 Law and currently carries an interest rate of 0%. There were no fees or costs attributed to the loan and as such there is no debt discount of debt premium associated with the loan facility.

Under the terms of the loans, the relevant companies are required to use the funds solely to cover the liquidity requirements of the Company. In particular, the Company cannot use the funds for new investments in fixed assets which do not constitute replacement investments; the distribution of dividends and directors' fees as well as the repayment of capital contributions, the granting of active loans; refinancing of private or shareholder loans; the repayment of intra-group loans; or the transfer of guaranteed loans to a group company not having its registered office in Switzerland, whether directly or indirectly linked to applicant.

As at June 30, 2020, the outstanding balance on the loan was CHF 571,500 (USD 603,512).

Note 23. Employee Benefit Plans

Defined Benefit Post-retirement Plan

The group maintains two pension plans: one maintained by WISeKey SA covering its employees in Switzerland, and a second one maintained by WISeKey Semiconductors SAS covering its French employees.

All plans are considered defined benefit plans and accounted for in accordance with ASC 715 Compensation – Retirement Benefits. This model allocates pension costs over the service period of employees in the plan. The underlying principle is that employees render services rateably over this period, and therefore, the income statement effects of pensions should follow a similar pattern ASC 715 requires recognition of the funded status or difference between the fair value of plan assets and the projected benefit obligations of the pension plan on the balance sheet, with a corresponding adjustment recorded in the net loss. If the projected benefit obligation exceeds the fair value of the plan assets, then that difference or unfunded status represents the pension liability.

The Group records a net periodic pension cost in the statement of comprehensive loss.

The liabilities and annual income or expense of the pension plan are determined using methodologies that involve several actuarial assumptions, the most significant of which are the discount rate and the long-term rate of asset return (based on the market-related value of assets). The fair value of plan assets are determined based on prevailing market prices.

The defined benefit pension plan maintained by WISeKey Semiconductors SAS and its obligations to employees in terms of retirement benefits are limited to a lump sum payment based on remuneration and length of service, determined for each employee. The plan is not funded.

The pension liability calculated as at June 30, 2020 is based on annual personnel costs and assumptions from December 31, 2019.

The expected future cash flows to be paid by the Group for employer contribution for the year ended December 31, 2020 are USD 1,336,588.

Movement in Funded Status USD'000	6 months ended	6 months ended
	June 30, 2020	June 30, 2019
Net Service cost	206	264
Interest cost/(credit)	24	66
Expected return on Assets	-	-
Amortization on Net (gain)/loss	123	36
Amortization on Prior service cost/(credit)	30	31
Total Net Periodic Benefit Cost/(credit)	383	397
Employer contributions paid in the period	(173)	(200)
Total Cashflow	(173)	(200)

All of the assets are held under the collective contract by the plan's re-insurer company and are invested in a mix of Swiss and International bond and equity securities.

Note 24. Commitments and contingencies

Lease Commitments

The future payments due under leases are shown in Note 16.

Guarantees

Our software and hardware product sales agreements generally include certain provisions for indemnifying customers against liabilities if our products infringe a third party's intellectual property rights. Certain of our product sales agreements also include provisions indemnifying customers against liabilities in the event we breach confidentiality or service level requirements. It is not possible to determine the maximum potential amount under these indemnification agreements due to our lack of history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. To date, we have not incurred any costs as a result of such indemnifications and have not accrued any liabilities related to such obligations in our consolidated financial statements.

Note 25. Stockholders' equity

WSeKey International Holding AG	As at June 30, 2020		As at December 31, 2019	
	Class A Shares	Class B Shares	Class A Shares	Class B Shares
Share Capital				
Par value per share (in CHF)	0.01	0.05	0.01	0.05
Share capital (in USD)	400,186	1,775,702	400,186	1,475,000
<i>Per Articles of association and Swiss capital categories</i>				
Authorized Capital - Total number of authorized shares	-	12,808,906	-	8,881,829
Conditional Share Capital - Total number of conditional shares	-	15,808,906	-	11,840,090
Total number of fully paid-in shares	40,021,988	34,617,813	40,021,988	28,824,086
<i>Per US GAAP</i>				
Total number of authorized shares	40,021,988	50,426,719	40,021,988	41,066,298
Total number of fully paid-in issued shares	40,021,988	34,617,813	40,021,988	28,824,086
Total number of fully paid-in outstanding shares	40,021,988	31,812,269	40,021,988	27,621,895
Par value per share (in CHF)	0.01	0.05	0.01	0.05
Share capital (in USD)	400,186	1,775,702	400,186	1,475,000
Total share capital (in USD)	2,175,888		1,875,186	
Treasury Share Capital				
Total number of fully paid-in shares held as treasury shares	-	2,805,544	-	1,202,191
Treasury share capital (in USD)	-	217,258	-	1,288,591
Total treasury share capital (in USD)	-	217,258	-	1,288,591

Note: unregistered conversion of conditional capital NOT deducted from total number of conditional shares, i.e. as if the issue had not taken place.

