UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 20-F

□ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934 or			
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2022 OR			
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 or			
□ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Date of event requiring this shell company report Commission File Number 001-39810			
IDEX Biometrics ASA			
(Exact name of Registrant as specified in its charter and translation of Registrant's name into English)			
Kingdom of Norway (Jurisdiction of incorporation or organization) Dronning Eufemias gate 16 NO-0191 Oslo Norway (Address of principal executive offices) Vincent Graziani Chief Executive Officer IDEX Biometrics ASA Dronning Eufemias gate 16 NO-0191 Oslo Norway Tel: +47 6783 9119 mailbox@idexbiometrics.com (Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person) Securities registered or to be registered pursuant to Section 12(b) of the Act.			
Trading Name of each exchange Title of each class Symbol(s) on which registered			
American Depositary Shares, each representing 75 Ordinary Shares, nominal value NOK 0.15 per share Ordinary Shares, nominal value NOK 0.15 per share* * Not for trading, but only in connection with the registration of the American Depositary Shares. Securities registered or to be registered pursuant to Section 12(g) of the Act. None Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. None			
Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report. Ordinary Shares: 1,166,326,584 shares outstanding as of December 31, 2022			
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. $\ \square$ Yes $\ \boxtimes$ No			
If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. No Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).			
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.			
Large accelerated filer □ Accelerated filer ☑ Non-accelerated filer □ Emerging growth company ☑			
If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. † The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012. Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.			
the relevant recovery period pursuant to §240.10D-1(b). Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:			
U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board ☑			
If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18			

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INTRODUCTION

Unless otherwise indicated, "IDEX," "IDEX Biometrics," "the Company," "our Company," "we," "us" and "our," when used throughout this Annual Report on Form 20-F (the "Annual Report"), refer to IDEX Biometrics ASA, inclusive of its wholly-owned subsidiaries in the United States, IDEX Biometrics Holding Company Inc. and IDEX Biometrics America Inc. ("IDEX America"), the United Kingdom, IDEX Biometrics UK Ltd. ("IDEX UK"), and the People's Republic of China, IDEX Electronics (Shanghai) Co., Ltd. ("IDEX China").

The wordmarks "IDEX" and "TrustedBio," the IDEX logo, and other trademarks or service marks of IDEX Biometrics ASA appearing in this Annual Report are the property of IDEX Biometrics ASA. Solely for convenience, the trademarks, service marks, and trade names referred to in this Annual Report are listed without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their right thereto. All other trademarks, trade names, and service marks appearing in this Annual Report are the property of their respective owners. We do not intend to use or display other companies' trademarks and trade names to imply any relationship with, or endorsement or sponsorship of us by, any other companies.

Our audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB, and IFRS as endorsed by the European Union. Our financial statements included in this Annual Report are presented in U.S. Dollars and, unless otherwise specified, all monetary amounts are in U.S. Dollars. All references in this Annual Report to "\$," "U.S. Dollars," "Dollars" and "USD" mean U.S. Dollars and all references to "NOK" mean Norwegian Krone, the currency of our home country.

Throughout this Annual Report, references to "ADSs" mean the Company's American Depositary Shares, issued by our "Depositary," The Bank of New York Mellon, and listed for trading on The Nasdaq Capital Market ("Nasdaq"). Each ADS represents 75 of the Company's "Ordinary Shares," our single class of outstanding shares, held by the Depositary. Our Ordinary Shares are listed for trading on the "Oslo Børs," a unit of EURONEXT N.V.

Also, throughout this Annual Report, references to the "Securities Act" mean the Securities Act of 1933, as amended, references to the "Exchange Act" mean the Securities Exchange Act of 1934, as amended, and references to the "SEC" mean the U.S. Securities and Exchange Commission.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 20-F, or Annual Report, contains forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act, that are based on our management's beliefs and assumptions and on information currently available to our management. All statements other than present and historical facts and conditions contained in this Annual Report, including statements regarding our future results of operations and financial positions, business strategy, plans, and our objectives for future operations, are forward-looking statements. When used in this Annual Report, the words "anticipate," "believe," "can," "could," "estimate," "expect," "intend," "is designed to," "may," "might," "plan," "potential," "predict," "objective," "should," or the negative of these and similar expressions identify forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- our expectations regarding our revenue (including expectations with respect to revenue growth), expenses (including expectations with respect to research and development spending and various other expenses), and other operating results (including forecasts for volumes of product orders or shipments);
- our ability to achieve or maintain market acceptance for our biometric technology and products;
- our ability to continue as a going concern;
- our ability to generate revenue;
- our ability to respond to ongoing constraints and uncertainties within the semiconductor supply chain;
- our ability to achieve profitability or, once doing so, sustain profitability;
- our estimates, and those of others, regarding our current and future capital requirements;
- our ability to compete effectively with existing competitors and any new market entrants;
- our assessment of the growth rates of the market segments and geographies in which we compete;
- our reliance on key personnel and our ability to identify, recruit, and retain skilled personnel;
- our ability to protect our intellectual property rights and any costs associated therewith;
- changes in applicable laws and regulations, including regulatory developments in Norway, the United States, the United Kingdom, China, and other jurisdictions;
- unfavorable conditions in our industry and macroeconomic conditions, including worsening global economic conditions, disruptions to and volatility and uncertainty in the credit and financial markets, increases in inflation and interest rates, including any impacts from and the continuing effects of the COVID-19 pandemic and the military conflict involving Russia and Ukraine and sanctions related thereto; and
- other risks and uncertainties, including those listed in this Annual Report.

You should refer in this Annual Report to Part I., "Item 3. Section D. Risk Factors", for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you the forward-looking statements in this Annual Report will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, such inaccuracy may be material. Because of the significant uncertainties associated with these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans, whether in any specified time frame or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law.

You should read this Annual Report and the documents referenced herein and filed as exhibits hereto completely and with the understanding that our actual future results may be materially different from those we currently expect. Accordingly, we qualify all of our forward-looking statements by these cautionary statements.

This Annual Report contains market data and industry forecasts obtained from industry publications and related sources we consider credible. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates, given the pace at which industry conditions and market circumstances may change. We have not independently verified any third-party information presented herein. While we believe the market statistics and related information included are accurate as of the date of this Annual Report, you are cautioned that such information is subject to change and, as such, inherently imprecise.

PART I

Item 1. Identity of Director, Senior Management and Advisers.

Not applicable.

Item 2. Offer Statistics and Expected Timetable.

Not applicable.

Item 3. Key Information.

A. [Reserved]

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Our business faces significant risks. Investors should carefully consider the risks described below, in addition to the other information set forth elsewhere in this Annual Report on Form 20-F (the "Annual Report"), including our consolidated financial statements and the related notes beginning on page F-1. If we were to encounter the risks described, our business, operational performance and financial position could be harmed, potentially with materially adverse consequences. In that event, the quoted prices of our Ordinary Shares and American Depositary Shares could decline.

In summary, these risks are:

- we have a history of operating losses and may not achieve or sustain profitability;
- there is significant doubt about our ability to continute as a going concern; if we are unable to raise capital when needed, we could be forced to delay, reduce, or terminate certain development activities or undertake other cost-reduction steps, including termination of employees, either of which could reduce our ability to execute our strategy, with potential harm to our business, operational performance, and financial position;
- our biometric technologies have not yet achieved, and may never achieve, widespread customer acceptance in the market segments we are targeting;
- if the estimates and assumptions we have used to calculate the pace of development and ultimate size of our targeted market segments are inaccurate, future revenue growth may take longer than anticipated and reaching the operational scale we believe necessary for sustained profitability may not be achieved;
- if we fail to innovate in response to changing customer needs, new technologies, and other evolving competitive requirements, our business, operational performance, and financial position could be harmed;
- we are exposed to risks associated with customer concentration and reliance on a limited number of suppliers, and the disruption to a significant customer or supplier could harm our business, operational performance, and financial position;
- we expect fluctuations in our quarterly financial results, making it difficult to project future results, and, if we fail to
 meet the expectations of securities analysts or investors with respect to our performance, the quoted prices of our equity
 securities could decline;
- because the market segments we target are highly competitive, the landscape of competitors, strategic partners, and
 market participants can change quickly, and because customer demand is difficult to accurately predict, our business,
 operational performance, and financial position could be harmed if we do not maintain our competitive advantages in
 response to unexpected developments in the market segments we target;

- we are vulnerable to adverse economic conditions, whether the result of business cycles or exogenous disruptions, and
 may not be able to respond quickly or effectively to unanticipated events or trends, such as a sudden or prolonged
 decline in business confidence and economic activities, which could harm our business, operational performance, and
 financial position and limit our ability to access the capital markets;
- we are exposed to potentially significant supply chain risks, as we currently rely on one semiconductor manufacturer and a limited number of providers or assembly and test services for outsourced production of our products;
- because we depend on the contributions of very skilled employees across engineering and business disciplines, if these employees were to leave the Company, we may not be able to attract and hire replacements with the same skills in a timely fashion, if at all, which could harm our business, operational performance, and financial position;
- although we have not experienced significant delays in development activities or product deliveries to date, the ongoing COVID-19 pandemic could have an adverse impact on the Company and the communities in which we, our customers, our vendors, and our partners operate;
- because we are domiciled in Norway, we are subject to Norwegian corporate and securities laws, and, pursuant to certain
 exemptions under the laws and regulations in the United States, as well as the rules defining the listing requirements of
 Nasdaq, we are allowed to follow certain Norwegian standards for governance, which may be different from such
 standards in the United States and, as such, may not provide the same level of investor protections and shareholder
 rights;
- because we list our Ordinary Shares on the Oslo Børs and list our American Depositary Shares ("ADSs") on Nasdaq, we
 are subject to two complex sets of corporate and securities laws, which increases the costs and burdens of compliance,
 while increasing the risk that we may fail to comply with such laws;
- failure or perceived failure to comply with existing or future laws, regulations, contracts, self-regulatory schemes, standards, and other obligations related to data privacy and security (including security incidents) could harm our business, and compliance or the actual or perceived failure to comply with such obligations could increase the costs of our products and services, limit their use or adoption, and otherwise negatively affect our operating results and business; and
- the provisions of the contractual agreements associated with our ADSs are complex, and, pursuant to those agreements, holders of ADSs are afforded fewer rights and protections than holders of our Ordinary Shares, are subject to transfer and related restrictions, and are required to pay various administrative fees, all of which may reduce investor interest in our ADSs.

Risks Related to Our Strategy and Business

Since our inception, we have generated limited revenue and have incurred significant operating losses. We cannot offer any assurances regarding whether or when we will generate sufficient operational cash flow to offset our costs and accelerate the expansion our business, or whether or when we will generate sufficient revenue to achieve or maintain profitability.

Our efforts to execute our strategy successfully may cost more and take longer than we anticipate. We generated revenue of \$4.1 million and recorded a net loss of \$32.7 million for the year ended December 31, 2022. We generated revenue of \$2.8 million and recorded a net loss of \$32.6 million for the year ended December 31, 2021.

We are not certain whether or when we will generate sufficient cash flow to fully fund our costs and accelerate the expansion of our business, or whether or when we will generate sufficient revenue to achieve or maintain profitability. Although we have established customer relationships with innovators and early adopters sharing our vision for the potential of fingerprint authentication in smart card applications, our forecasts of when we will generate revenue and cash flow sufficient to meet its funding requirements are based on complex assumptions regarding demand, products, costs, and other considerations that are subject to rapid change. These assumptions involve uncertainties and evolving circumstances, many of which are outside of our influence or control.

Our customers primarily are manufacturers of smart cards, although a critical element of demand for our solutions originates with these manufacturers' own customers (e.g., the demand for financial payment cards with fingerprint authentication originates with a bank issuer interested in offering such cards). As such, we focus our marketing and sales efforts on smart card manufacturers, as well as their customers and other influential participants in the smart card industry (e.g., payment card networks).

Fingerprint authentication applications in the market segments we target are in the early stages of development. Because of this, we have experienced uncertain and lengthy sales cycles, as potential customers and other influential participants in the smart card industry have required, and likely will continue to require, exposure to, and education about, fingerprint authentication technologies,

our solutions, and our value proposition. To address this, we expanded our marketing and sales staff in 2021 and our marketing spending in 2022. We expect our enhanced demand creation efforts will shorten sales cycles, but we cannot offer any assurances regarding the success of these efforts or the amounts and timing of customer orders.

Given recent inflationary pressures, primarily in the semiconductor supply chain, we expect our costs and expenses to increase, which could negatively influence cash flow and profitability, even if we are able to significantly increase our revenue. As a "fabless" developer of semiconductor-based products, our manufacturing costs for the products we currently sell are most influenced by the discounts our vendors offer for sustained, high-volume production orders. We may not achieve the necessary volume of production orders to obtain advantageous pricing for the manufacture of our current products. If we are not able to pass on increased costs to customers by increasing the prices of our products, our profitability could decline, harming our business, operational performance, and financial position.

We believe our advances in fingerprint authentication technologies are an important competitive differentiator. As such, we intend to maintain research and development spending at current levels. While we intend to continue development of new products, with improved performance, greater functionality, and broadened applications, with lower costs, we cannot accurately predict whether or when these new products will be introduced or the level of customer acceptance they will achieve in the market segments we target.

Our operating cost structure is largely fixed, reflecting our business model and strategic focus on development of highly differentiated biometric technologies. Variable costs are associated primarily with production volumes. Accordingly, we anticipate our profitability could improve as revenue increases, as our forecasts for operating expenses are based on our assumed ability to increase revenue without proportional increases in our operating cost structure. However, because of the uncertainties associated with accurately forecasting revenue levels and achieving operational economies of scale, we cannot offer any assurances regarding our ability to, or the timing of when we might, achieve profitability.

We have a going concern risk.

We do not currently have the cash resources to fully meet our operating commitments for the next twelve months. This and the circumstances discussed in the previous risk factor represent a going concern risk.

Among other factors, our history of losses, limited revenue and negative cash flows from operations represent a going concern risk. As a result, our independent registered public accounting firm has included an explanatory paragraph in their opinion for the year ended December 31, 2022 as to the significant doubt about our ability to continue as a going concern. Our financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and IFRS as endorsed by the European Union, which contemplate that we will continue to operate as a going concern. Historically, we have been able to raise funds through private placements of shares, including private placements of shares that raised \$15.1 million before expenses in 2022. We regularly review all strategic options to fund ongoing operations, research and development projects and working capital needs, including a capital raise. While we have been successful in the past in raising funds through private placements of shares, there is no assurance that we will be successful in the future.

We are not certain whether or when we will generate sufficient operational cash flow to offset our costs and accelerate the expansion of our business, nor whether or when we will generate sufficient revenue to achieve or maintain profitability. Because we intend to continue pursuing our strategy of re-investing in our business in order to achieve expected revenue growth, we anticipate that additional capital will be required to fund such revenue growth (e.g., funding of increased working capital requirements). We will require additional funding to support future operating losses and subsequent expected growth. Our forecasts are based on complex assumptions that are subject to rapid change. These assumptions involve uncertainties and evolving circumstances, many of which are outside of our influence or control.

While we previously have been able to raise capital through private placements of our Ordinary Shares, additional financing in any form may not be available on terms favorable to us, if at all. If adequate funds are not available on acceptable terms, we may be unable to maintain or expand our revenue, which could harm our business, operational results, and financial position, and, in turn, the value of an investment in our equity securities could decline. We continuously review all alternatives, financial and strategic, for meeting our future capital requirements. However, because our future funding decisions will depend on numerous considerations, including factors beyond our control, we cannot predict or estimate the amount, timing, or nature of any future funding from investors, lenders, or strategic partners.

Our fingerprint authentication solutions are targeted at three emerging applications within the smart card market, financial payments, digital authentication/access control, and digital currency storage, all of which are in early stages of development. As such, it is difficult to predict the varying pace at which these applications will develop into defined market segments, how large the market segments could be, and to what extent we will successfully penetrate any such market segment, if at all.

We are a developer of fingerprint authentication solutions and focus on use cases based on smart cards. The specific applications we are targeting with our fingerprint authentication solutions are in the early stages of their development and are characterized by the extended and unpredictable sales cycles associated with new, innovative technologies, a limited number of early adopting customers, immature supply chains, and evolving application requirements and industry-specific standards.

Financial Payments

Currently, our primary focus is on developing the financial payments market segment. We introduced the first flexible touch sensor for ISO ID-1 form factor requirements in 2015 and, later that year, entered into a strategic partnership with Mastercard to develop the biometric payment card opportunity. However, approximately five years passed before we announced significant customer engagements (e.g., IDEMIA France SAS), as:

- potential issuers of biometric payment cards (e.g., banks) have required, and continue to require, extensive education regarding fingerprint authentication, addressing their uncertainties associated with costs, card deployment, user enrolment, reliability, security, and infrastructure requirements, contributing to our extended and unpredictable sales cycles;
- our primary customers, the manufacturers of smart cards for financial payment applications, have required, and continue to require, extensive education regarding the opportunity and our differentiated value proposition, frequently followed by an extended period of sales and engineering support necessary for the development and qualification of a biometric payment card that a manufacturer can market to its customers, contributing to our extended and unpredictable sales cycles, resource allocation challenges, and high pre-sale customer engagement costs;
- design, development, and qualification of a biometric payment card incorporating fingerprint authentication to a
 customer's specifications has required, and may continue to require, customers, which may be resource-constrained or
 lack the appropriate engineering expertise, to coordinate multiple suppliers of complex components that must be
 integrated in a timely and cost-efficient manner, a process that has, and may continue to be, a source of delays in
 customer development of biometric payment cards;
- all financial payment cards require approvals from the global operators of payment processing platforms, notably
 Mastercard, VISA, and China UnionPay, certifying that a new financial payment card meets platform-specific security,
 reliability, performance, and interoperability requirements, and obtaining such certification has been, and may continue
 to be, delayed due to challenges card manufacturers have experienced with completing development of biometric
 payment cards and scheduling their certification with the payment processing platforms and the testing laboratories on
 which they rely; and
- because the added cost of incorporating fingerprint authentication in a financial payment card historically has been
 economically unjustifiable for many high-volume applications, we, since introducing the ISO ID-1 design in 2015, have
 aggressively addressed materials and manufacturing costs and, by 2021, with the introduction of our TrustedBio module,
 achieved a cost profile compelling to manufacturers of smart cards, and we continue our efforts to lower the costs of
 current and future solutions, although we cannot offer any assurances regarding our ability to do so, or the timing
 thereof.

Because of these and other challenges encountered in developing opportunities in the financial payment market segment, accurately forecasting demand within the market segment has been, and likely will continue to be, difficult, with forecasts based on complex assumptions that have been, and likely will continue to be, subject to rapid change. These assumptions involve uncertainties and evolving circumstances, many of which are outside of our influence or control.

Digital Authentication

We believe high value-add digital authentication applications across the access control market segment represent promising opportunities for our fingerprint authentication solutions. While this market segment shares the characteristics and challenges associated with the financial payments market segment, the competitive landscape for user authentication in access control applications is broader and more complex, with various alternative authentication methods available, delivered in numerous form factors across diverse applications. While we achieved FIDO (Fast Identity Online) Alliance certification for a fingerprint

authentication solution in 2016, our penetration of this market segment to date has been limited. We attribute our slower than expected penetration of the access control market segment to:

- the degree to which low-cost, low value-added, legacy solutions, based on minimal security requirements, continue to dominate the enterprise market, particularly within physical access control applications;
- the slower than expected pace at which physical access control and network user identity authentication are converging into unified, enterprise-wide security solutions;
- a relatively concentrated group of global and dominant regional vendors of IAM (Identity and Access Management) platforms and related access control solutions, split between those based on proprietary architectures and components and those integrating best-of-breed elements and standards-based protocols, both requiring extensive education regarding our products, technologies, and value proposition; and
- a highly-fragmented range of single- and multi-factor authentication solutions, including various biometric solutions, contributing to price competition and, for less demanding applications, commoditization, thereby potentially limiting opportunities for differentiating our solutions based on performance, total cost of ownership, and other elements of our value proposition.

Digital Currency Storage and Related Applications

We believe the opportunity for us in our third targeted market segment, digital currency storage, also referred to as digital wallets, holds great promise, given the applicability of our fingerprint authentication solutions. However, this market segment is the least developed of the three we are targeting.

Our diverse activities in the emerging digital currency storage market segment include providing fingerprint authentication for two Chinese banks piloting digital wallets for the e-CNY initiative of the People's Bank of China and collaborating with developers of innovations for emerging crypto-wallet and cybersecurity applications. We have not generated significant revenue within this market segment, as the diverse range of opportunities we have identified are in early stages of development and require disproportionate allocations of our time and resources to establish viable customer- and application-specific solutions. Such engagements have been characterized, to date, by long periods of product prototyping, as well as uncertainties associated with the performance requirements, scope, and timing of potential customer deployments. As such, accurately forecasting demand for digital wallet applications is difficult and based on complex assumptions, notably regarding solution definition and regulatory considerations, that are subject to rapid change. These assumptions involve uncertainties and evolving circumstances, many of which are outside of our influence or control.

The timing of and the rate of demand growth in each market segment we target are difficult to accurately predict, as the drivers of demand differ. Competitive conditions and solution requirements also differ, contributing to difficulty in accurately predicting revenue, profitability, and the timing thereof. Accordingly, we offer no assurances regarding whether or when our revenue growth will accelerate in any of the three targeted segments, nor can we offer assurances regarding whether or when we will reach profitability, if at all, in any such segment.

Our future success is dependent upon our ability to develop, communicate, and deliver a compelling value proposition to customers. If we do not do so, our business, operational results, and financial position could be harmed, and, in turn, the value of an investment in our equity securities could decline.

Our value proposition is based on the highly-differentiated functionality and performance of our fingerprint authentication solutions and our comprehensive approach to offering integrated solutions addressing multiple customer needs. These customer needs may vary among the market segments we target, but generally are associated with the creation of cost-effective competitive advantages for our customers (e.g., highly-differentiated end products).

We believe the primary customer requirement across the market segments we target is a compelling economic rationale for implementing fingerprint authentication in a smart card. We believe the absence of such a rationale, largely the consequence of the historically high costs associated with manufacturing and deploying such smart cards, has inhibited demand to date and, if we cannot further reduce these costs, likely will continue to inhibit demand and, in turn, harm our business, operational performance, and financial position.

Our strategy, reflected in our value proposition, has been focused on reducing these historically high costs. Our TrustedBio module, integrating a low-cost polymer sensor and advanced biometric processing circuitry, has been designed to be cost-competitive with alternative solutions, while delivering superior performance and reliability. We have developed a reference design integrating our TrustedBio module with the SLC38 security controller from Infineon Technologies AG, thereby allowing our manufacturing customers to minimize their own integration costs, while accelerating time-to-market. We have developed an optimized card inlay,

consisting of a card antenna and connective circuits, which reduces customer design and procurement costs. We are developing a proprietary card operating system for this reference design, which can be installed on the SLC38 prior to shipment to a card manufacturer, further reducing costs and process steps. We have collaborated with vendors of the capital equipment used for card manufacturing to optimize machine tooling and process management software, thereby increasing card production throughput, while lowering yield losses.

Our objective for solution design is to integrate the active components necessary to produce a smart card incorporating fingerprint authentication, creating a comprehensive, single package, solution design and bill of materials that should significantly reduce development and manufacturing costs for our customers. Our longer-term vision involves the integration of the functions currently performed by separate semiconductor devices into one such device, which, when packaged with our fingerprint sensor, could enable a customer to deliver a smart card with fingerprint authentication at a cost comparable to that associated with a basic, dual-interface smart card. However, we cannot predict whether or when we might complete such lower-cost, higher-functionality solutions or whether such solutions will achieve widespread acceptance.

A significant cost incurred by the end-customers of our manufacturing customers is associated with user enrolment (i.e., the process of imaging and storing a user's fingerprint, in the form of a template, within the memory of the smart card, thereby enabling its use). We have developed a proprietary enrolment solution that can be delivered directly to users that consists of a disposable, sleeve-like electronic device, with a small battery, allowing for the capture of a user fingerprint and the activation of the smart card for that user. This convenient process allows the user to enroll wherever and whenever he or she might choose, but it adds costs to the deployment of smart cards incorporating fingerprint authentication. To address these costs and to further improve user experience, we are developing software-based enrolment solutions, for which we have protected intellectual property, to allow for enrolment over the user's mobile phone or, specifically for enrolment of financial payment card users, through a point-of-sale terminal. However, we cannot predict whether or when we might complete such software-based enrolment solutions or whether such solutions will achieve widespread acceptance.

While our efforts have significantly reduced the difference between the costs of manufacturing and deploying smart cards incorporating fingerprint authentication and those associated with manufacturing and deploying less complex smart cards, this cost difference remains an obstacle to widespread adoption. We may not be able to achieve our objectives for additional cost reductions through further component integration and through development of software-based enrolment solutions, as the engineering challenges associated with both are substantial and characterized by uncertainties.

If we are not able to achieve additional cost reductions in support of our value proposition, our fingerprint authentication solutions may not achieve widespread adoption and our opportunities may be constrained, thereby harming our business, operational performance, and financial position.

Card-based fingerprint authentication solutions have not yet achieved, and may never achieve, widespread acceptance by card issuers, card manufacturers, or card users.

Fingerprint authentication integrated into a smart card remains a novel solution for enhancing security. In addition to addressing costs and supporting the economic rationale for customer use of our fingerprint authentication solutions, we must address the other uncertainties and concerns of potential customers and users if our solutions are to achieve widespread acceptance. Although recently escalating concerns about fraud losses, identify theft, data breaches, and other security risks have increased general awareness of the need for improved electronic security systems and data protection procedures, and fingerprint authentication has achieved widespread acceptance among manufacturers and users of smart phones, widespread acceptance of fingerprint authentication in smart cards, if it occurs, likely will depend on a wide range of variables and outcomes, including:

- our ability to further streamline the user enrolment process for issuers, reducing costs and complexity, while enhancing the user experience;
- our ability to collaborate with multiple, often competing, organizations and industry bodies on the development of
 industry- or customer-specific software applets, modification of card operating systems for customer purposes, or
 obtaining necessary industry or regulatory certifications;
- our ability to influence the standardization and simplification of the manner in which fingerprint authentication is integrated into transaction processing systems;
- our ability to address public perceptions regarding privacy and the potential exposure of personal biometric information;
 and
- our ability, on a worldwide basis, to address proposed or enacted legislation related to information privacy or the collection and storage of biometric information.

For these reasons, we are uncertain whether or when fingerprint authentication in smart cards will achieve widespread acceptance in any commercial markets or that demand for our solutions will be sufficient to create a market large enough to produce

significant revenue or earnings. If widespread acceptance is not achieved, our business, operational performance, and financial position may be harmed, and the value of an investment in our securities may decline.

The extended and unpredictable sales cycles which we have encountered, and may continue to encounter, may involve commitments of engineering support, requiring valuable time and resources. If our customer development activities are not successful, we will not meet our revenue forecasts and will absorb potentially significant customer- or application-specific costs.

As fingerprint authentication in smart cards has not yet been widely adopted in the market segments we target, our engagement with potential customers frequently begins with an extensive education process regarding our products and technologies, which may be followed by an extended period of pre-sale engineering support for customer development of a smart card incorporating our products and technologies. During a customer's product development process, we face the risk that our solutions will fail to meet the customer's technical, performance, or cost requirements, or that our product will be replaced by a competitor's product or an alternative authentication solution based on different technologies. Although we may complete a customer's product development process successfully, the customer subsequently may delay or terminate its product development efforts due to factors and considerations outside of our influence or control.

Until the advantages and benefits of fingerprint authentication in smart cards are well-known in the market segments we target, supported by compelling use cases and volume deployments of our solutions, we are likely to continue to experience extended and unpredictable sales cycles, resource allocation challenges, and high pre-sale customer engagement costs.

If the estimates and assumptions we have used to calculate the sizes and growth rates of our targeted market segments are inaccurate, our business, operational performance, and financial position may be harmed.

Our forecasts, based on assumptions and estimates, are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described herein. We utilize third-party data sources and analysis, which we generally do not independently verify, in our business planning and the development of our forecasts. Inaccuracies or errors in such third-party information likely could contribute to inaccuracies or errors in our business planning and forecasting. We also collect our own market data and competitive information, from which we develop certain assumptions and estimates used in our business plans and forecasts. If we make errors in developing the assumptions and estimates used in our business plans and forecasts, or the assumptions are inaccurate due to rapidly changing circumstances, our growth rate may be limited, as we may incorrectly allocate resources and capital, potentially harming our business, operating performance, and financial position.

If the size of one or more of our targeted market segments expands as we have estimated, our revenue may not expand at a similar rate, if at all. Growth of our revenue is subject to many risk factors, including those described herein. Accordingly, forward-looking statements regarding expected or forecast demand levels, market segment size, market shares, revenue levels, and growth rates included in this Annual Report or in other disclosures should be considered estimates, characterized by uncertainty and subject to change.

A significant portion of our revenue is associated with a limited number of customers, and the loss of such a customer, or a meaningful decline in revenue associated with such a customer, could harm our business, operating performance, and financial position.

We have historically generated limited total revenue, and most of that revenue has been associated with a limited number of customers. During 2022, 2021, and 2020, one customer accounted for approximately 48%, 85%, and 81% of our revenue, respectively.

While we pursue new customers and business opportunities as we maintain our relationships with our current customers, we have had limited success in diversifying our customer base. Excessive customer concentration, now and in the future, could cause any fluctuations in revenue and profitability to be more severe and could contribute to greater difficulty in resource allocation, inventory planning, and revenue forecasting. The loss of a major customer, an unanticipated decrease in demand for our products from a major customer, or our failure to diversify our customer base could harm our business, operational performance, and financial position.

If we are unable to retain our existing customers or attract new customers, our growth will be adversely affected and our business, operating performance, and financial position could be harmed.

The success of our business depends on retaining current customers, while expanding and diversifying our customer base, and relies on our ability to develop, communicate, and deliver a compelling value proposition to our customers. Our ability to attract new customers and retain existing customers depends in large part on our ability to be collaborative, responsive, and flexible in the timely delivery of fingerprint authentication solutions to customers, meeting their current and future needs. As enabling technologies evolve, manufacturing processes and requirements change and demand drivers shift within market segments, we are required to continually improve our existing products and introduce new, innovative products, thereby maintaining our competitive position as a leading developer of highly-differentiated fingerprint authentication solutions. If we fail to anticipate technological advances, fail to develop high-performance, lower-cost products incorporating those advances, and fail to deliver compelling, highly-differentiated solutions meeting customer requirements, our competitive position likely will suffer, harming our business, operational performance, and financial position.

Our hardware and software solutions may contain defects, which will make it more difficult for us to establish and maintain customer relationships.

Although we have completed the development of multiple generations of our fingerprint authentication solutions, they have not yet been deployed in high volumes. Despite extensive testing during development and third-party certifications, our solutions may contain undetected design flaws, coding errors, and material or manufacturing defects that are discovered only after high volume deployment and extensive use. Any such flaw, error, or defect in current or new solutions could cause product release delays, design modifications, customer delays, and product recalls, any of which could be costly and disruptive, with potentially adverse effects on customer relationships and our competitive position and, in turn, harm our business, operational performance, and financial position.

Our strategic alliances and collaborations may not achieve their objectives in a timely manner, if at all, and their failure to do so could inhibit our ability to pursue opportunities in targeted market segments.

An important element of our strategy is collaboration with well-positioned partners, leveraging their expertise and resources. We have entered, and we anticipate that we will continue to enter, into strategic alliances and collaborations. We continually evaluate strategic partnership opportunities designed to enhance or complement our technologies, to provide necessary expertise, components, or supplies, to facilitate and accelerate our access to customers and geographies, and to develop, introduce, and distribute solutions integrating our products and intellectual property with those of the partner. Certain strategic alliances may not achieve their intended objectives, and parties to our strategic alliances may not perform as we expect. The failure of these alliances to achieve their objectives may impede our ability to introduce new products and enter new markets, meeting our growth and performance expectations. Furthermore, our partners may possess, obtain, or retain rights in intellectual property they developed independently or as part of an alliance. In the event of a dispute with a partner, the partner may attempt to withhold or assert rights in intellectual property that we developed or sought access to for the purpose of enhancing or complementing our technologies.

We face intense competition.

We compete with both established companies and early-stage businesses providing identification and authorization solutions, as well as larger providers of broader, more traditional security solutions. Some of our competitors have substantially greater financial, engineering, marketing, customer support and manufacturing resources than us, and may independently develop superior technologies and solutions, which may result in our technologies and solutions becoming less competitive or obsolete.

In some circumstances, competitors may be able to aggressively compete on price in a manner we may not. Current and potential competitors also may have greater name recognition, more extensive market presence, larger installed bases, and long, established relationships with many of their customers and partners.

In the market segments we target, authentication solutions utilizing powered mobile devices (e.g., smart phones) are achieving broadening acceptance and represent a significant competitive threat. We believe the demonstrable vulnerabilities of such alternative solutions, most notably to hacking (i.e., the unauthorized access to and misuse, for fraudulent or criminal purposes, of private information stored on a networked electronic device), afford us a meaningful competitive advantage. However, we may not be able to successfully communicate this and other competitive advantages to those potential customers for which a networked, mobile device, albeit vulnerable to security risks, might be an acceptable alternative solution.

If we are unable to enhance our existing technologies or develop new technologies in a timely manner in response to technological and marketplace changes, our ability to compete in our targeted market segments likely will suffer. In addition, if one or more other biometric technologies, such as voice, face, iris, hand geometry, or blood vessel recognition offered by competitors, are widely adopted, the potential opportunities for our fingerprint authentication solutions could be reduced.

Our ability to compete successfully depends on a number of competitive factors, which may be outside our influence or control. These competitive factors include the following:

- our ability to design, introduce, and implement compelling new technologies, products, and solutions in a timely manner:
- our ability to accurately predict and adapt to the evolving needs of our customers and our targeted market segments;
- our ability to anticipate and meet our customers' price and performance requirements, as well as their requirements for product ease of use, reliability, and durability;
- our ability to provide responsive, high-quality customer service and support; and
- our ability to anticipate and respond to competitors' product and pricing moves, new product and technology development, marketing initiatives, strategic partnering, and other competitive actions.

Additional competitors may enter the market segments we have targeted, with fingerprint authentication solutions or solutions based on other technologies or approaches, increasing competition and increasing risks to our business, operational performance, and financial position.

Early-stage markets are susceptible to consolidation of participants and entry into the market by larger, established companies that acquire or form joint ventures with participants. Our position in the market segments we target could be harmed if the competitive landscape were to change due to consolidation or entry by a company with substantial resources through a merger, acquisition, or joint venture with a competitor. Increased competition within any of our targeted market segments could result in price reductions, reduced gross margins, and lost opportunities, potentially harming our business, operational performance, and financial position.

We are exposed to potentially significant supply chain risks, as we currently rely on one semiconductor manufacturer and a limited number of providers of assembly and test services for outsourced production of our products.

We currently rely on Taiwan Semiconductor Manufacturing Company, Limited ("TSMC"), the leading producer of semiconductor wafers, for production of our proprietary application specific integrated circuit ("ASIC") designs. We also rely on a limited number of providers of assembly and test services, including Amkor Technology, Inc. and Silicon Precision Industries Limited (a unit of ASE Technology Holding Co., Ltd.), both of which are leaders in outsourced semiconductor assembly and test services.

We enjoy collaborative, supportive relationships with these suppliers. While we have experienced lengthened delivery lead times, we have not experienced significant delays in delivery of wafers or completed products. However, broader supply chain uncertainties have contributed to, and likely will continue to contribute to, difficulties in accurately planning capacity utilization, inventory provisioning, and inventory levels.

We also have experienced increased costs and expect further cost increases if supply chain conditions remain for a prolonged period, which we anticipate. Numerous industries dependent on the semiconductor and electronics supply chains have experienced supply shortages and delays, contributing to lower production, higher costs, and reduced efficiencies. We expect, based on the research of industry analysts and information from our suppliers, uncertainties associated with capacity utilization, lead times, delivery schedules, and costs will continue in 2023 and possibly future years. However, we cannot accurately predict when conditions in our supply chains will normalize or what the consequences for our business might be if such normalization does not occur when expected.

The TSMC facility producing our semiconductor wafers is located in China, which exposes us to risks associated with international trade policy, tariffs, and related policy matters, all of which are outside of our influence or control. While TSMC facilities in other countries offer the fabrication processes we require, transition of production of our wafers to such a facility would require significant effort, time, and costs, which could harm our business, operational performance, and financial position.

Because we depend on the contributions of very skilled staff across critical engineering and business disciplines, if these individuals were to leave us, we may not be able to attract and hire replacements with the same skills in a timely fashion, if at all, which could harm our business, operational performance, and financial position.

Our ability to successfully execute our growth strategy depends on our ability to attract, motivate, and retain our personnel. Competition for well-qualified employees across critical disciplines, is intense. Our continued ability to compete effectively depends on our ability to attract new, well-qualified candidates and to retain and motivate existing staff. If we do not succeed in attracting well-qualified candidates or retaining and motivating existing staff, our business, operational performance, and financial position could be adversely affected.

We believe our success has depended, and will continues to depend, on the talents and efforts of our executives and our highly skilled staff, including our engineering, sales, and administrative personnel. We believe we provide compensation, in the form of salaries, benefits, and share-based awards, consistent with comparable technology companies of our size, development stage, and industry focus. We also maintain a yearly performance-based, variable compensation plan, in which all full-time employees participate, directly tied to company-wide, departmental, and individual performance goals. However, total variable compensation paid for the last three years has not been a significant portion of cash compensation, representing, in aggregate, approximately 5%, 5%, and 4% of employee salaries paid for the years ended December 31, 2022, 2021, and 2020. Until we achieve certain levels of sustained revenue and profitability, such amounts of variable compensation likely will not be a significant portion of total compensation. As such, our variable compensation plan may not have the intended effects associated with motivating and retaining our employees.

As of December 31, 2022, all of our full-time staff (i.e., employees and permanent individual contractors) held subscription rights for the purchase of our Ordinary Shares. Our executives and other key contributors receive a significant portion of their total annual compensation in the form of subscription rights awards or, from time to time, other forms of share-based compensation. If the quoted price of our Ordinary Shares does not appreciate from the prices per share associated with the subscription rights outstanding, the value, if any, of those subscription rights, if and when exercised, may not be meaningful to holders of those subscription rights. If the quoted price of our Ordinary Shares does not increase, the holder's perception of the potential value of his or her subscription rights may be insufficient to retain that holder as an employee or contractor. The loss of one or more important contributors, due to the perception that the current or future value of subscription rights awards is not sufficiently compelling to remain with us, could adversely affect our ability to execute our strategy, and we may not be able to find adequate replacements in a timely manner. Accordingly, we can provide no assurances that we will be able to retain the services of our executives or key contributors.

The COVID-19 pandemic could have an adverse impact on our business, operational performance, financial position, as well as the markets and communities in which we operate.

In response to the COVID-19 pandemic, many state, local, and national governments put in place quarantines, executive orders, shelter-in-place orders, and similar government orders and restrictions to control the spread of the virus. At the onset of the pandemic, we implemented a flexible work-from-home policy for employees and restricted travel. We will continue to monitor applicable regulations and the recommendations of public health professionals as we determine which actions are in the best interests of us and our employees.

We expect, based on the research of industry analysts and information from our suppliers, uncertainties associated with capacity utilization, lead times, delivery schedules, and costs will continue in 2023 and possibly future years. We cannot accurately predict when conditions in our supply chains will normalize or what the consequences for our business might be if such normalization does not occur when expected.