In the period to June 30, 2020, WISEKey purchased a total of 3,257,053 treasury shares at an average purchase price of USD 0.18 per share, and sold a total of 1,653,700 treasury shares at an average sale price of USD 1.02 per share.
 In 2019, WISEKey purchased a total 593,824 treasury shares at an average purchase price of USD 2.75 per share, and sold a total of 1,479,694 treasury shares at an average sale price of USD 2.40 per share.

Note 26. Revenue

Disaggregation of revenue

The following table shows the Company's revenues disaggregated by reportable segment and by product or service type:

Disaggregation of revenue	Typical payment	At one point in time		Over time		Total	
		6 months ended June 30, 2020	6 months ended June 30, 2019	6 months ended June 30, 2020	6 months ended June 30, 2019	6 months ended June 30, 2020	6 months ended June 30, 2019
USD'000							
IoT Segment							
<i>Payment at one point in time:</i>							
Secure chips	Upon delivery	7,825	11,332	-	-	7,825	11,332
Total IoT segment revenue		7,825	11,332	-	-	7,825	11,332
mPKI Segment							
Certificates	Upon issuance	-	-	-	-	-	-
Licenses and integration	Upon delivery	104	650	-	-	104	650
SaaS, PCS and hosting	Quarterly or yearly	-	-	95	487	95	487
Total mPKI segment revenue		104	650	95	487	199	1,137
Total Revenue		7,929	11,982	95	487	8,024	12,469

For the periods ended June 30, 2020 and 2019, the Company recorded no revenues related to performance obligations satisfied in prior periods.

The following table shows the Company's revenues disaggregated by geography, based on our customers' billing addresses:

Net sales by region	6 months ended June 30,	
	2020	2019
USD'000		
IoT Segment		
Switzerland	-	291
Rest of EMEA	2,773	4,165
North America	4,302	5,369
Asia Pacific	709	1,389
Latin America	41	118
Total IoT segment revenue	7,825	11,332
mPKI Segment		
Switzerland	143	641
Rest of EMEA	49	448
North America	-	-
Asia Pacific	7	27
Latin America	-	21
Total mPKI segment revenue	199	1,137
Total Net sales	8,024	12,469

*EMEA includes Europe, Africa and Middle-east

Contract assets and deferred revenue

Our contract assets and deferred revenue consist of:

Contract assets and contract liabilities

USD'000	As at June 30, 2020	As at December 31, 2019
Trade accounts receivables		
Trade accounts receivable - IoT segment	2,298	2,843
Trade accounts receivable - mPKI segment	344	800
Total trade accounts receivables	2,642	3,643
Contract assets	-	15
Total contract assets	-	15
Contract liabilities - current	141	255
Contract liabilities - noncurrent	159	2
Total contract liabilities	300	257
Deferred revenue		
Deferred revenue - mPKI segment	74	92
Deferred revenue - IoT segment	4	7
Total Deferred revenue	78	99
Revenue recognized in the year from amounts included in the deferred revenue of the mPKI segment at the beginning of the year	111	83

Increases or decreases in trade accounts receivable, contract assets and deferred revenue were primarily due to normal timing differences between our performance and customer payments.

Remaining performance obligations

As of June 30, 2020, approximately USD 377'707 is expected to be recognized from remaining performance obligations for mPKI contracts. We expect to recognize revenue for these remaining performance obligations during the next three years approximately as follows:

Estimated mPKI revenue from remaining performance obligations as at June 30, 2020	USD'000
2020	334
2021	41
2022	2
Total remaining performance obligation	377

Note 27. Stock-based compensation

Employee Stock Option Plans

The Stock Option Plan ("ESOP 1") was approved on December 31, 2007 by the stockholders of WISEKey SA, representing 2'632'500 options convertible into WISEKey SA shares with an exercise price of CHF 0.01 per share.

The Stock Option Plan ("ESOP 2") was approved on December 31, 2011 by the stockholders of WISEKey SA, representing 16'698'300 options convertible into WISEKey SA shares with an exercise price of CHF 0.01 per share.

At March 22, 2016 as part of the reverse acquisition transaction, both ESOP plans in existence in WISEKey SA were transferred to the Group at the same terms, with the share exchange term of 5:1 into WIHN Class B shares.

Grants

In the 6 months to June 30, 2020, the Group granted a total of 226,996 options, each option being exercisable into one class B share, as per below.

The options granted consist of:

- 10,521 options with immediate vesting granted to external advisors, none of which had been exercised as of June 30, 2020;
- 166,475 warrants with immediate vesting granted to employees, 5,381 of which had been exercised as of June 30, 2020; and
- 50,000 options with conditional vesting granted to an employee, which has not yet vested as of June 30, 2020.

The options granted were valued at grant date using the Black-Scholes model.

Stock Option Charge to the Income Statement

The Group calculates the fair value of options granted by applying the Black-Scholes option pricing model. Expected volatility is based on historical volatility of WIHN class B shares.

The following assumptions were used to calculate the compensation expense and the calculated fair value of stock options granted:

Assumption	June 30, 2020	June 30, 2019
Dividend yield	None	None
Risk-free interest rate used (average)	1.00%	1.00%
Expected market price volatility	37.61%	56.86%
Average remaining expected life of stock options (years)	2.09	3.60

Unvested options to employees as at June 30, 2020 were recognized prorata temporis over the service period (grant date to vesting date).

As a result, in the 6 months to June 30, 2020, a total charge of USD 171,248 for options granted to employees and nonemployees was recognized in the consolidated income statement calculated by applying the Black-Scholes model at grant.

The following table illustrates the development of the Group's non-vested options during the 6 months ended June 30, 2020.

Non-vested options	Number of WIHN Class B Shares under options	Weighted-average grant date fair value (USD)
Non-vested options as at December 31, 2019	5,026	3.65
Granted	226,996	1.00
Vested	(176,996)	0.80
Non-vested forfeited or cancelled	-	-
Non-vested options as at June 30, 2020	55,026	1.86

As at June 30, 2020, there was an unrecognized compensation expense of USD 6,820 related to non-vested stock option based on compensation arrangements.

The following table summarizes the Group's stock option activity for the 6 months ended June 30, 2020.

Options on WIHN Shares	WIHN Class B Shares under options	Weighted-average exercise price (USD)	Weighted average remaining contractual term (in years)	Aggregate intrinsic value (USD)
Outstanding as at December 31, 2019	2,843,115	0.99	5.19	3,693,941
Of which vested	2,838,089	1.00	5.19	3,682,672
Of which non-vested	5,026	-	-	-
Granted	226,996	1.50	-	-
Exercised or converted	(1,171,576)	1.55	-	2,684,725
Forfeited or cancelled	-	-	-	-
Expired	-	-	-	-
Outstanding as at June 30, 2020	1,898,535	1.50	4.73	1,596,299
Of which vested	1,843,509	1.55	4.69	1,470,204
Of which non-vested	55,026	-	-	-

Summary of Stock-Based Compensation Expenses

Stock-based compensation expenses	6 months ended	6 months ended
USD'000	June 30, 2020	June 30, 2019
In relation to Employee Stock Option Plans (ESOP)	171	149
In relation to non-ESOP Option Agreements	-	14
Total	171	163

Stock-based compensation expenses are recorded under the following expense categories in the income statement:

Stock-based compensation expenses	6 months ended	6 months ended
USD'000	June 30, 2020	June 30, 2019
Research & development expenses	2	(26)
Selling & marketing expenses	146	(108)
General & administrative expenses	23	297
Total	171	163

Note 28. Divestiture and Discontinued operations

Classification as discontinued operations of the QuoVadis Group

On December 21, 2018 the Group signed a sale and purchase agreement (the "SPA") to sell WISEKey (Bermuda) Holding Ltd and its affiliates to Digicert Inc, excluding the ISTANA product line. The group subsidiaries making up the QuoVadis Group in scope for the sale were WISEKey (Bermuda) Holding Ltd, QuoVadis Trustlink Schweiz AG, WISEKey (UK) Ltd, QuoVadis Trustlink BVBA, QuoVadis Trustlink BV, QV BE BV, QuoVadis Trustlink GmbH, QuoVadis Services Ltd, and QuoVadis Ltd.

The completion of the sale was conditional on: (i) the release of liens on QuoVadis companies held by ExWorks; (ii) consent from Edmund Gibbons Ltd, the joint venture partner holding 49% of QuoVadis Services Ltd; (iii) consent from the Bermuda Monetary Authority; and (iv) consent from the Regulatory Authority in Bermuda (the "RAB") (the "RAB Consent") to the change in ultimate beneficial ownership of QuoVadis Services Ltd, being the entity holding the Communications Operating Licence in Bermuda. The SPA states that should the RAB Consent not have been obtained when the other completion conditions are satisfied, WISEKey or Digicert Inc may require to complete the transaction except for QuoVadis Services Ltd, in which case the transfer of ownership of all QuoVadis entities to Digicert Inc would occur except for the shares held by WISEKey (Bermuda) Holding Ltd in QuoVadis Services Ltd which would be transferred to WISEKey International Holding AG until the RAB Consent is obtained.