While the ultimate duration and impact of the COVID-19 pandemic on the global economy, our targeted market segments, and our business is difficult to assess or predict, the pandemic has resulted in, and may again result in, the disruption of global financial markets, potentially reducing our ability to access capital.

Additionally, the pandemic could negatively impact the performance of our customers, which could cause reduced orders from them or delays in renewing or entering into contracts with us. We believe the pandemic has had an adverse influence on the timing of activities of smart card manufacturers and issuers, including delaying product development and the initiation of trials and pilots involving smart cards incorporating our fingerprint authentication solutions. Such negative impact on the performance of our customers could slow the collection of accounts receivable or expose us to inventory obsolescence, either of which, if significant, could harm our business, operational performance, and financial position.

We will continue to monitor circumstances closely. While the pandemic may have increased end-user awareness of the hygienic benefits of contactless payment solutions, such as those enabled by our fingerprint authentication solutions, therefore possibly increasing demand for such solutions, the full impact of COVID-19 (or a similar health emergency) is difficult to predict, highly uncertain, with assumptions and estimates subject to change.

Our business, operational performance, and financial position are subject to a range of exogenous risks. A sustained period of unfavorable conditions in the global economy or in the market segments we target could have an adverse impact on our business, operational performance, financial position. War, terrorism, other acts of violence, or natural or manmade disasters, could have an immediate and sustained impact on business and investor confidence, leading to reduced economic activities, potentially harming our business, operational performance, and financial position.

Because we sell an innovative technology solution for emerging applications in market segments in early stages of development, we are particularly vulnerable to a sustained decline in economic conditions, which likely would be accompanied by a decline in confidence within our targeted market segments. Heightened risk aversion within our targeted market segments could inhibit demand for our solutions, which have yet to achieve wide adoption.

We believe global economic conditions are subject to the following short- and long-term exogenous risks, individually and with combined effect:

- the COVID-19 pandemic does not abate, or new variants of the virus are identified, causing governments to prolong current, or impose new, restrictions on activities, potentially contributing to inflationary and recessionary pressures across the global economy;
- supply chain constraints and related uncertainties continue indefinitely across industries, or conditions deteriorate, with the potential consequence of increasing inflationary and recessionary pressures in specific geographies or market segments or across the global economy;
- the relationships between China and western trading partners, notably the United States, do not improve or deteriorate further, possibly contributing to further trade restrictions, leading to inflationary and recessionary pressures in China and across the global economy; and
- the war between Russia and Ukraine and the risk of escalation into a broader conflict does not abate, causing prolonged trade sanctions and other economic restrictions on Russia, potentially contributing to inflationary and recessionary pressures across the global economy. (We do not have personnel or customers in Russia or Ukraine.)

These and other risks to economic activity could make it difficult for our customers and other market participants to accurately forecast and plan business activities, leading to lower confidence and the possibility of reduced or delayed on new initiatives, such as the deployment of products incorporating our fingerprint authentication solutions. If economic conditions deteriorate or are characterized by greater uncertainty or volatility, we may not meet our revenue forecasts or our expectations for when profitability will be achieved may be delayed, which could have an adverse impact on our business, operational performance, and financial position.

Additionally, if economic conditions were to deteriorate, valuations in the capital markets likely would decline, independent of our performance or disclosed outlook, potentially resulting in lower quoted market prices for our equity securities. As such, our ability to access additional capital through the capital markets could be diminished or significantly delayed.

Our business is susceptible to risks associated with international operations.

We market our solutions worldwide. Our global marketing and sales personnel are assigned to offices in the United Kingdom, the United States, and China, and focus on demand creation and customer support. We also have sales and marketing personnel residing across Europe, North America, and Asia, addressing opportunities across our three targeted markets in those regions. Employing and managing personnel across disparate international domiciles, with differing employment and tax laws, has been, and likely will continue to be, a source of organizational complexities and costs that have been, and likely will continue to be, disproportionally high for a company of our size and stage of development.

Our reliance on international marketing and sales activities subjects us to the risks of conducting business internationally, including risks associated with political and economic instability, including trade restrictions, sanctions, and import/export regulations, currency controls and exchange rate fluctuations, changes in tariff and duty rates, and travel and trade restrictions related to health emergencies (e.g., the COVID-19 pandemic). Such instabilities or uncertainties associated with these risks may negatively impact the performance of our customers in one or more regions of the world, which could cause reduced orders from them or delays in renewing or entering into contracts with us, negatively affecting our business, operational performance, and financial position. Such negative impact on the performance of our customers in one or more regions of the world could slow the collection of accounts receivable from such customers or expose us to inventory obsolescence due to delayed or cancelled orders, either of which, if significant, could harm our business, operational performance, and financial position.

Our international activities may expose us to a number of other risks including, but not limited to:

- difficulties in staffing and managing international operations;
- potentially longer collection cycles, due to currency restrictions or other limitations on customer remittances;
- unexpected challenges within or changes to countries' banking and credit systems;
- unexpected changes in government regulatory requirements;
- managing complex value added tax, sales, or other indirect tax requirements, regulations, and treaties, which can be burdensome, and potential changes in tax and trade regulations and treaties in and among Norway, the United States, the United Kingdom, China, and in and among countries in which we operate or conduct business;
- unexpected changes in international trade policies, including potential adoption and expansion of tariffs or cross- border taxation;
- potentially longer inventory cycles, in the event our supply chain partners, which primarily are based in China, Taiwan, and South Korea, experience operational disruptions or are negatively affected by changes in international relations, trade policies or taxation;
- different, complex, and evolving laws governing intellectual property rights, which in certain countries provide uncertain or reduced protection of intellectual property rights; and
- operating in countries with a higher incidence of corruption and fraudulent business practices.

These and other risks associated international activities could contribute to reduced demand from, or disruptions of our relationships with, international customers operating in any of our three targeted markets, with a potentially adverse influence on our business, operational performance, and financial position.

If currency exchange rates fluctuate substantially in the future, our financial results, which are presented in U.S. Dollars, could be adversely influenced by potentially large gains or losses experienced in the translation of amounts denominated in foreign currencies.

Our terms and conditions of sale provide for pricing our products and invoicing our customers in U.S. Dollars, and our suppliers of outsourced product manufacturing and assembly and test services invoice us in U.S. Dollars. However, we incur expenses for employee compensation, property leases, and other operating expenses in the local currencies of the countries in which we operate. To date, we have not engaged in any currency hedging strategies, and any such strategies, such as forward contracts, currency options, and foreign exchange swaps, we may implement to mitigate this risk may not eliminate, or may increase, our exposure to foreign exchange fluctuations.

Product errors or defects could expose us to costs and liabilities, harm our reputation, and reduce our ability to compete effectively.

Semiconductor-based products such as those we develop and sell may contain errors or defects, especially when first introduced, when new versions are released, or when first integrated with other technologies, either by us or our customers. Product errors, including those resulting from third-party suppliers, could affect the performance or interoperability of our products, could delay the development or release of enhanced or new products and solutions, with potentially adverse consequences for our reputation, market acceptance of our products and solutions, and our ability to compete. Any errors or delays in releasing enhanced or new products and solutions could cause us to lose customers, subject us to liability for damages, and divert our resources from other tasks, any one of which could materially and adversely affect our business, operational performance, and financial position. Although we have insurance to cover product liability claims, the amount of coverage may not be sufficient.

If our information technology systems or data, or those of third parties upon which we rely, are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to: regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; and other adverse consequences.

In the ordinary course of our business, we may collect, receive, store, process, generate, use, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, processing) proprietary, confidential, and sensitive data, including personal data, intellectual property, and trade secrets (collectively, sensitive information). We may rely upon third-party service providers and technologies to operate critical business systems to process sensitive information in a variety of contexts, including, without limitation, third-party providers of cloud-based infrastructure, encryption and authentication technology, employee email, content delivery to customers, and other functions. Our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. We may share or receive sensitive information with or from third parties.

Cyberattacks, malicious internet-based activity, and online and offline fraud are prevalent and continue to increase. These threats are becoming increasingly difficult to detect. These threats come from a variety of sources, including traditional computer "hackers," threat actors, personnel (such as through theft or misuse), sophisticated nation-states, and nation-state-supported actors. Some actors now engage and are expected to continue to engage in cyber-attacks, including without limitation nation-state actors for geopolitical reasons and in conjunction with military conflicts and defense activities. During times of war and other major conflicts, we and the third parties upon which we rely may be vulnerable to a heightened risk of these attacks, including cyber-attacks, that could materially disrupt our systems and operations, supply chain, and ability to produce, sell and distribute our goods and services. We and the third parties upon which we rely may be subject to a variety of evolving threats, including but not limited to social-engineering attacks (including through phishing attacks), malicious code (such as viruses and worms), malware (including as a result of advanced persistent threat intrusions), denial-of-service attacks (such as credential stuffing), personnel misconduct or error, ransomware attacks, supply-chain attacks, software bugs, server malfunctions, software or hardware failures, loss of data or other information technology assets, adware, telecommunications failures, earthquakes, fires, floods, and other similar threats.

Ransomware attacks, including by organized criminal threat actors, nation-states, and nation-state-supported actors, are becoming increasingly prevalent and severe and can lead to significant interruptions in our operations, loss of data and income, reputational harm, and diversion of funds. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments. Similarly, supply-chain attacks have increased in frequency and severity, and we cannot guarantee that third parties and infrastructure in our supply chain or our third-party partners' supply chains have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach of or disruption to our information technology systems (including our products and services) or the third-party information technology systems that support us and our services.

Remote work has become more common and has increased risks to our information systems and data, as more of our employees utilize network connections, computers and devices outside our premises or network, including working at home, while in transit and in public locations. Future or past business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities' systems and technologies. Furthermore, we may discover security issues that were not found during due diligence of such acquired or integrated entities, and it may be difficult to integrate companies into our information technology environment and security program.

Any of the previously identified or similar threats could cause a security incident or other interruption. A security incident or other interruption could result in unauthorized, unlawful, or accidental acquisition, modification, destruction, loss, alteration, encryption, disclosure of, or access to our sensitive information. A security incident or other interruption could disrupt our ability (and that of third parties upon whom we rely) to provide our products or services. The failure of our information security infrastructure, procedures, and controls to protect us from an expanding variety of cybersecurity threats could have a material adverse effect on our business, operational performance, financial position, and damage to our reputation as a provider of solutions for information security.

We may expend significant resources or modify our business activities to try to protect against security incidents. Certain data privacy and security obligations may require us to implement and maintain specific security measures, industry-standard or reasonable security measures to protect our information technology systems and sensitive information.

To date, we have not experienced a security incident or similar event. Although we have implemented information security infrastructure, procedures, and controls designed to protect against these threats, there can be no assurance that these measures will be effective. Our systems remain vulnerable to an expanding variety of cybersecurity threats, including data theft, financial fraud, ransomware and similar third-party criminal activity, and computer viruses or similar operationally disruptive problems, given the pace at which such threats evolve. We take steps to detect and remediate vulnerabilities, but we may not be able to detect and

remediate all vulneratbilities because the threats and techniques used to exploit the vulnerability change frequently and are often sophisticated in nature. Therefore, such vulnerabilities could be exploited but may not be detected until after a security incident has occurred. These vulneratbilities pose material risks to our business. Further, we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities.

Applicable data privacy and security obligations may require us to notify relevant stakeholders of security incidents. Such disclosures are costly, and the disclosures or the failure to comply with such requirements could lead to adverse consequences. If we (or a third party upon whom we rely) experience a security incident or are perceived to have experienced a security incident, we may experience adverse consequences. These consequences may include: government enforcement actions (for example, investigations, fines, penalties, audits, and inspections); additional reporting requirements and/or oversight; restrictions on processing sensitive information (including personal data); litigation (including class claims); indemnification obligations; negative publicity; reputational harm; monetary fund diversions; interruptions in our operations (including availability of data); financial loss; and other similar harms. Security incidents and attendant consequences may cause customers to stop using our products or services, deter new customers from using our products or services, and negatively impact our ability to grow and operate our business. Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations.

We may pursue strategic transactions, including acquisitions of other businesses operating in our current market or operating in a new market, and integration of any such acquired assets or operations into our company may be disruptive or not meet expectations, thereby harming our business, operating performance, and financial position.

We may pursue strategic transactions in the future. Risks associated with mergers, acquisitions, investments, asset purchases, joint ventures, and related strategic transactions include:

- incomplete or inadequate due diligence on our part, regarding the business, operational, financial, and legal characteristics of the business and the development of associated assumptions and estimates;
- challenges and difficulties in the integration of acquired business operations into our operations, information systems, and control environment;
- challenges and difficulties in assimilating and retaining employees;
- challenges and difficulties in integrating technologies, intellectual property, and product development activities;
- challenges and difficulties in retaining existing customers of the acquired business and developing new customers after the strategic transaction;
- challenges and difficulties in integrating supply chains and inventories;
- meeting the terms of contractual liabilities assumed by us, or transferred to us, as a result of the strategic transaction;
- unanticipated liabilities and contingent obligations that may arise due to the strategic transaction;
- the breach of representations and warranties by one or more parties to the definitive agreement associated with the strategic transaction, for which remedy may be insufficient or unavailable;
- the failure of one or more parties to the definitive agreement associated with the strategic transaction to satisfy any obligations to indemnify us against liabilities arising from the strategic transaction; and
- development of unfavorable economic or trading conditions in the market segments we target (or are targeted by the acquired business), which could negatively impact the accuracy of our assumptions and estimates associated with the strategic or financial value of the strategic transaction.

These and other risks may prevent us from realizing the expected strategic and financial benefits from completion of the strategic transaction, and, if the full economic value of the strategic transaction is not realized, we may be required to incur an impairment charge to reduce the carrying value of any goodwill or intangible assets recorded at the time of the strategic transaction.

If we fail to properly evaluate and successfully execute any strategic transaction, our business, operational performance, and financial position may be harmed.

Because the value of an investment in our equity securities is subject to a range of risks, including those described herein, if investors were to experience significant losses in the value of their investments in our equity securities, we may face litigation alleging that we have violated securities laws.

Companies that have experienced declines in the quoted prices of their shares, leading to investor losses, have been the subject of securities class action litigation, principally associated with allegations of material misstatements or omissions in disclosures required under SEC rules. Any such lawsuit to which we are a party, with or without merit, may result in an unfavorable judgment, or we and our insurance carriers may decide to settle litigation on unfavorable terms. Any such negative outcome could result in substantial damages or fines, damage to our reputation, or require modification of our business practices, all of which could harm our business, operational performance, and financial position. Defending litigation is costly and time-consuming and could divert management's attention and our resources. Furthermore, negative public announcements associated with the litigation could have a negative effect on the quoted prices of our ADSs or Ordinary Shares.

We have received grants and subsidies in the past that we may not receive in the future.

We have received various grants and subsidies to fund our research and development programs from various funding organizations. Furthermore, the Company continues to engage in efforts to secure further grants and subsidies for the next development steps of its product candidates. There is no assurance that granting bodies and agencies will continue to provide grants or that our programs will continue to qualify for grants.

Risks Related to Intellectual Property

Any failure to protect our proprietary technology and intellectual property rights could substantially reduce our ability to compete effectively, thereby harming our business, operational performance, and financial position.

We protect our proprietary technology and confidential information through the use of patents, trade secrets, trademarks, confidentiality agreements, and other contractual instruments and provisions.

Our intellectual property rights cover individual inventions and complete systems ranging from fingerprint measurement principles, fingerprint processing and matching algorithms, image sensor designs, integrated circuit designs, card-not-present solutions, dynamic registration enrolment solutions, and integrated system solutions. We have filed applications to protect our intellectual property rights in many countries, including Norway, South Korea, the United Kingdom, the United States, and those of the European Union. As of December 31, 2022, we have been granted 175 patents and have 62 pending patent applications.

The wordmark 'IDEX' and the IDEX logo are registered trademarks of IDEX Biometrics ASA and are owned by our company. There can be no assurance we will obtain protective registrations of our trademarks in key markets. Failure to obtain registrations could compromise our ability to fully protect our trademarks and brands and could increase the risk of challenge from third parties to our use of our trademarks and brands.

Effective intellectual property protection may be unavailable or limited in some foreign countries in which we operate. For example, the validity, enforceability, and scope of protection of intellectual property in China, where we operate, are still evolving and do not protect our intellectual property rights to the same extent as the laws in the other countries in which we operate.

We rely upon written agreements with our customers, suppliers, manufacturers, and other recipients of our technologies and products, in which our intellectual property is used, setting forth requirements for the treatment of confidential information, including our intellectual property. However, such agreements may not be adequate to protect our intellectual property and other proprietary information. Our customers, suppliers, manufacturers, and other recipients of our technologies and products may seek to use our intellectual property or proprietary information in violation of the terms of such written agreements.

Unauthorized parties may attempt to copy or otherwise use elements of intellectual property or proprietary information. Other parties, including our competitors, may independently develop technologies and products that are similar to or replicate features and functions of our technologies and products, potentially infringing on our intellectual property rights. If our efforts to protect and enforce our intellectual property rights are ineffective, we may engender increased competition in the market segments we target or in other markets in which fingerprint authentication applications are appropriate.

We may pursue and, from time to time, defend litigation to enforce our intellectual property rights, to protect our trade secrets, and to determine the validity and scope of the proprietary rights of others. Such litigation, whether successful or unsuccessful, could result in substantial costs and diversion of resources, which could have a material adverse effect on our business, operating performance, and financial position.

Any claims by third parties alleging we have infringed on their intellectual property rights could result in substantial costs and diversion of resources, which could have a material adverse effect on our business, operating performance, and financial position.

Our success depends, in part, on our ability to develop and commercialize our solutions and services without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. However, we may not be aware that our solutions or services are infringing, misappropriating, or otherwise violating third-party intellectual property rights and such third parties may bring claims alleging such infringement, misappropriation, or violation. For example, there may be issued patents of which we are not aware, held by third parties that, if found to be valid and enforceable, could be alleged to be infringed by our current or future technologies or products. There also may be pending patent applications of which we are not aware that may result in issued patents, which could be alleged to be infringed by our current or future technologies or products. Because patent applications can take years to issue and are often afforded confidentiality for some period of time there may currently be pending applications, unknown to us, that later result in issued patents that could cover our current or future technologies or products. A claim may also be made relating to technology that we acquire or license from others. We are not aware of any claims of infringement. However, any such claims, with or without merit, could result in significant litigation costs and diversion of resources, including the attention of management, and could require us to enter into licensing agreements. There can be no assurance such licenses could be obtained on commercially reasonable terms in a timely manner, if at all, or that the terms of any offered licenses would be acceptable to us.

We also may be required to pay substantial penalties and damages to third parties, potentially including treble damages if we are found to have willfully infringed patents or copyrights. We may also be required to indemnify customers or our licensees for penalties and damages they suffer, if the products they purchase from us, or the technology they may license from us, are found to violate third-party intellectual property rights. We cannot predict the outcome of lawsuits and cannot ensure that the results of any such actions will not have an adverse effect on our business, operational performance, or financial position or results of operations. An adverse determination in a judicial or administrative proceeding, or a failure to obtain necessary licenses to use such third-party intellectual property could prevent us from manufacturing, using, or selling certain of our products, and there is no certainty we will be able to develop or acquire other non-infringing intellectual property to allow us to continue to offer such products without infringement.

In addition, we may license from third-parties certain technologies used in our products. These third-party licenses may be granted with restrictions, and there can be no assurances that such third-party technologies will be available to us on commercially acceptable terms. If we are unable to license technologies for our products from third-parties on commercially acceptable terms, or if any third-party initiates litigation against us for alleged infringement of their intellectual property rights, we may not be able to sell certain of our products and we could incur significant costs in defending against litigation or attempting to develop or acquire alternate non-infringing products, which would have an adverse effect on our business, operating performance, and financial position.

Our patents may not provide us with competitive advantages.

Our success is dependent, in part, upon protecting our intellectual property rights. We rely on a combination of patents, copyrights, trademarks, service marks, trade secret laws, and contractual restrictions to establish and protect our intellectual property rights in our products and services. However, the steps we take to protect our intellectual property may be inadequate. We will not be able to protect our intellectual property if we are unable to enforce our rights or if we do not detect unauthorized use of our intellectual property. Despite our precautions, it may be possible for unauthorized third parties to copy our products and use information that we regard as proprietary to create products and services that compete with ours.

We hold numerous patents in the United States and in other countries, covering multiple elements of our highly-differentiated technologies and products. There can be no assurance we will continue to develop proprietary technologies and products that are patentable, that any issued patent will provide us with any competitive advantages or will not be challenged by third-parties, or that patents of others will not limit our ability to effectively compete. Although we have patented the intellectual property that we believe provides us with competitive advantages, our competitors offer products for fingerprint authentication applications, employing different technologies and processes.

Additionally, the process of obtaining patent protection is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications, or we may not be able to do so at a reasonable cost or in a timely manner. The United States Patent and Trademark Office (the USPTO) and various foreign governmental patent agencies also require compliance with procedural, documentary, fee payment, and other similar provisions during the patent application process and after a patent has issued. There are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Even if issued, these patents may not adequately protect our intellectual property, as the legal standards relating to the infringement, validity, enforceability, and scope of protection of patent and other intellectual property rights are complex and often uncertain. Any patents, trademarks, or other intellectual property rights that we have or may obtain may be challenged or circumvented by others or invalidated or held unenforceable through administrative

processes, including re-examination, *inter partes* review, interference and derivation proceedings and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings) or litigation.

In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and protect these rights. Litigation brought to protect and enforce our intellectual property rights could be costly, time consuming, and distracting to management, and could result in the impairment or loss of portions of our intellectual property. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims, and countersuits attacking the validity and enforceability of our intellectual property rights. An adverse determination of any litigation proceedings could put our intellectual property at risk of being invalidated or interpreted narrowly and could put our related patents, patent applications and trademark filings at risk of being invalidated, not issuing or being cancelled. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential or sensitive information could be compromised by disclosure in the event of litigation. In addition, during the course of litigation there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Our inability to protect our proprietary technology against unauthorized copying or use, as well as any costly litigation or diversion of our management's attention and resources, could delay further sales or the implementation of our existing products, impair the functionality of our products, delay introductions of new products, result in our substituting inferior or more costly technologies into our products, or harm our reputation or brand. In addition, we may be required to license additional technology from third-parties to develop and market new products, and we may not be able to license that technology on commercially reasonable terms or at all. Our inability to license this technology could harm our ability to compete.

Risks Related to Government Laws and Regulations

Our business is subject to a complex variety of laws and regulations around the world. Any changes in government regulations relating to our business or other unfavorable developments may adversely affect our business, operational performance, and financial position.

We are incorporated in and registered under the laws of Norway, with staffed subsidiaries in Norway, the United Kingdom, the United States, and China. We also have personnel in various other countries in which we operate. As a result of this organizational structure and the scope of our operations, we are subject to a complex variety of laws and regulations across different countries. The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting. If we establish operations in, or have customers domiciled in, other countries, we likely will become subject to the laws and regulations of those countries. It is difficult to accurately predict how existing laws and regulations may be applied to our business, or what new laws and regulations may come into effect.

We are subject to various laws and regulations regarding how we conduct our business. Such laws and regulations include, but are not limited to, labor, advertising and marketing, real estate, taxation, user privacy, data collection and protection, intellectual property, anti-corruption, anti-money laundering, tariffs and customs regulations, export controls, economic sanctions, foreign exchange controls, antitrust and competition, electronic contracts, telecommunications, sales procedures, credit card processing procedures, and consumer protections. We cannot guarantee we have been or will be fully compliant in every country in which we operate, as existing laws and regulations governing issues such as intellectual property, privacy, taxation, and consumer protection, among others, are complex and subject to constant change. The adoption or modification of laws or regulations relating to our technologies and products, and the use thereof, could limit or otherwise adversely affect the manner in which we currently conduct our business. Further, compliance with laws, regulations, and other requirements imposed upon our business may be onerous and expensive, and such compliance may be inconsistent from jurisdiction to jurisdiction, further increasing costs and risk of noncompliance.

Noncompliance with applicable laws, regulations, or requirements could subject us to investigations, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, injunctions, or other consequences. Our response to any legal action or a government enforcement action or sanction likely would result in a significant diversion of management attention, an unproductive redirection of resources, and an increase in costs. If our response is ineffective, our business, operational performance, and financial position could be materially adversely affected.

We are subject to stringent and evolving U.S. and foreign laws, regulations, rules, contractual obligations, policies, and other obligations related to data privacy and security. Our actual or perceived failure to comply with such obligations could lead to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; and other adverse business consequences.

In the ordinary course of business, we process personal data and other sensitive information, including proprietary and confidential business data, trade secrets, intellectual property, sensitive third-party data, and biometric identification information,

although we do not copy or store any such data or sensitive information. Our data processing activities may subject us to numerous data privacy and security obligations, such as various laws, regulations, guidance, industry standards, external and internal privacy and security policies, contracts, and other obligations relating to data privacy and security.

Many governments have adopted or are considering adopting laws and regulations regarding the processing of personal data, including biometric information, and notification procedures in the event of a breach of data security or other unintentional disclosure of such information. For example, the European Union's General Data Protection Regulation ("EU GDPR"), the United Kingdom's GDPR ("UK GDPR"), and China's Personal Information Protection Law ("PIPL") impose strict requirements for processing personal data. For example, under the EU GDPR, government regulators may impose temporary or definitive bans on data processing, as well as fines of up to 20 million euros or 4% of annual global revenue, whichever is greater; or private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests. Further, individuals may initiate litigation related to processing of their personal data. We also target customers in Asia and have an office in China, and, as such, may be subject to new and emerging data privacy regimes in Asia, including China's PIPL, Japan's Act on the Protection of Personal Information, and Singapore's Personal Data Protection Act.

We, our card manufacturer customers, and their issuing customers are subject to evolving laws and regulations limiting the circumstances under which certain personal data can be obtained, transferred, received, and processed between countries or jurisdictions. Many jurisdictions in which we operate have established data security and legal frameworks specifically applicable to the collection and storage of biometric information.

European countries and the European Union (the "EU") have been early and active in the development of such frameworks, but the terms and provisions of such frameworks are not uniform and are subject to change. As such, we are exposed to increased costs associated with compliance, as well as increased risks caused by evolving regulatory requirements and uncertainties.

Complying with the GDPR and the ePrivacy Regulation, when enacted, may cause us to incur additional costs or require us to modify our strategy, business practices, and solutions, as many of our current and targeted customers are domiciled in the EU. Norway, the domicile of our company, is not an EU member state, although it is associated with the EU through its membership in the European Economic Area ("EEA"). Through Norway's adoption of the Personal Data Act in 2018, the GDPR was incorporated into Norway's EEA agreement, thus binding Norway to the terms of the GDPR in the same manner as an EU Member State.

In the United States, federal, state, and local governments have enacted numerous data privacy and security laws, including data breach notification laws, personal data privacy laws, consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), and other similar laws (e.g., wiretapping laws). For example, the California Consumer Privacy Act of 2018 ("CCPA") applies to personal information of consumers, business representatives, and employees, and requires businesses to provide specific disclosures in privacy notices and honor requests of California residents to exercise certain rights related to their personal data. The CCPA provides for civil penalties of up to \$7,500 per violation and allows private litigants affected by certain data breaches to recover significant statutory damages. In addition, the California Privacy Rights Act of 2020 ("CPRA"), effective January 1, 2023, expands the CCPA's requirements, including by adding a new right for individuals to correct their personal information and establishing a new California Privacy Protection Agency to implement and enforce the law, which could increase the risk of enforcement. Other states, such as Colorado, Connecticut, Virginia and Utah have passed comprehensive privacy laws and similar data privacy and security laws have been proposed and are being considered at the federal, state, and local levels in recent years, which could further complicate compliance efforts and increase legal risk and compliance costs for us and the third parties upon whom we rely.

Additionally, there are U.S. state laws and regulations governing the collection and use of biometric information, such as fingerprints. For example, the Illinois Biometric Information Privacy Act regulates the collection, use, safeguarding, and storage of "biometric identifiers" and "biometric information" by private entities and provides a private right of action for persons who are aggrieved by violations of the law, which have resulted in a number of class action lawsuits. These regulations could have a significant impact on our business.

In addition to government regulation, privacy advocates and industry groups may propose new and different self-regulatory standards that may become applicable to us. We publish privacy policies, marketing materials and other statements regarding data privacy and security. If these policies, materials or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences We are also bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. For example, certain privacy laws, such as the GDPR and the CCPA, require our customers to impose specific contractual restrictions on their service providers. Because the interpretation and application of privacy and data protection laws are still uncertain, it is possible that these laws and other actual or alleged legal obligations, such as contractual or self-regulatory obligations, may be interpreted and applied in a manner that is inconsistent with our existing data management practices or the features of our fingerprint authentication solutions. If so, in addition to the possibility of fines, lawsuits, and other claims, we could

be required to change our business activities and practices or to modify our products and solutions, which could have an adverse effect on our business, operational performance, and financial position.

In the ordinary course of business, we may transfer personal data from Europe and other jurisdictions to the United States or other countries. Europe and other jurisdictions have enacted laws requiring data to be localized or limiting the transfer of personal data to other countries. In particular, the European Economic Area (EEA) and the United Kingdom (UK) have significantly restricted the transfer of personal data to the United States and other countries whose privacy laws it believes are inadequate. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws. Although there are currently various mechanisms that may be used to transfer personal data from the EEA and UK to the United States in compliance with law, such as the EEA and UK's standard contractual clauses, these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States.

If there is no lawful manner for us to transfer personal data from the EEA, the UK or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions at significant expense, increased exposure to regulatory actions, substantial fines and penalties, the inability to transfer data and work with partners, vendors and other third parties, and injunctions against our processing or transferring of personal data necessary to operate our business. Additionally, companies that transfer personal data out of the EEA and UK to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants, and activist groups. Some European regulators have ordered certain companies to suspend or permanently cease certain transfers out of Europe for allegedly violating the GDPR's cross-border data transfer limitations.

Additionally, certain countries outside Europe (e.g., China) have also passed or are considering laws requiring local data residency or otherwise impeding the transfer of personal data across borders, any of which could increase the cost and complexity of doing business.

If we cannot implement a valid compliance mechanism for cross-border data transfers, we may face increased exposure to regulatory actions, substantial fines, and injunctions against processing or transferring personal data from Europe or other foreign jurisdictions. The inability to import personal data to the United States could significantly and negatively impact our business operations; limiting our ability to collaborate with parties that are subject to such cross-border data transfer or localization laws; or requiring us to increase our personal data processing capabilities and infrastructure in foreign jurisdictions at significant expense.

Obligations related to data privacy and security are quickly changing, becoming increasingly stringent, and creating regulatory uncertainty as to the effective future legal framework. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. Preparing for and complying with these obligations requires significant resources and may necessitate changes to our information technologies, systems, and practices and to those of any third parties that process personal data on our behalf. Although we endeavor to comply with all applicable data privacy and security obligations, we may at times fail (or be perceived to have failed) to do so. Moreover, despite our efforts, our personnel or third parties upon whom we rely may fail to comply with such obligations, which could negatively impact our business operations and compliance posture. For example, any failure by a third-party processor to comply with applicable law, regulations, or contractual obligations could result in adverse effects, including inability to or interruption in our ability to operate our business and proceedings against us by governmental entities or others.

If we, or the third parties on which we rely, fail or are perceived to have failed to adequately address privacy concerns or comply with applicable privacy or data protection laws, regulations and policies, we could face significant consequences. These consequences may include, but are not limited to, government enforcement actions (e.g., investigations, fines, penalties, audits, inspections, and similar); litigation (including class-related claims); additional reporting requirements and/or oversight; bans on processing personal data; and orders to destroy or not use personal data. Any of these events could have a material adverse effect on our reputation, business, or financial position, including but not limited to: loss of customers; interruptions in our business operations; inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or revision or restructuring of our operations.

We are a multinational organization faced with increasingly complex tax issues in many jurisdictions, in which we could be obligated to pay additional taxes.

Given our international operating structure, with our parent company domiciled in Norway and subsidiaries domiciled in the United Kingdom, the United States, and China, we can be subject to taxation on sales, profits, and assets, as well as payments of social security obligations, in several worldwide jurisdictions. Tax laws are complex, difficult to interpret accurately, and subject to change. Accordingly, the amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax laws and regulations, including increased tax rates or revised interpretations of existing tax laws and precedents, which could have a material adverse effect on our business, operating performance, and financial position. Moreover, we generally conduct our international operations through wholly-owned subsidiaries and report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. Our intercompany relationships are and will continue to be subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. Additionally, tax authorities in the jurisdictions in which we operated could review our prior and future tax returns and impose additional tax, interest, and penalties.

As of December 31, 2022, the Company has a tax loss carryforward balance in Norway of 252.6 million, representing a potential deferred tax asset, if recognized and calculated at the current corporate tax rate of 22.0%, of \$55.6 million. The Company has a tax loss carryforward balance in the United Kingdom of \$3.4 million, representing a potential deferred tax asset, if recognized and calculated at the current corporate tax rate of 19.0%, of \$0.6 million. The Company does not have any tax loss carryforward balance or deferred tax liability in China. In the USA, the Company has research and development credits amounting to \$1.4 million, which may be applied to offset part of taxable income in future years. There are no restrictions as to the length of time tax losses may be carried forward in Norway and the United Kingdom. Tax rules may change and we cannot guarantee we will generate sufficient taxable profit in future periods that would allow us to recognize the value of the deferred tax asset on our Consolidated Statement of Financial Position. Nor can we guarantee that we ultimately will realize a tax benefit in any country in which he have tax loss carryforwards.

Forecasting our estimated annual effective tax rate for financial accounting purposes is complex and subject to uncertainty, and there may be material differences between our forecasted and actual tax rates.

Forecasts of our income tax position and effective tax rate for financial accounting purposes are complex and subject to uncertainty because our income tax position for each year combines the effects of a mix of profits earned and losses incurred by us in various tax jurisdictions with a broad range of income tax rates, as well as changes in the valuation of deferred tax assets and liabilities, the impact of various accounting rules and changes to these rules and tax laws, the results of examinations by various tax authorities, and the impact of any acquisition, business combination, or other reorganization or financing transaction.

To forecast our global tax rate, we estimate our pre-tax profits and losses by jurisdiction and forecast our tax expense or benefit by jurisdiction. If the actual mix of profits and losses, our ability to use tax credits, or effective tax rates by jurisdiction are different than those estimated, our actual tax rate could be materially different than forecasted, which could have a material impact on our business, operational performance, and financial position.

The countries in which we operate may have broad authority to issue regulations and interpretative guidance that may significantly impact how we apply tax laws and influence the presentation of our financial statements for the period issued. As additional regulatory guidance is issued by the applicable taxing authorities, as accounting treatment is clarified, as we perform additional analysis on the application of tax laws, we refine estimates used in our tax calculations. As such, assumptions and estimated for current tax calculations for the most recent period completed may differ from assumptions and estimated used for prior tax calculations, causing reported tax expense or benefits to differ from period to period. These differences could be material to the tax expense or benefit reported and to comparisons of effective tax rates for the periods.

We are subject to anti-corruption, anti-bribery, anti-money laundering, and similar laws, and non-compliance with such laws can subject us to criminal or civil liability and harm our business, operational performance, and financial position.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, ("FCPA"), the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the United Kingdom Bribery Act 2010, and other anti-corruption laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We use third-party law firms, accountants, and other representatives for regulatory compliance, sales, and other purposes in different countries. We can be held liable for the corrupt or other illegal activities of our employees, contractors, and other agents, regardless of whether we explicitly authorized such activities. In addition, although we have implemented policies and procedures to ensure compliance with anti-corruption laws, there can be no assurance all of our employees, contractors, or agents will comply with these laws at all times.

Noncompliance with these laws could subject us to whistleblower complaints, investigations, government enforcement actions, prosecution, litigation settlements, disgorgement of profits, fines, damages, other civil and criminal penalties or injunctions,

suspension or prohibition from contracting with certain parties, the loss of export privileges, reputational harm, adverse media coverage, and other consequences. If any subpoenas or investigations are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, operational performance, and financial position could be materially harmed. Our response to any event or action likely would result in a significant diversion of management's attention and resources and a significant increase in legal costs and other professional fees. Enforcement actions and sanctions could further harm our business, operational performance, and financial position.

As an issuer of securities, we also are subject to the accounting and internal controls provisions of the FCPA. These provisions require us to maintain accurate books and records and a system of internal controls sufficient to detect and prevent corrupt conduct. Failure to abide by these provisions could have an adverse effect on our business, operational performance, and financial position.

We must comply with U.S. government laws and regulations governing exports and imports, and we and certain employees are subject to criminal and civil liabilities for violation of those controls.

Our sales are subject to laws and regulations governing exports and imports, including the U.S. Export Administration Regulations, U.S. Customs regulations, and the economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. Exports of our technologies and products must be made in compliance with these laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including fines and loss of export or import privileges for us and fines or imprisonment for certain employees.

In addition, changes in our products or solutions or changes in applicable export or import laws and regulations may create delays in the introduction and sale of such products and solutions in certain international markets, prevent our customers from deploying our products and solutions or, in some cases, prevent the export or import of our products and solutions to certain countries or customers. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons, or technologies targeted by such laws and regulations could result in a substantial reduction of revenue, with potentially adverse effects on our business, operational performance, and financial position.

Risks Related to Our Governance and Investor Protections

Concentration of ownership of our Ordinary Shares (including Ordinary Shares represented by ADSs) among our executives, members of our Board of Directors, and our principal shareholders may prevent new investors from influencing important corporate decisions and matters submitted to shareholders for approval.

Certain executives, members of Board of Directors ("Board," as a whole, and each member a "Director"), and beneficial owners of 5% or more of our Ordinary Shares, in aggregate beneficially owned approximately 21% of our issued and outstanding Ordinary Shares, as of March 31, 2023. (For a list of our Directors and Executive Officers, see "Item 6. Section A. Directors and senior management.") As a result, depending on the level of attendance at general meetings of our shareholders, these persons, acting together, would be able to significantly influence all matters requiring shareholder approval, including the election, re-election, and removal of Directors, any merger, scheme of arrangement, or sale of all or substantially all of our assets, other significant corporate transactions, and amendments to our Articles of Association. Accordingly, this concentration of ownership may harm the market price of our Ordinary Shares or ADSs by enabling the persons, acting as a group, to:

- delay, defer, or prevent a change in control;
- take steps to entrench our management and/or the Boards;
- impede or disproportionately influence a merger, change of control transaction, or other business combination involving us:
- discourage a potential acquirer from a tender offer or otherwise influence the outcome of any attempt to obtain control of the Company; or
- pursue strategies that deviate from the interests of other holders of our equity securities.

Under SEC rules, we qualify as a foreign private issuer and, as a result, we are exempt from certain governance requirements, for as long as we maintain such qualification. Because of such reduced requirements, investors may find our equity securities less attractive.

Because we qualify as a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the Exchange Act applicable to domestic (i.e., domiciled in the United States) public companies, including the sections of the Exchange Act regulating: (i) the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act; (ii) insider reporting requirements regarding insider share ownership and trading activities; (iii) liabilities for insiders who profit from trades made in a short period of time (i.e., "short-swing trading"); and (iv) the required filings with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K upon the occurrence of specified significant events. In addition, foreign private issuers are not required to file their Annual Report on Form 20-F until 120 days after the end of each fiscal year, while domestic issuers must comply with shorter periods. Foreign private issuers also are exempt from Regulation Fair Disclosure, which sets forth rules for issuer disclosures of material information.