We assessed the SPA under ASC 205 and concluded that the operation met the requirement to be classified as held for sale and as such qualifies as a discontinued operation from the date of the SPA, December 21, 2018. In line with ASC 205-20-45-3A and ASC 205-20-45-10 respectively, we reported the results of the discontinued operations as a separate component of income for the six months to June 30, 2020 and 2019, and we classified their assets and liabilities separately as held for sale in the balance sheet for the year to December 31, 2018. No gain or loss on classification as held for sale was recorded in 2018.

The table below shows the reconciliation of the major classes of line items constituting income / (loss) on discontinued operations to the income / (loss) on discontinued operations reported in discontinued operations in the income statement:

USD'000	6 months ended June 30, 2020	6 months ended June 30, 2019
Net sales from discontinued operations	-	1,934
Cost of sales from discontinued operations	-	(791)
Gross profit	-	1,143
Research & development expenses	-	(121)
Selling & marketing expenses	-	(143)
General & administrative expenses	-	(337)
Non-operating income	-	36
Non-operating expenses	-	(103)
Gain / (loss) on debt extinguishment	-	(1,093)
Interest and amortization of debt discount	-	(41)
Gain on disposal of a business	-	31,100
Total operating and non-operating expenses from discontinued operations	-	29,299
Income / (loss) from discontinued operations before income tax	-	30,442
Income tax (expense) / recovery from discontinued operations	-	42
Income / (loss) on discontinued operations	-	30,484
Less: Net income on discontinued operations attributable to noncontrolling interests	-	58
Net income / (loss) on discontinued operations attributable to WISeKey International Holding AG	-	30,426

In line with ASC 205, the depreciation of property, plant and equipment from discontinued operations stopped on the day that they qualified as held for sale. As a result, we did not record any depreciation charge from discontinued operations for the six months ended June 30, 2019.

In line with ASC 205, the amortization of intangible assets from discontinued operations stopped on the day that they qualified as held for sale. As a result, we did not record any amortization charge from discontinued operations for the six months ended June 30, 2019.

WISeKey considered guidance on allocation of interest to discontinued operations per ASC 205-20-45-6 to 205-20-45-8. In the year 2017, the Group secured an acquisition line of credit agreement with ExWorks with an annual interest rate of 12% (see note 24 for detail). The purpose of this line of credit was the acquisition of the QuoVadis group which was completed on April 03, 2017. Although the debt and interest on debt will not be assumed by Digicert Inc nor is required to be repaid upon disposal, we have assessed that the amount of debt and related interest contracted for the acquisition of the QuoVadis Group is not directly attributable to or related to other operations of WISeKey, and elected to allocate those interests relating to the debt to acquire QuoVadis to discontinued operations. We reviewed the method of allocation based on net assets proposed under ASC 205-20-45-7 and considered that such allocation would not provide meaningful results because it would spread the interest onto other operations of the entity to which the interest is not directly attributable or related. Therefore, WISeKey further elected to apply ASC 205-20-45-8 and to allocate interest to the discontinued operations based on the debt that can be identified as specifically attributed to the operations of QuoVadis.

The interest amounts allocated to and included in discontinued operations was USD 1,233,324 for the six months ended June 30, 2019.

In previous annual and interim reports, the results of the discontinued operations were included in the mPKI segment.

The table below shows the total operating and investing cash flows of the discontinued operation:

USD'000	6 months ended June	6 months ended June
	30, 2020	30, 2019
Net cash provided by (used in) operating activities	-	783

Divestiture of the QuoVadis Group

The sale was completed on January 16, 2019, when all QuoVadis entities except QuoVadis Services Ltd were transferred to Digicert Inc. The transfer of ownership of QuoVadis Services Ltd was conditional on receiving the consent from the Regulatory Authority in Bermuda (the "RAB") (the "RAB Consent") to the change in ultimate beneficial ownership of QuoVadis Services Ltd, being the entity holding the Communications Operating Licence in Bermuda. The RAB Consent was obtained in February 2019 and the transfer of ownership of QuoVadis Services Ltd from WISEKey to Digicert Inc. was effective on February 28, 2019. We assessed the SPA under ASC 810-10-40-6 and concluded that the terms and conditions of the SPA met the definition to account for the sale as a single transaction effective on January 16, 2019.

The purchase price set in the SPA was USD 45,000,000 of which USD 40,500,000 was payable at completion of the sale and USD 4,500,000 was to be paid into an escrow account as security for any post-completion claims by Digicert Inc. against the Company and to be released in an amount up to USD 2,500,000 on the first anniversary of the completion and the remaining amount on the second anniversary of completion. The net purchase price of USD 35,839,960 paid to WISEKey was adjusted for the following items: (a) all accounts payable items and other liability items due for payment on or before December 31, 2018 were paid in full; (b) the QuoVadis Group companies was transferred free of indebtedness including any loan with WISEKey; and (c) the equivalent of USD 4,000,000 in cash in aggregate was retained in the bank accounts of the QuoVadis companies.

ISTANA-related contracts and rights were transferred to WISEKey SA prior to December 31, 2018.

The gain from divestiture recorded in the prior reporting period is USD 31,099,632, shown as a separate line within discontinued operations in the income statement in 2019.

WISEKey did not have any involvement with the QuoVadis Group or Digicert Inc after it had been deconsolidated. Digicert Inc was not and is not a related party of WISEKey, and neither the QuoVadis Group nor Digicert Inc are related parties to WISEKey after the deconsolidation.

Note 29. Non-operating income

Non-operating income consisted of the following:

USD'000	Unaudited 6 months ended June 30,	
	2020	2019
Foreign exchange gain	223	939
Financial income	7	50
Interest income	8	-
Other	38	100
Total non-operating income from continuing operations	276	1,089

Note 30. Non-operating expenses

Non-operating expenses consisted of the following:

USD'000	Unaudited 6 months ended June 30,	
	2020	
Foreign exchange losses	751	1,397
Financial charges	32	105
Interest expense	344	256
Other components of defined benefit plans, net	66	70
Other	457	6
Total non-operating expenses from continuing operations	1,650	1,834

Note 31. Segment Information and Geographic Data

The Group has two segments: Internet of Things (“IoT”, previously referred to as “Semiconductors”) and managed Public Key Infrastructure (“mPKI”, previously referred to as “Others”). The Group’s chief operating decision maker, who is its Chief Executive Officer, reviews financial performance according to these two segments for purposes of allocating resources and assessing budgets and performance.

The IoT segment encompasses the design, manufacturing, sales and distribution of microprocessors operations. The mPKI segment includes all operations relating to the provision of secured access keys, authentication, signing software, certificates and digital security applications.

USD'000	6 months to June 30, 2020		
	IoT	mPKI	Total
Revenues from external customers	7,825	199	8,024
Intersegment revenues	-	3,662	3,662
Interest revenue	7	8	15
Interest expense	6	353	358
Depreciation and amortization	688	44	732
Segment income /(loss) before income taxes	238	(8,947)	(8,709)
Profit / (loss) from intersegment sales	-	174	174
Income tax recovery /(expense)	-	(2)	(2)
Other significant non cash items			
Share-based compensation expense	-	154	154
Gain on derivative liability	-	44	44
Interest and amortization of debt discount and expense	-	239	239
Segment assets	13,049	30,673	43,722

6 months to June 30,	2020
Revenue reconciliation	USD'000
Total revenue for reportable segment	11,686
Elimination of intersegment revenue	(3,662)
Total consolidated revenue	<u>8,024</u>
Loss reconciliation	USD'000
Total profit / (loss) from reportable segments	(8,709)
Elimination of intersegment profits	(174)
Loss before income taxes	<u>(8,883)</u>

As at June 30,	USD'000
Assets	USD'000
Total assets from reportable segments	43,722
Elimination of intersegment receivables	(7,769)
Elimination of intersegment investment and goodwill	10,531
Consolidated total assets	<u>46,484</u>

Revenue and Property, plant and equipment by geography

The following tables summarize geographic information for net sales based on the billing address of the customer, and for property, plant and equipment.

Net sales by region from continuing operations

USD'000	6 months ended June 30,	
	2020	2019
Switzerland	143	932
Rest of EMEA*	2,822	4,612
North America	4,302	5,369
Asia Pacific	716	1,416
Latin America	41	140
Total Net sales from continuing operations	8,024	12,469

* EMEA includes Europe, Africa and the Middle-East

Property, plant and equipment, net of depreciation, by region USD'000	As at June 30, 2020	As at December 31, 2019
Switzerland	36	44
Rest of EMEA*	1,443	1,742
North America	1	1
Asia Pacific	11	14
Total Property, plant and equipment, net of depreciation	1,491	1,801

* EMEA includes Europe, Africa and the Middle-East

Note 32. Earnings / (loss) per share

The computation of basic and diluted net loss per share for the Group is as follows:

Gain / (loss) per share	6 months ended June 30,	
	2020	2019
Net gain / (loss) attributable to WISeKey International Holding AG (USD'000)	(8,698)	21,768
Shares used in net gain / (loss) per share computation:		
Weighted average shares outstanding - basic	39,137,480	35,544,665
Effect of potentially dilutive equivalent shares	N/A	1,260,387
Weighted average shares outstanding - diluted	N/A	36,805,052
Net gain / (loss) per share		
Basic weighted average loss per share attributable to WIHN (USD)	(0.22)	0.61
Diluted weighted average loss per share attributable to WIHN (USD)	(0.22)	0.60

For the six months ended June 30, 2020, for purposes of the diluted net loss per share calculation, stock options, share subscriptions in progress, convertible instruments and warrants are considered potentially dilutive securities and are excluded from the calculation of diluted net loss per share, because their effect would be anti-dilutive. Therefore basic and diluted net loss per share was the same for the six months ended June 30, 2020 due to the Group's net loss position.