As a result of these exemptions, investors in our ADSs or Ordinary Shares may not have protections and safeguards afforded to investors holding the equity securities of companies that are not considered foreign private issuers. As such, investors may find our equity securities less attractive.

As a foreign private issuer domiciled in Norway, under Nasdaq rules we are permitted to adopt certain Norwegian corporate governance practices that differ significantly from corporate governance standards applicable to a domestic issuer. These practices may afford less protection to holders of our equity securities than they would enjoy if we complied fully with Nasdaq listing standards.

As a foreign private issuer listed on Nasdaq, we are subject to corporate governance listing standards. However, Nasdaq rules permit a foreign private issuer to follow the corporate governance practices of its home country in lieu of certain Nasdaq corporate governance listing standards. Corporate governance practices in Norway, which is our home country, may differ significantly from Nasdaq corporate governance listing standards.

Notably, Norwegian independence requirements for our Board are less stringent than the Nasdaq requirements applicable to domestic issuers. In Norway, we are required to comply with the Oslo Børs Issuer Rules, published by Oslo Børs ASA, which operates the stock exchange on which our Ordinary Shares are listed. These rules require at least two of the shareholder-elected members of our Board to be independent of material business relationships with us and any of our significant shareholders. Also, our Board may not include members of our executive management. Subject to these home country requirements, our Board may have members who are not considered independent, and holders of our equity securities may not be afforded the same protections otherwise required under Nasdaq corporate governance listing standards applicable to domestic issuers. See "Item 6. Section C. Board Practices—Corporate Governance" for the exemptions to the Nasdaq corporate governance rules applicable to foreign private issuers.

At some point in the future, we may no longer be considered a foreign private issuer, and we would be required to comply with the Exchange Act's domestic reporting requirements and the corporate governance listing standards applicable to domestic issuers, likely causing us to incur possibly significant legal, accounting, and other costs related to achieving and maintaining compliance.

As a foreign private issuer, we are not required to comply with certain periodic disclosure and current reporting requirements of the Exchange Act applicable to domestic issuers. Although we do not anticipate losing foreign private issuer status for the foreseeable future, if we were to lose such status, we would be required to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers, beginning with the next fiscal year after loss of such status.

In order to maintain our status as a foreign private issuer, either:

- (a) a majority of our voting securities must be either directly or indirectly owned of record by non-residents of the United States, or
- (b) (i) a majority of our Executive Officers or Directors cannot be U.S. citizens or residents (see "Item 6. Section A. Directors and senior management" for a list of our Executive Officers and Directors),
 - (ii) more than 50% of our assets must be located outside the United States, and
 - (iii) our business must be administered principally outside the United States.

If we lose our status as a foreign private issuer, we would be required to comply with the Exchange Act reporting and other requirements applicable to U.S. domestic issuers, which are more detailed and extensive than the requirements for foreign private issuers. We also will be required to make changes in our corporate governance practices in accordance with applicable SEC and Nasdaq rules.

If we lose our status as a foreign private issuer, the compliance and regulatory filing costs and commitments of management time we would likely incur under SEC and Nasdaq requirements could be higher than those we currently incur as a foreign private issuer, potentially increasing our uncertainty regarding whether or when we will achieve profitability.

Because we are an "emerging growth company" and utilize exemptions to certain SEC disclosure requirements, our ADSs and Ordinary Shares may be less attractive to investors.

We are an emerging growth company ("EGC") as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). For as long as we continue to meet the definition of an emerging growth company, we may utilize exemptions from various SEC reporting requirements applicable to other public companies, including exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002. We may take advantage of these exemptions until we no longer qualify as an EGC.

We will maintain our EGC status until the earliest of:

- (a) the last day of the fiscal year in which we have total annual gross revenue of \$1.235 billion or more;
- (b) December 31, 2026;
- (c) the date on which we have issued more than \$1.0 billion in nonconvertible debt over the prior three years; and
- (d) the date on which we are considered a "large accelerated filer" under SEC rules.

We cannot determine whether investors consider our Ordinary Shares or ADSs less attractive because of our utilization of EGC exemptions, but if they do, we could have reduced demand for our equity securities, resulting in less active trading, reduced liquidity, and greater volatility in quoted prices.

Risks Related to Our ADSs and Ordinary Shares

An active trading market for our ADSs may not develop or be sustained, and investors in our ADSs may not be able to resell those ADSs at or above the price paid for them, if at all. If such a market is sustained, we cannot predict its effect on the trading price of our Ordinary Shares on the Oslo Børs.

Our Ordinary Shares have been traded on Oslo Børs since 2010, and we listed our ADSs on Nasdaq on March 1, 2021. Each ADS represents 75 Ordinary Shares. The average daily trading volume for our Ordinary Shares in 2022 was 4,942,583 shares (253 trading days). In contrast, the average daily trading volume for our ADSs for the same period was 1,539 ADSs (251 trading days), representing 115,392 Ordinary Shares.

There can be no assurance an active trading market for the ADSs will develop or be sustained, and the lack of active trading could limit investor interest in our ADSs. If active trading of our ADSs were to develop on Nasdaq, we cannot predict how such trading would influence the quoted prices for our ADSs, nor can we predict the extent to which trading volumes and quoted prices for ADSs, on Nasdaq, and trading volumes and quoted prices for our Ordinary Shares, on the Oslo Børs, may or may not be correlated.

If equity research analysts do not publish research or reports, or express unfavorable opinions about us, our business, or our targeted market segments, the quoted prices of our equity securities could decline. A sustained decline likely will have a negative influence on our ability to access additional capital on favorable terms, if at all.

The quoted prices and trading volumes of our equity securities are influenced by the research and reports, published by equity research analysts, setting forth opinions about our company, our estimated financial performance, estimated future prices for our equity securities, and many other matters such analysts consider important.

We do not have any control over the analysts, or the content and opinions included in their reports. The quoted price of our equity securities could decline if one or more analysts expresses unfavorable opinions or lowers a previously published estimate of future prices of our equity securities. If one or more analysts ends coverage of us or fails to publish reports on us on a regular basis, demand for our equity securities could decrease, which in turn could cause the trading price or trading volume of our equity securities to decline.

Because the quoted prices of our ADSs and Ordinary Shares may be volatile, an investor in our equity securities could incur a rapid and substantial loss.

The quoted prices of our ADSs and our Ordinary Shares may be volatile, with sudden changes to quoted prices and trading volumes, due to numerous factors, some of which are outside of our influence or control. Limited liquidity for investors holding our ADSs is a significant source of price volatility, given a relatively small trading float (i.e., the total number of ADSs held by investors).

In addition to other risk factors discussed herein, such sources of volatility include investor reactions to:

- our public disclosures, including our regulatory filings, press releases, and other public statements;
- publications or statements made by securities analysts regarding our company, our customers, our competitors, or developments in the market segments in which we are active, including revisions to investment recommendations, estimates of future financial performance for us or our competitors, estimates of growth rates for market segments, and other relevant matters, including the launch or termination of our research coverage;
- credible news, reported by reliable sources, directly or indirectly related to us, our customers, our competitors, or the market segments in which we are active;
- publication of business analyses, industry surveys, or related information authored by organizations focused on the development of market studies and related research products and services;
- investor reactions to rumors, speculative statements, and other unreliable information, sometimes deliberately misleading, published by unidentified authors on social media, Internet investment forums, and other unreliable outlets, with the intent of influencing or manipulating the quoted prices of our equity securities;
- coordinated buying and/or selling activity in our ADSs and/or Ordinary Shares, including such trading intended to manipulate quoted prices of our equity securities;
- large short positions in our Ordinary Shares, publicly reported from time to time; and
- sudden and significant news regarding economic, political, and financial market conditions.

We caution investors to thoughtfully consider the sources and context of information encountered regarding or describing us, particularly if that information is found on social media, Internet investment forums, and other unreliable outlets. While we communicate regularly with investors, securities analysts, the investment press, and trade publications, employ a dedicated investor relations professional supporting the investor communications efforts of our executives, and maintain an active investor relations program coordinated by a third-party professional services firm, we cannot offer assurances regarding our ability, through our communications and investor outreach, to offset the negative influence of rumors, speculative statements, and other unreliable information, which may be associated with those engaged in speculative trading activities.

We cannot accurately predict whether or when the nature of these and other factors may cause the quoted prices or trading volumes of our ADSs or Ordinary Shares to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from selling their ADSs or Ordinary Shares at or above the price paid for such securities and may otherwise negatively affect the liquidity of those securities.

Because we do not anticipate paying any cash dividends on our Ordinary Shares (including Ordinary Shares underlying ADSs), capital appreciation, if any, will be an investor's sole source of return, and an investor may not receive a return on an investment in our equity securities.

An investment in ADSs should not be made to provide dividend income to the investor. Under current Norwegian law, a public limited liability company may only distribute dividends to the extent it will have net assets covering the company's share capital and other restricted equity after the dividend distribution has been made. We have never declared or paid a dividend on our Ordinary Shares, and we intend to retain our future net earnings, if any, to fund the expansion of our business. As a result, capital appreciation, if any, will be an investor's sole source of return for the foreseeable future.

Fluctuations in the exchange rate between the U.S. Dollar and the Norwegian Krone may increase the risk of holding ADSs and Ordinary Shares.

The price of our Ordinary Shares is quoted on the Oslo Børs in Norwegian Krone, while the price of our ADSs is quoted on Nasdaq in U.S. Dollars. Fluctuations in the exchange rate between the U.S. Dollar and the Norwegian Krone may result in differences between the value of our ADSs (each of which represents 75 Ordinary Shares) and the value of our Ordinary Shares, which may result in high trading volumes, as investors seek to exploit such differences.

As a result of fluctuations in the exchange rate between the U.S. Dollar and the Norwegian Krone, the U.S. Dollar equivalent of the proceeds a holder of ADSs would receive upon the sale on the Oslo Børs, for Norwegian Krone, of Ordinary Shares withdrawn from the Depositary may fluctuate. Similarly, the U.S. Dollar equivalent of any cash dividends paid by us in Norwegian Krone to holders of Ordinary Shares or Ordinary Shares represented by ADSs held, could also fluctuate.

Raising additional capital likely will dilute the ownership interests of holders of our equity securities. Also, depending on the nature and source of additional capital raised, we may relinquish certain rights to our intellectual property, future revenue streams, or other sources of value.

We are not certain whether or when we will generate sufficient cash flow to offset our costs and accelerate the expansion of our business, nor whether or when we will generate sufficient revenue to achieve or maintain profitability. Because we intend to continue pursuing our strategy in order to achieve expected rapid revenue growth, we anticipate additional capital likely will be required to fund such revenue growth (e.g., funding of increased working capital requirements). However, if we do not meet our current performance forecast, we will require additional funding to support future operating losses.

If we raise capital through issuance of equity securities or convertible debt securities, such issuance will result in dilution of the ownership interests of then-current holders of our equity securities. Also, new investors could gain rights, preferences, and privileges senior to those of then-current holders of our equity securities.

Debt financing and preferred equity financing, if available, could result in fixed payment obligations, and we may be required to accept terms that restrict our ability to incur additional indebtedness, force us to maintain specified liquidity ratios or other financial ratios, or restrict our ability to pay dividends or make acquisitions.

If we raise additional funds through strategic partnerships or alliances, or through marketing, distribution, or licensing arrangements with third parties, we may be required to relinquish valuable rights to our intellectual property, future revenue streams, and development activities, or to grant licenses on terms that may not be favorable to us. In addition, we could also be required to seek funds through arrangements with partners or others at an earlier stage than otherwise would be desirable. If we raise funds through government research grants, as we have, we may be subject to certain requirements limiting our discretionary use of the funds provided or require us to share information from our research and development.

If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce, or terminate our product development or future sales and marketing efforts or grant rights to a third-party to develop and market products or software solutions that we would otherwise prefer to develop and market ourselves. Raising additional funds through any of these or other means could adversely affect the rights of the holders of our equity securities and may cause the quoted price of our equity securities to decline.

The rights of holders of our equity securities may differ from the rights typically offered to shareholders of a corporation domiciled in the United States.

We are incorporated under Norwegian law. The rights of holders of Ordinary Shares and, therefore, certain rights of holders of our ADSs, are governed by Norwegian law, including the provisions of the Companies Act and our Articles of Association. These rights differ in certain respects from the rights of shareholders in a corporation domiciled in the United States.

The following summarizes certain important differences in shareholder rights between Norway and the United States:

- Under Norwegian corporate law, a shareholder may, at the general meeting of shareholders, require the Board and the Chief Executive Officer make available information about (i) matters that may affect the consideration of the annual financial statements and report; (ii) any matters that have been submitted to the shareholders for decision; (iii) the company's financial condition and (iv) any other matters before the general meeting.
- Other than the foregoing, or in respect of a formal investigation of the company, as approved by at least 10% of the share capital represented at a general meeting, our shareholders may not ask for an inspection of our corporate records. In contrast, under Delaware corporate law, for example, any shareholder, irrespective of the size of such shareholder's holdings, may do so.
- An individual shareholder of a Norwegian limited liability company is, as a starting point, also unable to initiate a derivative action, a remedy typically available to shareholders of companies domiciled in the United States, in order to enforce our right, in case we fail to enforce such right ourselves, other than in certain cases of Board and management liability under limited circumstances.

- Distribution of dividends from Norwegian companies to foreign companies and individuals may be subject to Norwegian non-refundable withholding tax, and not all receiving countries allow for deduction for the Norwegian withholding tax.
- The rights as a creditor may not be as strong under Norwegian insolvency law as under United States law or relevant state insolvency law, and, as a consequence, creditors may recover less in the event we are subject to insolvency, compared to a similar case involving an insolvent United States debtor.
- The use of a deferred tax asset consisting of accumulated tax losses (i.e., carryforwards) requires that we are able to generate positive taxable income, and the use of tax losses carried forward to offset against future income is subject to certain restrictions and can be restricted further by future amendments to Norwegian tax law.
- Norwegian corporate law may not provide appraisal rights in the case of a business combination, in a manner equivalent to those available to a shareholder of a United States company under applicable United States or state laws.

For additional information on these and other aspects of Norwegian corporate law and our Articles of Association, see Exhibit 2.4 (Description of Share Capital and Articles of Association) filed herewith.

As a result of the differences between Norwegian corporate law and our Articles of Association, on the one hand, and United States federal and state laws, on the other hand, in certain instances, an investor could receive less protection as a holder of our equity securities than would be available as a shareholder of a company domiciled in the United States and chartered under the corporate laws of a particular state.

Holders of ADSs have fewer rights than holders of our Ordinary Shares and, to exercise their voting rights, must withdraw underlying Ordinary Shares from the Depositary and temporarily register ownership of those withdrawn Ordinary Shares with the appropriate Norwegian authority.

A single ADS represents a claim on 75 Ordinary Shares held on deposit by the Depositary. Holders of ADSs (and the beneficial owners thereof) do not have the same rights as holders of Ordinary Shares and may only exercise their voting rights with respect to the underlying Ordinary Shares in accordance with the provisions of our deposit agreement with the Depositary and the holders of ADSs (the "Deposit Agreement"). An ADS holder is not able to call for a meeting of shareholders.

The following is an incomplete summary of the procedure to be followed if an ADS holder seeks to exercise his or her voting rights. As this procedure is complex and time-consuming, an ADS holder may encounter difficulties and delays in exercising his or her voting rights, and such delays could result in an ADS holder being unable to do so.

An ADS holder cannot vote underlying Ordinary Shares held by the Depositary at a meeting of shareholders, unless those underlying Ordinary Shares are temporarily registered with the Norwegian Central Securities Depository and with the Norwegian Foreign Registrar in the name of the holder (or the beneficial owner, if the holder is not the beneficial owner). Under the Deposit Agreement, ADS holders may instruct the Depositary how to vote that number of deposited Ordinary Shares underlying their ADS holdings. In order to carry out such instruction, in accordance with current Norwegian law, the Depositary will temporarily re-register the underlying Ordinary Shares in the name of the ADS holder (or beneficial owner), vote those Ordinary Shares as proxy for the holder (or beneficial owner) as instructed, and then cause the Ordinary Shares to be re-registered in the Depositary's name (or the name of its custodial nominee) immediately after the meeting of shareholders. In giving voting instructions to the Depositary as provided in the Deposit Agreement, ADS holders may be required to agree to the temporary restriction of transfer of their ADSs until after the meeting of shareholders and the disclosure of the identity of the ADS holder.

When a meeting of shareholders is convened, an ADS holder may not receive sufficient notice beforehand to allow the holder to instruct the Depositary to take the actions required in the time available. We will make all commercially reasonable efforts to cause the Depositary to extend voting rights to ADS holders, as described, in a timely manner, but we cannot assure ADS holders they will receive voting materials in time to instruct the Depositary to vote. It is possible that persons who hold their ADSs through securities brokers or other third-parties will not have the opportunity to exercise a right to vote. Furthermore, the Depositary will not be liable for any failure to carry out any instructions to vote, for the manner in which any vote is cast, or for the effect of any such vote. As a result, an ADS holder may not be able to exercise his or her right to vote and may lack recourse if his or her ADSs are not voted as requested.

Investors should review the Deposit Agreement, specifically Section 4.7. Voting of Deposited Shares, which sets forth this procedure in detail. The Deposit Agreement is presented as Exhibit 2.2 to this Annual Report and is archived on the SEC website.

The Depositary is entitled to charge ADS holders for various administrative services, including annual service fees. Holders of our Ordinary Shares are not subject to many of these charges.

The Depositary is entitled to charge ADS holders for various administrative services, including for the issuance of ADSs upon deposit of Ordinary Shares, cancellation of ADSs, distributions of cash dividends or other cash distributions, distributions of ADSs pursuant to share dividends, distributions of securities other than ADSs, and annual service fees.

In the case of ADSs held through The Depository Trust Company ("DTC"), the fees will be charged by the DTC participant (e.g., a securities broker) to the account of the applicable beneficial owner in accordance with the procedures and practices of the DTC participant as in effect at the time.

ADS holders may not receive distributions we may make to holders of Ordinary Shares underlying the ADSs held, if the Depositary determines it is illegal or impractical to make such distributions to holders of ADSs.

Although we do not have any present plans to declare or pay any dividends to holders of Ordinary Shares, in the event we do so, the Depositary has agreed to pay to ADS holders the dividends it (or its custodian) receives on Ordinary Shares, after deducting its fees and expenses. An ADS holder will receive such dividends, in proportion to the number of Ordinary Shares underlying the ADSs held, after conversion of the dividend's value in Norwegian Krone to U.S. Dollars.

The provisions of the Deposit Agreement associated with distributions of cash, securities, subscription rights, and other property are complex and afford the Depositary discretion in decision making, particularly regarding the determination that a distribution is unlawful or impractical. We have no obligation to register with the SEC any ADSs, Ordinary Shares, rights, or other securities received through such distributions. The Depositary may determine a distribution made to the holders of Ordinary Shares may be unlawful or impractical if made to ADS holders, and we have no obligation to take any other action to permit such distribution to ADS holders. As such, an ADS holder is exposed to the risk he or she may not receive distributions we make on our Ordinary Shares, or any value from such distributions, if it is unlawful or impractical to make them available to an ADS holder. These restrictions may have an adverse effect on the value of ADSs.

Holders of the ADSs may not be able to exercise the pre-emptive subscription rights related to underlying Ordinary Shares and, accordingly, may suffer dilution of their equity ownership in the event of future issuances of equity securities.

Under the Companies Act, holders of Ordinary Shares benefit from a pre-emptive subscription right on the issuance of Ordinary Shares, for cash consideration only (and not in the event of issuance of Ordinary Shares against non-cash contributions or debt conversion). Such pre-emptive subscription rights, in the event of issuance of Ordinary Shares for cash proceeds, as in a private placement, may be waived by a resolution of the holders of Ordinary Shares at a general meeting of shareholders representing a majority of two-thirds of the votes cast at such general meeting.

At the extraordinary general meeting of shareholders on December 9, 2022, shareholders agreed to waive their pre-emptive subscription rights with respect to the authorization of our Board to increase capital through issuance of up to 116,632,658 Ordinary Shares. This authorization has not been used by the date of this Annual Report.

Pursuant to the Deposit Agreement, we have no obligation to register with the SEC any subscription rights received through a distribution made to holders of Ordinary Shares. The Depositary may determine such a distribution may be unlawful or impractical if made to ADS holders, and we have no obligation to take any other action to permit such distribution to ADS holders. However, a distribution of pre-emptive subscription rights to holders of Ordinary Shares underlying ADSs may be addressed in a manner of our choice, to the extent permitted by law and subject to the determination of the Depositary that the proposed process is practical. For example, we may instruct the Depositary, to the extent permitted by law, to grant ADS holders rights to instruct the Depositary to purchase the number of Ordinary Shares proportional to the ADSs held (i.e., the number of Ordinary Shares subject to the pre-emptive subscription rights distributed to the Ordinary Shares underlying the ADSs held) and deliver those Ordinary Shares or the proportional number of ADSs to the holder. Alternatively, we may instruct the Depositary, to the extent permitted by law, to (i) deliver the pre-emptive subscription rights to ADS holders, or (ii) to the extent practical, sell such pre-emptive subscription rights and distribute the net proceeds thereof to ADS holders. If any such pre-emptive rights are not so exercised, delivered, or otherwise disposed of, the Depositary is required to permit the rights to lapse unexercised.

If we are a deemed a passive foreign investment company, there could be adverse federal income tax consequences for ADS holders that are subject to taxation in the United States.

Under the Internal Revenue Code of 1986, as amended ("IRC"), we will be a passive foreign investment company ("PFIC"), for any taxable year in which (i) 75% or more of our gross income consists of passive income, or (2) 50% or more of the of the gross value our assets (determined on the basis of a weighted quarterly average) consists of assets that produce, or are held for the production of, passive income (including cash). For purposes of these tests, passive income includes dividends, interest, gains from the sale or exchange of investment property, and certain rents and royalties. In addition, for purposes of the above calculations, a foreign domiciled corporation that directly or indirectly owns at least 25%, by value, of the shares of another corporation is treated as if it held its proportionate share of that corporation's assets and received, directly from that corporation, a proportionate share of its income.

If we are deemed a PFIC for any taxable year during which a "U.S. Holder" (as defined herein in "Item 10. Section E. Taxation") holds our ADSs, the U.S. Holder may be subject to adverse tax consequences, regardless of whether we continue to qualify as a PFIC, including ineligibility for any preferred tax rates on capital gains or on actual or deemed dividends, interest charges on certain taxes treated as deferred, and additional reporting requirements.

Based on our analysis of our income, assets, activities, and market capitalization, we do not believe we met the tests to be deemed a PFIC for our taxable year ended December 31, 2022. However, no assurances regarding our PFIC status can be provided for any past, current, or future taxable years, as the determination of whether we are a PFIC is a fact-intensive determination, made on an annual basis, and the applicable IRC provisions are subject to varying interpretation. In particular, the characterization of our assets as active or passive may depend in part on our current and intended future business plans, which are subject to change. In addition, for our current and future taxable years, the total value of our assets for PFIC testing purposes may be determined in part by reference to the market price of our Ordinary Shares or ADSs from time to time, which may fluctuate considerably. Under the income test, our status as a PFIC depends on the composition of our income, which will depend on the transactions we enter into in the future, our corporate structure, and other considerations. The composition of our income and assets is also influenced by how, and at what pace, we spend the cash we raise through issuance of securities or borrowing. Even if we determine that we are not a PFIC for a taxable year, there can be no assurance that the Internal Revenue Service ("IRS"), will agree with our conclusion and that the IRS would not successfully challenge our position. Accordingly, our U.S. counsel expresses no opinion with respect to our PFIC status for any prior, current, or future taxable year.

For further discussion of the PFIC rules and the adverse federal income tax consequences in the event we are deemed a PFIC, see the section herein under "Item 10. Section E. Taxation."

Changes and uncertainties in the tax system in the countries in which we have operations could have an adverse effect our business, operational performance, and financial position, potentially reducing the net returns available to holders of our equity securities.

We conduct business globally and file income tax returns in multiple jurisdictions. Our consolidated effective income tax rate could be materially adversely affected by several factors, including: changing tax laws, regulations and treaties, or the interpretation thereof; tax policy initiatives and reforms under consideration (such as those related to the Organisation for Economic Co-Operation and Development's ("OECD"), Base Erosion and Profit Shifting Project, the European Commission's state aid investigations and other initiatives); the practices of tax authorities in jurisdictions in which we operate; the resolution of issues arising from tax audits or examinations and any related interest or penalties. Such changes may include (but are not limited to) the taxation of operating income, investment income, dividends received or (in the specific context of withholding tax) dividends paid.

Tax authorities may disagree with our positions and conclusions regarding certain tax positions, or may apply existing rules in an unforeseen manner, resulting in unanticipated costs, taxes, penalties, or the non-realization of expected benefits.

A tax authority may disagree with tax positions we have taken, which could result in increased tax liabilities. For example, a tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between our affiliated companies, pursuant to our intercompany arrangements and transfer pricing policies, including amounts paid with respect to our intellectual property development. Similarly, a tax authority could assert that we are subject to tax in a jurisdiction where we believe we have not established a taxable connection, often referred to as a "permanent establishment" under international tax treaties, and such an assertion, if successful, could increase our expected tax liability in one or more jurisdictions.

A tax authority may take the position that material income tax liabilities, interest, and penalties are payable by us, which may occur due to complex and changing tax laws and regulations may be contradictory, as new laws and regulations have not been subject to extensive review or interpretation. We may negotiate tax obligations with tax inspectors of a particular jurisdiction, which may be costly, time-consuming, and subject to an unpredictable outcome.

Provisions of the Norwegian Securities Trading Act may delay or discourage a takeover attempt, including attempts that may be beneficial to holders of our ADSs.

We are subject to the Norwegian Securities Trading Act (the "STA"), as it applies to an offer made by a third-party to acquire the equity securities of a Norwegian public company with securities trading on a regulated Norwegian exchange. The STA provides a framework within which takeovers of certain companies organized in Norway are regulated and conducted. The provisions of the STA may materially differ from the provisions of other such frameworks (e.g., the takeover provisions of the Delaware General Corporate Law).

The following is a limited summary of important rules of the STA:

- The STA requires any person, entity, or consolidated group that becomes the owner of shares representing more than one-third of the voting rights of a Norwegian company whose shares are listed on a Norwegian regulated exchange to, within four weeks, make an unconditional general offer for the purchase of the remaining shares of that company.
- A mandatory offer obligation may be imposed by the Oslo Børs, on which our Ordinary Shares are listed for trading, when a party acquires the right to become the owner of shares that, together with the party's own shareholding, represent more than one-third of the voting rights in the company, and the Oslo Børs determines this acquisition is regarded as an effective acquisition of the shares in question. The mandatory offer obligation ceases to apply if the person, entity, or consolidated group sells the portion of the shares that exceeds the relevant threshold within four weeks of the date on which the mandatory offer obligation was triggered.
- When a mandatory offer obligation is triggered, the person subject to the obligation is required to immediately notify the Oslo Børs and the targeted company. The notification shall state the person's intentions and whether an offer will be made to acquire the remaining shares in the targeted company. An earlier notification stating an intention to acquire no additional shares or an intention to dispose of acquired shares can be altered to become a notice of an intended offer within the four-week period, while a notification stating an intention to make an offer cannot be retracted and is binding.
- The offer price per share associated with a mandatory offer must be at least as high as the highest price paid or agreed by the offeror for the shares in the six-month period prior to the date the ownership threshold was exceeded. If the offeror acquires or agrees to acquire additional shares at a higher price prior to the expiration of the mandatory offer period, the offeror is obligated to restate its offer at such higher price. A mandatory offer must be settled in cash or contain a cash alternative at least equivalent to any other consideration offered.
- In case of failure to make a mandatory offer or to sell the portion of the shares that exceeds the relevant threshold within four weeks, the Oslo Børs may force the acquiring party to sell the shares exceeding the threshold through public auction. While the mandatory offer obligation remains in force, an acquiring party failing to make such an offer may not exercise rights in the company, such as voting in a general meeting, without the consent of a majority of the remaining shareholders. The acquiring party may, however, exercise its rights to dividends and pre-emptive subscription rights in the event of a share capital increase by the targeted company. If the acquiring party neglects its duty to make a mandatory offer, Oslo Børs may impose a daily fine that is cumulative until the circumstance has been rectified.
- A mandatory offer obligation also is triggered when any person, entity, or consolidated group, already owning shares representing more than one-third of the votes in a Norwegian company listed on a Norwegian regulated exchange, through acquisition of additional shares, becomes the owner of shares representing 40% or more of the votes in the company. Similarly, a mandatory offer obligation is triggered when the person, entity, or consolidated group, through acquisition, becomes the owner of shares representing 50% or more of the votes in the company. The mandatory offer obligation ceases to apply if the person, entity, or consolidated group sells that portion of that shares which exceeds the relevant threshold within four weeks of the date on which the mandatory offer obligation was triggered.
- Any person, entity, or consolidated group that has passed any of the stated thresholds in such a way as not to trigger the
 mandatory bid obligation, and, therefore, has not made an offer previously for the remaining shares in the company in
 accordance with the mandatory offer rules is required to make a mandatory offer in the event of a subsequent acquisition
 of shares that increases the acquiring party's voting rights in the company.

Civil liabilities judgements made in United States courts may not be enforceable against us.

We are incorporated under Norwegian law. Certain Directors and executive officers are not residents of the United States, and all or a substantial portion of our assets and the assets of such persons are located outside the United States. As a result, it may not be possible for investors to effect service of process in the United States upon us or such persons or to enforce judgments obtained in courts in the United States against them or us, including judgments predicated upon the civil liability provisions of the federal securities laws.

The United States and Norway currently do not have a treaty providing for recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Consequently, a final judgment for payment given by a court in the United States, whether or not predicated solely upon the securities laws of the United States, may not automatically be recognized or enforceable in Norway. In addition, uncertainty exists as to whether the courts in Norway would entertain original actions brought in Norway against us, our Board, or Executive Officers predicated upon the securities laws of any state in the United States.

Any final and conclusive monetary judgment for a definite sum obtained against us in the United States would not be automatically recognized by Norwegian courts, unless: (i) the relevant parties have agreed to such court's jurisdiction in writing and for a specific legal action or for legal actions that arise out of a particular legal relationship; and (ii) the judgment is not in conflict with Norwegian public policy rules (*ordre public*) or internationally mandatory provisions. Instead, new proceedings would need to be initiated before the competent court in Norway. However, a judgment obtained in the United States may still have strong evidentiary weight in the Norwegian proceedings, depending on the circumstances and the assessment of the court. If the conditions for recognition of a judgement against us in the United States are satisfied, or a Norwegian court rules for the sum payable under such judgment, the judgement or the Norwegian ruling (as the case may be) will be enforceable by methods generally available for this purpose. These methods generally permit the Norwegian court discretion to prescribe the manner of enforcement. In addition, it may not be possible to obtain a Norwegian ruling or to enforce that ruling if the party subject to the ruling is or becomes subject to any insolvency or similar proceedings, or in other circumstances.

As a result, United States investors may not be able to enforce any judgments against us or certain Directors and our Executive Officers obtained in courts of the United States in civil and commercial matters, including judgments under the federal securities laws.

Holders of ADSs may not be entitled to a jury trial with respect to claims arising under the Deposit Agreement, which could result in less favorable results to a plaintiff in any such action.

The Deposit Agreement provides that ADS holders irrevocably waive the right to a trial by jury in any legal proceeding arising out of or relating to the Deposit Agreement. We are not aware of a specific federal decision addressing the enforceability of a jury trial waiver in the context of federal securities laws, and we have been advised by counsel that jury trial waivers are generally enforceable in the United States. Moreover, insofar as the Deposit Agreement is governed by the laws of the State of New York, such laws recognize the validity of jury trial waivers in appropriate circumstances. In determining whether to enforce a jury trial waiver provision, New York courts and federal courts likely will consider whether the visibility of the jury trial waiver provision within the agreement in question is sufficiently prominent, such that a party has knowingly waived any right to trial by jury. We believe that this is the case with respect to the Deposit Agreement.

Because an ADS holder may not be entitled to a jury trial with respect to his or her claims arising under the Deposit Agreement against us or the Depositary, lawsuits against us or the Depositary may be discouraged or limited. If a lawsuit is brought against us or the Depositary under the Deposit Agreement, the proceedings may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures than a jury trial and may result in different outcomes than a jury trial, including results that could be less favorable to the plaintiff(s) in any such action, depending on, among other things, the nature of the claims, the judge or justice hearing such claims, and the venue of the hearing.

Item 4. Information on the Company.

A. History and Development of the Company

We were incorporated as a public limited company under the laws of Norway on July 24, 1996. Our Ordinary Shares have been listed for trading in Norway on the Oslo Børs under the symbol "IDEX" since March 12, 2010, and our ADSs have been listed for trading on Nasdaq under the symbol "IDBA" since March 1, 2021.

Our strategy has been and remains based on the development and commercialization of differentiated solutions for fingerprint authentication. Our technologies originated within SINTEF, the largest research organization in Scandinavia, which is affiliated with the Norwegian Institute of Technology. The Company's initial focus was on the development and sale of swipe sensors for fingerprint authentication, targeting consumer applications such as user authentication for personal computers, personal digital assistants, and the then-emerging market for smart phones. We also pursued a licensing strategy, which would enable others to create and market their own products based on our intellectual property.

In 2013, IDEX acquired the assets and operations of PicoField Technologies, Inc., obtaining important intellectual property associated with touch (i.e., full fingerprint) sensors and adding biometric industry veterans to our design team. In 2015, we acquired the patent portfolio of Metadyne Software, a developer of highly efficient fingerprint algorithms. Both acquisitions contributed to advancing our development of fingerprint authentication solutions with differentiated characteristics.

In the latter half of the last decade, IDEX undertook a strategic pivot toward market segments and applications for which these differentiated characteristics provided demonstrable and sustainable competitive advantages. Our focus today is on smart cards, which present challenging form factors, demanding performance requirements, and extreme power limitations, for which our fingerprint authentication solutions are ideally suited. The International Standards Organization uses the term Integrated Circuit Card, or ICC, which essentially is the same type of card. This strategic pivot toward differentiation of a comprehensive solution is embodied in our latest offering, the TrustedBio family of fingerprint authentication modules.

We do not own or operate industrial manufacturing facilities, but operate as a "fabless" manufacturer, utilizing third parties for outsourced manufacturing, assembly, and test capabilities. Our capital expenditures for the years ended December 31, 2022, 2021, and 2020 were \$267 thousand, \$141 thousand, and \$152 thousand respectively. As a fabless manufacturer, our capital expenditures primarily are for purchases of laboratory and test equipment related to product development, although we will acquire production equipment for use by our contract manufacturing service providers.

During 2022, 2021, and 2020, we raised, through private placements of our Ordinary Shares, gross proceeds of \$15.6 million, \$47.1 million, and \$18.0 million, respectively. As of December 31, 2022, our accumulated losses totaled \$303.4 million and the net equity amounted to \$22.8 million. For further financial information, see "Item 5. Operating and Financial Review and Prospects."

We have locations in Oslo, Norway (finance, and group administration), Farnborough, United Kingdom (marketing, systems engineering, quality, supply chain management, and human resources), Rochester, New York, United States (hardware engineering), Wilmington, Massachusetts, United States (software engineering, circuit design, and administration), and Shenzhen, China (systems engineering). Our sales and marketing resources are located in various countries, and the majority of these staff members are individual contractors because we do not have a legal presence in such countries.

Our headquarters are located at Dronning Eufemias gate 16, NO-0191 Oslo, Norway, which is also our registered office address, and our telephone number is +47 6783 9119. Our agent for service of process in the United States is IDEX Biometrics America Inc., with a registered address at 187 Ballardvale Street, Suite A260, Wilmington, MA 01887.

The SEC maintains an Internet site, https://www.sec.gov, containing reports, proxy information statements, and other information regarding issuers that file electronically with the SEC. Oslo Børs maintains a website (newsweb.oslobors.no) that contains reports and other filings, press releases and other disclosures that listed companies, such as IDEX Biometrics ASA, issue to the market. Our website address is www.idexbiometrics.com. The reference to our website is an inactive textual reference only and information contained in, or that can be accessed through, our website or any other website cited herein is not part of this Annual Report.

B. Business Overview

Description of the Company

IDEX develops and markets differentiated fingerprint authentication solutions optimized for use in smart cards, based on patented and proprietary sensor technologies, integrated circuit designs, and highly-specialized firmware and software. We primarily target fingerprint authentication applications involving standardized smart cards without batteries, although our products also are applicable to battery-powered devices in different form factors.

Our extensive intellectual property portfolio, leveraging 175 patents awarded and 62 patents pending (as of December 31, 2022), across applicable jurisdictions worldwide, is a critical enabler of our strategy and competitive positioning.

From time to time, we may provide project-oriented engineering or design services to customers. We also license our intellectual property and software to third parties, although licensing currently does not contribute to our revenue.



A standard-format smart card, utilizing our fingerprint authentication solution, offered by First Abu Dhabi Bank and manufactured by our customer, IDEMIA France SAS

Our current product portfolio consists of fingerprint authentication modules, related software, and cardholder enrolment solutions. Our latest generation of fingerprint authentication device, introduced in 2020, the TrustedBio family of modules, is a single package solution consisting of our most advanced fingerprint imaging sensor and a proprietary application specific integrated circuit ("ASIC"), which is a multi-purpose microprocessor executing image processing, biometric processing, and power management functions. Our cardholder enrolment solutions currently are based on an innovative, reusable sleeve, which provides secure, convenient smart card enrolment.

Our current product portfolio is targeted at three applications, which we refer to as "market segments," within the smart card market: financial payments (i.e., credit, debit, and stored value transaction cards), digital access (i.e., devices for identification and authorization of users for access to high-value electronic networks or sensitive physical facilities), and digital currency storage (i.e., devices for highly-secure authorized access to cryptocurrency trading platforms and the secure storage of digital currencies, both private and government-sponsored). The financial payments market segment is the largest of the three we target, and it is the most developed. The digital access and digital currency storage segments currently are far smaller, and application-specific form factors, performance requirements, and standards are evolving.

Our customer focus primarily is on manufacturers of smart cards. Other customers include integrators of authentication technologies and developers and vendors of security systems, across a broad market for identification-based authorization solutions. We also have individual corporate customers that design authentication solutions for their own consumption. Our products are not limited to use in smart cards, but also are applicable to a range of applications across varying form factors.

Because a critical element of demand for our solutions originates with these manufacturers' own customers (e.g., the demand for financial payment cards with fingerprint authentication originates with a bank issuer interested in offering such cards), we also direct our marketing and demand creation efforts toward the education of customers of smart card manufacturers, as well as other influential participants in the smart card industry.

We utilize a direct sales force and have customers around the world. At the present time, we do not sell our products through stocking distributors. Given the early-stage characteristics of the market segments we are targeting, including the extended and unpredictable sales cycles frequently associated with marketing new and innovative technology-based products, we expanded our marketing and sales staff in 2021 and increased our marketing spending in 2022.

We do not own or operate capital-intensive manufacturing facilities, but operate as a *fabless* manufacturer, utilizing third parties for outsourced manufacturing and product assembly capabilities. We currently rely on Taiwan Semiconductor Manufacturing Company, Limited ("TSMC"), the leading producer of semiconductor wafers, as the sole source of wafers for our proprietary ASIC designs. We also rely on a limited number of providers of outsourced semiconductor packaging, design, and test services, including Amkor Technology, Inc., and Silicon Precision Industries, Limited, both of which are leaders in outsourced semiconductor assembly and test services.