Note 33. Legal proceedings

We are currently not party to any legal proceedings and claims.

Note 34. Related parties disclosure

Subsidiaries

The consolidated financial statements of the Group include the entities listed in the following table. All are fully consolidated in the financial statements of the Group.

Group Company Name	Country of incorporation	Year of incorporation	Share Capital	% ownership as at June 30, 2020	% ownership as of June 30, 2019	Nature of business
WiSeKey SA	Switzerland	1999	CHF 933,436	95.58%	95.55%	Main operating company. Sales and R&D services
WiSeKey Semiconductors SAS	France	2010	EUR 1,298,162	100.0%	100.0%	Chip manufacturing, sales & distribution
WiseTrust SA	Switzerland	1999	CHF 680,000	100.0%	100.0%	Non-operating investment company
WiSeKey (Suisse) SA**	Switzerland	2002	CHF 100,000	100.0%	100.0%	Dormant
WiSeKey ELA SL	Spain	2006	EUR 4,000,000	100.0%	100.0%	Sales & support
WiSeKey SAARC Ltd	U.K.	2016	GBP 100,000	51.0%	51.0%	Non trading
WiSeKey USA Inc*	U.S.A	2006	USD 6,500	100%*	100%*	Sales & support
WiSeKey India Private Ltd***	India	2016	INR 1,000,000	45.9%	45.9%	Sales & support
WiSeKey IoT Japan KK	Japan	2017	JPY 1,000,000	100.0%	100.0%	Sales & distribution
WiSeKey IoT Taiwan	Taiwan	2017	TWD 100,000	100.0%	100.0%	Sales & distribution
WiSeCoin AG	Switzerland	2018	CHF 100,000	90.0%	90.0%	Sales & distribution
WiSeKey Equities AG	Switzerland	2018	CHF 100,000	100.0%	100.0%	Financing, Sales & distribution
WiSeCoin France R&D Lab SAS	France	2019	EUR 10,000	90.0%	90.0%	Research & development
WiSeKey Semiconductors GmbH	Germany	2019	EUR 25,000	100.0%	100.0%	Sales & distribution
WiSeKey Arabia - Information Technology Ltd Saudi Arabia	Saudi Arabia	2019	SAR 200,000.00	51.0%	51.0%	Sales & distribution
Trust Protocol Association	Switzerland	2019	n/a	100.0%	100.0%	Internet security

* 50% owned by WiSeKey SA and 50% owned by WiseTrust SA

** The company was merged with and into WiSeKey SA effective June 29, 2020, as a result of which the company ceased to exist

*** 88% owned by WiSeKey SAARC which is controlled by WiSeKey International Holding AG

Related Party Transactions and Balances

Related Parties (in USD'000)	Receivables as at		Payables as at		Net expenses to		Net income from	
	June 30, 2020	December 31, 2019	June 30, 2020	December 31, 2019	in the 6 months ended June 30, 2020	in the 6 months ended June 30, 2019	in the 6 months ended June 30, 2020	in the 6 months ended June 30, 2019
1 Carlos Moreira	-	-	-	-	-	9	-	-
2 Maryla Shingler-Bobbio	-	-	-	-	-	71	-	-
3 Philippe Doubre	-	-	6	40	20	55	-	-
4 Juan Hernández Zayas	-	-	7	37	28	82	-	-
5 Thomas Hürlimann	-	-	-	16	-	47	-	-
6 Dourgam Kummer	-	-	-	2	-	31	-	-
7 David Fergusson	-	-	5	22	28	67	-	-
8 Eric Pellaton	-	-	1	-	2	-	-	-
9 Jean-Philippe Ladisa	-	-	2	-	2	-	-	-
10 Roman Brunner	-	-	-	-	-	426	-	87
11 Anthony Nagel	-	-	-	-	-	-	-	58
12 Wei Wang	10	-	-	-	-	-	10	-
13 OISTE	61	119	182	-	166	110	7	14
14 Edmund Gibbons Limited	-	-	-	-	-	29	-	36
15 Terra Ventures Inc	-	-	30	33	-	-	-	-
16 SAI LLC (SBT Ventures)	-	-	31	33	-	-	-	-
17 GSP Holdings Ltd	-	-	15	17	-	-	-	-
18 Related parties of Carlos Moreira	-	-	-	2	91	-	-	-
Total	71	119	280	202	337	927	17	195

1. Carlos Moreira is the Chairman of the Board and CEO of WiSeKey.

2. Maryla Shingler Bobbio is a former Board member of the Group, and former member of the Group's audit committee and nomination & compensation committee. Ms. Shingler Bobbio resigned from WiSeKey's Board on November 21, 2019.

3. Philippe Doubre is a Board member of the Group, and member of the Group's nomination & compensation committee, as well as a shareholder. The payable to Philippe Doubre as at June 30, 2020 and expenses recorded in the income statement in the period to June 30, 2020 relate to his Board fee.

4. Juan Hernandez-Zayas is a former Board member of the Group, and former member of the Group's audit committee and the strategy committee, as well as a shareholder. The payable to Juan Hernandez-Zayas as at June 30, 2020 and expenses recorded in the income statement in the period to June 30, 2020 relate to his Board fees.

5. Thomas Hürlimann is a former Board member of the Group. Mr. Hürlimann did not seek reelection at the Group's last Annual General Meeting on May 21, 2019.

6. Dourgam Kummer is a Board member of the Group, as well as a shareholder. Dourgam Kummer serves as Head of M&A of WISEKey and has therefore become an executive member of the Board.

7. David Fergusson is a Board member of the Group, and member of the Group's audit committee and nomination & compensation committee, as well as a shareholder. The payable to David Fergusson as at June 30, 2020 and expenses recorded in the income statement in the year to June 30, 2020 relate to his Board fees.

8. Eric Pellaton is a new member of Board of the Group and a member of the Group's nomination & compensation committee, as well as a shareholder. The payable to Eric Pellaton as at June 30, 2020 and expenses recorded in the income statement in the period to June 30, 2020 relate to his Board fees.

9. Jean-Philippe Ladisa is a new member of the Board of the Group and a member of the Group's audit committee, as well as a shareholder. The payable to Jean-Philippe Ladisa as at June 30, 2020 and expenses recorded in the income statement in the period to June 30, 2020 relate to his Board fees.

10. Roman Brunner is the former Chief Revenue Officer of the Group and a shareholder.

11. Anthony Nagel is the former Chief Operations Officer of QuoVadis.

12. Wei Wang is a former member of the Group's advisory committee. The Receivable from Wei Wang as at June 30, 2020 and income recorded in the income statement in the period as at June 30, 2020, relates to fees invoiced to the Chinese delegation for their attendance at the Davos World Economic Forum in January 2020.

13. The Organisation Internationale pour la Sécurité des Transactions Electroniques ("OISTE") is a Swiss non-profit making foundation that owns a cryptographic rootkey. In 2001 WISEKey SA entered into a contract with OISTE to operate and maintain the global trust infrastructures of OISTE. In line with the contract, WISEKey pays a regular fee to OISTE for the use of its cryptographic rootkey. A member of the Board of Directors of WISEKey is also a member of the Counsel of the Foundation which gives rise to the related party situation.

OISTE is also the minority shareholder in WISECoin AG with a 10% ownership.

The receivable from OISTE as at June 30, 2020 and income recorded in the income statement in the period to June 30, 2020 relate to the facilities and personnel hosted by WISEKey SA on behalf of OISTE. In the 6 months, WISEKey SA invoiced OISTE CHF 6,917 (USD 7,160).

The expenses relating to OISTE recognized in 2020 are made up of license and royalty fees for the period in 2020 under the contract agreement with WISEKey SA.

14. Edmund Gibbons Limited had a 49% shareholding in QuoVadis Services Ltd which was 51% owned by WISEKey until the divestiture of the QuoVadis Group on January 16, 2019.

15. Terra Ventures Inc has a 49% shareholding in WISEKey SAARC Ltd. Terra Ventures granted a GBP 24,507 loan to WISEKey SAARC Ltd on January 24, 2017. The loan is non-interest bearing and has no set repayment date.

16. SAI LLC, doing business as SBT Ventures, is a former shareholder in WISEKey SAARC Ltd. SAI LLC granted a GBP 25,000 loan to WISEKey SAARC Ltd on January 25, 2017. The loan is non-interest bearing and has no set repayment date.

17. GSP Holdings Ltd is a former shareholder in WISEKey SAARC Ltd. GSP Holdings Ltd granted a GBP 12,500 loan to WISEKey SAARC Ltd on February 02, 2017. The loan is non-interest bearing and has no set repayment date.