Fingerprint Authentication Steps

Every individual has unique, immutable fingerprints. A fingerprint consists of a series of ridges and valleys on the surface of a finger. The uniqueness of a fingerprint is established by each finger's distinctive pattern of ridges, valleys, and minutiae points, which are specific ridge characteristics occurring at either the point at which a fingerprint ridge bifurcates or ends.

Biometric technologies are automated methods for identifying individuals based on a comparison of stored biological and behavioral characteristics with the current presentation of such characteristics. Of all biometric techniques, fingerprint-based identification is the oldest and most established. Fingerprint identification has been successfully used in numerous applications for over a century.

A fingerprint authentication solution, in summary, is an electronic system, combining hardware and software, that captures an image of these unique fingerprint characteristics, transforms that image into a mathematical representation, and then compares that representation with a valid representation. If the results of the comparison exceed a predefined verification threshold, the identity of the presenting individual is authenticated.

The following summarizes the primary elements of fingerprint authentication, addressing our approach to each:

Scanning

Scanning is the process of recognizing and capturing the necessary characteristics of an individual's fingerprint using an electronic device. Ink and paper were originally used to capture fingerprint images. Optical scanning was an early method for electronic capture of a fingerprint, and remains common in certain high-volume applications, primarily in law enforcement. Other scanning technologies for the detection of fingerprint variances include those based on sensing variances in heat, pressure, and ultrasound.

Our scanning technology is based on capacitive sensing, which utilizes an electrical field to detect fingerprint characteristics such as ridges, valleys, and minutiae by measuring miniscule variances in current associated with those varying characteristics. The surface of the sensor, the platen, acts as one plate of a capacitor, and the finger acts as the other. Capacitive sensing, the most appropriate technology for resource-constrained applications, was the area in which the Company pioneered the signal processing innovations that remain foundational to our strategy.

We have developed a differentiated approach to capacitive image capture, using a polymer substrate (i.e., a flex circuit) in which a capacitive sensing array (i.e., a fine-pitched wire mesh, with each wire intersection representing an electrode) is embedded. Compared to conventional semiconductor-based capacitive sensors, for which the sensing array is on the surface of a rigid integrated circuit, our flexible sensor is relatively inexpensive to manufacture and allows for a larger sensor surface area, more than twice the size of competitive silicon sensors. Our capacitive sensor produces a larger image, yielding more data, which enables superior scanning, feature extraction, and matching performance.

Feature Extraction

The miniscule variations in current detected in scanning are a data set representing the fingerprint, and the common practice is to create from this data set an 8-bit gray-scale digital image for further processing (i.e., feature extraction). Feature extraction is a computationally-challenging process requiring speed and signal-processing precision. Algorithms used in a resource-constrained environment such as a smart card must be highly efficient, reducing the burdens placed on processor, memory, and power resources.

We utilize proprietary algorithms to refine the image, allowing for precise identification of patterns, which are transformed into an accurate mathematical representation of the image, referred to as a "template."

Matching

A matching algorithm compares the template created from the scanned image to the encrypted template stored within the system at the time of the user's enrolment. These algorithms also are computationally-challenging, again requiring speed and precision, as well as consistency of outcomes. Matching performance is measured by the correlated rates of false acceptance ("FAR") and false rejection ("FRR"), accuracy and reliability, and computational speed. Matching algorithms can be adjusted to meet the requirements of the application, addressing the trade-offs between desired security levels and end-user convenience (i.e., a low FAR, suggesting high security, implies a high FRR, suggesting low end-user convenience).

Our matching algorithms, which are compact and highly efficient, are well-suited for providing fast results in resource-constrained environments. They are differentiated by patented features such as insensitivity to image rotation and the ability to process incomplete images (i.e., partial touches), enabling high accuracy and reliability.

Our algorithms also are differentiated by the flexibility of how they may be used. In a smart card implementation, because of security requirements, matching algorithms are typically executed in a secure microcontroller (referred to as a secure element ("SE"). However, our TrustedBio is designed to allow matching algorithms to be executed in a distributed (i.e., shared) mode, whereby computationally intensive functions can be executed on our module's faster ASIC, reducing the computational requirements of the SE. This allows customers the flexibility to optimize designs based on application requirements and available processing resources, reducing overall system costs.

Summary of Smart Cards and Applications

A smart card can be described as a compact microelectronic system, generally with the dimensions of a credit card or driver's license, in which one or more embedded integrated circuits ("ICs") enable secure storage, processing, and communication of encrypted data.

Because we primarily target the financial payments market segment, our fingerprint authentication solutions are designed in compliance with industry standards of EMV Company, LLC ("EMV"), a consortium established by Europay, Mastercard, and VISA to develop and maintain communications, security, and encryption specifications for the use of smart cards across financial payment networks. Because our solutions are used in smart cards utilizing the JavaCard card operating system and Java-based "applets," we comply with the standards of GlobalPlatform, an independent standards body, for secure channel communications and the use of cryptographic data.

Smart Card Design

The enabling ICs in a smart card are typically a secure microcontroller, the SE, which functions as the system-level processor, and one or more secondary microcontrollers dedicated to functions such as power management or biometric processing. SE processors execute the card operating system and one or more applets, which are compact programs that execute proprietary functions (e.g., an applet for a payment network will coordinate communication of encrypted data using an encryption key only known by that payment network). SEs generally have robust memory blocks for encrypted data storage, with multiple memory types, but separate memory ICs may be necessary, depending on the smart card's application.

Also embedded in the layers of a smart card are an antenna, for wireless communication and power harvesting, connecting circuitry (referred to as an inlay), and, depending on the design of the smart card, various passive electronic devices. Multi-layer smart cards are generally made of thermoplastics (polyvinyl chloride, or PVC, is the most common material used), although metal and ceramic compounds recently have been introduced.

Contact-only and dual-interface (i.e., contact and contactless functionality) smart cards do not have batteries and are powered, in the case of contact-only and dual-interface designs, through physical contact with a card reader, or, for dual-interface designs in contactless mode, though energy harvesting (i.e., resonant inductive coupling) enabled, most commonly, by near field communications ("NFC") interface protocols.

A trend toward greater use of contactless communication continues across smart cards and reader infrastructure (e.g., point-of-sale terminals) has been underway, accelerated by heightened end-user concerns about hygiene caused by the COVID-19 pandemic. According to ABI Research, worldwide shipments of dual-interface cards for financial payments represented over 80% of the 3.1 billion smart cards shipped in 2022, and we expect this percentage to expand. ABI Research also estimates the worldwide volume of contactless smart card transactions grew by 36% from 2021 to 2022. However, contactless smart card transactions generally are limited by financial institutions and payment processing networks to small value transactions, given the absence of a required signature or personal identification number ("PIN") as a second authentication factor.

Usage and Applications

The defining characteristic of a smart card is the security afforded by the SE and its use of data encryption to secure storage and communications, making it an ideal solution for a very broad range of applications. Smart cards are used worldwide in high volumes across the following applications (in descending order of estimated total unit volumes for 2022): financial payments; government identification (including healthcare and social-security applications); transportation and ticketing; and access control (for logical and physical applications).

The development of widely accepted standards for smart card performance uniformity and cross-vendor compatibility has contributed to the sustained growth of smart cards in circulation, notably for financial payment applications. ABI Research estimates approximately 11 billion smart cards, in the form of credit and debit cards, ATM cards, and stored value cards, were in circulation as of December 31, 2022, with 3.1 billion financial payment cards shipped during the year.

According to ABI Research, 71% of the total volume of smart cards shipped (excluding SIM cards) were for payments, while less than 5% of smart cards shipped in 2022 were access control applications. Physical access control applications commonly utilize keycards, also known as proximity cards, which are wireless devices enabling a relatively low level of security for contactless identification. Shipments for use in digital currency storage applications, an emerging market segment, were not material in volume.

Our Strategy

Our strategy emphasizes demonstrable solution advantages that address evolving customer and end-user requirements, leading to a sustainable competitive position and the avoidance of commoditizing pressures. Since the Company was founded, our strategy and competitive positioning have been based on continuous advances in technologies, innovations in design, and achievements in performance, enabled by our focus on research and development.

We believe the combination of our broad and substantive intellectual property portfolio, our expertise across a comprehensive range of challenging and complex domains, and our integrated, systems engineering approach represents a significant competitive advantage for IDEX.

Our intellectual property portfolio, as of December 31, 2022, consisted of 175 patents awarded and 62 patents pending, across applicable jurisdictions worldwide. Reflecting our core competencies, we have substantial intellectual property across the following areas: design of biometric sensors, ASICs, and modules; signals and data processing; and a broad range of solution features and functionalities.

Our core competencies, characterized by deep domain expertise and a multi-disciplined, systems engineering approach, are built on organizational strengths in the following domains: biometric imaging and processing; sensor architectures; integrated circuit design; materials, manufacturing, and packaging; algorithm, firmware, and software development; encryption technologies; NFC and power management; and industrial design.

Our value proposition is based on the differentiated functionality and performance of our fingerprint authentication solutions and our distinctive systems engineering approach to offering integrated solutions addressing multiple customer needs. These customer needs may vary among the market segments we target, but generally are associated with the enhancement of our customer's competitive advantages, based on the differentiated functionality and performance of our solutions, and reduced total cost of ownership ("TCO"), based on our distinctive systems engineering capabilities, enabling comprehensive, integrated solutions.

TCO represents the sum of the purchase price of our products, which we believe are competitive, and the costs customers may encounter when implementing a fingerprint authentication solution in their own products. In contrast to vendors of individual elements of a solution, our core competencies enable us to contribute to lowering the costs and challenges of system design for customers, while accelerating their time-to-market.

We believe many customers in the market segments we target could benefit from the TCO element of our value proposition, as only a few global card manufacturers currently have the depth of resources and experience to develop a fingerprint authentication solution on an expedited timeline. Design of a smart card incorporating fingerprint authentication can be challenging, as the interaction between the fingerprint sensor, the smart card electronics, and the environment is complex, particularly given the limitations on power, processing capacity, and form factor, and the stringent requirements for response time and accuracy. As such, we are committed to offering a differentiated, integrated approach to our customers.

An important element of our strategy, linked to our delivery of comprehensive, integrated solutions, is our development and use of strategic partnerships, which are intended to extend the scope of the integration of our TrustedBio modules and related elements of our software across the smart card supply chain, thereby enhancing our value proposition and, potentially, accelerating adoption of fingerprint authentication and demand for our solutions.

Our Solutions

Our solutions consist of integrated fingerprint authentication modules, which our customers use in their end-products, and our enrollment device, with which a user can securely and easily store his or her fingerprint on a smart card, thereby activating the smart card's fingerprint authentication capabilities. In 2021, we announced our intention to market and complete solutions for the manufacture of fully functioning biometric smart cards including fingerprint sensors, card inlay, antennae, EMV module with an SE released by Infineon Technologies AG, and proprietary software, including our card operating system, special purpose applets, and biometric algorithms.

Recent product and solution announcements are indicative of our strategy and value proposition, as well as the strategic shift we undertook late in the last decade toward market segments and applications for which the differentiated characteristics of our solutions provide a demonstrable and sustainable competitive advantage.

In 2017, we announced a patented solution architecture, which we believe is competitively unique: a small, and lightweight module containing two optimized components, a fingerprint imaging sensor made of a flexible polymer substrate for image scanning and a small, yet powerful, ASIC for feature extraction, matching, and a range of other advantageous functions. This architecture is ideal for use in smart cards and similar demanding applications.

TrustedBio Product Family

In 2020, we announced the latest generation of this architecture, the TrustedBio family of modules which began shipping to customers in 2021, and, in 2021, released an enhanced version, the TrustedBio Max.

The capacitive sensor in a TrustedBio module covered by a robust, protective coating, allowing for years of usage. Our flexible sensor is relatively inexpensive to manufacture and allows for an approximately 90 square millimeter sensor surface area, more than twice the size of competitive silicon sensors. The capacitive sensor in a TrustedBio module produces a larger image, yielding more data, which enables superior scanning, feature extraction, and matching performance. Semiconductor-based sensors can have higher electrode density, but their smaller sensor areas yield meaningfully less data for image processing, while increasing processing challenges to achieve equivalent



A TrustedBio module, showing the sensor surface (left) and, on the reverse side (right), our ASIC and connection circuits

results. Additionally, the flexibility of the polymer substrate, into which the wire mesh array is embedded, allows the TrustedBio module to easily meet industry specifications for torsion of plastic smart cards.

The ASIC used in a TrustedBio module is mounted on the reverse side of the polymer substrate in which our sensor array is embedded. The ASIC includes a proprietary microprocessor executing our third generation scanning and template-creation (i.e., image processing and feature extraction) algorithms, our patented anti-spoofing algorithm, NFC power harvesting and voltage management, and data encryption. Depending on a customer's design or application requirements, our ASIC also can store and execute our proprietary matching algorithms.

The ASIC in our latest TrustedBio Max module provides a high level of single-device functionality for fingerprint authentication in a smart card. Fabricated on a 40-nanometer process node by TSMC, the approximately 10 square millimeter ASIC utilizes an ARM Cortex-M3 32-bit processor, operating at up to 200 MHz, enhanced memory, and a proprietary parallel-processing logic core for accelerating our template-creation and anti-spoofing algorithms.

The capabilities of the TrustedBio Max module reflect our strategy of creating competitive differentiation for our customers, while reducing TCO. The TrustedBio Max enables smart cards with fingerprint authentication that are secure, accurate, and power efficient, while providing a differentiated user experience characterized by fast transaction speed. The groundbreaking functionality of TrustedBio Max reduces computational burdens on a smart card's SE, thereby allowing smart card manufacturers to utilize standard, low-cost SEs, rather than more costly SEs with expanded capabilities to address biometric processing. The capabilities of the ASIC allow for a smart card with fingerprint authentication to be designed without separate microcontrollers for biometric processing and power management functions, reducing design complexity and costs. Our advanced algorithms and other proven software elements of our solution minimize software development by our customers, as well as reducing associated risks and delays. The TrustedBio Max solution is targeted at smart card manufacturers seeking faster time-to-market with a comprehensive fingerprint authentication design that maximizes performance, while reducing development and manufacturing costs.

Also in 2021, we announced a reference design based on integration of the SLC38 security controller, the latest SE released by Infineon Technologies AG, and the latest version of our TrustedBio module. Applicable to implementation of fingerprint

authentication in smart card applications across all three of our targeted market segments, the high level of integration of this reference design enables differentiated authentication performance (e.g., low latency, high accuracy, and high electrical efficiency), while reducing integration challenges for the card manufacturer, thereby reducing costs and time-to-market.

This reference design, developed with the SE market share leader, represents an important achievement toward our strategic goal of offering to smart card manufacturers the most comprehensive solutions for fingerprint authentication, creating competitive advantages for their own smart card products, while lowering the barriers to adoption of fingerprint authentication by lowering TCO, reducing complexities, and accelerating time-to-market.

Complete Biometric Smart Card Solutions

In 2021, we began the development of complete solution for the manufacture of fully functional biometric smart cards. The hardware is based on the IDEX-Infineon reference platform described above. The complete solution adds elements of proprietary software, including our JavaCard operating system, special-purpose Java applets, biometric algorithms, and enrolment solutions. We believe our expanding capabilities in software development have the potential to meaningfully add to our value proposition, broadening customer engagements and increasing revenue.



IDEX Pay complete solution for card manufacturers

In 2017, we introduced a patented enrolment solution, addressing another significant barrier to adoption of fingerprint authentication, particularly within the financial payments market segment: user enrolment (i.e., the process of imaging and storing a user's fingerprint, in the form of a template, within the memory of the smart card, thereby enabling its use). IDEX was the first to release such an innovative device, incorporating proprietary hardware and software, which we developed in partnership with Mastercard Inc. We have continued to work together with leaders in the industry to further improve the enrolment process. In addition to the enrolment sleeve, we expect to soon be able to offer several options including enrolment via mobile phone, assisted enrolment (in-branch enrolment), and ultimately, enrolment at Point of Sale (PoS).

Using one of our proprietary solutions, a user can complete the enrolment process in less than a minute, following simple instructions. Enrollment is completed entirely within the biometric smart card and, importantly, the encrypted fingerprint template is immediately stored only on the card, never in the cloud or on any connected device such as a smart phone or PC.



Our enrolment solutions enable the creation of a user fingerprint template, which is encrypted and stored only on the smart card, never in the cloud.

We believe low-cost, simple, convenient, and secure user enrolment processes are necessary to accelerate the adoption of fingerprint authentication in smart cards. To further lower the costs of enrolment and improve user experience, we are developing software-based enrolment solutions, for which we have protected the associated intellectual property rights, to allow for enrolment over the user's mobile phone or, specifically for enrolment of financial payment card users, through a point-of-sale terminal.

Three-Year Revenue Summary

For the full year 2022, the Company recorded consolidated revenue of \$4.1 million, compared to \$2.8 million for 2021, and \$1.1 million for 2020. Product revenue, as a percentage of total revenue, represented 95.0 %, 99.9 % and 92.5 % for 2022, 2021, and 2020, respectively. Revenue from sensors for smart cards represented 52% of our total revenue for 2022. Revenue associated with our customer in the digital authentication market segment represented 48%, 85%, and 81% of our total revenue for 2022, 2021, and 2020, respectively. There was no licensing revenue for 2022, 2021, or 2020.

Order Backlog

We define order backlog as non-cancellable orders scheduled to be delivered within 12 months and any deferred revenue scheduled for recognition within 12 months. Customer order volume accelerated across 2022 from both existing customers and, notably, new customers adopting the TrustedBio – SLC38 reference design we developed with Infineon Technologies. Our backlog totaled \$3.3 million, \$2.5 million and \$1.7 million as of December 31, 2022, 2021, and 2020, respectively.

Marketing and Sales

Our customer focus primarily is on manufacturers of smart cards. Other customers include integrators of authentication technologies and developers and vendors of security systems, across a broad market for identification-based authorization solutions. We also have individual corporate customers that design authentication solutions for their own consumption. Our products are not limited to use in smart cards, but also are applicable to a range of applications across varying form factors.

Because a critical element of demand for our solutions originates with these manufacturers' own customers (e.g., the demand for financial payment cards with fingerprint authentication originates with a bank issuer interested in offering such cards), we also direct our marketing and sales efforts toward the customers of smart card manufacturers, as well as other influential participants in the smart card industry.

Within the digital access market segment, vendors of hardware- and software-based security systems and associated access control solutions represent the majority of our targeted customers, although, to date, the majority of our revenue has been derived from the development and sale of a customized network authentication solution to a single enterprise customer.

Within the digital currency storage market segment, which is less structured than our other targeted market segments, our customers have ranged from large smart card manufacturers addressing emerging digital currency applications to small technology innovators developing devices for secure access to proprietary cryptocurrency exchanges.

We utilize a direct sales force and have customers around the world. At the present time, we do not sell our products through stocking distributors. Given the early-stages of the market segments we are targeting, including the extended and unpredictable sales cycles frequently associated with marketing new and innovative technology-based products, we expanded our sales and marketing staff in 2021 and increased our marketing spending in 2022.

Our go-to-market strategy emphasizes the creation and maintenance of relationships with and between companies and organizations that are positioned to support the acceleration of the adoption of fingerprint authentication in smart card applications. An important element of this strategy is establishing collaborative agreements with well-positioned partners, leveraging their expertise and resources. Examples of these partnerships include: IDEMIA France SAS and E-Kart Elekronik Kart Sistemleri A.S., customers with which we have critical go-to-market engagements; Mastercard Inc., which is a valuable contributor to demand creation and the advancement of fingerprint authentication in financial payments; and Infineon Technologies AG and Tongxin Microelectronics Co., Ltd., leaders in SE design and smart card electronics, with which we are developing integrated solutions.

Other strategic initiatives involve integration projects with numerous developers of SEs and electronic components for financial payment smart card applications, as well as technology partners addressing the digital accessand digital currency storage market segments. We consider our initiatives to extend the scope of the integration of our fingerprint authentication solutions across the smart card supply chain to be an important element of our strategy, and we intend to expand such initiatives in the future.

Our marketing and sales personnel work closely with our product line management personnel to support strategic sales activities. A broad range of marketing communications activities also help to expose and promote the benefits of our fingerprint authentication solutions to potential customers. We have invested significant time and resources to meet with card and device manufacturers to understand their requirements and performance issues.

Our Opportunity

Targeted Market Segments and Customers

We currently target fingerprint authentication applications involving smart cards without batteries (i.e., cards conforming to ISO/IEC standards for electronic identification cards), for which our solutions are especially well-suited. Customers for these and adjacent applications are within three emerging market segments, for which the solutions we offer and the applications served are summarized in the following table:

Market Segment	IDEX Solutions	Representative Applications
Financial Payments	 Smart cards Dual-interface, NFC powered Thermoplastic or metal Customized COS and Applets Enrolment sleeve or tablet-based solution 	 EMV-compliant transaction applications Credit, debit and stored value cards Dual- and multi-use applications Co-branded with partners
Digital Access	 Smart cards and similar devices o ID-1 form factor or customer design o RFID/NFC or battery powered Customized COS and Applets Enrolment sleeve or tablet-based solution 	Secure user authorization for high value assets O Critical networks or applications O High security facilities O Easily integrated with IAM platforms O FIDO Alliance compliance
Digital Currency /Crypto Wallets	 Enhanced smart cards and similar devices o ID-1 form factor or customer design o RFID/NFC or battery powered o Optional displays and keypads o Optional Bluetooth connectivity o Customized COS and Applets Enrolment sleeve or tablet-based solution 	Secure devices for government digital currency Example: e-CNY initiative of Chinese central bank Card-like "wallets" issued by stateowned banks Dual- and multi-use applications Secure storage of health and welfare records Highly secure cryptocurrency management devices Authorized user access to trading platforms Secure storage of cryptocurrencies

Our targeted customers in the financial payments market segment primarily are smart card manufacturers. We believe this market segment has the potential to be significantly larger and more well-defined than the other two targeted market segments. According to ABI Research, three global companies, IDEMIA France SAS (France), Giesecke+Devrient GmbH (Germany), and Thales Group SAS (France), represent approximately 50% of total 2022 revenue associated with shipments of smart cards for financial payments, and the top six represent close to 70% of such revenue. Other regionally-focused smart card manufacturers represented the balance. As previously disclosed, IDEMIA currently is our largest customer in the financial payment market segment.

Within the digital access and digital currency storage market segments, our targeted customers include vendors of access control and identity and access management ("IAM") platforms, vendors and integrators of authentication technologies, and developers of application-specific devices. As previously disclosed, we also have a long-standing relationship with a customer that designs network authentication solutions for its own consumption. As indicated in the preceding table, our fingerprint authentication solutions are not limited to use in smart cards without batteries and are suitable for a range of applications within the access control and digital currency storage market segments, across varying form factors and power requirements.

Smart cards are used in a variety of other applications appropriate for fingerprint authentication, each of which could develop in the future into a compelling market segment for us. A primary example of a potential opportunity outside of our targeted market segments is within health care, for which a non-transferable form of identification, on which an individual's personal details, health records, and insurance or similar social-security data is encrypted and stored, addresses an important need for both providers and patients for immediate, secure access to necessary information. We have investigated, and will continue to investigate, such opportunities for new use cases, but our limited resources currently inhibit our ability to adequately support such activities.

The market segments we currently target are not subject to seasonal shifts in demand.

Demand Drivers

Demand for fingerprint authentication in our targeted market segments starts with the evolving needs of the end-users. Across all smart card market segments, demand drivers for our solutions at the consumer level uniformly include the following "ease of use" requirements: convenient enrolment; fast, convenient transactions; and accuracy and security of transactions.

With the onset of the COVID-19 pandemic, hygienic, touch-free transactions became an important demand driver for end-users, particularly within the financial payments market segment. Given evidence of a substantial shift toward contactless transactions, the Smart Payment Association in December 2021 concluded that "tap and go" transactions, whether using smart cards or mobile phone applications, had become the preferred payment option for all age groups. This trend continued in 2022.

The shift toward contactless transactions is evidenced by ABI Research estimates of worldwide shipments of dual-interface cards for financial payments, which represented over 80% of the 3.1 billion smart cards shipped in 2022. ABI Research also estimates the worldwide volume of contactless smart card transactions grew by 36% from 2021 to 2022. However, contactless smart card transactions generally are limited by financial institutions and payment processing networks to small value transactions, given the absence of a second authentication factor, such as a user-entered PIN.

Another contributor to end-user satisfaction, in our opinion, is a desire to reduce abstract uncertainties and perceptions of risk associated with fraud, identity theft, and other information security risks. Cybersecurity events have become frequent and high profile, and public opinion surveys indicate that consumers are aware of biometric authentication solutions and are willing to adopt such solutions to offset their concerns. According to a 2020 Gallup survey, respondents reported that identify theft and loss of personal information were their greatest concerns, by more than a two-to-one margin over other forms of crime.

Mobile devices (e.g., cell phones) are considered particularly vulnerable to a wide variety of security threats, primarily because they are connected to public networks. According to recently published research by a provider of fraud prevention solutions, mobile devices account for greater than 60% of reported digital fraud, with mobile digital wallets, cryptocurrency applications, and payment services applications experiencing significant increases in fraudulent transactions.

Bridging consumer preference for contactless transactions and ease of use requirements is a demand driver shared with the issuers of smart cards: the elimination of the password or PIN as an authentication factor. Long established as the "what you know" element of two- or multi-factor authentication ("MFA"), MFA has become a core component of a security-conscious organization's IAM policy and procedures, increasing security and user confidence, while lowering risks and costs of access to, or usage of, a secured device, a secured network or online application, or a secured facility. Despite their prevalent use, passwords and PINs are acknowledged as now as a burden, cost, and source of risk for end-users and organizations relying on them. Passwords and PINs frequently are forgotten and must be replaced or reinstated. Entering passwords and PINs can inconveniently slow the MFA process, impacting user experience, particularly when making a purchase with a credit or debit card, causing such delays to be a concern for end-users, merchants, issuers, and transaction processors. Also, the vulnerabilities of MFA using passwords or PINs to phishing and other social engineering techniques are well-known and associated with costly and disruptive data breaches.

A consequence of the shift to contactless transactions has been the imposition of transaction value limits on end-users, who are required to enter a PIN at the point-of-sale when a purchase exceeds a threshold value. In response to end-user preferences, financial institutions and transaction processing networks have raised these threshold values, but doing so increases risk of loss, increases the volume and costs of charge-backs to merchants, and taxes the fraud detection and prevention systems of issuers and transaction processing networks. Contactless biometric cards enable offer a convenient tap and go experience for users with higher security than PIN transactions. Therefore, enabling a contactless payment experience with no threshold on transaction value.

Fingerprint authentication represents a compelling security solution for smart cards, particularly in the financial payments market segment, as a fingerprint, unlike a password or PIN, cannot be lost, forgotten, transferred, stolen, or easily compromised. Fingerprint authentication:

- meets end-user requirements for convenience and ease of use;
- addresses end-user concerns about biometric information collection and storage, as the fingerprint template never leaves the smart card;
- addresses end-user concerns about transaction security risks;
- provides a secure alternative to vulnerable mobile devices for payments and financial transactions;
- enables contactless transactions, while eliminating passwords, PINs, and limits on transaction value; and
- maintains the higher security level of MFA, while efficiently combining two authentication factors ("what you have" and "what you are").

Fingerprint authentication demand drivers for issuers and transaction processors include:

- maintaining the superior fraud protection of MFA, while improving end-user experience;
- given the improved end-user experience, the possibility of higher frequency card usage (i.e., the "top of wallet" effect), thereby increasing transaction-based revenue;
- increased differentiation for their smart card offerings and brands, potentially improving customer retention and customer acquisition rates;
- addition of tangible value, potentially supporting new or higher fees for a premium card offering; and
- minimal investment in infrastructure to support fingerprint authentication:
- no modification of existing protocols for encrypted communications and transactions;
- existing contactless point-of-sale terminals seamlessly process such transactions; and
- limited modifications to back-end transaction processing.

For smart card issuers and transaction processors in the EU, fingerprint authentication satisfies the revised Stronger Customer Authentication requirements for two-factor authentication under the Second Payment Services Directive, or PSD2.

Many of these demand drivers are applicable to the Digital Access and Digital Currency Storage market segments we target. Ease of use considerations are important for end-users, and the efficiencies of fingerprint authentication as an alternative to passwords and PINs in MFA applications are compelling to end-users and organizations relying on MFA. Given the different characteristics and development stages of these market segments, however, our experience has been that demand drivers are frequently very specific to individual customers.

Advantages of Our Fingerprint Authentication Solution for Smart Card Manufacturers

We believe the historically high cost of manufacturing smart cards with fingerprint authentication has impeded their adoption. In response, we have focused on reducing the upfront cost of our products to smart card manufacturers, while developing a value proposition emphasizing our differentiated approach to addressing multiple customer needs. Our approach to providing fingerprint authentication solutions is to contribute to a comprehensive design and bill of materials that should significantly reduce development and manufacturing costs, while accelerating time to market.

Our TrustedBio module, integrating a low-cost polymer sensor and advanced biometric processing circuitry, has been designed to be cost-competitive with alternative solutions, while delivering high levels of accuracy, reliability, and power efficiency. The TrustedBio module has been designed to provide smart card manufacturers numerous advantages, including the ability to design a smart card optimized for cost and performance objectives by:

- utilizing a general-purpose SE, thereby reducing component costs and increasing design flexibility;
- eliminating the need for separate microcontrollers for biometric processing or power management, reducing component costs, integration challenges, layout complexity, and manufacturing risks;
- offering a large, yet flexible, sensor surface, enabling superior image capture, processing, and matching performance, improving user experience;
- providing design flexibility (e.g., our matching algorithms can operate entirely on the SE, or be partitioned to also operate on the ASIC within our TrustedBio module, maximizing resource efficiency and system performance).

We have developed and are marketing a certified payment card solution integrating our TrustedBio module with the SLC38 security controller from Infineon Technologies, thereby allowing our manufacturing customers to further minimize their own integration costs and improve manufacturing yields (through reduced design complexity), while accelerating their time-to-market.

For this certified payment card solution:

- with a leading smart card module supplier, we developed a custom EMV module with an SLC38;
- the SLC38 can include our proprietary card operating system, substantially reducing software development time and costs;
- with a leading inlay vendor, we have developed an optimized, cost-effective card inlay, consisting of a card antenna and connective circuits, reducing customer design and procurement costs; and
- with a leading production equipment vendor, we have optimized the vendor's tooling and process management software, thereby facilitating for a customer rapid creation of manufacturing capacity delivering increased card production volume and lower yield losses.

Card manufacturers can choose this complete solution which is pre-certified by Visa and Mastercard thereby eliminating the time and expense of the certification process. Alternatively, manufacturers can utilize subcomponents of the solution as they see fit to maximize their own contribution to the value chain.

We also have valuable relationships with standards bodies and leading global payment processors, which provide the necessary certifications for a new financial payment card design before that design can be released for production. We have had our fingerprint authentication solutions incorporated into smart card designs approved by Mastercard, VISA, and China UnionPay. We also were the first biometric vendor to have passed a development site security evaluation performed by EMV.

Given our breadth of experience and core competencies, as well as the breadth of our collaborative relationships with vendors across the smart card supply chain, we add value well beyond that associated with the cost of our products. We believe many customers in the market segments we target could benefit from the comprehensive, systems engineering element of our value proposition, as only a few global card manufacturers currently have the depth of resources and experience to develop a fingerprint authentication solution on an expedited timeline. Design of a smart card incorporating fingerprint authentication can be challenging, as the interaction among the fingerprint sensor, the smart card electronics, and the environment is complex, particularly given the limitations on power, processing capacity, and form factor, and the stringent requirements for response time and accuracy.

Potential Size and Growth Rates of Targeted Market Segments

Within the financial payment market segment, we consider the annual volume of dual-interface smart cards shipped to be a reasonable approximation of our addressable market opportunity. Because approximately 20% of worldwide point-of-sale terminals and related reader infrastructure are contact-only, and because a dual-interface capability allows for a transaction to occur when contactless functionality is not available, end-users and issuers prefer dual-interface cards. Significant demand drivers are the increasing preference by end-users for contactless payments and the desire of both end-users and issuers and transaction payment processors to replace passwords and PINs with fingerprint authentication, thereby efficiently combining two authentication factors into one device. As such, we believe a reasonable and appropriate measurement of our strategic progress in the financial payment market segment is the rate at which our fingerprint authentication solutions are incorporated into the annual volume of dual-interface smart cards shipped. ABI Research refers to this measurement as the "penetration rate."

According to ABI Research (February 2023), worldwide shipments of dual-interface smart cards, enabling contactless transactions, totaled 2.4 billion units for 2022, representing a record 79% of total smart card shipments. This annual shipment volume of dual-interface smart cards is expected to expand to 3.1 billion units by 2027, representing a five-year CAGR of 5.2%.

ABI Research also estimates the worldwide volume of contactless smart card transactions grew by 36% from 2021 to 2022, forecasting growth for the next five years at a compound annual rate exceeding 21%.

While we believe dual-interface card volumes represent an approximation of our addressable market for payment cards, we expect that the adoption rate for biometric payment cards will be faster than the historical rate of adoption for contactless payments.

According to the Smart Payment Association, contactless smart cards transaction volume took approximately six years to reach 15% of total transaction volume at the point-of-sale. According to Mastercard, that total today has reached 50%. Contactless capabilities (e.g., NFC) were introduced in parallel with the introduction of the SE-enabled smart card in 2004. Prior to that introduction, payment card transactions utilized cards with end-user account information stored on a strip of exposed magnetic tape (the "mag stripe"). Both contact-only and contactless transaction volumes were inhibited for the following decade by the slow pace at which merchants upgraded point-of-sale infrastructure. Several events contributed to rapid shift in smart card transactions toward contactless volumes during the latter half of the last decade, including mandates by major transaction processing networks requiring the installation by merchants of point-of-sale systems capable of accepting contactless payments. The most recent driver of contactless volume has been the onset of the COVID-19 pandemic, which significantly changed consumer behavior. The Smart Payment Association in December 2021 concluded that "tap and go" transactions, whether using smart cards or mobile phone applications, had become the preferred payment option for all age groups.

Fingerprint authentication adoption is not inhibited by the challenges faced by contactless transaction methods when they were introduced. Today, contactless-capable point-of-sale infrastructure, as a percentage of total infrastructure, varies from approximately 50% to 90% by region globally, with expectations for that figure to continue higher, driven by consumer demand for contactless smart card and mobile device transactions. Also, the major transaction processing networks, aligned with EMV in support of fingerprint authentication, have facilitated streamlined integration of match-on-card fingerprint authentication at the point-of-sale. Fingerprint authentication occurs within the processing capabilities of the smart card, with the matching algorithm determining if the presented fingerprint template matches the template stored in the memory of the Secure Element. All user information, including the stored template, is encrypted within the smart card and never leaves the smart card at any time. A data element indicating the transaction originated with a smart card incorporating fingerprint authentication is the only additional information communicated to the point-of-sale reader.

Deployment of smart cards with fingerprint authentication has been limited to date, with numerous program trials of various volumes since 2018. In 2021, one major bank in Europe launched a full-scale commercial launch, using a competitor's silicon image sensor. As of December 31, 2022, we are aware of 9 banks who have launched biometric payment card programs involving the use of our fingerprint authentication solutions through our partnerships with IDEMIA France SAS and Zwipe AS. Since we announced in July 2021, with Infineon Technologies, a reference design based on an integration of our TrustedBio fingerprint authentication module with their SLC38 secure controller, we have secured 11 important design wins with smart card manufacturers, each of which we believe could be in mass production by the end of 2023. Based on these announcements and design wins, we believe the financial payment market segment is in the early-adopter stage, characterized by visionaries who are willing to accept a degree of risk for the opportunity to lead in their own markets.

With an expanding list of customer design wins and announced bank launches we are now better able to create bottom-up product forecasts to manage our supply chain. For overall market forecasting, we utilize a modified version of the framework published by ABI Research for assessing the types of deployments expected to be associated with an issuer's introduction of smart cards incorporating fingerprint authentication to its customers:

- Stage 1: an initial trial, consisting of several hundred smart cards, generally distributed to a controlled group within the issuer, intended as "proof of concept" and used to assess systems requirements. Our experience has been that a Stage 1 trial is generally for less than 90 days.
- Stage 2: an expanded pilot, consisting of several thousand smart cards, more broadly distributed to a targeted cohort of users, and intended to identify deployment risks and evaluate usage patterns. We anticipate many of the 20 announced programs of which we are aware are Stage 2 deployments.
- Stage 3: an initial commercial launch, consisting of multiple, phased deployments of tens of thousands of smart cards over six to 12 months, supported by consumer education and high-touch marketing initiatives. A Stage 3 deployment may be a distinct program, for example, targeting an exclusive customer cohort with a premium service level, or it may be a preparatory deployment in anticipation of a full commercial launch.
- Stage 4: a full commercial launch, also consisting of multiple, phased deployments, but of hundreds of thousands of smart cards, over an extended period, with broad marketing support highlighting the program as a mature element of the issuer's product portfolio.

Based on our own research and estimates independently developed by biometric industry analysts and securities analysts covering the Company and its competitors, we have developed, using this four-stage framework, multiple scenarios for the "penetration rate" (i.e., the percentage of annual shipments of dual-interface smart cards represented by smart cards incorporating fingerprint authentication) we might achieve over the five-year forecast period. All of these scenarios are characterized by single-digit rates of penetration over the first three years, reflecting our assumptions regarding the number and sequencing of trials, pilots, and launches for which our customers, the smart card manufacturers, are supplying smart cards incorporating our fingerprint authentication solutions. Our scenarios' revenue levels markedly diverge, beginning in year four, based on our assumptions regarding our ability over the preceding three years to "cross the chasm" of technology adoption. Based on our recent accomplishments, we are confident we can reduce costs, improve our solutions, and, through development of innovative, complementary software, notably addressing scalable, low-cost enrolment solutions, deliver a compelling fingerprint authentication solution to mainstream, high-volume customers. If we successfully reach the mainstream of the financial payment market segment, our potential long-term growth could be substantial.

The digital access market segment we are targeting shares certain characteristics with the financial payment market segment, but we estimate it to be far smaller. As is the case with the financial payment market segment, we believe the annual unit volume of smart cards shipped for access control applications is a reasonable approximation of our addressable market opportunity. Based on ABI Research estimates in Biometrics Payment Cards Development, Project and Market Opportunities (April 2022), the annual unit volume is expected to be between 41 million and 254 million units by 2026.

As is the case with the financial payment market segment, we also believe measurement of our strategic progress in the digital access market segment could be based on the rate at which our fingerprint authentication solutions are incorporated into the annual volume of smart cards shipped. However, given the characteristics of the broader access control market and the varying nature of our customer engagements to date, our revenue forecasting based on such penetration assumptions is less certain. We have achieved success with a high-profile customer with which we developed a customized network authentication solution for that customer's own consumption. In 2021, we secured a design win for a government identification card with digital authorization features, and we also have multiple design wins for digital access solutions with smart card manufacturers. Currently, estimating any penetration rate for the digital access market segment is difficult and unreliable.

Within the digital currency storage market segment, which is very early in its development, accurately estimating the size and growth rate of our opportunity is difficult. We have experienced encouraging success in developing customized solutions with a small number of early innovators. Based on this limited experience, and our assessment of the opportunity, we believe the market segment has the potential to develop into a meaningful contributor to our revenue.

Competition

We compete worldwide with many companies offering identification and authentication solutions, and some of these companies have substantially greater financial, engineering, marketing and sales, customer support, and other resources than we do. We compete directly with other companies providing biometric sensors and solutions, including our principal competitors, Fingerprint Cards AB and NEXT Biometrics ASA. On January 25, 2022, Samsung Electronics, a global leader in semiconductors, introduced a device integrating a fingerprint sensor, secure element, and a microprocessor. The device is targeted at the same market segments and applications as our TrustedBio solution. While we have yet to encounter Samsung in the market segments we are targeting, nor can we predict when we will, we consider Samsung's announcement to be a confirmation of our own positive view of the business opportunity for fingerprint authentication in applications using smart cards.

The principal competitive factors upon which we compete include breadth of solution, engineering and manufacturing support, solution performance (i.e., accuracy, ease of use, power consumption, reliability, and transaction speed), and total cost of ownership. We maintain our ability to compete effectively primarily through our engineering activities and the ongoing development of new and enhanced technologies, methods, and processes.

We also may face competition from companies that may expand into our industry and introduce additional competitive products. Existing and potential customers and partners are also potential competitors. These customers may internally develop or acquire competitive technologies or comparable products, which may cause them to reduce or end their purchases of our products.

Research and Development

Our research and development activities are conducted primarily in the United Kingdom and the United States. As of December 31, 2022, we had an engineering staff of 64 employees and six individual contractors, representing approximately 70% of our staff. As of December 31, 2021, the numbers were 77 employees and eight contractors, and 77% of the staff. While we maintain a high level of development activities, we have made a moderate shift of resources to our commercialization activities.

Innovation through research and development is critical for us to remain competitive and to help our customers maintain cost and performance leadership. Our technology roadmap includes:

- further reduction of system costs through optimized architecture and integration;
- continuous solution performance improvements through enhancing sensor and ASIC designs;
- further refinement and enhancement of our scanning, feature extraction, and matching algorithms;
- development of compelling software to complement our solution strategy, including innovative software-only enrolment solutions and card-not-present applications; and
- developing and integrating technologies (e.g., displays) for use in next-generation smart cards.

Manufacturing and Supply Chain

Our fabless operational strategy is to maximize efficiency and cost competitiveness by designing our products using industry standard design processes, incorporating verified high-volume components and materials, and utilizing established manufacturing processes. In support of the anticipated demand for our solutions, we have established a supply chain capable of satisfying forecast

demand. We currently utilize external partners for the fabrication, assembly, and testing of our products. We believe this strategy provides the best combination of performance, cost, and feature attributes necessary for our products.

We develop the production test solutions for use by our assembly and test partners. In addition, to accelerate the development of future mass production test solutions for our products, we have invested in sophisticated test equipment at our facility in Rochester, New York. Production test routines are fully verified in-house, prior to installation on production lines at our partners' facilities, reducing cycle time, engineering support, and costs.

Our selected manufacturing partners for sensor production are Amkor Technology, Inc. and Silicon Precision Industries Limited, both of which are leaders in outsourced semiconductor assembly and test services. TSMC, one of the leading semiconductor manufacturers in the world, is our partner for ASIC wafer production. The TSMC relationship gives us access to the newest and most competitive silicon manufacturing processes and geometries, while providing the capacity and cost structure to serve high volume opportunities. The TSMC facility producing our semiconductor wafers is located in China, which exposes us to risk associated with international trade policy, tariffs, and related policy matters, all of which are outside of our influence or control.

We select our manufacturing partners based on a comprehensive supplier capability analysis, in order to meet the high quality and reliability standards required of our products. Our engineers and supply chain personnel work closely with manufacturing and supply chain partners to increase yield, reduce manufacturing costs, improve product quality, and ensure component sourcing strategies are in place to support our manufacturing needs.

We believe our fabless manufacturing model enables us to focus our resources and expertise on the design, development, sales, marketing and support of our products. We also believe this manufacturing model provides us the flexibility required to quickly respond to new market opportunities and shifts in customer demand. It also simplifies the scope of our operations and administrative processes and significantly reduces our working capital requirements.

Intellectual Property

Our intellectual property rights cover individual inventions and complete biometric systems ranging from measurement principles, algorithms, sensor design, and system solutions. Our extensive intellectual property portfolio, leveraging 175 patents awarded and 62 patents pending, across applicable jurisdictions worldwide (as of December 31, 2022), is a critical enabler of our strategy and competitive positioning. We maintain a program designed to identify technology appropriate for patent and trade secret protection, and we file patent applications in the United States and certain other countries for inventions we consider significant. We continuously seek to protect aspects of our technology that provide significant competitive advantage.

Although our business is not materially dependent upon any one intellectual property right, our intellectual property rights and the products made and sold under them, taken as a whole, are a significant element of our business and our ability to compete. We rely on patents, trademark and copyright laws, trade secret protection efforts, contractual terms, and confidentiality agreements to protect our intellectual property rights. In addition, we require employees and consultants to execute appropriate non-disclosure and proprietary rights agreements. These agreements acknowledge our exclusive ownership of intellectual property developed for, and by, us, requiring confidential treatment of all proprietary information.

In addition to patents, we also possess other forms of intellectual property rights, including trademarks, know-how, trade secrets, design rights and copyrights. We control access to and use of our software, technology, and other proprietary information. Our software is protected by the copyright, patent, and trade secret laws of appropriate jurisdictions. Despite our efforts to protect our software, technology, and other proprietary information, unauthorized parties may copy or otherwise obtain and use our software, technology, and other proprietary information. In addition, as we further expand our international operations and markets, effective patent, copyright, trademark and trade secret protections may not be available, may be limited, or may not be enforceable in certain foreign countries.

Companies in the markets in which we operate frequently are sued or receive informal claims of patent infringement or infringement of other intellectual property rights. As we become more successful, we believe it is likely that competitors will attempt to develop products similar to ours, which may infringe our intellectual property rights. It also is possible competitors or other third parties will claim our products infringe on their intellectual property rights. Successful adjudication of claims of infringement by a third-party could result in: injunctions that could prevent us from selling some of our products in certain markets; penalties, settlements, or judgements that require payment of royalties or financial damages; and settlements or judgements requiring us to develop non-infringing products at significant expense. We cannot provide assurance we will not be accused of infringing any third-party intellectual property rights at any time in the future.

The wordmark "IDEX," the IDEX logo, and the brand name TrustedBio are registered trademarks of, and owned by, IDEX Biometrics ASA.

Human Capital Management

Talented, highly-motivated contributors are important to executing the Company's strategy. In order to maintain our leadership position in fingerprint authentication in a highly competitive employment market, attracting and retaining the best employees and individual contractors worldwide is a priority. Accordingly, we offer compelling compensation and benefits, and seek to foster a culture of innovation in which personnel are empowered to do (and are rewarded for) their best work. The board and management seek to create a working environment that is pleasant, stimulating, safe and to the benefit of all employees. The working environment complies with the existing rules and regulations. IDEX offers flexible working hours for all employees. The board has not found reason to implement special measures.

As of December 31, 2022, the Company had 104 individuals on staff, consisting of 85 employees and 19 individual contractors (individual contractors typically reside in countries in which we do not have business operations). Of this total, 17 were assigned to our Oslo office, 46 were assigned to our two offices in the United States, 36 were assigned to our office in the United Kingdom, and five were assigned to our office in China.

Some of our staff serve on a part-time basis. We assess staffing needs based on a full-time equivalent ("FTE") basis. As of December 31, 2022, we had 82 FTE employees and 17 FTE individual contractors. Of this total of 99 FTEs:

- 70 were engaged in engineering functions (hardware design, systems design, and software development);
- 15 were engaged in marketing and sales functions;
- seven were engaged in administrative and financial functions; and
- seven were engaged in production planning and supply chain management.

None of our employees are represented by a labor union or covered by a collective bargaining agreement and we have not experienced any work stoppages in 2022.

No employee has suffered work-related injury resulting in sick leave. No accidents or incidents involving the assets of IDEX have occurred. The sick leave in the group was 1.2% in 2021, compared to 0.6% in 2021. Due to the low number of employees, statistics for the parent company are not presented. The sick leave data are not considered reason for concern.

IDEX practices equal opportunities in all aspects. All facilities at IDEX are equally well equipped for females and males. Traditionally, fewer women than men have graduated in IDEX's fields of work. The management structure reflects the composition of the technical staff. The board has not taken any special measures in these respects.

Our compensation program is designed to attract and reward talented individuals who possess the skills necessary to support our business objectives, assist in the achievement of our strategic goals, and create long-term value for our holders of our equity securities. We provide employees with compensation packages including a competitive base salary and benefits, which may vary from country to country, such as life and health insurance, supplemental insurance, paid time off, paid parental leave, and an Employee Share Purchase Plan in which eligible employee may participate. Generally (and subject to local laws), new employees and individual contractors are awarded subscription rights for the purchase of the Company's Ordinary Shares. Staff members also generally are eligible to participate in an annual performance-based variable compensation plan, as well as be eligible for periodic awards of subscription rights based on the performance of the Company and that of the staff member. We believe a compensation program with the appropriate balance of short- and long-term incentives aligns the interests of holders of our equity securities and our personnel.

Environmental, Social, and Governance Considerations

We acknowledge and embrace the importance of Environmental, Social, and Governance ("ESG") considerations in the development and execution of the Company's strategy, which must be sustainable and contribute to the well-being of the communities in which we operate.

Our values are set forth in our Code of Conduct and Code of Ethics ("the Code," available on our website). The Code states, "The purpose of the Company is to create value for the shareholders, while the business shall also be to the benefit for the Company's customers, staff, suppliers, other business relations and the society at large."

The Code also states, "IDEX makes every reasonable effort to secure a healthy, safe, and lawful work environment, and that the Company complies with all applicable laws, rules, and regulations concerning occupational health, safety, and environmental protection. The Company promotes equality and non-discrimination, non-harassment, fairness, and ethical behavior. The Company offers a pleasant, well-equipped, and safe work environment, maintains fair and balanced employment practices and equal employment opportunity policies, and complies with all applicable labor laws. IDEX encourages and also expects similar commitment from its suppliers, partners, and customers."

As a *fabless* developer and supplier of high-technology products, we outsource all manufacturing activities. We select manufacturing partners and other providers of products and services that follow responsible practices in all ESG aspects. Our own operations do not have a significant impact on the natural environment, and the end-products in which our fingerprint authentication solutions are used (e.g., PVC smart cards) can be efficiently recycled. The Company is committed to minimizing use of energy, raw materials, water, and other resources, and makes every reasonable effort to minimize the waste we generate. We have recycling programs in place in all our facilities.

As set forth in our Code, we consider shareholders, staff, customers, business partners, authorities, and society in general to be important stakeholders, with interests to be protected and served. We consider how we interact with and treat our stakeholders to be the most efficient way we can have a meaningful impact on their wellbeing. As such, IDEX is committed to fulfill its obligation to be a responsible member of society through the conduct of its business in an ethical, socially-responsible, and transparent manner.

As of December 31, 2022, women represented 19% of our staff, and four departments are led by women. The composition of our Board meets Norwegian statutory requirements, with three women among our seven members.

ESG risks are not considered to be material to our financial statements. We have not identified any such risks that could have the potential to materially harm our business in a non-financial manner.

As our business grows, our operations and the elements of our ESG profile likely will evolve. When our ESG profile evolves to include measurable and material matters, we will supply investors and other stakeholders with decision-useful information regarding our ESG objectives and indicators of our progress toward those objectives.

The current corporate governance review is included in the 2022 annual report to Norway and is also available at the company's website, https://www.idexbiometrics.com/about-idex/.

The Company will publish its annual due diligence review of the Company's impact on human rights and working conditions, pursuant to the Norwegian transparency act, by 30 June 2023. The review will be available at the Company's web site, https://www.idexbiometrics.com/.

Government Regulation

Regulation related to the provision of services over the Internet is evolving, as federal, state, and foreign governments continue to adopt new, or modify existing, laws and regulations addressing data privacy and the collection, processing, storage, transfer, and use of data, including biometric data.

In some cases, data privacy laws and regulations, such as the European Union's General Data Protection Regulation ("GDPR"), which took effect in May 2018, impose new obligations on us as a participant in the technology sector, as well as on our customers. In addition, domestic data privacy laws in the United States, such as the California Consumer Privacy Act ("CCPA"), which took effect in January 2020, continue to evolve and could expose us to further regulatory burdens. Further, laws such as the EU's proposed e-Privacy Regulation are increasingly aimed at the use of personal information for marketing purposes, and the tracking of individuals' online activities.

Although we monitor the regulatory environment and have invested in addressing these developments, these laws may require us to make changes to our products to enable us or our customers to meet new legal requirements and may also increase our potential liability exposure through higher potential penalties for non-compliance. These new or proposed laws and regulations are subject to differing interpretations and may be inconsistent among jurisdictions (see "Item 3. Section D. Risk Factors" for additional disclosures regarding current and possible future regulation).

C. Organizational Structure

IDEX Biometrics ASA, the registrant, is the Norwegian-domiciled parent company for wholly-owned subsidiaries in the United States (IDEX Holding Company Inc., which owns 100% of IDEX America Inc.), the United Kingdom (IDEX Biometrics UK Ltd.), and China (IDEX Electronics (Shanghai) Co., Ltd.).

D. Property, Plants and Equipment

We lease office space in Oslo, Norway, for our corporate headquarters, and office and laboratory space in the United Kingdom (Farnborough) under lease agreements that currently have rolling three-month terms. We also lease laboratory space and offices on three to five year fixed-term agreements in the United States (Rochester, New York, and Wilmington, Massachusetts), and China (Shenzhen). We believe our existing facilities meet our current needs.

We do not own or operate industrial manufacturing facilities. As a fabless manufacturer, we design our products based on standard, readily available manufacturing techniques and obtaining wafer foundry and semiconductor packaging, design, and test services from leading providers. Our capital expenditures generally are associated with purchases of laboratory and test equipment related to product development. We may in certain situations invest in bespoke manufacturing equipment that is placed inside a manufacturing partner's facility.

Item 4A. Unresolved Staff Comments.

Not applicable.

Item 5. Operating and Financial Review and Prospects.

The following discussion of our operating and financial performance and future prospects should be read in conjunction with our audited financial statements and the related notes thereto included elsewhere in this Annual Report. In addition to historical information, the following discussion and analysis contains forward-looking statements reflecting our plans, estimates, and beliefs. Our actual results and the timing of events could differ materially from those anticipated in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Annual Report, particularly in sections titled "Special Note Regarding Forward Looking Statements" and "Risk Factors." The audited financial statements as of and for the years ended December 31, 2022, 2021 and 2020 were prepared in accordance with International Financial Reporting Standards, ("IFRS"), as issued by the International Accounting Standards Board ("IASB") and IFRS as endorsed by the European Union.

Overview

Our competitive positioning has been, and is, based on continuous advances in technologies, innovations in design, and achievements in performance, enabled by our focus on research and development. After the commoditization (and subsequent competitive consolidation) of the mobile device market in the latter half of the last decade, IDEX undertook a strategic pivot toward applications for which our differentiated characteristics could provide demonstrable and sustainable competitive advantages, reducing our exposure to commoditization. Our focus today is on incorporating fingerprint authentication into smart cards, which present the challenging form factors, demanding performance requirements, and extreme power limitations for which our solutions are ideally suited.

IDEX has established customer relationships with innovators and early adopters sharing our vision for the potential of fingerprint authentication in smart card applications, and, over the last three years, we have experienced increasing strategic momentum, successfully attracting new customers and increasing our revenue for ten consecutive quarters up to June 30, 2022. In the second half of 2022, shipments were limited by supply chain delays and component shortage. Revenue in 2022 increased 44% from 2021.

Since we released a reference design integrating our TrustedBio fingerprint authentication module and the SLC38, the latest SE from Infineon Technologies, we have marketed this reference design to smart card manufacturers. By the end of 2022, we had 11

design wins (i.e., contractual commitments) for this reference design with smart card manufacturers worldwide and anticipate these designs could be in full production by the end of 2023.

Customer order volume accelerated across 2022 from both existing customers and, notably, new customers adopting the TrustedBio—SLC38 reference design. Our backlog, consisting of confirmed customer orders scheduled for delivery within the following 12 months (and amounts, if any, of deferred revenue scheduled for recognition during the period), totaled \$3.3 million, \$2.5 million and \$1.7 million as of December 31, 2022, 2021, and 2020, respectively.

IDEX recorded revenue of \$4.1 million for 2022, compared to \$2.8 million for 2021, and \$1.1 million for 2020. Product revenue, as a percentage of total revenue, represented 95.0 %, 99.9 % and 92.5 % for 2022, 2021, and 2020, respectively. Revenue associated with our early-adopting customer in the digital access market segment, inclusive of services revenue associated with product development, represented 48.2%, 85.4%, and 89.7% of our total revenue for 2022, 2021, and 2020, respectively. We began to ship production volumes of our TrustedBio solution in 2021 and experienced significant growth in 2022, and expect such volumes to represent an increasing percentage of total revenue in the future.

We do not own or operate capital-intensive manufacturing facilities, but operate as a *fabless* manufacturer, outsourcing manufacturing and product assembly activities. We currently rely on TSMC, the leading producer of semiconductor wafers, as the sole source of wafers for our proprietary ASICs. We also rely on a limited number of providers of semiconductor packaging, design, and test services, including Amkor Technology, Inc., and Silicon Precision Industries Limited, both of which are leaders in outsourced semiconductor assembly and test services. Like many other companies in the electronics markets we experienced some disruptions in the supply chain which restricted our revenue in the second half of 2022. We have ordered, and may continue to order, relatively high values of raw materials and carry relatively large quantities of finished goods with the aim that customer delivery schedules can be met. While inventory levels likely will continue to expand as order backlog increases and expectations of higher orders and shipments increase, we do not believe the quantities of inventory represent, for the foreseeable future, a material risk to our financial position.

Due to inflationary pressures, primarily in the semiconductor supply chain, we expect our costs and expenses likely will increase, which could negatively influence cash flow and profitability, even if we are able to significantly increase our revenue. Given our fabless model, our manufacturing costs for the products we currently sell are most influenced by the discounts our vendors offer for sustained, high-volume production orders. We may not achieve the necessary volume of production orders to obtain advantageous pricing for the manufacture of our current products. Also, we may not be able to pass on increased costs to customers by increasing the prices of our products.

Variable costs are associated primarily with cost of materials, net of inventory change. Our operating cost structure is largely fixed, reflecting our business model and strategic focus on research and development. Because we believe the Company's leadership in fingerprint authentication technologies is an important competitive differentiator, we intend to maintain research and development activities to maintain this leadership.

We utilize a direct sales force and have customers around the world. At the present time, we do not sell our products through stocking distributors. Given the early-stage characteristics of the market segments we are targeting, including the extended and unpredictable sales cycles frequently associated with marketing new and innovative technology-based products, we expanded our marketing and sales staff in 2021 and increased our marketing spending in 2022.

As a Norwegian public company, with Ordinary Shares listed on the Oslo Børs, and an SEC registrant, with ADSs listed on Nasdaq Capital Markets, we are required to comply with two sets of applicable laws, rules, and regulations. From time to time, this may result in a complex compliance framework, with the consequence being higher costs associated with analysis of dual legal regimes, ongoing revisions to disclosure requirements, and adherence to different governance practices. We devote a substantial amount of time to compliance, which has increased our legal and accounting costs. These compliance costs and commitments of management time likely will continue to expand.

Our largest expenses are associated with personnel costs, including salaries, variable, performance-based compensation, sales commissions, benefits, and charges for the recognition of share-based compensation costs. Our total staff, consisting of employees and individual contractors located in countries in which we do not have operations, totaled 99, 111, and 102 as of December 31, 2022, 2021, and 2020, respectively. As of December 31, 2022, 16 were assigned to our head office in Oslo, 42 were assigned to our two offices in the United States, 36 were assigned to our office in the United Kingdom, and five were assigned to our offices in China. We expect to maintain a stable staff level during 2023, but there may be shifts from engineering to marketing and sales.

We anticipate our profitability could improve as revenue increases, as our forecasts for operating expenses are based on our assumed ability to increase revenue without proportional increases in our operating cost structure. However, because of the

uncertainties associated with accurately forecasting revenue levels, inventory planning, and achieving operational economies of scale, we cannot predict whether, or when, we might achieve profitability.

Impact of COVID-19

The future progression of the COVID-19 pandemic and its effects on the Company's business and operations are unknown and not predictable. There have not been any significant delays in our development projects or material operating cost increases due to COVID-19. However, the pandemic did cause certain, short-term delays of projects in 2021, and 2022.

Disruption of supply chains, and significant price increases, particularly the semiconductor supply chain, have been attributed to the pandemic. We did experience some supply chain disruptions during 2022, and operational planning and management of inventory levels were challenging, given uncertainties associated with vendor capacity availability and allocations to us of such capacity. Because we expect such uncertainties may continue through 2023, we may place orders for, and hold balances of, inventory at higher levels than would be expected if such uncertainties did not exist.

We believe the pandemic has had an adverse influence on the timing of activities of smart card manufacturers and issuers, including delaying product development and the initiation of trials and pilots involving smart cards incorporating our fingerprint authentication solutions.

The full impact of COVID-19 on the Company's business, results of operations, and financial condition may depend on numerous evolving factors that are highly uncertain and cannot be accurately predicted. The Company will continue to monitor the evolving situation and will assess the relevant implications for its consolidated financial statements. Should governments in the countries in which IDEX Biometrics, its suppliers or customers operate reimpose restrictions on interpersonal contact, workplace access, and travel, IDEX Biometrics may experience reduced productivity, customers and potential customers may delay orders, or there may be disruptions in the supply chain.

Components of Consolidated Statements of Profit and Loss

Revenue

Our primary source of revenue is derived from the sale of our products and services. We sell directly to customers and do not utilize distributors for the resale of our products.

We record revenue from the sale of our products and the delivery of technical development and other engineering services to our customers. Product-related revenue is recognized upon shipment. Shipments are generally on an Incoterms EXW (i.e., Ex-works) basis. Revenue is recognized according to the criteria of IFRS 15 *Revenue from Contracts with Customers*. Sales taxes, value add taxes, and other taxes incurred concurrent with revenue producing activities are excluded from revenue. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are not recorded as revenue.

The Company, from time to time, licenses its intellectual property under right-to-use licenses, in which royalties due to the Company are based upon a percentage of the licensee's sales and/or unit volumes. There was no licensing revenue for 2022, 2021, or 2020.

Operating expenses

Pursuant to IAS 1 *Presentation of Financial Statements*, we classify the expenses recognized in our Consolidated Statements of Profit and Loss based on the nature of such expenses, without allocations to functional departments. Our operating expense categories for presentation purposes are:

• Cost of materials, net of inventory change

The costs included in this caption are costs associated with materials consumed, contract manufacturing, and inbound logistics. Inventory is valued as the lower of cost or net realizable value.

This category does not include costs of personnel assigned to inventory management, procurement, logistics, and other functions typically associated with manufacturing overhead. Also excluded are any charges associated with the depreciation of Company-owned equipment (e.g., tooling) utilized by contract manufacturing vendors. These costs have not been material to date.

Compensation and benefits

The category includes, for all departments and activities, the following employee-related expenses: salaries, variable, performance-based compensation, sales commissions, benefits, and charges for the recognition of share-based compensation costs.

As of December 31, 2022, we had 19 individuals on staff, out of a total staff of 104, whom are individual contractors, not employees. Generally, these individuals live and work in countries in which the Company does not have a formal business presence. Compensation of individual contractors is reported as Research and development expenses or Sales and administrative expenses, as applicable, based on the role of the individuals. Individual contractors may be eligible for awards of subscription rights and may be eligible to participate in variable, performance-based compensation plans, but the Company does not provide benefits to individual contractors.

• Research and development

Expenses in this category consist primarily of the costs of services and materials used in engineering activities and outsourced development activities. Our policy has been to expense research and development costs as incurred, unless the criteria for capitalization of certain development costs have been met. No development costs were capitalized in 2022, 2021 or 2020.

Research and development expenses also include the compensation paid to individual contractors performing engineering roles. As of December 31, 2022, six of our total engineering staff of 70 were individual contractors.

Research and development costs are offset by the earned (i.e., recognized) value, if any, of government grants applicable to research and development activities. Generally, the applications or claims for such grants are submitted after completion of the qualifying activities. When there is reasonable assurance that the application or claim will be successful and the amount can be determined reliably, we credit the value of the grant against research and development expenses for that reporting period. Due to the timing difference between the completion of the qualifying activities, the approval of our grant application or claim, and the receipt of the funds associated with the grant, we may record, pending receipt of funds, the value of the grant as an Account receivable, other. We recorded credits of \$0.7 million, \$0.7 million, and \$2.3 million against research and development expenses in each of 2022, 2021, and 2020, respectively.

Other operating expenses

Expenses in this category consist of costs associated with our marketing and sales activities as well as customer service and supply chain administration, and costs associated with administrative activities.

Marketing and sales costs include the fees of third-party service providers supporting public relations, advertising, website and social media programs, and related activities. The direct costs of customer engagement (e.g., promotional material and trade show participation) are included. Marketing and sales expenses also include the compensation paid to individual contractors performing such roles. As of December 31, 2022, nine of our total marketing and sales staff of 15 were individual contractors.

Costs of supply chain administration include the external costs related to customer service, order processing and related administration. As of December 31, 2022, there were no contractors among our 7 staff performing supply chain administration.

Administrative costs include fees of third-party service providers supporting auditing, financial reporting, human resources, investor relations, and legal and regulatory activities. Direct administrative costs include those associated with banking and insurance, communications, information systems, occupancy (excluding lease payments), and supplies. Administrative expenses also include the compensation paid to individual contractors performing such roles. As of December 31, 2022, two of our total administrative staff of eight were individual contractors.

Lease payments are not included in Other operating expenses. Pursuant to IFRS 16 *Leases* (effective January 2019), a lease is capitalized at the calculated present value of future lease payments, and the creation of a corresponding right-of-use asset is depreciated. Both are presented in our Consolidated Statements of Financial Position. A periodic lease payment is split into periodic depreciation expense and periodic notional interest expense. The initial values of the right-of-use asset is amortized over the term of the lease liability.

• Amortization and depreciation

Expenses in this category consist of charges associated with amortization of certain intangible assets and depreciation of our property, plant, and equipment, including the charges associated with the depreciation of our right-of-use assets recorded pursuant to IFRS 16. For assets subject to amortization or depreciation, these periodic charges generally are calculated using the straight-line method, based on each asset's estimated useful life.

Finance income and Finance cost

Pursuant to IAS 1, the Finance income and Finance cost captions appear below the Operating income (loss) caption and include income and expenses associated with financial transactions (i.e., transactions not related to the Company's operations), the net amount of foreign exchange gains or losses arising from settlement of obligations denominated in foreign currencies during the period and foreign currency translation adjustments recognized at period-end, and income and expenses arising from the adoption of, or changes to, IFRS reporting requirements.

For the Company:

- Finance income may include interest received on bank balances, the net gain associated with aggregated foreign
 exchange translation adjustments for the period, and upward revisions to provisions, reserves, or the recorded fair values
 of financial assets or liabilities.
- Finance cost may include interest expenses on lease liabilities, interest expenses on VAT obligations, the net loss
 associated with aggregated foreign exchange translation adjustments for the period, and downward revisions to
 provisions, reserves, or the recorded fair values of financial assets or liabilities.

Income tax expense (benefit)

The provision for income tax presented in the Consolidated Statements of Profit and Loss consists of the sum of current taxes due and changes in deferred tax. Any portion of income tax expense (benefit) attributable to changes in equity during the period is recognized in the equity section of the Consolidated Statements of Financial Position.

Current taxes due represents the sum of the periodic income tax obligations of our parent company and our individual subsidiaries. Our parent company is subject to tax pursuant to the corporate tax laws of Norway. As our parent company has been in a loss position since inception, no corporate income taxes have been incurred in Norway. Each of our subsidiaries is taxed pursuant to the corporate tax laws of their respective countries of domicile. Our subsidiaries do not generate revenue from external sales of products or services. The subsidiaries generally provide services to the parent company using the cost-plus transfer pricing method, in line with international tax treaties based on the guidelines of the Organisation for Economic Co-operation and Development. This normally results in a taxable profit in the subsidiary.

Deferred tax is measured, pursuant to IAS 12 *Income Taxes*, using the liability method, whereby expected future tax effects of timing differences (i.e., temporary differences between the value of tax obligations calculated for financial reporting purposes and tax obligations calculated following tax laws and regulations) are reported as liabilities or assets. Both are measured at the tax rates applicable when the timing difference is expected to reverse, and balances recorded on our Consolidated statements of financial position are adjusted to reflect changes in tax rates or the imposition of new taxes.

Deferred tax liabilities are generally recognized for all taxable temporary differences, and deferred tax assets are recognized to the extent, in management's judgment, it is convincingly probable sufficient taxable profits will be generated, against which deductible temporary differences can be utilized (i.e., against which a recorded deferred tax asset can be used to reduce future taxes due). We review the potential carrying value of deferred tax assets at the end of each reporting period, based on the balance of tax loss carryforwards at the time. If we conclude there is insufficient convincing evidence of future taxable profits, against which a recorded deferred tax asset can be used to reduce future taxes due, we do not recognize a deferred tax asset.

The values of such unrecognized deferred tax assets, as of December 31, 2022, 2021, and 2020, totaled \$56.6 million, \$57.1 million, and \$51.3 million, respectively. The figure as of December 31, 2022, includes, in addition to the tax-effected value of cumulative tax losses (i.e., carryforwards), \$1.4 million of available tax credits in the United States, related to our research and development activities in the United States.

For further information regarding the calculation of our tax provisions, see Footnote 6 to our Consolidated Financial Statements, which are presented in Part III of this Annual Report.

A. Operating Results

The following table summarizes the results of our operations for the years ended December 31, 2022, 2021, and 2020.

	Year Ended December 31,							
(\$000s)	2022		2021			2020	2022-2021 Change	2021-2020 Change
Revenue:								
Product	\$	3,889	\$	2,837	\$	1,013	37%	180%
Service		203		3		82	6654%	(96)%
Total revenue		4,091		2,840		1,095	44%	159%
Operating expenses:								
Cost of materials, net of inventory change		3,244		1,254		275	159%	356%
Compensation and benefits		19,213		21,107		17,672	(9)%	19%
Research and development		3,250		2,680		1,895	21%	41%
Other operating expenses		8,402		7,347		5,936	14%	24%
Amortization and depreciation		1,352		1,802		1,719	(25)%	5%
Total operating expenses		35,460		34,190		27,497	4%	24%
Loss from operations		(31,369)		(31,350)		(26,402)	0%	19%
Finance income		97		11		26	781%	(58)%
Finance cost		(1,425)		(1,123)		(477)	27%	135%
Loss before tax		(32,698)		(32,462)		(26,853)	1%	21%
Income tax expense (benefit)		(36)		90		(99)	(140)%	(191)%
Net loss for the year	\$	(32,662)	\$	(32,552)	\$	(26,754)	0%	22%

Revenue

Revenue for the year ended December 31, 2022, was \$4.1 million, consisting of \$3.9 million of revenue from product sales and \$0.2 million from services. The increase in product sales of \$1.1 million from 2021 to 2022, representing an annual increase of 37%, is associated with significant growth in sales to customers in the card market, while sales to the customized digital access solution were lower than in the previous year. Service revenue is a minor element of customer engagement. Our two largest customers represented 48% and 25%, respectively, of total revenue for the year.

We expect shipments of our TrustedBio modules will expand through 2023, based on our backlog and our current forecast for additional orders, production lead times, and shipments. Such shipments are expected to contribute to important diversification of our customer base. We expect that shipments of our customized digital access solution may decline in 2023.

Revenue for the year ended December 31, 2021, was \$2.8 million consisting of \$2.8 million of revenue from product sales, and negligible amount of revenue from services, associated with the completion of development of a customized digital access solution to an existing customer. As such, this single customer represented approximately 85% of our revenue for 2021. Our second largest customer represented approximately 9% of total revenue for the year.

Revenue for the year ended December 31, 2020, was \$1.1 million, consisting of \$1.0 million of revenue from product sales, and \$0.1 million of revenue from services associated with the development of the customized digital access solution for the customer referenced above. Revenue from this customer represented approximately 81% of our revenue for 2020. Our second largest customer represented approximately 4% of total revenue for the year.

We categorize origin of revenue based on the billing addresses of our deliveries. Certain customers may request delivery to other countries than the customer's demicile. Customers' contract manufacturers may place orders with us under the terms of the customer's contract. We are potentially exposed to the risks associated with the countries to which delivery is requested and in countries where the contract manufacturers are domiciled (e.g., risks associated with customs delays and other logistical delays).

Cost of materials, net of inventory change

Cost of materials, net of inventory change, rose 159% from 2021 to 2022, to \$3.2 million, reflecting the 37% increase for the year in product revenue and also the product mix. For 2021, the figure was \$1.3 million, a sequential increase of 356%, reflecting a 180% increase for the year in product revenue. For 2020, services represented 7% of total revenue, in 2021, almost nil, and in 2022, 5% of revenue. Because we present our Consolidated Financial Statements reflecting the nature of expenses, the costs of personnel delivering engineering services associated with services revenue are not included in Cost of materials, net of inventory change.

Certain costs typically associated with manufacturing and manufacturing overhead, such as personnel costs and depreciation charges, are excluded from Cost of materials, net of inventory change, given the presentation of operating expenses based on the nature of expenses rather than by function. These excluded costs have not been material to date. Pursuant to IAS 1 and our presentation of operating expenses based on the nature of expenses, we do not present in our Consolidated Statements of Profit and Loss a line representing "gross margin," reflecting the subtraction of Cost of materials, net of inventory change, from Revenue. We assess product-level profitability by calculating a *proxy* gross margin based on subtraction of Cost of materials, net of inventory change, from revenue derived from product sales. Under IFRS, the gross margin and ratio figures are alternative performance measures ("APMs"), as they are not defined in IFRS. We believe these figures are useful indicators of our performance. We also believe these figures are consistent with IFRS, as no adjustments to other IFRS-defined figures have been made, and their use in no way represents pro forma presentation of non-IFRS figures in our Consolidated Financial Statements. For 2022, such a product gross margin to product revenue was 17%. For 2021, and 2020, the product gross margins were 56% and 73% respectively. The declining gross margin ratios reflect sequentially higher shipment volumes and shifts in product mix. In 2022, the margin was additionally adversely impacted by several factors: higher component prices have not yet been passed on to customers, manufacturing costs have not yet achieved high-volume level, and a write-off of inventory of a discontinued product.

Compensation and benefits

Compensation and benefits expenses include, for all departments and activities, the following employee-related expenses: salaries, variable, performance-based compensation, sales commissions, benefits, and charges for the recognition of share-based compensation costs.

Compensation and benefits expenses for the year ended December 31, 2022, were \$19.2 million, as compared to \$21.1 million for the year ended December 31, 2021, a decrease of \$1.9 million or minus 9%, reflecting a reduction in number of employees, and a lower level of share-based compensation costs.

Such expenses for the year ended December 31, 2021, were \$21.1 million, as compared to \$17.7 million for the year ended December 31, 2020, an increase of \$3.4 million, or 19%. The increase was due to a higher number of employees, customary merit-based salary increases, and increased levels of share-based compensation costs. Additionally, salary expenses for 2020 reflected a temporary reduction of salaries for approximately one quarter of the year, implemented in response to the COVID-19 pandemic.

The year-end numbers of employees for 2022, 2021, and 2020 were 82, 93, and 90, respectively, reflecting staff reductions and attrition in engineering during the three years and the expansion of our marketing and sales team during 2021 and 2022. We expect staffing levels through 2023 will not change notably, as we anticipate any incremental hiring for specific needs will be offset by attrition.

For more information regarding compensation and the composition of our staff, see Footnote 4 to our Consolidated Financial Statements, which are presented in Part III of this Annual Report.

Research and development

Research and development expenses are presented on a net basis, reflecting the reduction of gross expenses through application of grants approved, if any. As described, we regularly apply for and receive grants under government programs, in Norway and the United Kingdom, supporting research and development activities.

For the year ended December 31, 2022, research and development expenses were \$3.2 million, reflecting gross expenses of \$4.0 million, offset by government grants of \$0.7 million. For the year ended December 31, 2021, research and development expenses were \$2.7 million, reflecting gross expenses of \$3.4 million, offset by government grants of \$0.7 million. For the year ended December 31, 2020, research and development expenses were \$1.9 million, reflecting gross expenses of \$4.2 million, offset by government grants of \$2.3 million.

Research and development expenses include the cost of individual contractors assigned to engineering roles. As of December 31, 2022, December 31, 2021, and December 31, 2020, compensation for six, eight, and six individual contractors, respectively, were included in Research and development expenses.

The variations in gross research and development costs between the years reflect primarily the use of third-party service providers for outsourced engineering activities, particularly related to ASIC development and initiation of fabrication. Variances in the values of government grants approved reflect the timing of our applications and when we are notified of approvals. During the first quarter of 2020, we filed claims in the United Kingdom for research and development grants applicable to activities in 2017, 2018, and 2019. As a result, we received \$1.5 million of grant funds in 2020, which contributed to the significantly higher level of grant value for that year.

For 2023, we have focused our research and development activities on a narrower range of priorities associated with near-term product introduction objectives. Going forward we expect gross expenses associated with these activities will be comparable to gross expenses incurred in 2022. Similarly, we expect government grant funding for 2023 will be approximately the same as received in 2022.

Other operating expenses

As described above, expenses in this category consist of costs associated with our marketing and sales activities and costs associated with administrative activities.

Other operating expenses for the year ended December 31, 2022, were \$8.4 million, as compared to \$7.3 million for the year ended December 31, 2021, an increase of \$1.1 million or 14%. Other operating expenses for the year ended December 31, 2021, were \$7.3 million, as compared to \$5.9 million for the year ended December 31, 2020, an increase of \$1.4 million, or 24%.

The expansion of our marketing and sales staff in 2021 and higher activity level in 2022 has contributed to the increase in Other operating expenses. The costs of individual contractors assigned to such roles are included in marketing and sales expenses. The number of individual contractors in marketing and sales roles expanded to nine as of December 31, 2022, up from five at the end of 2020. Due to the restrictions associated with the COVID-19 pandemic, travel and related customer engagement costs in 2021 remained significantly below pre-pandemic level, partially offsetting other increases.

Other operating expenses increased significantly from 2020 to 2021 and into 2022 also because of higher professional services fees associated with the Company's listing of ADSs on the Nasdaq during the first quarter of 2021, as well as the related expanded scope of regulatory compliance and investor relations. Expanded liability insurance coverage for our Directors and Executive Officers caused insurance costs to rise significantly from 2020 to the following years.

While we seek to identify opportunities to reduce our use of outside providers of professional services, we rely on the expertise of such providers given our dual listing of Ordinary Shares and ADSs and the resulting exposure to the complex legal and regulatory requirements of Norway and the United States. If we increase our revenue as we currently anticipate, these expenses should decline as a percentage of revenue, but we do not expect an absolute decline in these expenses for the foreseeable future.

Finance income and Finance cost

As described above, Finance income generally includes interest received on bank balances, the net gain associated with aggregated foreign exchange translation adjustments for the period, and upward revisions, if any, to provisions, reserves, or the recorded fair values of financial assets or liabilities. Finance cost generally includes interest expenses on lease liabilities, interest expenses on VAT obligations, the net loss associated with aggregated foreign exchange translation adjustments for the period, and downward revisions, if any, to provisions, reserves, or the recorded fair values of financial assets or liabilities.