18. Two immediate family members of Carlos Moreira are employed by WISEKey SA and WISEKey USA respectively. In line with ASC 850-10-50-5, transactions involving related parties cannot be presumed to be carried out on an arm's-length basis. The aggregate employment remuneration of these two immediate family members amounted to USD 81,185 recorded in the income statement in 2020.

Note 35. Subsequent events

New facility with Crede

On August 07, 2020, WISEKey executed with Crede a new convertible loan agreement for a total amount of USD 5 million, subject to the Company receiving a tax ruling from the Swiss Federal Tax Administration and the Zug tax authority. The loan is repayable in WIHN class B Shares any time between the receipt of the tax ruling and the maturity date of August 07, 2022, at Crede's election. The new convertible loan agreement bears an interest rate of 5% per annum payable quarterly in arrears.

As part of the transaction, WISEKey also signed an option agreement granting Crede the option to acquire up to 1,675,885 WIHN class B shares at an exercise price of CHF 1.65, exercisable between the date of receipt of the Tax Ruling and the third anniversary of this date.

SEDA drawdown

WISeKey has made three drawdowns from the SEDA on July 14, July 16 and August 05, 2020, for CHF 384,813.30 (USD 417,902.10 at historical rates) in exchange for 333,686 WIHN class B shares issued out of treasury share capital. The outstanding equity financing available after this drawdown was CHF 46,257,831, and 116,314 WIHN Class B shares remained on loan to Yorkville under the share-lending arrangement.

Yorkville Convertible Loan

At the time of release of this report, WISeKey has repaid USD 470,741.17 toward the Yorkville Convertible Loan in cash, bringing the principal amount of the loan down to USD 2,713,513.58.

Nice & Green Facility

At the time of release of this report, WISeKey has made two further subscriptions under the Nice & Green facility on July 22 and August 18 for CHF 3,760,534. Nice & Green has made two further conversion requests on July 30 and August 08 for a total of CHF 1,239,226 in exchange for 1,023,496 WIHN class B shares. The outstanding equity financing available after these subscriptions was CHF 4,308,111

Investment in ARAGO GmbH

On 11 August 2020, WISeKey entered into an agreement to invest up to CHF 5,000,000 in ARAGO GmbH, a German privately-held technology company. The investment is to be made to ARAGO by way of a convertible loan, payable in five monthly instalments of CHF 1,000,000, subject to the successful completion of due diligence by WISeKey. The loan will be converted into shares of ARAGO upon the final instalment being paid. The loan carries interest at a rate of 5% per annum which is convertible into shares of ARAGO. The shares issued by ARAGO will represent 5% of the share capital of ARAGO.

Options granted under WISeKey ESOP

After June 30, 2020 a total of 36,783 options were granted under the Group's ESOP.

Note 36. Business Update Related to COVID-19

In March 2020 the World Health Organization declared the Coronavirus (COVID-19) a pandemic. The outbreak spread quickly around the world, including in every geography in which the Company operates. The pandemic has created uncertainty around the impact of the global economy and has resulted in impacts to the financial markets and asset values. Governments implemented various restrictions around the world, including closure of non-essential businesses, travel, shelter-in-place requirements for citizens and other restrictions.

The Company took a number of precautionary steps to safeguard its businesses and colleagues from COVID-19, including implementing travel restrictions, working from home arrangements and flexible work policies. Through the end of the first half of the year, the majority of the Company's colleagues continued working either fully or partially in a remote work environment, with virtually no disruption to the Company as a whole and its ability to serve clients. The Company started to return to offices around the world, in line with the guidelines and orders issued by national, state and local governments, implementing a phased approach in its main offices in Switzerland and in France. We continue to prioritize the safety and well-being of our colleagues during this time.

The Company's major production centers, located in Taiwan and Vietnam, were quick to implement controls and safeguards around their processes that enabled us to continue delivering products with minimal interruption to our clients. At the end of the second quarter, we started to see the first impact of the pandemic upon our activities with certain clients reducing or delaying their orders. At this stage, the impact upon the Company has been limited and we remain confident that we will be able to fulfil all current client orders.

The Company retains a strong liquidity position and believes that it has sufficient cash reserves to support the entity for the foreseeable future (see note 2 for further details.) The Company continues to review its costs and suspended its share buy-back programs in order to reduce the cash burn. The Company has applied for, and received, support under the schemes announced by the Swiss government and is applying for similar support under the schemes announced by the French government. Currently the Company remains able to meet its commitments and does not foresee any significant challenges in the near future. The Company currently does not anticipate any material impact on its liquidity position and outlook

At this stage it remains impossible to predict the extent of the impact of the COVID-19 pandemic as this will depend on numerous evolving factors and future developments that the Company is not able to predict.