For the year ended December 31, 2022, Finance income totaled \$97 thousand, consisting primarily of interest income on our bank deposits. Finance cost for the year, totaled \$1.4 million consisting primarily of the net amount of losses associated with foreign exchange translation adjustments.

In 2021 and 2020, Finance income of \$11 thousand and \$26 thousand, respectively, consisted primarily of interest income, while Finance cost in those years, \$1.1 million and \$0.5 million, respectively, were net foreign exchange translation losses.

Income tax expense (benefit)

The provision for income tax presented in the Consolidated Statements of Profit and Loss represents, for the reporting period, the sum of current taxes due and changes in deferred tax. Current taxes due represents the sum of income tax expense (benefit) for each of our taxable entities. Income tax expense (benefit) for each entity is calculated using the income tax rates of the tax jurisdiction in which it operates.

Changes in deferred tax represent the periodic reconciliation of differences between financial reporting values and tax reporting values. The Company does not capitalize any deferred tax asset. Hence, any potential gain from increase in deferred tax asset is not recognized. For further details of tax calculations, see Footnote 6 to our Consolidated Financial Statements, which are presented in Part III of this Annual Report.

For the years ended December 31, 2022, 2021, and 2020, the provision for income tax presented in the Consolidated Statements of Profit and Loss was a benefit of \$36 thousand, an expense of \$90 thousand and a benefit of \$99 thousand. During the years ended December 31, 2022, 2021 and 2020, the parent company did not record or pay income taxes in Norway.

Net loss for the year

Net loss for the years ended December 31, 2022, 2021, and 2020 was \$32.7 million, \$32.6 million, and \$26.8 million, respectively.

On a per share basis for these three years, these losses were \$0.03, \$0.04, and \$0.03 per share, respectively. For the Company, pursuant to IAS 33 *Earnings per Share*, these loss per share figures are the same on a basic and fully-diluted basis. Because the Company has recorded a loss, loss per share on a fully-diluted basis excludes any Ordinary Shares issuable upon exercise of outstanding subscription rights, as doing so, given the loss, would be anti-dilutive (i.e., reduce loss per share).

For the Company, basic earnings per share is the quotient of the profit or loss for the period divided by the weighted average number of Ordinary Shares outstanding for the period. The weighted average number of Ordinary Shares outstanding during the period is the number of Ordinary Shares outstanding at the beginning of the period, adjusted by the number of Ordinary Shares issued or bought back during the period, multiplied by a time-weighting factor representing the number of days the Ordinary Shares are outstanding as a proportion of the total number of days in the period.

Similarly, for the Company, fully-diluted earnings per share is the quotient of the profit or loss for the period divided by the weighted average number of Ordinary Shares outstanding for the period, but, if profit is recorded for the period, the weighted average number of Ordinary Shares also includes the weighted average number of Ordinary Shares that would be issued upon exercise of vested subscription rights at a share price equal to the Ordinary Share price for the period. Such weight average of dilutive Ordinary Shares shall be calculated on a time-weighting basis, assuming subscription rights vested at the beginning of the period would be exercised at the beginning of the period or, if vesting occurs after the beginning of the period, assuming exercise of subscription rights would occur on the subsequent vesting date.

B. Liquidity and Capital Resources

Overview

Since our establishment, we have incurred significant operating losses and negative cash flows. We anticipate we will continue to incur operating losses and consume cash through 2023. There is significant doubt about our ability to continue as a going concern. We will require additional funding to defray anticipated future operating losses. Because we intend to continue pursuing our strategy and to rapidly grow our revenue, we anticipate additional capital will be required (i.e., for the funding of increased working capital requirements).

We expect our revenue for 2023 will be higher than the level in 2022. We expect shipments of our TrustedBio modules will expand through 2023, based on our backlog and our current forecast for additional orders, production lead times, and shipments. Maintaining and improving product-level profitability in 2023 compared to 2022 will depend on our ability to pass along expected increases in the costs to manufacture, assemble, and test our products.

Compensation and related personnel expenses are our largest costs and we anticipate a decrease in such expenses in 2023 compared to 2022, reflecting the reduction in number of employees in the second half of 2022 and given our expectation of a stable number of employees in 2023. Our research and development spending is expected to continue at its current level through 2023, reflecting ongoing technology and product development, some of which is funded by grants from the governments of Norway and the United Kingdom. Other operating expenses likely will increase modestly in connection with expanded marketing and sales activities, as well as the likelihood of increased travel costs, given reduced restrictions on travel.

On November 16, 2022, we completed a private placement of 150 million Ordinary Shares, with gross proceeds of \$15.6 million.

As of December 31, 2022, we had cash and cash equivalents of \$16.1 million, representing approximately 56% of total assets.

We have no debt to financial institutions or other lenders. Our ongoing material financing commitments are limited to the lease agreements we entered into associated with our office and lab facilities.

The going concern assumption has been applied in the preparation of the consolidated financial statements. The going concern assumes the realization of assets and liquidation of liabilities in the normal course of business. IDEX has incurred significant operating

losses, and has accumulated losses, net of capital reduction reserve of \$33,901 as of December 31, 2022, and reported cash outflow amounting to \$17,555, after obtaining new equity in a net amount of \$14,334. The company has no debt to financial institutions. Net equity amounted to \$22,841 and the balance sheet solvency amounted to \$13,370 at December 31, 2022. The Company aims to increase revenue generation through sales of its products, however, it does not currently have the cash resources to fully meet its operating commitments for the next twelve months. These factors, among others, cast significant doubt on the Company's ability to continue as a going concern.

As an ongoing activity, we monitor liquidity and the board is prepared to take appropriate measures if and when required. We have been successful in the past with implementing cost reductions and raising capital through private placements of equity. However, there can be no assurance that cash generated by future operations will be adequate to meet our needs or that we will be successful in raising additional capital in the form of equity or debt.

The Company plans to undertake a private placement of shares or procure other substantial funding by the end of the third quarter of 2023 to provide additional funding to support research and development and fund working capital.

Cash Flows

Pursuant to IAS 7 *Statement of Cash Flows*, we present our Consolidated Statements of Cash Flow following the indirect method. The following table summarizes the results of our cash flows for the periods presented:

	Year Ended December 31,					
(\$000s)		2022		2021		2020
Net cash used in operating activities	\$	(31,914)	\$	(27,533)	\$	(23,294)
Net cash used in investing activities		(160)		(143)		(232)
Net cash provided by financing activities	_	14,520		54,148		17,438
Net change in cash and cash equivalents	\$	(17,555)	\$	26,472	\$	(6,088)

Net cash flow used in operating activities

During the year ended December 31, 2022, operating activities consumed cash of \$31.9 million, primarily as a consequence of our net loss before tax of \$32.7 million, and a net working capital increase of \$2.3 million, partially offset by non-cash charges of \$4.1 million included in the net loss for the year.

Operating activities during 2021 consumed cash of \$27.5 million, primarily as a result of our net loss before tax of \$32.5 million and a net working capital decrease of \$0.1 million partially offset by non-cash charges of \$4.6 million included in net loss for the year.

Operating activities during 2020 consumed cash of \$23.3 million primarily as a result of our net loss before tax of \$26.9 million and a net working capital increase of \$0.5 million, partially offset by non-cash charges of \$4.5 million included in net loss for the year.

Net cash flow used in investing activities

During the year ended December 31, 2022, investing activities consumed cash of \$160 thousand reflecting the use of \$267 thousand for capital expenditures for engineering equipment, partially offset by the receipt of \$97 thousand of interest income associated with higher interest rates for the period.

Investing activities during 2021 consumed cash of \$143 thousand, reflecting the use of \$141 thousand for capital expenditures for engineering equipment.

Investing activities during 2020 consumed cash of \$232 thousand, reflecting the use of \$152 thousand for capital expenditures for engineering equipment and the use of \$181 thousand for the acquisition of certain patents.

Net cash flow provided by financing activities

During the year ended December 31, 2022, share issuance generated net cash of \$14.4 million, which included the proceeds from a private placement of Ordinary Shares, as well as proceeds from share issuances associated with our Employee Share Purchase Plan and the exercise of incentive subscription rights, partially offset by reductions of lease liabilities totaling \$400 thousand.

Financing activities during 2021 generated cash of \$54.1 million, which included the net proceeds from two private placements of Ordinary Shares, as well as proceeds from share issuances associated with our Employee Share Purchase Plan and the exercise of incentive subscription rights, partially offset by reductions of lease liabilities totaling \$844 thousand.

Financing activities during 2020 generated cash of \$17.4 million, representing net proceeds of \$18.0 million from a private placement of Ordinary Shares and proceeds of \$731 thousand from share issuances associated with our Employee Share Purchase plan and the exercise of incentive subscription rights, partially offset by reductions of lease liabilities totaling \$793 thousand and the final payment of \$500 thousand associated with the purchase of intangible assets.

Operating and Capital Expenditure Requirements

We have not achieved profitability on an annual basis since our inception. While we expect our revenue for 2023 will be higher than the revenue in 2022, we also expect to incur net losses and consume cash for the year. We expect our operating expenses will remain stable as we continue to spend on the development of new products and expanded product features and the development of new customers in our three targeted markets. Additionally, as we have Ordinary Shares listed in Norway and ADSs listed in the United States, we expect we will continue to incur the costs of regulatory compliance.

We do not anticipate an increase in capital expenditures above the level incurred during 2022 and 2021. We also are not planning to acquire intangible assets or have significant investment activities for the foreseeable future.

Our future funding requirements will depend on many factors, including but not limited to:

- the pace and amount of new production orders placed with us by existing customers and customers with which we have secured design wins;
- the scope, rate of progress, and costs of our expanded marketing and sales activities;
- the scope, rate of progress, and costs of our product development activities;
- our ability to secure manufacturing capacity and address other ongoing supply chain uncertainties;
- the cost of manufacturing our products and our ability to pass on cost increases to our customers;
- the cost of developing our software and the timing thereof;
- the costs involved in filing and prosecuting patent applications and enforcing and defending potential patent claims; and
- the costs of retaining existing personnel and hiring additional skilled individuals to support our continued growth.

Among other factors, our history of losses, limited revenue and negative cash flows from operations raise significant doubt about our ability to continue as a going concern. As a result, our independent registered public accounting firm has included an explanatory paragraph in their opinion for the year ended December 31, 2022 as to the significant doubt about our ability to continue as a going concern. Our consolidated financial statements contemplate that we will continue to operate as a going concern. We have been able to raise funds through private placements of shares in the past. During 2022, we raised \$15.1 million through private placements. We regularly review all strategic options to fund ongoing operations, research and development projects and working capital needs, including a capital raise. While we have been successful in the past in raising funds through private placements of shares, there is no assurance that we will be successful in the future.

For additional information regarding the risks to which we are, or may be, exposed, see "Item 3. Section D. Risk Factors."

C. Research and Development

For a discussion of our research and development activities and policies, see "Item 4. Section B. Business Overview," "Item 5. Section A. Operating Results," herein, as well as Footnote 3 and Footnote 5 to our Consolidated Financial Statements, which are presented in Part III of this Annual Report.

D. Trend Information

For a discussion of business trends, see "Item 4. Section B. Business Overview," "Item 5. Section A. Operating Results," and "Item 5. Section B. Liquidity and Capital Resources."

E. Critical Accounting Estimates

The application of certain accounting standards requires considerable judgment based upon assumptions that may involve high levels of uncertainty at the time the estimates are made. Judgments and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual outcomes may deviate from estimates. Changes in assumptions and deviations between estimates and final outcomes may have a material influence on the financial statements in the periods when assumptions are changed or when uncertainty is resolved.

As set forth in Footnote 3 to our Consolidated Financial Statements, which are presented in Part III of this Annual Report, we consider the following estimates to be the significant accounting items requiring management's judgement and use of assumptions: The recorded values of goodwill, intangible assets, and inventory; and the calculation and recognition of share-based compensation expenses.

Item 6. Directors, Senior Management and Employees.

A. Directors and senior management

The following table sets forth information concerning our Executive Officers and Directors as of December 31, 2022:

Age	Position(s)
62	Chief Executive Officer
56	Chief Financial Officer (interim)
50	Chief Technology Officer
53	Chief Commercial Officer
69	Chair
64	Deputy Chair
59	Director
68	Director
46	Director
60	Director
60	Director
	62 56 50 53 69 64 59 68 46 60

- Member of Audit Committee.
- 2. Member of Compensation Committee.

Executive Officers

Vincent Graziani has served as our Chief Executive Officer ("CEO") since February 2020. He joined IDEX from Infineon Technologies AG, for which he was most recently Vice President of Strategy Development and Implementation, with responsibility for leading new business development and strategic partnerships. Mr. Graziani has also led technology companies from the prerevenue stage to significant revenues and scale while serving as CEO of Sand 9, Vbrick Systems, and Sandburst. Earlier in his career, he held positions of increasing responsibility in engineering as well as marketing and sales at Intel, Broadcom, and Siemens Semiconductor. Mr. Graziani holds a B.S. in Electrical Engineering from the University of New Hampshire and a M.S. in Electrical Engineering from Northeastern University. Mr. Graziani is located at the Company's offices in Wilmington, Massachusetts.

Eileen M. Wynne has served as our Interim Chief Financial Officer ("CFO") since August 2022. Prior to August 2022, Ms. Wynne provided interim and part-time accounting and finance services to businesses, including IDEX. From December 2020 until August 2022, Ms. Wynne provided consulting services to IDEX. Prior to joining us, and from May 2013 to June 2019, Ms. Wynne served as Vice President and Chief Accounting Officer of Analog Devices, Inc. (NASDAQ: ADI) where she was responsible for ADI's accounting processes and controls globally. From March 2017 to September 2017, Ms. Wynne served as interim Chief Financial Officer of Analog Devices, Inc. Before 2013, Ms. Wynne held various corporate accounting roles within Analog Devices, Inc. and was an audit manager for Grant Thornton, LLP. Ms. Wynne also serves on the board of directors of Monolithic Power Systems, Inc. Ms. Wynne holds a B.A. from Saint Anselm College and an M.S.A. in Accounting from Bentley University. She is located at the Company's offices in Wilmington, Massachusetts.

Anthony Eaton has served as our Chief Technology Officer ("CTO") since March 2019. Mr. Eaton served as our Vice President of Systems Engineering from February 2017 to February 2019, and our Senior Director of Engineering from August 2016 to January 2017. Prior to joining us, he served as Director of System Engineering at Atmel, where he was responsible for building and running the System Engineering function for the MaxTouch Business Unit. Earlier, Mr. Eaton held senior engineering roles at NVIDIA Corporation, Mirics Semiconductor, Inc. and Sony Semiconductor Solutions Group. Mr. Eaton holds Bachelor's and Master's degrees in Engineering from Cambridge University. He is located at the Company's offices in Farnborough, United Kingdom.

Catharina Eklof has served as our Chief Commercial Officer ("CCO") since June 2021. Prior to joining us, Ms. Eklof held the position as Chief Commercial Officer at Defentry, a cyber safety solutions provider, for which she led marketing and sales, leading the company's international expansion. Ms. Eklof has over 20 years of experience as a global executive leading business transformation across financial services, retail, travel, and information security. Notably, she had roles of increasing responsibility over 12 years with Mastercard. She was instrumental in establishing Mastercard's global strategic merchant program, bringing digital payment solutions and new, data-driven business models to the organization. Ms. Eklof serves on the board of directors of Avanza Bank Holding AB (Nasdaq Stockholm: AZA). Ms. Eklof holds an M.B.A. in International Business and a M.S. in Economics from the University of Uppsala, Sweden. Ms. Eklof is assigned to our office in Oslo, Norway, but resides and works in Belgium.

Board of Directors

Our Board held seven meetings during the period from our Annual General Meeting on May 12, 2022, until and including April 19, 2023. The meetings have been conducted as in-person and virtual meetings via live webcast.

Morten Opstad has served as Board Chair since March 1997. Mr. Opstad is a partner in Advokatfirmaet Ræder AS in Oslo, Norway. He has rendered legal assistance with respect to establishing and organizing several technology and innovation companies. He currently serves as chair of the board of Ensurge Micropower ASA (Oslo Børs: ENSU). Mr. Opstad holds a legal degree (Cand.Jur.) from the University of Oslo and was admitted to the Norwegian Bar Association in 1986. Mr. Opstad was born in 1953, is a Norwegian citizen, and resides in Oslo. Mr. Opstad attended 7 Board meetings in the period.

Lawrence J. Ciaccia has served as a Director since May 2015 and was appointed as Deputy Chair in May of 2019. He has broad expertise from the semiconductor industry, most notably playing a pivotal role in transforming AuthenTec, Inc. from a start-up into the world's leading fingerprint sensor supplier. He served as AuthenTec, Inc's CEO from September 2010 until the company's acquisition by Apple Inc. in October 2012. He remained with Apple Inc. through February 2013 to assist in the acquisition integration and transition. Mr. Ciaccia holds a B.S. in Electrical Engineering from Clarkson University and an M.B.A. from the Florida Institute of Technology. Mr. Ciaccia was born in 1958, is a United States citizen, and resides in Florida. Mr. Ciaccia attended 6 Board meetings in the period.

Deborah Lee Davis has served as a Director since May 2015. She is independent of the Company's executive management, material business contacts, and larger shareholders. Ms. Davis serves on the boards of directors of International Personal Finance Plc, The Institute of Directors, Diaceutics plc, and Lloyds Banking Group Insurance Board. She also serves as a trustee of the Southern African Conservation Trust in South Africa. During her career, she held senior executive leadership roles at PayPal, eBay, Verizon, and Symantec. Ms. Davis holds a Sloan Masters in Science (Management) with Distinction from London Business School and a Bachelor of Applied Science (Electronics) Honours degree from the University of Melbourne. She also holds a Diploma in Company Direction with distinction from The Institute of Directors. Ms. Davis was born in 1963, is a dual citizen of Australia and the United Kingdom. Ms. Davis attended 7 Board meetings in the period.

Hanne Høvding has served as a Director since December 2007. She is independent of the Company's executive management, material business contacts, and larger shareholders. During her professional career, Ms. Høvding held several management positions within personnel administration, finance, credit card administration, and debt collection. She holds a B.S. in Economics and Business Administration from the Norwegian School of Economics and Business Administration. Ms. Høvding was born in 1954, is a Norwegian citizen, and resides in Oslo. Ms. Høvding attended 7 Board meetings in the period.

Annika Olsson was elected as a Director in May 2021. She is independent of the Company's executive management, material business contacts, and larger shareholders. Ms. Olsson is the CEO of Ekspres Bank A/S, a unit of the BNP Paribas Group. During her 20-year career in consumer financial services, Ms. Olsson has held various executive positions. Before joining Ekspres Bank A/S in 2010, she served as Commercial Director for Resurs Bank, a leader in retail finance in the Nordic region. Ms. Olsson also serves on the board of directors of Finans & Leasing (the Association of Danish Finance Houses). She holds a B.S. in finance and marketing from IHM Business School. Ms. Olsson was born in 1976, is a Swedish citizen, and resides in Copenhagen, Denmark. Ms. Olsson attended 6 Board meetings in the period.

Thomas M. Quindlen was elected as a Director in May 2021. From October 2020 until his election, he attended Board meetings as a non-voting observer. He is independent of the Company's executive management, material business contacts, and larger shareholders. Mr. Quindlen has worked in financial services for three decades and was the CEO of Retail Card, a division of Synchrony, a Fortune 200 company, from January 2014 until his recent retirement in January 2023. Earlier in his career, Mr. Quindlen served in several leadership roles for GE Capital, the financial services subsidiary of the General Electric Company. Mr. Quindlen holds a B.S. in accounting from Villanova University. Mr. Quindlen was born in 1962, is a United States citizen, and resides in Connecticut. Mr. Quindlen attended 5 Board meetings in the period.

Stephen A. Skaggs has served as a Director since May 2019. He is independent of the Company's executive management, material business contacts, and larger shareholders. Mr. Skaggs has more than 25 years of experience in the semiconductor industry and most recently served as Senior Vice President and CFO of Atmel Corporation, a leading supplier of microcontrollers, prior to its acquisition by Microchip Technology, Inc. in 2016. Mr. Skaggs served as CEO and, earlier, as CFO of Lattice Semiconductor Corporation, a supplier of programmable logic devices and related software. Earlier in his career, he worked for Bain & Company, a global management consulting firm. He currently serves as a non-executive director of Coherent Corporation, a global leader in engineered materials, optoelectronics and lasers. Mr. Skaggs holds a B.S. in Chemical Engineering from the University of California, Berkeley, and an M.B.A. from the Harvard Business School. Mr. Skaggs was born in 1962, is a United States citizen, and resides in Nevada. Mr. Skaggs attended 7 Board meetings in the period.

Family Relationships and Selection Arrangements

There are no family relationships between any of the Directors. There are no family relationships between any Director and any member of senior management of our Company. There is no arrangement or understanding with major shareholders, customers, suppliers, or others, pursuant to which Directors were elected or members of management was selected.

Board Diversity Matrix

Under the Board Diversity Rule of Nasdaq, we are required to publicly disclose statistics describing the diversity of our Board. Our philosophy regarding candidates for the Board is to identify, nominate, and elect the most qualified individuals available to us, regardless of race, creed, sexual orientation, nationality, ethnicity, language, or religion.

The following table sets forth a profile of the composition of our seven-member Board as of December 31, 2022:

Board Diversity Matrix	Female	Male
Part I: Gender Identity		
Directors:	3	4
Part II: Demographic Background		
Norway Citizen	1	1
Swedish Citizen	1	
United Kingdom Citizen ¹	1	
United States Citizen		3
Ethnicity: White	2	4
Ethnicity: Underrepresented Individual in Home Country Jurisdiction ²	1	

- 1. This Director holds dual citizenship in Australia and the United Kingdom.
- 2. Pursuant to Nasdaq instructions, underrepresentation is based definitions of "national, racial, ethnic, indigenous, cultural, religious, or linguistic identity" in the country of the Company's principal executive offices (i.e., Norway).

B. Compensation

Compensation of Directors and Executive Officers

For the year ended December 31, 2022, the aggregate compensation paid to Directors and our Executive Officers for services in all capacities was \$2.0 million.

Guidelines for Compensation of Executive Officers

Compensation for all employees includes a basic salary and other standard benefits. Certain salaried employees, including our Executive Officers, are eligible for performance-based cash payments and merit-based awards of subscription rights. Amounts payable under annual performance-based plans are limited to fixed amounts or fixed percentages of base salary. For our CEO, the performance-based payments are limited to 70% of base salary, while the limit for such payments for other Executive Officers is 40%.

The base salary of our Executive Officers is evaluated annually, and our performance-based, variable compensation plans are established each year, in effect for the calendar year. Executive Officers are enrolled in the same benefit and pension programs we offer to other employees, to the extent available in their country of domicile.

The Board has the authority to determine the salary, maximum variable compensation under performance-based plans, and other compensation for the CEO, who, in turn, determines the salary and other compensation for all other staff, within the applicable framework set by our Board. All share-based compensation programs must be authorized by the shareholders at a general meeting. We do not provide any post-employment compensation beyond conventional notice periods of three to six months, or such shorter notice period as applicable.

We have not made any advance payments or issued loans to, or guarantees in favor of, any Executive Officer.

Share-Based Compensation

All share-based compensation programs must be authorized by the shareholders in a general meeting. We have in place a subscription rights incentive program, which is renewed on an annual basis, whereby subscription rights are granted to employees, including our Executive Officers, and to eligible individual contractors. Under the Companies Act, such subscription rights have a

maximum duration of five years from the date of the general meeting of shareholders at which the program was approved. To enable a four-year vesting schedule, we renew our subscription rights incentive plans each year at the Annual General Meeting, whereby the preceding plan is closed for new grants when the new plan takes effect. The maximum number of Ordinary Shares underlying subscription rights that may be issued under each annual plan, and all plans collectively, may not exceed 10% of the Company's share capital.

At our Annual General Meeting held on May 12, 2022, our shareholders adopted the 2022 Subscription Rights Incentive Plan, or the 2022 Plan. As a result, the previous incentive plan adopted in 2021 ceased to be available for future issuance as of such date.

As of December 31, 2022, subscription rights to purchase 81,106,631 Ordinary Shares were outstanding.

As of our Annual General Meeting held on May 13, 2020, we had 31,890,450 subscription rights outstanding under the 2016 Plan, 2017 Plan and 2018 Plan, at a weighted average exercise price of NOK 5.40 per share. As the trading price of our Ordinary Shares on the Oslo Børs had been significantly lower than such exercise price, these subscription rights had no intrinsic value and were not contributing to the incentive and retention goals in support of which those subscription rights were granted. Therefore, at the Annual General Meeting, it was resolved that we may offer employees, including our Executive Officers, and eligible individual contractors who held subscription rights granted under the 2016 Plan, 2017 Plan, and 2018 Plan an opportunity to surrender and cancel those existing subscription rights in exchange for a right to receive new subscription rights under the 2020 Plan. On June 17, 2020, the Board resolved to authorize this offer, with new subscription rights having an exercise price of NOK 1.71 per share and a three-year vesting schedule. Following the offer to eligible holders and upon receipt of surrender notices from those holders, the Board resolved on October 2, 2020, to award new subscription rights under the 2020 Plan, representing an aggregate of 25,962,800 Ordinary Shares, in exchange, on a one-for-one basis, for subscription rights granted pursuant to subscription rights awarded under the 2016 Plan, 2017 Plan and 2018 Plan. All these replacement subscription rights expire on May 15, 2025.

In 2020, we adopted an Employee Share Purchase Plan (the "ESPP"), to secure the services of new employees, to retain the services of existing employees, and to provide incentives for participants to exert maximum efforts toward our success. The ESPP was revolved at the annual general meetings in 2021 and 2022. Our employees, including Executive Officers, are eligible to participate in the ESPP. See "—Equity Incentive Plans" below.

Executive Officer Compensation for 2022

During 2022, our Executive Officers were paid salaries and payments pursuant to performance-based incentive compensation plans, which were subject to current income taxes in the countries in which the Executive Officers were domiciled. The Company also provided healthcare and related employee benefits, and, in one country, pension contributions, to Executive Officers who are employees of the Company. Individual contractors serving as Executive Officers do not participate in the Company's benefit plans.

The compensation of our Chief Executive Officer and his direct reports was proposed by the Compensation Committee and determined by the Board.

During 2022, subscription rights to purchase 2,467,900 Ordinary Shares were awarded to our current Executive Officers. None of our Executive Officers exercised any subscription rights during 2022.

Beginning in March 2020, due to uncertainty surrounding COVID-19, the base salaries of the Executive Officers at the time were reduced by 30%. Salaries were restored to their earlier levels in June 2020.

The following table sets forth the compensation paid to our Executive Officers during 2022:

								Sl	hare-Based	
			ash		Other		Pension	Co	mpensation	
(\$000s)	 Salary	Bonu	s Paid	B	enefits	Co	ntributions_		(1)	 Total
Vincent Graziani, Chief Executive Officer	\$ 400	\$	_	\$	26	\$		\$	139	\$ 565
Eileen Wynne (2), interim Chief Financial										
Officer	37									37
James A. Simms (3), former Chief										
Financial Officer	290				21				(56)	255
Anthony Eaton, Chief Technology Officer	237				_		14		74	325
Catharina Eklof (4), Chief Commercial										
Officer	398								114	512
Total	\$ 1,362	\$		\$	47	\$	14	\$	271	\$ 1,694

The amount represents the amortized cost in the year, pursuant to IFRS 2 *Share-based Payments*, for incentive subscription rights, as well as the cost of our ESPP. The amortized cost of subscription rights is based on a calculations of grant value at the time of grant. The cost of the ESPP is based on calculations of an purchase option value at the start of the contribution period.

The following table sets forth the number subscription rights granted to our Executive Officers during the year ended December 31, 2022:

	Grant Date	Exercise Price NOK per Share	Number of Subscription Rights
Vincent Graziani (1), CEO	August 10, 2022	1.18	1, 210,400
Eileen Wynne (2), interim CFO			_
James A. Simms (3), former CFO			_
Anthony Eaton (4), CTO	February 23, 2022	2.08	836,900
	August 10, 2022	1.18	210,300
Catharina Eklof (5), CCO	August 10, 2022	1.18	210,300

As of December 31, 2022, Mr. Graziani held subscription rights to purchase an aggregate of 7,420,800 Ordinary Shares.

Our Executive Officers may also participate in our ESPP, on the same terms as other participants in their respective countries of domicile. In, 2022, Messrs. Graziani and Eaton purchased 186,011 Ordinary Shares and 19,683 Ordinary Shares, respectively, through their participation in the ESPP.

As of December 31, 2022, the officers held an aggregate number of subscription rights to purchase Ordinary shares of 12,341,400, representing 1.06% of our share capital.

Director Compensation

Our Directors receive board compensation in arrears, as determined annually at the Annual General Meeting. At our 2022 Annual General Meeting, held on May 12, 2022, it was resolved that the annual compensation for each Director would be \$44 thousand for the period from the 2021 Annual General Meeting to the 2022 Annual General Meeting. Mr. Opstad, Board chair, receives an additional \$9 thousand for his service. Each of the Compensation Committee members receives an additional \$9 thousand for their service on the committee chair receives \$13 thousand. Each of the Audit Committee members receives an additional \$10 thousand for their service on the committee, and the committee chair receives \$18 thousand. Director compensation for the period from the date of our 2022 Annual General Meeting through the date of our 2023 Annual General Meeting will be determined at that 2023 Annual General Meeting.

^{2.} Ms. Wynne has served as our interim Chief Financial Officer since August 15, 2022.

Mr. Simms tendered his resignation effective August 15, 2022.

^{4.} Ms. Eklof resides and works in Belgium and serves the Company as an individual contractor.

² Ms. Wynne has served as our interim Chief Financial Officer since August 15, 2022.

Mr. Simms tendered his resignation effective August 15, 2022.

As of December 31, 2022, Mr. Eaton held subscription rights to purchase an aggregate of 2,710,300 Ordinary Shares.

^{5.} As of December 31, 2022, Ms. Eklof held subscription rights to purchase an aggregate of 2,210,300 Ordinary Shares.

The following table sets forth the compensation paid to our Directors during the year ended December 31, 2022, for service as Directors and on committees of the Board:

(\$000s)	Cash Compensation	Share-based Compensation	Total
Morten Opstad, chair	\$ 53	\$ —	\$ 53
Lawrence J. Ciaccia, deputy chair	53	_	53
Deborah Lee Davis	68	_	68
Hanne Høvding	55	_	55
Annika Olsson	44	_	44
Thomas M. Quindlen	55	_	55
Stephen A. Skaggs	62		62
Total	\$ 390	<u> </u>	\$ 390

At our 2022 Annual General Meeting, held on May 12, 2022, it was resolved to allow Directors to elect to receive all or part of their respective Board compensation in the form of Ordinary Shares. No Directors elected to receive their board compensation in the form of Ordinary Shares.

Our Directors do not receive any benefits in connection with their services. Directors are reimbursed for travel costs for attendance at Board meetings.

Share-Based Compensation of Directors

We do not grant subscription rights to Directors, in their capacity as such, pursuant to our subscription rights plans. However, we granted Mr. Ciaccia subscription rights to purchase 600,000 Ordinary Shares as compensation for certain consulting and advisory services he provided to us, outside of his responsibilities as a Director. See "Item 7. Section B. Related Party Transactions— Arrangements with Our Board of Directors." Pursuant to the Board resolution of October 2, 2020, described above, Mr. Ciaccia exchanged his subscription rights to purchase the 600,000 Ordinary Shares in full for new subscription rights under the 2020 Plan.

Equity Incentive Plans

2022 Subscription Rights Incentive Plan

At our Annual General Meeting held on May 12, 2022, our shareholders adopted the 2022 Subscription Rights Incentive Plan (the "2022 Plan"), to enable our Company to offer employees and individual contractors equity interests in the Company, thereby helping to attract, retain, and motivate staff members and align their interests with those of shareholders. In the past several years, we have adopted an annual subscription rights incentive plan each year, termed the "2021 Plan" and so forth, or collectively, the "Previous Plans". The previous plans have in all material aspects had the same terms as the 2022 Plan. Each of the Previous Plans ceased to be available for future issuance immediately when the next year's Subscription Rights Plan became effective.

Our 2022 Plan provides for the grant of subscription rights, including subscription rights characterized as: (i) incentive stock options, within the meaning of Section 422 of the IRC; (ii) nonqualified stock options (i.e., subscription rights not considered incentive stock options); (iii) independent subscription rights within the meaning of Section 11-12 of the Public Limited Companies Act of the Kingdom of Norway dated June 13, 1997, as amended (the "PLCA"); or, if permitted by applicable law and our shareholders.

The maximum number of Ordinary Shares that may be issued under the 2022 Plan may not exceed 101,254,865; provided, however, the maximum number of Ordinary Shares that may be outstanding under the 2022 Plan and Previous Plans may not exceed 10% of the total authorized number of Ordinary Shares at any time. As of December 31, 2022, subscription rights to purchase 81,106,631 Ordinary Shares, at exercise prices ranging from NOK 0.15 to NOK 5.10 per share, or a weighted average exercise price of NOK 1.74 per share, were outstanding under the 2022 Plan and Previous Plans.

The subscription rights granted under our 2021 Plan generally vest over a four-year period and may be subject to acceleration of vesting and exercisability under certain termination and change of control events. The subscription rights generally vest 25% each year, beginning one year after the vesting commencement date, being the latest of the following dates preceding a grant: (i) January 15, (ii) April 15, (iii) July 15 or (iv) October 15. Our Board may determine an accelerated vesting schedule, if deemed appropriate.

In the event the subscription right holder resigns or is terminated, without cause, he or she will be entitled to exercise, within 90 days after end of employment or service, the subscription rights that were vested at the end of the employment or service notice

period. In the event the subscription right holder is terminated for cause, all non-exercised subscription rights will be cancelled. The subscription rights are non-assignable other than by will or by the laws of descent and distribution. The terms and conditions for vesting and exercise of subscription rights under the Previous Plans are substantially the same as the terms and conditions under the 2021 Plan.

Upon vesting, each subscription right entitles the holder to demand the issuance of one Ordinary Share. As consideration for the Ordinary Shares to be issued upon exercise of the subscription rights issued under the 2022 Plan, the holder of such subscription rights shall pay to us a price per share (i.e., the exercise price), which shall be the greater of (i) the average quoted closing price of our Ordinary Shares, as traded on Oslo Børs, over a period of 10 trading days immediately preceding the date of grant of such subscription rights, or (ii) the quoted closing price of our Ordinary Shares, as traded on Oslo Børs, on the trading day immediately preceding the date of grant of such subscription rights.

The subscription rights under the 2022 Plan will expire five years after the date of our 2022 Annual General Meeting resolving the 2022 Plan.

2022 Employee Share Purchase Plan

The 2022 ESPP was adopted at our Annual General Meeting on May 12, 2022. The purpose of our 2022 ESPP is to provide a voluntary, convenient, and cost-effective way for employee participants to become shareholders. Our 2022 ESPP has three components: (i) a component intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the IRC for employees who are taxpayers in the United States; (ii) a component applicable to employees who are taxpayers in the United Kingdom; and (iii) a general component applicable to all employees outside the United States and United Kingdom. Under the 2022 ESPP, as of December 31, 2022, 50,627,432 new Ordinary Shares can be issued, representing 5% of the authorized share capital of the Company at the time the ESPP was adopted. Since 2020, we have adopted an annual employee share purchase plan each year, termed the "2021 ESPP" and so forth, or collectively, the "ESPPs". The ESPPs have in all material aspects had the same terms as the 2022 ESPP. Each of the ESPPs ceased to be in effect for future contribution when the next year's ESPP became effective.

The ESPP is structured using two six-month contribution periods over 12 months; September-February and March-August. During each contribution period, a fixed amount (up to 20% of the employee's gross base salary) is withheld from the employee's salary. The employee may elect to participate in the ESPP from the date after public disclosure of an interim report until the beginning of the contribution period. Unless the employee explicitly withdraws from the ESPP, the employee's participation in the plan is automatically renewed for the same amount for subsequent contribution periods. The subscription price per share is equal to the lower of 85% of (i) the closing price of our Ordinary Shares, as traded on Oslo Børs, on the first day of the contribution period, and (ii) the closing price of our Ordinary Shares, as traded on Oslo Børs, on the last trading day of the contribution period. Ordinary Shares purchased through the ESPP are issued after the end of each contribution period.

Limitations on Liability and Indemnification Matters

To the extent permitted by the Companies Act, we are empowered by the general meeting of shareholders to indemnify our Directors against any liability to third parties that they incur by reason of their service as Directors. We maintain directors' and officers' insurance to insure such persons against certain liabilities. We entered into an indemnity agreement with each of our Directors and Executive Officers in connection with the listing of our ADSs on Nasdaq. Insofar as indemnification of liabilities arising under the Securities Act may be permitted to our Board, Executive Officers or persons controlling us pursuant to the foregoing provisions, we have been informed by outside legal counsel that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

C. Board Practices

Composition of our Board of Directors

Our Board currently is composed of seven members, all of whom are non-executive Directors. As a foreign private issuer, under the listing requirements and rules of Nasdaq, we are not required to have a majority of our Board made up of independent Directors, except that our Audit Committee is required to consist fully of independent Directors. Nevertheless, our Board has undertaken a review of the independence of Directors and considered whether any Director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from, and provided by, each Director concerning such Director's background, employment, and affiliations, including family relationships, our Board has determined that five of our seven Directors qualify as "independent directors" as defined under applicable Nasdaq rules and the independence requirements contemplated by the Exchange Act. The Board determined that Mr. Opstad, our Board chair, and Mr. Ciaccia, our Deputy chair, do not qualify as independent, given their business relationships with the Company. In making these determinations, our Board considered the current and prior relationships that each non-employee director has had with our Company and all other facts and circumstances deemed relevant in determining Director independence, including the

beneficial ownership of Ordinary Shares by each Director and his or her affiliated entities (if any). Furthermore, our Board made the same determination under the criteria of the Norwegian Code of Practice for Corporate Governance, dated October 14, 2021 (the "Code of Practice"). The composition of our Board complies with the independence requirements under the Code of Practice, as well as Oslo Børs' terms of listing. It also meets the Norwegian statutory gender requirements.

Our corporate governance practices were last reviewed in April 2023 in accordance and compliance with the Code of Practice. The Code of Practice stipulates certain compliance and explanatory guidelines. We post our corporate governance review on our website and in the annual report filed with Norwegian regulatory bodies.

Our Articles of Association provide that the number of Directors shall be between three and seven members, as decided at our Annual General Meeting of shareholders. At such meeting, Directors are elected to serve for a term of two years. At our 2021 Annual General Meeting, on May 12, 2021, it was resolved that Mr. Opstad shall serve as Board chair for a two-year term, and Mr. Ciaccia shall serve as Deputy chair for a two-year term.

Corporate Governance Practices

The Norwegian Public Limited Liability Companies Act (the "Companies Act") provides the legal and regulatory framework, including provisions for corporate governance, for Norwegian listed companies such as IDEX. The Company adheres to the Code of Practice, published by the Norwegian Committee for Corporate Governance, a self-regulating body of eight member organizations (the Confederation of Norwegian Enterprise (and the Owners' Forum thereof), Finance Norway, the Norwegian Association of Financial Analysts, The Norwegian Auditors' Association, the Norwegian Securities Funds Association, the Oslo Børs, and the Pension Fund Association).

The Issuer Rules of the Oslo Børs, on which our Ordinary Shares are listed, stipulate that listed companies, such as IDEX, must annually publish a statement on their principles of corporate governance in accordance with the Code of Practice. We present this statement each year in the Annual Report we deliver to shareholders and file with the Oslo Børs.

Although Norway is not a member of the EU, it is a member of the European Economic Area and has implemented relevant directives of the European Commission into national law, so that the corporate governance framework applicable to Norwegian companies is substantially similar to the framework in place across the EU.

However, Norwegian corporate governance regulations and principles differ from those generally applicable to public companies listed on Nasdaq. Nasdaq Rule 5615(a)(3) permits a foreign private issuer, such as the Company, to rely on home country corporate governance practices, in lieu of certain of the rules in the Nasdaq Rule 5600 Series and Rule 5250(d), provided the foreign private issuer nevertheless complies with Nasdaq's Notification of Noncompliance requirement (Rule 5625), the Voting Rights requirement (Rule 5640), and it maintains an audit committee meeting the requirements of Rule 5605(c)(3), consisting of members of the Board meeting the independence requirements of Rule 5605(c)(2)(A)(ii).

Pursuant to Nasdaq Rule 5615(a)(3), we follow certain corporate governance rules conforming to Norwegian requirements. Accordingly, our shareholders do not have the same protections afforded to shareholders of publicly-listed companies subject to all of the corporate governance requirements of Nasdaq. We follow Norwegian corporate governance practices in lieu of certain Nasdaq Rules as follows:

- We do not intend to comply with Nasdaq Rule 5605(b)(1), which requires that our Board be comprised of a majority of independent Directors. Such provisions are not required under the laws of Norway. However, the Code of Practice, recommends (i) the majority of the Directors be independent of executive personnel and material business contacts, and (ii) at least two Directors be independent of significant shareholders. Accordingly, we do assess the independence of our Directors pursuant to the Code of Practice and have concluded the majority of our Directors are independent, based upon those standards.
- We do not intend to follow Nasdaq Rule 5605(d)(1) regarding the charter of the Compensation Committee of the Board or Nasdaq Rule 5605(d)(2) regarding Compensation Committee composition. Such provisions are not required under the laws of Norway. However, we do maintain a Compensation Committee in compliance with the Code of Practice. See "Item 6. Section C. Board Practices—Committees of Our Board of Directors—Compensation Committee" for additional information.
- We do not intend to follow Nasdaq Rule 5605(e)(1)(A) with respect to having Director nominees selected by independent Directors or Nasdaq Rule 5605(e)(2) with respect to the adoption of a formal written charter or Board resolution, as applicable, addressing the Director nomination process. Such provisions are not required under the laws of Norway. In compliance with the Code of Practice, we maintain a Nomination Committee, which is not a subcommittee of our Board, but a separate body elected directly by shareholders at our Annual General Meeting. Members of our Nominating Committee are not Directors of the Company. The establishment of our Nomination Committee was

resolved by our Annual General Meeting on May 15, 2012, in accordance with the Code of Practice, along with guidelines for the Nominating Committee addressing the Director nomination process, among other matters. See "Item 6. Section C. Board Practices—Committees of Our Board of Directors—Nomination Committee" for additional information.

- We do not intend to comply with the provision of Nasdaq Rule 5610 requiring disclosure within four business days of
 any determination by our Board to grant a waiver to the Company's Directors and officers of provisions of the
 Company's Code of Conduct and Code of Ethics. However, we do comply with the provision of Nasdaq Rule 5610
 requiring that such determination must be disclosed in a Form 6-K or in the next Form 20-F we file.
- We do not intend to follow Nasdaq Rule 5620(c), which sets forth quorum requirements applicable to meetings of shareholders. Such quorum requirements are not required under the Norwegian Public Companies Act.
- We do not intend to follow Nasdaq Rule 5635 regarding shareholder approval requirements in connection with certain corporate actions, such as a change of control of the Company. However, under the Companies Act, any issuance of Ordinary Shares by the Company requires shareholder approval or a resolution by the Board in accordance with an authorization from a General Meeting of shareholders. Shareholder approval also is required for share-based compensation programs, as well as compensation to the Board and certain major agreements between the Company and an affiliated party.

We intend to utilize these exemptions from certain Nasdaq Rules for as long as we continue to qualify as a foreign private issuer.

Committees of our Board of Directors

Our board of directors has two standing committees: an audit committee and a compensation committee. The committees are purely advisory to the board, which is the competent decision-making body. In addition, we have a nomination committee, which composition and mandate are resolved by our Annual General Meeting of shareholders.

Audit Committee

Our Audit Committee consists of Messrs. Skaggs and Quindlen and Mses. Høvding and Davis. Mr. Skaggs serves as chair of the committee. While the Audit Committee consists exclusively of Directors who are financially literate, Mr. Skaggs is considered an "audit committee financial expert" as defined by applicable SEC rules and has the requisite financial sophistication as defined under applicable Nasdaq rules. Our Board has determined that all of the members of the Audit Committee satisfy the independence requirements set forth in Rule 10A-3 under the Exchange Act. The Audit Committee, which advises the Board, is governed by a charter that complies with the rules of Nasdaq.

The Audit Committee's responsibilities include:

- overseeing accounting and financial reporting processes, systems of internal control, financial statement audits, and the integrity of our financial statements;
- managing the selection, engagement terms, fees, qualifications, independence, and performance of any registered public
 accounting firm engaged as our independent outside auditor for the purpose of preparing or issuing an audit report or
 performing audit services, recommending appointment or retention of any such firm to our Board, and approving any
 non-audit services to be provided by such firm;
- reviewing and discussing with management and our independent auditors any financial statements, reports or disclosures required by applicable law and stock exchange listing requirements, and any other financial information issued by us;
- overseeing the design, implementation, organization, and performance of our internal control over financial reporting and our internal audit function;
- overseeing procedures for reviewing, retaining and investigating complaints regarding accounting, internal accounting controls, or auditing matters;
- reviewing and recommending to the board any related-party transactions;
- helping our Board oversee legal and regulatory compliance, including risk assessment; and
- providing regular reports and information to our board.

Compensation Committee

Our Compensation Committee, which consists of Ms. Davis and Mr. Ciaccia, assists the Board in determining Executive Officer compensation. Ms. Davis serves as chair of the committee.

The Compensation Committee's responsibilities include advising the Board on matters including:

- designing a compensation policy that is designed to promote our long-term success;
- ensuring that the overall compensation of employees is in alignment with both their individual performance and their contribution to our overall results, and consistent across the Company;
- determining the design of, and targets for, any performance-related variable compensation programs and making a recommendation regarding the total annual payments made under such programs;
- investigating any compensation or other payment-related matter it deems appropriate to investigate, and making recommendations to the Board as it may deem necessary;
- reviewing the design of all share-based incentive plans to ensure compliance with relevant legislation and good compensation practice and, as necessary, proposing any changes to the Board; and
- analyzing appropriate data from comparative companies to review compensation and related policies to support strategy and promotion of sustainable success and, as necessary, proposing any changes to the Board.

Nomination Committee

In compliance with the Code of Practice, we maintain a Nomination Committee, which is not a subcommittee of our Board, but a separate body elected directly by shareholders at our Annual General Meeting. The Nomination Committee should not include any executive personnel or members of the Board in the Company.

The duties of our Nomination Committee, election of the chair and members of the committee, and the committee's compensation are determined and approved at the Annual General Meeting of shareholders. The requirement to form a Nomination Committee is set out in our Articles of Association, as recommended by the Code of Practice.

Our Nomination Committee consists of Robert N. Keith, Håvard Nilsson, and Harald Voigt. Mr. Keith serves as chair of the committee. The Nomination Committee's primary duties include proposing candidates for election to the Board and the Nomination Committee and proposing the fees to be paid to members of these bodies.

In addition, the Nomination Committee's responsibilities include:

- regularly reviewing the structure, size, and composition (including the skills, knowledge, experience, and diversity) required of our Board and making recommendations regarding proposed changes to shareholders for approval at the Annual General Meetings;
- determining the qualities and experience required of our Directors and identifying suitable candidates, assisted where appropriate by third-party recruitment consultants;
- formulating plans for succession for Directors, in particular for the key role of Board chair; and
- assessing the re-nomination or re-election of any Director at the conclusion of his or her specified term, having given due regard to the Director's performance and ability to continue to contribute to the Board, as well as the need for periodically refreshing the composition of the Board.

Code of Conduct and Code of Ethics

We last revised our Code of Conduct and Code of Ethics on December 21, 2020, to cover a broad range of matters including the handling of conflicts of interest, compliance issues and other corporate policies such as equal opportunity and non-discrimination standards. Our Code is available on our website at www.idexbiometrics.com.

D. Employees

As of December 31, 2022, we had 104 individuals on staff, consisting of 85 employees and 19 individual contractors (individual contractors typically reside and work in countries in which the Company does not have a subsidiary). Of this total, 17 were assigned to our head office in Oslo, 46 were assigned to our two offices in the United States, 36 were assigned to our office in the United Kingdom, and five were assigned to our office in China.

Certain members of our staff serve on a part-time basis. We assess staffing needs based on a full-time equivalent ("FTE") basis. As of December 31, 2022, we had 82 FTE employees and 17 FTE individual contractors. Of this total of 99 FTEs:

- 70 were engaged in engineering functions (hardware design, systems design, and software development);
- 15 were engaged in marketing and sales functions;
- seven were engaged in administrative and financial functions; and
- seven were engaged in production planning and supply chain management.

We have no collective bargaining agreements with our employees, and we have not experienced any work stoppages.

E. Share Ownership

For information regarding the share ownership of our directors and senior management, see "Item 6. Section B. Compensation" and "Item 7. Section A. Major Shareholders."

Item 7. Major Shareholders and Related Party Transactions.

A. Major Shareholders

The following table and accompanying footnotes set forth, as of March 31, 2023, information regarding beneficial ownership of our Ordinary Shares by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our Ordinary Shares;
- each of our Executive Officers;
- each of our Directors; and
- all of our Executive Officers and Directors as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include Ordinary Shares that can be acquired within 60 days of March 31, 2023. Percentage ownership calculations are based on 1,168,974,920 Ordinary Shares issued and outstanding as of March 31, 2023, plus, consistent with SEC rules on disclosure of beneficial ownership, Ordinary Shares that each security holder has the ability to acquire within 60 days of March 31, 2023.

Except as otherwise indicated, all of the Ordinary Shares reflected in the table are Ordinary Shares, and all persons listed below have sole voting and investment power with respect to the Ordinary Shares beneficially owned by them, subject to applicable community property laws. The information is not necessarily indicative of beneficial ownership for any other purpose.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o IDEX Biometrics ASA, Dronning Eufemias gate 16, NO-0191 Oslo, Norway.

Name of Reported Beneficial Owner (1)	Number of Ordinary Shares Beneficially Owned as of March 31, 2023	Percentage of Total
5% or Greater Shareholders:		
Robert N. Keith (2)	135,145,579	11.56%
Sundt AS (3)	85,974,977	7.35%
Executive Officers:	5 500 011	
Vincent Graziani (4)	5,782,011	*
Eileen Wynne		*
Anthony M. Eaton (5)	1,917,289	*
Catharina Eklof (6)	1,089,684	*
Board of Directors:		
Morten Opstad (7)	7,398,916	*
Lawrence J. Ciaccia (8)	1,015,021	*
Deborah Lee Davis (9)	564,479	*
Hanne Høvding (10)	487,778	*
Annika Olsson (11)	52,631	*
Thomas M. Quindlen (12)	413,981	*
Stephen A. Skaggs (13)	1,018,053	*
Directors and Executive Officers as a group (11 persons)	19,739,843	1.68%

- * Represents beneficial ownership of less than 1%.
- 1. Beneficial ownership presented in this table, as of March 31, 2023, is determined in accordance with the rules of the SEC, which differ from local rules in Norway. Pursuant to the Norwegian Securities Trading Act dated June 29, 2007, no.75, (the "STA"), our shareholders are required to immediately and simultaneously notify us and the Oslo Børs when the shareholder's holdings, as percentage of total Ordinary Shares outstanding, reaches, exceeds, or falls below the thresholds of 5%, 10%, 15%, 20%, 25%, 1/3, 50%, 2/3, or 90% of the share capital or voting rights of our Company.
- 2. Pursuant to annual disclosure requirements of the STA, Mr. Keith reported to the Oslo Børs, as of November 18, 2022, that he, together with "related parties," as such term is defined in section 2-5 of the STA, collectively held 135,145,579 Ordinary Shares, representing 12.1% of the total number of our outstanding Ordinary Shares as of that date. According to data from the Euronext VPS, as of March 31, 2023, and Mr. Keith's ownership to 30,000,000 Ordinary Shares held by the Depositary for our ADSs, Mr. Keith has direct holdings of 81,014,444 Ordinary Shares. We believe the balance of Ordinary Shares comprising the total number of Ordinary Shares beneficially owned by Mr. Keith, as of March 31, 2023, are held in nominee accounts with a limited number of financial institutions. See also "Related Party Transactions—Capital Increases."
- 3. The principal business address for Sundt AS is Dronningen 1, 0287 Oslo, Norway.
- 4. Represents 1,729,411 Ordinary Shares held by Mr. Graziani and 4,052,600 Ordinary Shares issuable pursuant to subscription rights that are exercisable or settled within 60 days of March 31, 2023.
- 5. Consists of 284,639 Ordinary Shares held by Mr. Eaton and 1,632,650 Ordinary Shares issuable pursuant to subscription rights that are exercisable or settled within 60 days of March 31, 2023.
- 6. Consists of 89,684 Ordinary Shares held by Ms. Eklof and 1,000,000 Ordinary Shares issuable pursuant to subscription rights that are exercisable or settled within 60 days of March 31, 2023.
- 7. Represents 7,398,916 Ordinary Shares held by Mr. Opstad and related parties as of March 31, 2022.
- 8. Represents 415,021 Ordinary Shares held by Mr. Ciaccia and 600,000 Ordinary Shares issuable pursuant to subscription rights that are exercisable or settled within 60 days of March 31, 2023.
- 9. Represents 564,479 Ordinary Shares held by Ms. Davis as of March 31, 2023.
- 10. Represents 487,778 Ordinary Shares held by Ms. Høvding as of March 31, 2023.
- 1. Represents 52,631 Ordinary Shares held by Ms. Olsson as of March 31, 2023.
- 12. Represents 413,981 Ordinary Shares held by Mr. Quindlen as of March 31, 2023.
- 13. Represents 1,018,053 Ordinary Shares held by Mr. Skaggs as of March 31, 2023.

Change in ownership of major shareholders last three years

The following table shows shareholders of record in the shareholder registry in Norway who held more than 5% of our Ordinary Shares as of December 31, 2019, December 31, 2020, December 31, 2021, or December 31, 2022:

	December 31	, 2022	December 31	December 31, 2021 Decemb		December 31, 2020		1, 2019
Shareholder	Number of Ordinary Shares	Percent of Total	Number of Ordinary Shares	Percent of Total	Number of Ordinary Shares	Percent of Total	Number of Ordinary Shares	Percent of Total
Sundt AS	85,974,977	7.37%	68,507,977	6.78%	55,740,365	6.70%	_	_
Robert N. Keith (1)	72,109,394	6.18%	62,139,394	6.15%	61,639,394	7.41%	60,000,000	8.36%
Société Générale (N)	_	_	72,660,606	7.19%	-		_	_
Sundvall Holding AS			55,964,051	5.54%	56,964,051	6.85%	57,661,021	8.03%
The Northern Trust Company (N)	_	_	_	_	45,030,909	5.41%	50,030,909	6.97%
Goldman Sachs					,,,		20,020,00	
International (N)					59,623,073	7.16%	47,720,360	6.65%
UBS Switzerland AG (N)	_	_	_	_	73,260,653	8.80%	55,764,466	7.77%
Others	1,008,242,213	86.45%	751,116,426	74.34%	479,888,303	57.67%	446,811,976	62.23%
Total	1,166,326,584	100.00%	1,010,388,454	100.00%	832,146,748	100.00%	717,988,732	100.00%

⁽N) The shareholder on record is a nominee for one or more beneficial owners. We are normally not aware of the number or identity of the beneficial owners of Ordinary Shares held in nominee accounts.

As shown in the table above, outstanding Ordinary Shares as of December 31, 2022, increased by 488,337,852 Ordinary Shares from December 31, 2019. The change in holdings of our major shareholders as of December 31, 2022, compared to major shareholder holdings at the end of each of the three years earlier shows that the number of shareholders with 5% holding or more has been reduced from five at the beginning of 2020 down to two at December 31, 2022. The change is caused by shareholders' trades of Ordinary Shares in the open market and by participation or not in private placements of our Ordinary Shares during the period. Nominee shareholders' holdings may change because the beneficial shareholders choose to move their holdings between nominee accounts.

Voting Rights

All our Ordinary Shares have equal voting rights. There are no Ordinary Shares with special voting rights, nor are there any restrictions on voting. We have no other class of equity security outstanding. See also Exhibits 2.4 and 2.5 filed herewith.

Shareholders in the United States

As of December 31, 2022, there were 46,880,108 or 4.02% of our outstanding Ordinary Shares held by 21 shareholders of record who are United States legal or natural persons. The actual number of beneficial holders can not be determined reliably, and is greater than the numbers of holders of record, because Ordinary Shares are held in the custodial name of brokers and other nominees on behalf of beneficial owners. One such nominee is Bank of New York Mellon, the Depositary, holding 38,905,050 Ordinary Shares that are represented by 518,734 ADSs listed on Nasdaq. We listed our ADSs on Nasdaq as of March 1, 2021.

Controlling interests, shareholder agreements

To the best of our knowledge, we are not directly owned or controlled by another corporation or corporations, any government, or by any other natural or legal person(s), severally or jointly. We are not aware of any shareholder agreements. We are not aware of any arrangements that may result in a change of control of our company.

B. Related Party Transactions

Since January 1, 2022 and until the date of this annual report, we have engaged in the following transactions with our Directors, Executive Officers and holders of more than 10% of our outstanding voting securities and their affiliates, which we refer to as our related parties.

The number of Ordinary Shares includes Mr. Keith's holding of 30,000,000 Ordinary Shares held by the Depositary for our ADSs, as well as the reported direct ownership of 42,109,394 Ordinary Shares. Pursuant to disclosure requirements of the STA, Mr. Keith reported to the Oslo Børs, as of November 18, 2022, that he, together with "related parties," as such term is defined in section 2-5 of the STA, collectively held 135,145,579 Ordinary Shares, representing 12.1% of the total number of our outstanding Ordinary Shares as of that date.

Agreements with Our Executive Officers and Directors

We have in place continuing employment or service contracts with our Executive Officers. These agreements contain customary provisions and representations, including confidentiality, non-competition, non-solicitation and inventions assignment undertakings by the Executive Officers. The enforceability of the non-competition provisions may be limited under applicable law.

We have in place continuing service contracts with two of our Directors, see section "Arrangements with Our Board of Directors".

Further, we have granted share-based awards to certain of our Directors and Executive Officers. See "Item 6. Section B. Compensation—Compensation of Executive Offices and Directors".

Indemnification Agreements

We entered into an indemnity agreement with each of our Directors and Executive Officers in connection with the listing of our ADSs on Nasdaq in 2021. The indemnity agreement requires us to indemnify our Directors and Executive Officers to the fullest extent permitted by law. See "Item 6. Section B. Compensation—Limitations."

Capital Increases

In March 2023, we issued 2,648,336 Ordinary Shares to 31 employees participating in our ESPP, raising \$182 thousand. Among the employees, our Chief Executive Officer, Vincent Graziani, acquired 145,121 Ordinary Shares.

In November 2022, we completed a private placement of an aggregate of 150,000,000 Ordinary Shares with Norwegian and international investors, including certain existing shareholders, for gross proceeds of \$15.1 million. No Directors or Executive Officers subscribed to shares in the private placement.

Also in November 2022, we issued 246,167 shares at a price NOK 0.15 per share to employees upon their exercise of vested incentive subscription rights, raising \$3 thousand. No Executive Officers exercised vested subscription rights.

In September 2022, we issued 3,181,755 Ordinary Shares to 40 employees participating in our ESPP, raising \$232 thousand. Among the employees, our Chief Executive Officer, Vincent Graziani, acquired 133,565 Ordinary Shares.

In August 2022, we issued 289,608 shares at a price NOK 0.15 per share to employees upon their exercise of vested incentive subscription rights, raising \$4 thousand. No Executive Officers exercised vested subscription rights.

In May 2022, we issued 60,400 shares at a price NOK 1.68 per share to employees upon their exercise of vested incentive subscription rights, raising \$11 thousand. No Executive Officers exercised vested subscription rights.

Also in May 2022, our Chief Executive Officer, Vincent Graziani, acquired 3,000 IDBA, the IDEX American Depository Shares listed at the Nasdaq Capital Market in New York. The acquired IDBA were the equivalent of 225,000 Ordinary Shares.

In March 2022, we issued 394,409 shares at a price NOK 0.48 per share to employees upon their exercise of vested incentive subscription rights, raising \$21 thousand. No Executive Officers exercised vested subscription rights.

Also in March 2022, we issued 1,765,791 Ordinary Shares to employees participating in our ESPP, raising \$341 thousand. Among such employees, our Chief Executive Officer, Vincent Graziani, acquired 52,446 Ordinary Shares, and our Chief Technology Officer, Anthony Eaton, acquired 19,683 Ordinary Shares.

Arrangement with Our Major Shareholders

In connection with our November 2022 private placement, we entered into a share lending agreement with certain shareholders in order to facilitate settlement of the new shares in the private placement. As a fixed fee for the share lending, each lender received a fee equaling 5% per annum of the sum of the subscription price per new share in the private placement multiplied by the number of borrowed shares lent by the respective lender. In total, we paid approximately \$14 thousand under the share lending agreement with approximately \$6 thousand paid to Sundt AS and approximately \$4 thousand paid each to Sundvall Holding AS and Mr. Keith.

Arrangements with Our Board of Directors

Morten Opstad, chair of our board, is a partner at Advokatfirmaet Ræder AS ("Ræder"), our Norwegian counsel. Ræder provides legal services to our company. In addition, Mr. Opstad provides certain business and management services ("Executive Function") to us that are not typical board functions, pursuant to an executive function agreement dated January 30, 2018, by and among Mr. Opstad, IDEX Biometrics ASA, and Ræder. The Executive Functions include, among other things, shareholder contact, strategic discussions with existing and prospective partners, customers and suppliers, organizational issues, and other projects from time to time. As consideration for the Executive Function, Mr. Opstad is entitled to receive a fee per hour at the same level as partners at Ræder invoice us, and such fee is invoiced by Ræder. In 2022, we expensed \$234 thousand for Ræder's services, including Mr. Opstad's Executive Function in the year.

Larry J. Ciaccia, deputy chair of our board, is the principal owner of Black River Advisors LLC. On November 1, 2013, Black River Advisors entered into a service agreement with us, pursuant to which Black River Advisors assigned Mr. Ciaccia to provide certain consulting services to us in the areas of fingerprint imaging and recognition technology. Mr. Ciaccia has also served on our Strategic Advisory Council, effective January 2014, through June 30, 2022. The terms and conditions of this agreement apply solely to Mr. Ciaccia in his capacity as the principal of Black River Advisors. Either party may terminate the agreement upon a 90-day written notice. Under this agreement, Mr. Ciaccia is/was entitled to receive \$50,000 per annum for the consulting services and \$15,000 per annum for services performed by Mr. Ciaccia as a member of our Strategic Advisory Council. In addition, Mr. Ciaccia may receive grants of subscription rights to purchase our Ordinary Shares in such amount and on such terms as may be agreed by the parties and approved by our board of directors. In 2022, we paid Mr. Ciaccia \$57,500 under this agreement.

Loans and guarantees for the benefit of related parties

We have not issued any loans or guarantees for the benefit of any related parties.

Related Party Transaction Policy

We comply with Norwegian law regarding approval of transactions with related parties. We have adopted a Code of Conduct and Code of Ethics (the "Code") that sets forth our procedures for the review and approval or ratification of any not immaterial related party transactions. Per the Code, a related party is (i) any Executive Officer or Director, (ii) a shareholder, a shareholder's parent company, or other beneficial owner who holds more than 5% of any class of our voting securities; (iii) other persons as defined in the Norwegian Accounting Act and regulations promulgated thereunder; and (iv) any of the immediate family members and any entity owned or controlled by such legal or natural persons as mentioned in the foregoing clauses.

Under our Code and related policies, if a transaction is identified as a related party transaction, including any transaction that was not a related party transaction when originally consummated or any transaction that was not initially identified as a related party transaction prior to consummation, it would be subject to approval by our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our board of directors, for review, consideration and approval or ratification.

In addition, our employees and Directors have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest.

In considering related party transactions, our Audit Committee, or other independent body of our Board, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs, and benefits to us;
- the impact on a Director's independence in the event the related person is a Director, immediate family member of a Director, or an entity with which a Director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

All of the transactions described above were entered into prior to the adoption of the written policy, but all were approved by our Board to the extent required by, and in compliance with, Norwegian law.

Material transactions under which the fair market value of the obligations of the Company at the time of conclusion exceeds 2.5% of the balance sheet amount of our last approved annual financial statement, which do not form part of the Company's ordinary course of business, shall be approved by a general meeting of shareholders. In assessing whether such threshold is met, all related party transactions in the same financial year shall be summarized.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information.

A. Consolidated Statements and Other Financial Information

Consolidated Financial Statements

Our Consolidated Financial Statements are presented within this Annual Report, starting at page F-1.

Dividend Policy

We have never declared nor paid any dividends on any class of our issued share capital. We intend to retain any earnings for use in our business and do not currently intend to pay dividends on our Ordinary Shares. The declaration and payment of any future dividends will be subject to a resolution by a general meeting of shareholders with a simple majority upon a proposal from our Board and will depend upon our results of operations, cash requirements, financial condition, contractual restrictions, any future debt agreements or applicable laws and other factors that our Board may deem relevant.

Under the laws of Norway, a public limited liability company such as IDEX may only distribute dividends to the extent it will have net assets covering its share capital and other restricted equity after the distribution has been made. The calculation shall be made on the basis of the balance sheet in the company's last approved financial statements, provided, however, it is the registered share capital at the time of decision that applies. Extraordinary dividend payments may be resolved based upon an interim balance sheet prepared no more than six months prior to the date of resolution by a general meeting of shareholders.

In the amount that may be distributed as a dividend, a deduction shall be made for (i) the aggregate nominal value of treasury shares held by the company, if any, (ii) credit and collateral pursuant to Sections 8-7 and 8-10 of the Norwegian Public Limited Companies Act, dated June 13, 1997 no. 45, or the Companies Act, with the exception of credit and collateral repaid or settled prior to the time of decision or credit which is settled by a netting in the dividend, and (iii) other dispositions after the balance day which pursuant to law shall lie within the scope of the funds that the company may use to distribute dividend. Even if all other requirements are fulfilled, a company may only distribute dividend to the extent that it maintains a sound equity and liquidity post-distribution. "See Exhibit 2.4—Description of Share Capital and Articles of Association" for additional information.

Legal Proceedings

From time to time, we may be involved in various claims and legal proceedings relating to claims arising out of our operations. We are not currently a party to any legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

B. Significant Changes

None.

Item 9. The Offer and Listing.

A. Offer and Listing Details

Our Ordinary Shares have been listed for trading on the Oslo Børs under the symbol "IDEX" since March 12, 2010. Prior to that date, there was no regulated trading market for our Ordinary Shares. Our ADSs have been listed on Nasdaq under the symbol "IDBA" since March 1, 2021. Prior to that date, there was no regulated public trading market for our ADSs.

B. Plan of Distribution

Not applicable.

C. Markets

Our Ordinary Shares have been listed for trading on the Oslo Børs under the symbol "IDEX" since March 12, 2010. Prior to that date, there was no regulated trading market for our Ordinary Shares. Our ADSs have been listed on Nasdaq under the symbol "IDBA" since March 1, 2021. Prior to that date, there was no regulated public trading market for our ADSs.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information.

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

The information set forth in Exhibit 2.4 is incorporated herein by reference.

C. Material Contracts

Supply Agreement with IDEMIA

On February 13, 2020, we entered into a supply agreement with IDEMIA France SAS ("IDEMIA"). Pursuant to this agreement, we agreed to supply IDEMIA our TrustedBio fingerprint sensor modules, for use in IDEMIA's F.CODE payment cards. The Supply Agreement with IDEMIA is included on this annual report as Exhibit 4.3.

Under the terms of this agreement, we are responsible for assisting IDEMIA in installing and integrating our products when they are delivered. When needed, IDEMIA may provide us with workspace in their offices for us to work alongside IDEMIA employees to successfully integrate our products into IDEMIA's systems. We are also responsible for monitoring the risk of obsolescence of any components of our products. We retain the intellectual property rights to the products we provide. However, to ensure that IDEMIA can maintain supply of the needed products in the event we cannot supply them, the agreement provides for IDEX to place product designs and related proprietary information into escrow and grant to IDEMIA a license to access and utilize these escrowed materials under certain conditions.

IDEMIA places orders for our products on an ongoing basis. IDEMIA placed its first order in September 2020. As of December 31, 2022, orders from IDEMIA represented a substantial portion of the Company's order backlog. The agreement runs for a term of three years, and automatically renews for one-year terms thereafter, unless either party terminates the agreement by prior written notice no later than thirty days prior to the expiration of the original three-year term.

Master Services Agreement with Bloomberg

On April 4, 2019, we entered into an agreement to provide services to Bloomberg L.P. ("Bloomberg"). Under the initial statement of work, we agreed to provide Bloomberg with fingerprint sensors modified for integration into Bloomberg's network security infrastructure. We retain the rights to all our pre-existing intellectual property and any future intellectual property that we create. We have granted Bloomberg a non-exclusive, royalty-free license so that Bloomberg may use any deliverables that we provide under the agreement. Under the terms of the agreement, we agreed to indemnify Bloomberg from all claims arising from or in connection with, among other things, our provision of services to Bloomberg, any material breach of the agreement, or any claim alleging infringement upon or misappropriation of any applicable intellectual property rights.

Bloomberg or its manufacturing partner places orders for our products on an ongoing basis. We began shipping units to Bloomberg's subcontract manufacturer during the second quarter of 2020 and have shipped steady volumes under the agreement through 2022. As of December 31, 2022, orders from Bloomberg's manufacturing partner represented a substantial portion of the Company's order backlog.

The agreement terminates on November 30, 2023, by Bloomberg for cause with immediate effect, or with 90 days' prior written notice. The Master Services Agreement with Bloomberg is included on this annual report as Exhibit 4.4.

D. Exchange Controls

Under current Norwegian foreign exchange control regulations, there are no limitations on the amount of cash payments we may remit to residents of foreign countries. Laws and regulations concerning foreign exchange controls do, however, require that all payments or transfers of funds made by a Norwegian resident to a non-resident be handled by an accredited intermediary. All registered banks and substantially all credit institutions in Norway are accredited intermediaries.

E. MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR U.S. HOLDERS

The following summary contains a description of material income tax consequences of the acquisition, ownership, and sale of our Ordinary Shares or ADSs for taxpayers in the United States. This summary should not be considered a comprehensive description of all the tax considerations that may be relevant to the decision to acquire ADSs representing our Ordinary Shares.

The following is a description of the material federal income tax consequences to the U.S. Holders (as defined and described below) of owning and disposing of our Ordinary Shares or ADSs. This is not a comprehensive description of all tax considerations that may be relevant to a particular person's decision to acquire the Company's securities. This discussion applies only to a U.S. Holder that holds our Ordinary Shares or ADSs as a capital asset for tax purposes. In addition, it does not describe all tax consequences that may be relevant to a U.S. Holder's particular circumstances, including state and local tax consequences, estate tax consequences, alternative minimum tax consequences, the potential application of the Medicare contribution tax, and tax consequences applicable to U.S. Holders subject to special rules, such as:

- banks, insurance companies, and certain other financial institutions;
- U.S. expatriates and certain former citizens or long-term residents of the United States;
- dealers or traders in securities who use a mark-to-market method of tax accounting;
- persons holding Ordinary Shares or ADSs as part of a hedging transaction, "straddle," wash sale, conversion transaction, or an integrated transaction, or persons entering into a constructive sale with respect to Ordinary Shares or ADSs;
- persons whose "functional currency" for U.S. federal income tax purposes is not the U.S. Dollar;
- brokers, dealers, or traders in securities, commodities or currencies;
- tax-exempt entities or government organizations;
- S corporations, partnerships, or other entities or arrangements classified as partnerships for U.S. federal income tax purposes (and investors therein);
- regulated investment companies or real estate investment trusts;
- persons who acquired our Ordinary Shares pursuant to the exercise of a compensatory subscription right awarded by the Company. Our annual Subscription Rights Incentive Plans only provide for the award of stock options for the purchase of the Company's Ordinary Shares. These options may be incentive stock options or nonstatutory stock options, and both are referred to as "subscription rights" pursuant to the Public Limited Companies Act of the Kingdom of Norway dated 13 June 1997, as amended.;

- persons that own or are deemed to own 10 percent or more of our Ordinary Shares (by vote or value); and
- persons holding our Ordinary Shares or ADSs in connection with a trade or business, permanent establishment, or fixed base outside the United States.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds Ordinary Shares or ADSs, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding Ordinary Shares or ADSs and partners in such partnerships are encouraged to consult their tax advisers regarding the particular U.S. federal income tax consequences of holding and disposing of Ordinary Shares or ADSs.

The discussion is based on the IRC administrative pronouncements, judicial decisions, final, temporary, and proposed Treasury Regulations, and the income tax treaty between the Norway and the United States (the "Treaty"), all as of the date hereof, changes to any of which may affect the tax consequences described herein, possibly with retroactive effect.

A "U.S. Holder" is a holder who, for U.S. federal income tax purposes, is a beneficial owner of Ordinary Shares or ADSs who is eligible for the benefits of the Treaty and is:

- (1) a citizen or individual resident of the United States;
- (2) a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein, or the District of Columbia;
- (3) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- (4) a trust, if (a) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust, or (b) the trust has a valid election to be treated as a U.S. person under applicable Treasury Regulations.

U.S. Holders are encouraged to consult their tax advisers concerning the U.S. federal, state, local, and non-U.S. tax consequences of owning and disposing of our Ordinary Shares or ADSs in their particular circumstances.

The discussion below assumes the representations contained in the deposit agreement are true and that the obligations in the deposit agreement and any related agreement will be complied with in accordance with their terms. Generally, a holder of an ADS should be treated for U.S. federal income tax purposes as holding the Ordinary Shares represented by the ADS. Accordingly, no gain or loss will be recognized upon an exchange of ADSs for Ordinary Shares.

Passive Foreign Investment Company Rules

Pursuant to §1297(a) of the IRC, a non-U.S. corporation will be classified as a Passive Foreign Investment Company ("PFIC") for any taxable year in which, after applying certain look-through rules, either:

- at least 75% of its gross income is passive income (such as interest income); or
- at least 50% of its gross assets (determined on the basis of a quarterly average) is attributable to assets that produce passive income or are held for the production of passive income (including cash).

For purposes of this classification, IDEX is treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation, the equity of which we directly or indirectly own 25% or more (by value).

Based on our analysis of our income, assets, activities, and market capitalization, we do not believe IDEX was a PFIC for the taxable year ended December 31, 2022. However, no assurances regarding the Company's PFIC status can be provided for any past, current, or future taxable year.

The determination of whether the Company is a PFIC is a fact-intensive determination made on an annual basis, and the applicable law is subject to varying interpretation. In particular, the characterization of our assets as active or passive may depend in part on our current and intended future business plans, which are subject to change. In addition, for our current and future taxable years, the total value of our assets for PFIC classification purposes may be determined in part by reference to the market price of our Ordinary Shares or ADSs from time to time, which may fluctuate considerably. Under the passive income test, our status as a PFIC depends on the composition of our income, which will depend on a variety of factors that are subject to uncertainty, including the characterization of certain intercompany payments and payments from tax authorities, transactions we enter into in the future, and our corporate structure. Even if we determine that the Company is not a PFIC for a taxable year, there can be no assurance the IRS would not successfully challenge our determination. Accordingly, our U.S. counsel expresses no opinion with respect to the Company's PFIC status for any taxable year.

If IDEX is classified as a PFIC in any year with respect to which a U.S. Holder owns Ordinary Shares or ADSs, we will continue to be treated as a PFIC with respect to such U.S. Holder in all succeeding years during which the U.S. Holder owns the Ordinary Shares or ADSs, regardless of whether we continue to meet the tests described above, unless the Company ceases to be a PFIC and the U.S. Holder has made a "deemed sale" election under the PFIC rules. If such a deemed sale is made, a U.S. Holder will be deemed to have sold the Ordinary Shares or ADSs at their fair market value, and any gain from such deemed sale would be subject to the rules described below. After the deemed sale election, so long as IDEX does not become a PFIC in a subsequent taxable year, the U.S. Holder's Ordinary Shares or ADSs for which such election was made will not be treated as shares in a PFIC and the U.S. Holder will not be subject to the rules described below with respect to any "excess distribution" the U.S. Holder receives from IDEX or any gain from an actual sale or other disposition of the Ordinary Shares or ADSs. U.S. Holders should consult their tax advisers as to the possibility and consequences of making a deemed sale election if the Company ceases to be a PFIC and such election becomes available. For each taxable year IDEX is treated as a PFIC with respect to U.S. Holders, U.S. Holders will be subject to special tax rules with respect to any "excess distribution" such U.S. Holder receives and any gain such U.S. Holder recognizes from a sale or other disposition (including a pledge) of Ordinary Shares or ADSs, unless (1) such U.S. Holder makes a "qualified electing fund" election, or QEF Election, with respect to all taxable years during such U.S. Holder's holding period in which IDEX is a PFIC, or (2) our Ordinary Shares or ADSs constitute "marketable stock," and such U.S. Holder makes a mark-to-market election (as discussed below).

Distributions a U.S. Holder receives in a taxable year that are greater than 125% of the average annual distributions a U.S. Holder received during the shorter of the three preceding taxable years or the U.S. Holder's holding period for the Ordinary Shares or ADSs will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over a U.S. Holder's holding period for the Ordinary Shares or ADSs;
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which IDEX became a PFIC, will be treated as ordinary income; and
- the amount allocated to each other year will be subject to the highest tax rate in effect for that year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

The tax liability for amounts allocated to years prior to the year of disposition or "excess distribution" cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale of the Ordinary Shares or ADSs cannot be treated as capital gains, even if a U.S. Holder holds the Ordinary Shares or ADSs as capital assets.

If the Company is a PFIC, a U.S. Holder will generally be subject to similar rules with respect to distributions we receive from, and our dispositions of the stock of, any of our direct or indirect subsidiaries that also are PFICs, as if such distributions were indirectly received by, and/or dispositions were indirectly carried out by, such U.S. Holder. U.S. Holders should consult their tax advisers regarding the application of the PFIC rules to our subsidiaries.

If a U.S. Holder makes an effective QEF Election, the U.S. Holder will be required to include in gross income each year, whether or not we make distributions, as capital gains, such U.S. Holder's pro rata share of our net capital gains and, as ordinary income, such U.S. Holder's pro rata share of our earnings in excess of our net capital gains. However, a U.S. Holder can only make a QEF Election if the Company, once designated as a PFIC, agrees to furnish such U.S. Holder with certain tax information annually. We currently do not expect to provide such information in the event the Company is classified as a PFIC.

U.S. Holders can avoid the interest charge on excess distributions or gain relating to our Ordinary Shares or ADSs by making a mark-to-market election with respect to the Ordinary Shares or ADSs, provided that the Ordinary Shares or ADSs are "marketable stock." Ordinary Shares or ADSs will be marketable stock if they are "regularly traded" on certain U.S. stock exchanges or on a non-U.S. stock exchange that meets certain conditions. For these purposes, the Ordinary Shares or ADSs will be considered regularly traded during any calendar year during which they are traded, other than in *de minimis* quantities, on at least 15 days during each calendar quarter. Any trades that have as their principal purpose meeting this requirement will be disregarded. Our ADSs are listed on Nasdaq, which is a qualified exchange for these purposes. Consequently, if our ADSs are listed on Nasdaq and are regularly traded, we expect the mark-to-market election would be available to U.S. Holders if the Company is classified as a PFIC. Each U.S. Holder should consult its tax advisor as to the whether a mark-to-market election is available or advisable with respect to the Ordinary Shares or ADSs.

A U.S. Holder making a mark-to-market election must include in ordinary income for each year an amount equal to the excess, if any, of the fair market value of our Ordinary Shares or ADSs at the close of the taxable year over the U.S. Holder's adjusted tax basis in the Ordinary Shares or ADSs. An electing holder may also claim an ordinary loss deduction for the excess, if any, of the U.S. Holder's adjusted basis in the Ordinary Shares or ADSs over the fair market value of the Ordinary Shares or ADSs at the close of the taxable year, but this deduction is allowable only to the extent of any net mark-to-market gains for prior years. Gains from an actual

sale or other disposition of the Ordinary Shares or ADSs will be treated as ordinary income, and any losses incurred on a sale or other disposition thereof will be treated as an ordinary loss to the extent of any net mark-to-market gains for prior years. Once made, the election cannot be revoked without the consent of the IRS unless the Ordinary Shares or ADSs cease to be "marketable stock."

However, a mark-to-market election generally cannot be made for equity interests in any lower-tier PFICs that we own, unless shares of such lower-tier PFIC are themselves "marketable stock." As a result, even if a U.S. Holder validly makes a mark-to-market election with respect to our Ordinary Shares or ADSs, the U.S. Holder may continue to be subject to the PFIC rules (described above) with respect to its indirect interest in any of our investments that are treated as an equity interest in a PFIC for U.S. federal income tax purposes. U.S. Holders should consult their tax advisors as to the availability and desirability of a mark-to-market election, as well as the impact of such election on interests in any lower-tier PFICs.

Unless otherwise provided by the U.S. Treasury, each U.S. shareholder of a PFIC is required to file an annual report containing such information as the U.S. Treasury may require. A U.S. Holder's failure to file such annual report will cause the statute of limitations for such U.S. Holder's U.S. federal income tax return to remain open with regard to the items required to be included in such report until three years after the U.S. Holder files the annual report, and, unless such failure is due to reasonable cause and not willful neglect, the statute of limitations for the U.S. Holder's entire U.S. federal income tax return will remain open during such period. U.S. Holders should consult their tax advisors regarding the requirements of filing such information returns under these rules.

Taxation of Distributions

Subject to the discussion above under "Passive Foreign Investment Company Rules," distributions paid on Ordinary Shares or ADSs, other than certain *pro rata* distributions of Ordinary Shares or ADSs, will generally be treated as dividends to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Because we may not calculate our earnings and profits under U.S. federal income tax principles, we expect that distributions generally will be reported to U.S. Holders as dividends. Subject to applicable limitations, dividends paid to certain non-corporate U.S. Holders may be taxable at preferential rates applicable to "qualified dividend income." However, the qualified dividend income treatment may not apply if the Company is treated as a PFIC with respect to the U.S. Holder. The amount of the dividend will be treated as foreign-source dividend income to U.S. Holders and will not be eligible for the dividends-received deduction generally available to U.S. corporations. Dividends will generally be included in a U.S. Holder's income on the date of the U.S. Holder's receipt of the dividend. The amount of any dividend income paid in foreign currency will be the U.S. Dollar amount calculated by reference to the exchange rate in effect on the date of actual or constructive receipt, regardless of whether the payment is in fact converted into U.S. Dollars.

If the dividend is converted into U.S. Dollars on the date of receipt, a U.S. Holder should not be required to recognize foreign currency gain or loss in respect of the dividend income. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. Dollars after the date of receipt. Such gain or loss would generally be treated as U.S.-source ordinary income or loss. The amount of any distribution of property other than cash (and other than certain pro rata distributions of Ordinary Shares or ADSs or rights to acquire Ordinary Shares or ADSs) will be the fair market value of such property on the date of distribution.

As noted below and subject to applicable limitations, taxing jurisdictions other than the United States may withhold taxes from jurisdictions on Ordinary Shares or ADSs. A U.S. Holder may be eligible for a reduced rate of withholding to the extent there is an applicable tax treaty between the applicable taxing jurisdiction and the United States and/or may be eligible for a foreign tax credit against the U.S. Holder's U.S. federal income tax liability. Recently issued U.S. Treasury regulations, which apply to foreign taxes paid or accrued in taxable years beginning on or after December 28, 2021, may in some circumstances prohibit a U.S. Holder from claiming a foreign tax credit with respect to certain foreign taxes that are not creditable under applicable tax treaties. In lieu of claiming a foreign tax credit, a U.S. Holder may, at such U.S. Holder's election, deduct foreign taxes in computing such U.S. Holder's taxable income, subject to generally applicable limitations under U.S. tax law. An election to deduct foreign taxes in lieu of claiming a foreign tax credit applies to all foreign taxes paid or accrued in the taxable year in which such election is made. The foreign tax credit rules are complex and U.S. Holders should consult their tax advisers regarding the application of such rules, including the creditability of foreign taxes, in their particular circumstances.

Sale or Other Taxable Disposition of Ordinary Shares and ADSs

Subject to the discussion above under "Passive Foreign Investment Company Rules," gain or loss realized on the sale or other taxable disposition of Ordinary Shares or ADSs will be capital gain or loss, and such capital gain or loss will be long-term if the U.S. Holder held the Ordinary Shares or ADSs for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder's tax basis in the Ordinary Shares or ADSs disposed of, and the amount realized on the disposition, in each case as determined in U.S. Dollars. This gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes. The deductibility of capital losses is subject to limitations.

If the consideration received by a U.S. Holder is not paid in U.S. Dollars, the amount realized will be the U.S. Dollar value of the payment received determined by reference to the spot rate of exchange on the date of the sale or other disposition. However, if the Ordinary Shares or ADSs are treated as traded on an "established securities market" and the U.S. Holder is either a cash basis taxpayer or an accrual basis taxpayer that has made a special election (which must be applied consistently from year to year and cannot be changed without the consent of the IRS), the U.S. Holder will determine the U.S. Dollar value of the amount realized in a non-U.S. Dollar currency by translating the amount received at the spot rate of exchange on the settlement date of the sale. If the U.S. Holder is an accrual basis taxpayer that is not eligible to or does not elect to determine the amount realized using the spot rate on the settlement date, the U.S. Holder will recognize foreign currency gain or loss to the extent of any difference between the U.S. Dollar amount realized on the date of sale or disposition and the U.S. Dollar value of the currency received at the spot rate on the settlement date.

FOR U.S. HOLDERS, CERTAIN SIGNIFICANT AND POTENTIALLY ADVERSE U.S. FEDERAL INCOME TAX CONSEQUENCES WOULD RESULT FROM CLASSIFICATION OF THE COMPANY AS A PFIC. WE STRONGLY URGE INVESTORS TO CONSULT THEIR TAX ADVISORS REGARDING THE IMPACT OF A PFIC CLASSIFICATION ON AN INVESTMENT IN OUR ORDINARY SHARES OR ADSs.

Information with Respect to Foreign Financial Assets

Certain U.S. Holders may be required to report information relating to holdings of Ordinary Shares or ADSs, subject to certain exceptions (including an exception for Ordinary Shares or ADSs held in accounts maintained by certain U.S. financial institutions). U.S. Holders should consult their tax advisers regarding their reporting obligations with respect to their ownership and disposition of the Ordinary Shares or ADSs.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is a corporation or other exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is furnished in a timely manner to the Internal Revenue Service.

Distribution of dividends from Norwegian companies to foreign companies and individuals may be subject to Norwegian non-refundable withholding tax. While Norway and the United States are parties to international tax treaties addressing withholding tax, not all countries in which a holder may be domiciled allow for deduction for the Norwegian withholding tax. (See "NORWAY TAXATION" below.)

NORWAY TAXATION

Non-Resident Shareholders

The following is a summary of Norwegian tax rules applicable to holders of our Ordinary Shares or ADSs who are not residents in Norway for tax purposes ("Non-resident Shareholders"). Non-resident Shareholders' tax liabilities in their home country or other countries will depend on applicable tax rules in the relevant country.

Taxation of dividends

Dividends distributed to Non-resident Shareholders, as a general rule, are subject to withholding tax at a rate of 25%. The distributing company may however apply a reduced withholding tax rate in accordance with a double taxation treaty or a 0 percent tax rate pursuant to the exemption method in section 2-38 of the Norwegian Tax Act, if the shareholder has provided documentation that proves they are entitled to a reduced withholding tax rate. The withholding tax rate of 25% is normally reduced through tax treaties between Norway and the country in which the Non-resident Shareholders resides. As of the date of this Annual Report, a withholding rate of 15% is applicable to dividends distributed by a Norwegian company to a U.S. taxpayer, pursuant to the tax treaty between Norway and the U.S. In the event the Company were to declare a dividend, IDEX has a statutory withholding obligation.

Non-resident individual Shareholders residing within the EEA area are subject to ordinary withholding tax but are entitled to apply for a partial refund of the withholding tax equal to a calculated tax-free allowance. Note that there are certain documentation requirements for non-resident individual shareholders that proves they are entitled to a reduced withholding tax rate. To fulfil the documentation requirements under a tax treaty, personal shareholders must i.e., provide certificate of residence on certain conditions and confirmation that they are the beneficial owner of the dividends.

Non-resident Shareholders that are limited liability companies can obtain a reduced withholding tax rate according to a tax treaty and/or be entitled to exemption from withholding tax pursuant to the exemption method. Note that there are certain documentation requirements for a reduced withholding tax rate according to a tax treaty and for exemption from withholding tax pursuant to the exemption method. However, dividends distributed to such Non-resident Shareholders resident within the EEA for tax purposes are exempt from Norwegian withholding tax, provided the Non-resident Shareholder is resident in an EEA country, conducts business activity within the EEA, and is the final dividend recipient.

Ordinary Shares or ADSs registered in the name of a nominee will be subject to withholding tax at a rate of 25%, unless the beneficial owner has fulfilled specific documentation requirements, and the nominee has obtained approval from the Norwegian Tax Administration for the dividend to be subject to a lower withholding tax rate. Note that permits granted under the rules that applied before 1 January 2019 (permits dated before 1 June 2017) are no longer valid. Custodians who have been granted permits under the former rules, and who wish to continue to register shares on an account with a reduced tax rate, must apply for a new permit.

Non-resident Shareholders that have incurred a higher withholding tax than set out by an applicable tax treaty or the Norwegian Tax Act may apply to the Norwegian Tax Administration for a refund of the excess withholding tax deducted.

If a Non-resident Shareholder is carrying on business activities in Norway, and the holding of Ordinary Shares or ADSs are effectively connected with such activities, the Non-resident Shareholder will be subject to the same taxation as Norwegian shareholders, as described above.

Taxation on realization of shares or independent subscription rights

Realization of shares or independent subscription rights by a Non-resident individual or corporate shareholder will not be subject to taxation in Norway unless the Non-resident shareholder is holding the shares or warrants in connection with the conduct of a trade or business in Norway, in which case the tax treatment is as described for Norwegian shareholders.

Net wealth tax

Generally, Non-resident Shareholders are not subject to Norwegian net wealth tax. However, Non-resident Shareholders can be subject to tax if holdings of Ordinary Shares or ADSs are associated with the conduct of trade or business in Norway.

F. Dividends and Paying Agents.

Not applicable.

G. Statement by Experts.

Not applicable.

H. Documents on Display.

We are subject to the information reporting requirements of the Exchange Act applicable to foreign private issuers and under those requirements will file reports with the SEC. As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our Directors, officers, and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act. Nevertheless, we intend to file with the SEC annual reports on Form 20-F containing financial statements that have been examined and reported on, with an opinion expressed by an independent registered public accounting firm.

We maintain a corporate website at www.idexbiometrics.com. Information contained in, or that can be accessed through, our website is not a part of, and shall not be incorporated by reference into, this report. We have included our website address in this report solely as an inactive textual reference.

The SEC maintains a website (www.sec.gov) that contains reports and other filings regarding registrants, such as IDEX Biometrics ASA, that file electronically with the SEC.

Oslo Børs maintains a website (newsweb.oslobors.no) that contains reports and other filings, press releases and other disclosures that listed companies, such as IDEX Biometrics ASA, issue to the market.

With respect to references made in this Annual Report to any contract or other document of the Company, such references are not necessarily complete and readers should refer to the exhibits attached or incorporated by reference to this Annual Report for copies of the actual contract or document.

I. Subsidiary Information.

Not required.

Item 11. Quantitative and Qualitative Disclosures About Market Risk.

Foreign Currency Exchange Risk

The Company's trading transactions are commonly denominated in U.S. Dollars ("USD"), which is the Company's consolidation and presentation currency. The functional currency of the parent company, IDEX Biometrics ASA, is USD, while the functional currencies of the subsidiaries are the currency in their respective domiciles. The Company incurs a portion of its expenses in other currencies than the USD, primarily British Pounds ("GBP"), Norwegian Krone ("NOK"), Euro ("EUR"), and Chinese Yuan ("CNY"). The Company's cost level is exposed to changes in the rates of exchange between the USD and these currencies. IDEX seeks to minimize this exposure by maintaining currency cash balances at targeted levels appropriate to meet foreseeable short-term expenses in these other currencies. The Company does not use forward exchange contracts or other hedging strategies to manage exchange rate exposure. Excess cash balances are generally held in USD-denominated accounts.

Each subsidiary's assets and liabilities are naturally hedged by being held and denominated in the functional currency of the subsidiary.

In addition to USD, the parent company holds bank deposits in NOK and GBP; receivables in NOK, GBP and EUR; and payables in NOK, GBP and EUR. A 10% change in the relative value of USD to NOK would not have had a material effect on the carrying value of the Company's net financial assets and liabilities in foreign currencies at December 31, 2022 and December 31, 2021. The same applies to the value of USD to CNY or EUR. A 10% increase in the value of the GBP relative to the USD would have had a corresponding effect on the carrying value of our net financial assets and liabilities in foreign currencies at December 31, 2022 of approximately \$750 thousand.

Interest Rate Risk

As of December 31, 2022, and 2021, we had cash and cash equivalents of \$16.1 million and \$33.8 million, respectively. As IDEX emphasizes capital preservation and liquidity in managing its cash, the Company's exposure to interest rate sensitivity is influenced primarily by changes in the underlying bank interest rates in Norway, where the Company's cash accounts are concentrated. Cash is held in non-interest-bearing transactional accounts and interest-bearing savings accounts, all of which are considered highly liquid. Accordingly, an immediate one percentage point change in interest rates would not have a material effect on the fair market value the Company's cash accounts.

As the Company has no debt to third-party lenders, it is not exposed to interest rate risks associated with variable rate debt. In calculating the recorded and carrying values of leases, interest rates are a variable in the calculations of these values, but do not represent a meaningful level of risk of material changes in these values.

Credit and Liquidity Risk

IDEX extends customary credit terms to customers, reflecting its assessment of their individual creditworthiness. The Company does not believe it was exposed to significant credit risk associated with its Accounts receivable, trade, balance as of December 31, 2022. (See Note 11—Accounts receivable.) If revenue continues to increase, such balances from a broadening customer base will expand, potentially increasing the Company's exposure to credit risk.

The Company believes it faces minimal liquidity risk on its cash position, as IDEX's cash is on deposit with reputable, well-regulated financial institutions in Norway, the United Kingdom, and the United States. Only a small balance is held in Chinese banks. The Company has no debt to financial institutions.

The current cash position and financial forecasts indicate that in 2023, the company will need significant funding in the form of equity injection, debt or other. The board is considering various funding options and believes that the Company will obtain further financing for its planned operation, growth and working capital requirements.

Inflation Risk

We do not believe price inflation has had a material effect, to date, on our business, operational performance, or financial position. However, during 2022, continuing from 2021, certain vendors notified the Company of price increases. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases for our products. Our inability or failure to do so could harm our business, operational performance, or financial position.

Item 12. Description of Securities Other than Equity Securities.

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

The Bank of New York Mellon, as Depositary, registers and delivers American Depositary Shares, also referred to as ADSs. Each ADS represents 75 Ordinary Shares (or a right to receive 75 Ordinary Shares) deposited with Nordea Bank Norge, ASA, which serves as custodian in Norway for the Depositary. The Depositary's office at which the ADSs are administered and its principal executive office are located at 240 Greenwich Street, New York, New York 10286.

An investor may hold ADSs either (A) directly, (i) by having an American Depositary Receipt, also referred to as an ADR, which is a certificate evidencing a specific number of ADSs, registered in the investor's name, or (ii) by having uncertificated ADSs registered in the investor's name, or (B) indirectly, by holding a security entitlement in ADSs through a broker or other financial institution that is a direct or indirect participant in The Depository Trust Company, also called DTC. If an investor holds the ADSs indirectly, that investor must rely on the procedures of a broker or other financial institution to assert the rights of ADS holders described in this section. An investor should consult with a broker or financial institution to find out what those procedures are.

Registered holders of uncertificated ADSs will receive statements from the Depositary confirming their holdings.

An investor holding our ADSs will not be treated as one of our shareholders and will not have the rights available to our holders of our Ordinary Shares. Norwegian law governs shareholder rights. The Depositary will be the holder of the Ordinary Shares underlying ADSs. A registered holder of ADSs will have ADS holder rights. A deposit agreement among the Company, the Depositary, ADS holders, and all other persons indirectly or beneficially holding ADSs sets out such ADS holder rights, as well as the rights and obligations of the Depositary. New York law governs the ADSs and the deposit agreement, except with respect to its authorization and execution by us, which shall be governed by the laws of Norway.

When required in order to comply with applicable laws and regulations or our Articles of Association or similar document of ours (as in effect from time to time) or the rules and regulations of the Oslo Børs, the Nasdaq Stock Market LLC, or of any other stock exchange on which the Ordinary Shares or ADSs are registered, traded, or listed, or any book-entry settlement system, we may from time to time request, and may from time to time request the Depositary to request, certain information from an ADS holder relating to: (a) the capacity in which ADSs are held, (b) the identity of any holders or other persons or entities then or previously interested in those ADSs and the nature of those interests, (c) if for any reason, the proportion of the Ordinary Shares or ADSs owned reaches, exceeds, or falls below the thresholds specified under Norwegian law, and (d) any other matter for which disclosure of such matter is, in our reasonable opinion, required for that compliance.

As an ADS holder, an investor agrees to comply with the laws and regulations of United States and Norway (if and to the extent applicable) with respect to the disclosure requirements regarding beneficial ownership of Ordinary Shares, all as if the ADSs were the Ordinary Shares represented thereby, including requirements to make notifications and filings within the required timeframes to the Company, the SEC, the Financial Supervisory Authority of Norway, and any other authorities in the United States or Norway.

ADS Fees and Expenses

The Depositary collects its fees for delivery and surrender of ADSs directly from investors depositing Ordinary Shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may collect its annual fee for Depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The Depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The Depositary may generally refuse to provide services until its fees for those services are paid.

From time to time, the Depositary may make payments to the Company to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the Depositary, or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the Depositary may use brokers, dealers, foreign currency dealers, or other service providers that are owned by or affiliated with the Depositary and that may earn or share fees, spreads, or commissions.

The Depositary may convert currency itself or through any of its affiliates, or the custodian or we may convert currency and pay U.S. dollars to the Depositary. Where the Depositary converts currency itself or through any of its affiliates, the Depositary acts as principal for its own account and not as agent, advisor, broker, or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the Depositary or its affiliate receives when buying or selling foreign currency for its own account. The Depositary makes no representation that the exchange rate used or obtained by it or its affiliate in any currency conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the Depositary's obligation to act without negligence or bad faith. The methodology used to determine exchange rates used in currency conversions made by the Depositary is available upon request. Where the custodian converts currency, the custodian has no obligation to obtain the most favorable rate that could be obtained at the time or to ensure that the method by which that rate will be determined will be the most favorable to ADS holders, and the Depositary makes no representation that the rate is the most favorable rate and will not be liable for any direct or indirect losses associated with the rate. In certain instances, the Depositary may receive dividends or other distributions from the U.S. Dollars that represent the proceeds of a conversion of foreign currency or translation from foreign currency at a rate that was obtained or determined by us and, in such cases, the Depositary will not engage in, or be responsible for, any foreign currency transactions and neither it nor we make any representation that the rate obtained or determined by us is the most favorable rate and neither it nor we will be liable for any direct or indirect losses associated with the rate.

Payment of Taxes

An ADS holder will be responsible for any taxes or other governmental charges payable on held ADSs or on the deposited securities represented by any of such ADSs. The Depositary may refuse to register any transfer of an investor's ADSs or allow the withdrawal of the deposited Ordinary Shares represented by those ADSs until those taxes or other charges are paid. It may apply payments owed to an investor or sell deposited Ordinary Shares represented by an investor's ADSs to pay any taxes owed, and that investor will remain liable for any deficiency. If the Depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies.

Not applicable.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds.

Not applicable.

Item 15. Disclosure Controls and Procedures.

We qualify as an "emerging growth company" as defined in the U.S. Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. This includes an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002. We may take advantage of this exemption for up to five years or such earlier time that we are no longer an emerging growth company. We will cease to be an emerging growth company if we have more than \$1.235 billion in total annual gross revenue, have more than \$700.0 million in market value of our Ordinary Shares held by non-affiliates or issue more than \$1.0 billion of non-convertible debt over a three-year period.

A. Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure information required to be disclosed in our reports filed or submitted under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer (*principal executive officer*) and Chief Financial Officer (*principal financial officer*), as appropriate, to allow timely decisions regarding required disclosure.

Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of December 31, 2022, have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

B. Management's Annual Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining an adequate system of internal control over financial reporting.

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements in accordance with IFRS. Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and the Board of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the Company's Consolidated Financial Statements.

Based on an evaluation of the effectiveness of the Company's disclosure controls and procedures, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2022, such disclosure controls and procedures are effective to ensure that information required to be disclosed within a Company filing made pursuant to the Exchange Act is recorded, processed, and reported within the time period specified in the rules and forms of the SEC.

C. Attestation Report of the Registered Public Accounting Firm

This Annual Report does not include an attestation report of the Company's internal control over financial reporting by the Company's registered public accounting firm, as the Company currently is exempt from the attestation requirement, pursuant to the provisions of the JOBS Act.

D. Changes in Internal Control Over Financial Reporting

There have been no changes in the Company's internal control over financial reporting identified in connection with the evaluation described above that have materially affected, or are reasonably likely to materially affect, the company's internal control over financial reporting.

Item 16A. Audit Committee Financial Expert.

Our Board has determined that Stephen A. Skaggs is an "audit committee financial expert" as defined by SEC rules and regulations and has the requisite financial sophistication under the applicable Nasdaq rules and regulations. Our Board has determined Mr. Skaggs is independent, as such term is defined in Rule 10A-3 under the Exchange Act and under Nasdaq listing standards.

Item 16B. Code of Conduct and Code of Ethics.

We have adopted a Code of Conduct and Code of Ethics applicable to all of our employees, ongoing individual contractors, and our Board. Our Code is available on our website at www.idexbiometrics.com.

Item 16C. Principal Accountant Fees and Services.

The following table sets out the aggregate fees related to professional services rendered by our external auditor, Ernst & Young AS ("EY"), for the calendar years 2022 and 2021:

	Year Ended	Decer	nber 31,		
(\$000s)	2022	2022 2021			
Audit services	\$ 447	\$	352		
Audit-related services	43		22		
Tax services	7		7		
Other services	4		24		
	\$ 501	\$	405		

Audit services represents the fees for the audit that must be performed by EY in order to issue an opinion on our consolidated financial statements and to issue reports on our statutory financial statements. The definition also includes fees for certain other audit services, which are services only the designated independent auditor reasonably can provide, such as the auditing of non-recurring transactions, the application of new accounting policies, and limited reviews of our quarterly financial results.

Audit-related services represents fees for other assurance and related services provided by EY, but not limited to those that only reasonably can be provided by EY, which are reasonably related to the performance of the audit.

Tax services represent fees, approved by our Audit Committee, for tax services not related to the audit provided by EY, pursuant to the provisions of the Sarbanes-Oxley Act.

Other services represent other fees, approved by our Audit Committee, for services not related to the audit provided by EY, pursuant to the provisions of the Sarbanes-Oxley Act.

Item 16D. Exemptions from the Listing Standards for Audit Committees.

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant.

Not applicable.

Item 16G. Corporate Governance.

The Norwegian Public Limited Liability Companies Act (the "Companies Act") provides the legal and regulatory framework, including provisions for corporate governance, for Norwegian listed companies such as IDEX. The Company adheres to the at all times current Norwegian Code of Practice for Corporate Governance (the "Code of Practice"), published by the Norwegian Committee for Corporate Governance, a self-regulating body of eight member organizations (the Confederation of Norwegian Enterprise (and the Owners' Forum thereof), Finance Norway, the Norwegian Association of Financial Analysts, The Norwegian Auditors' Association, the Norwegian Securities Funds Association, the Oslo Børs, and the Pension Fund Association).

The Issuer Rules of the Oslo Børs, on which our Ordinary Shares are listed, stipulate that listed companies, such as IDEX, must annually publish a statement on their principles of corporate governance in accordance with the Code of Practice. We present this statement each year in the Annual Report we deliver to shareholders and file with the Oslo Børs.

Although Norway is not a member of the EU, it is a member of the European Economic Area and has implemented relevant directives of the European Commission into national law, so that the corporate governance framework applicable to Norwegian companies is substantially similar to the framework in place across the EU.

Norwegian corporate governance regulations and principles differ on certain points from those generally applicable to public companies listed on Nasdaq. Nasdaq Rule 5615(a)(3) permits a foreign private issuer, such as the Company, to rely on home country corporate governance practices, in lieu of certain of the rules in the Nasdaq Rule 5600 Series and Rule 5250(d), provided the foreign private issuer nevertheless complies with Nasdaq's Notification of Noncompliance requirement (Rule 5625), the Voting Rights requirement (Rule 5640), and it maintains an audit committee meeting the requirements of Rule 5605(c)(3), consisting of members of the Board meeting the independence requirements of Rule 5605(c)(2)(A)(ii).

For additional information regarding our reliance on certain home country corporate governance practices, pursuant to Nasdaq Rule 5615(a)(3), see "Item 6. Section C. Board Practices."

Item 16H. Mine Safety Disclosure.

Not applicable.

Item 16I. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

PART III

Item 17. Financial Statements.

See pages F-1 through F-27 of this Annual Report. Our independent public accounting firm is Ernst & Young AS, Bergen, Norway, PCAOB Auditor ID: 1572.

Item 18. Financial Statements.

Not applicable.

Item 19. Exhibits.

		Incorporation by Reference							
Exhibit	Description	Schedule/ Form	File Number	Exhibit	File Date				
1.1*	Amended and Restated Articles of Association of IDEX Biometrics ASA								
2.2	Deposit Agreement	F-6	333- 250744	(a)	11/20/20				
2.3	Form of American Depositary Receipt	F-6	333- 250744	(a)	11/20/20				
2.4*	Description of Share Capital and Articles of Association								
2.5	Description of American Depositary Shares	20-F	001-39810	2.5	04/29/22				
4.1†	IDEX Biometrics ASA 2022 Subscription Rights Incentive Plan	S-8	333- 259210	99.1	06/08/22				
4.2†	IDEX Biometrics ASA 2022 Employee Share Purchase Plan	S-8	333- 259210	99.2	06/08/22				
4.3	Supply Agreement, by and between IDEX Biometrics ASA and IDEMIA France SAS, dated as of February 13, 2020	F-1	333- 250186	10.3	11/19/20				
4.4#	Master Services Agreement, by and between IDEX Biometrics ASA and Bloomberg L.P., dated as of April 4, 2019	F-1	333- 250186	10.4	11/19/20				
4.5†	Form of Indemnity Agreement between the registrant and its Executive Officers and Directors	F-1	333- 250186	10.5	11/19/20				
8.1	Subsidiaries of IDEX Biometrics ASA	F-1	333- 250186	21.1	11/19/20				
12.1*	Certification by the Principal Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002								
12.2*	Certification by the Principal Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002								

Exhibit	Description	Schedule/ Form	File Number	Exhibit	File Date	
13.1**	Certification by the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					
13.2**	Certification by the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					
15.1*	Consent of Ernst & Young AS, the registrant's independent registered public accounting firm					
101.INS*	XBRL Instance Document					
101.SCH*	XBRL Taxonomy Extension Schema Document					
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document					
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document					
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document					
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document					
104	Cover Page Interactive Data File (formatted as inline XBRL and co	ontained in Exl	nibit 101)			

^{**} Furnished herewith.

† Indicates a management contract or any compensatory plan, contract or arrangement.

Certain portions of this exhibit have been omitted because they are material and are the type the registrant treats as private or confidential.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

IDEX BIOMETRICS ASA

By: /s/ Vincent Graziani

Name: Vincent Graziani Title: Chief Executive Officer

Date: April 26, 2023

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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of IDEX Biometrics ASA

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of IDEX Biometrics ASA (the Company) as of December 31, 2022, and 2021, the related consolidated statements of profit and loss, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and IFRS as endorsed by the European Union.

The Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has incurred significant losses and negative cash flows from operations that raise substantial doubt about its ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young AS

We have served as the Company's auditor since 2000.

Bergen, Norway

April 26, 2023

CONSOLIDATED FINANCIAL STATEMENTS

IDEX Biometrics ASA

Consolidated Statements of Profit and Loss (\$000s, except per share amounts)

	Note		2022		2021		2020
Revenue:							
Product		\$	3,889	\$	2,837	\$	1,013
Service			203		3		82
Total revenue			4,091		2,840		1,095
Operating expenses:							
Cost of materials, net of inventory change			3,244		1,254		275
Compensation and benefits	4		19,213		21,107		17,672
Research and development	5, 6		3,250		2,680		1,895
Other operating expenses	18		8,402		7,347		5,936
Amortization and depreciation	8, 9, 10		1,352		1,802		1,719
Total operating expenses			35,460		34,190		27,497
Loss from operations			(31,369)		(31,350)		(26,402)
Finance income			97		11		26
Finance cost			(1,425)		(1,123)		(477)
Loss before tax			(32,698)		(32,462)		(26,853)
Income tax expense (benefit)	6		(36)		90		(99)
Net loss for the year		\$	(32,662)	\$	(32,552)	\$	(26,754)
Loss per share, basic and diluted	7	\$	(0.03)	\$	(0.04)	\$	(0.03)

Consolidated Statements of Comprehensive Income

		Year Ended December 31,					
	Note		2022		2021		2020
Net loss for the year		\$	(32,662)	\$	(32,552)	\$	(26,754)
Other comprehensive income that may be reclassified to profit (loss) in subsequent periods:							
Foreign currency translation adjustment			680		10		670
Total comprehensive income (loss) for the period (net of tax)		\$	(31,981)	\$	(32,542)	\$	(26,084)

IDEX Biometrics ASA Consolidated Statements of Financial Position (\$000s)

	Note	D	ecember 31, 2022	December 31, 2021		
Assets						
Non-current assets:						
Goodwill	8	\$	968	\$	968	
Intangible assets	8		1,488		1,965	
Property, plant, and equipment	9		1,107		1,301	
Right-of-use assets	10		1,545		357	
Non-current receivables			73		87	
Total non-current assets			5,181		4,678	
Current assets:						
Prepaid expenses			986		851	
Inventory	13		4,447		1,234	
Accounts receivable, other	11		929		703	
Accounts receivable, trade	11		1,349		801	
Cash and cash equivalents	14		16,124		33,759	
Total current assets			23,835		37,348	
Total assets		\$	29,016	\$	42,026	
Equity and liabilities				_		
Share capital (NOK 0.15 par value per share, 1,166,326,584 and 1,010,388,454						
shares issued and outstanding at December 31, 2022 and 2021, respectively)	15	\$	22,762	\$	20,410	
Share premium			4,036		9,452	
Share-based payment reserve			23,576		21,414	
Foreign currency translation effects			(11,632)		(12,312)	
Capital reduction reserves			287,500		269,500	
Accumulated loss			(303,401)		(270,739)	
Total equity			22,841		37,725	
Non-current liabilities:						
Non-current lease liabilities	10, 12		1,142		11	
Total non-current liabilities			1,142		11	
Current liabilities:						
Accounts payable	12		1,540		685	
Current lease liabilities	10, 12		402		362	
Public duties payable			394		393	
Other current liabilities	12		2,697		2,850	
Total current liabilities			5,033		4,290	
Total liabilities			6,175		4,301	
Total equity and liabilities		\$	29,016	\$	42,026	

IDEX Biometrics ASA Consolidated Statements of Changes in Equity (\$000s)

		Share capital		Share premium		are based		Foreign currency ranslation effects	ı	Capital reduction reserve *	Accumulated loss *		Total equity
Balance at December 31,	Ф	15 445	Ф	107 (20	Ф	15.002	Ф	(12,002)	¢.	12.250	Ф (211 422)	ф	17.013
2019	\$	15,445	\$,	\$	15,903	\$	(12,992)	\$	13,250	\$ (211,433)	\$	17,812
Share issuance		1,729		16,219		2.761		_		_	-		17,948
Share-based compensation		77		_		2,761				_	(26.754)		2,838
Net loss for the year		_				_		_			(26,754)		(26,754)
Transfer of share premium		_		(210,250)		_				210,250			
Other comprehensive income			_					670	_		<u> </u>		670
Balance at December 31,													
2020	\$	17,251	\$	3,608	\$	18,664	\$	(12,322)	\$	223,500	\$ (238,187)	\$	12,514
Share issuance		3,107		51,205		_		—		_	_		54,312
Share-based compensation		52		639		2,750		_					3,441
Net loss for the year		_		_		_				_	(32,552)		(32,552)
Transfer of share premium				(46,000)						46,000			_
Other comprehensive income		_				_		10		_	_		10
Balance at December 31,													
2021	\$	20,410	\$	9,452	\$	21,414	\$	(12,312)	\$	269,500	\$ (270,739)	\$	37,725
Share issuance		2,273		12,103									14,376
Share-based compensation		79		481		2,161		_		_	_		2,721
Net loss for the year		_		_		´ —		_		_	(32,662)		(32,662)
Transfer of share premium				(18,000)						18,000	(- , ,		_
Other comprehensive income		_				_		680			_		680
Balance at December 31,			_										
2022	\$	22,762	\$	4,036	<u>\$</u>	23,576	\$	(11,632)	\$	287,500	\$ (303,401)	\$	22,841

^{*}Refer also to Note 2: Basis of Preparation and to Note 15: Share Capital and Share Premium.

IDEX Biometrics ASA Consolidated Statements of Cash Flow (\$000s)

		Yes	Year Ended December 31				
	Note	2022	2021	2020			
Operating activities							
Profit (loss) before tax		\$ (32,698)	\$ (32,462)	\$ (26,853)			
Amortization and depreciation expense	8, 9, 10	1,352	1,802	1,719			
Share-based compensation expense	16	2,721	2,750	2,755			
(Increase) decrease in inventories	13	(3,215)	(375)	(139)			
(Increase) decrease in accounts receivable	11	(548)	(314)	(414)			
Increase (decrease) in accounts payable	12	858	53	141			
Change in other working capital items		564	577	(39)			
Interest paid		(33)	(11)	(27)			
Taxes paid (received)		(372)	447	(437)			
Net cash flows from operating activities		(31,370)	(27,533)	(23,294)			
Investing activities							
Purchases of property, plant, and equipment	9	(267)	(141)	(152)			
Purchases of intangible assets	8			(181)			
(Payment) collection of non-current receivables	11	9	(13)	75			
Interest received		97	11	26			
Net cash flows from investing activities		(160)	(143)	(232)			
Financing Activities							
Net proceeds from issuance of shares	15	14,376	54,992	18,731			
Payment of principal portion of lease liabilities	10	(400)	(844)	(793)			
Payment related to a financed asset purchase	9	_		(500)			
Net cash flows from financing activities		13,976	54,148	17,438			
Net change in cash and cash equivalents		(17,555)	26,472	(6,088)			
Effect of foreign exchange on cash balances		(80)	(11)	(740)			
Opening cash and cash equivalents balance		33,759	7,298	14,126			
Cash and cash equivalents at December 31	14	\$ 16,124	\$ 33,759	\$ 7,298			

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in thousands, except per share amounts)

1. Corporate Information

IDEX Biometrics ASA and its wholly-owned subsidiaries (collectively, "IDEX" or the "Company") specialize in the design, development, and sale of fingerprint authentication solutions. The Company's fingerprint authentication solutions are used primarily in contactless smart cards, including financial payment cards, access control cards, and card-based devices for the storage of digital currencies.

IDEX Biometrics ASA, the parent company, is a public limited liability company incorporated in 1996 in Norway. The address of the head office is Dronning Eufemias gate 16, NO-0191 Oslo, Norway. The Company's Ordinary Shares, representing the only class of equity securities issued and outstanding, are listed on the Oslo Børs, the stock exchange in Oslo, Norway, under the ticker symbol IDEX. The Company's American Depositary Shares ("ADSs"), each ADS representing 75 Ordinary Shares, are listed on Nasdaq, under the ticker symbol IDBA.

IDEX is comprised of the Norwegian parent company and its subsidiaries in the United States (IDEX Biometrics Holding Company Inc. and IDEX Biometrics America Inc. (together, "IDEX America")), the United Kingdom (IDEX Biometrics UK Ltd. ("IDEX UK")), and China (IDEX Electronics (Shanghai) Co., Ltd. ("IDEX China")). The parent company is the owner of all intellectual property of IDEX and is the contractual party to all customer and manufacturing partner agreements. All sales are generated by the parent company. The subsidiaries provide various services to the parent company, mainly associated with engineering, supply-chain administration, and customer service functions.

2. Basis of Preparation

The Company prepares its Consolidated Financial Statements in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and IFRS as endorsed by the European Union. The consolidated financial statements are presented in U.S. Dollars ("USD"), and all values are rounded to the nearest thousand (\$000), except when otherwise indicated. As of January 1, 2020, the parent company changed its presentation currency from the Norwegian Krone ("NOK") to USD, and, as of January 1, 2021, the parent company changed its functional currency from NOK to USD. The change of functional currency from NOK to USD, was determined by to be appropriate, given that the parent company's operational transactions had come to be primarily dominated in USD.

The Consolidated Financial Statements, prepared on a historical cost basis, include the accounts of the parent company and its subsidiaries, with all intercompany transactions, balances, revenue, expenses, and unrealized internal profit or losses eliminated upon consolidation.

During the year ended December 31, 2022, the Company revised its classification related to the presentation of Capital Reduction Reserve to reflect the legal decision of the absorption of historical accounting losses into Share Premium. Previously, the Company presented transfer of Share premium to absorb losses as a component of Accumulated Loss. The Company changed its presentation to reflect the amount of transfer losses to Share Premium separately from accumulated losses on the Consolidated Statements of Financial Position and Consolidated Statements of Changes in Equity. The Company has applied this change to all periods.

The consolidated financial statements for the year ended December 31, 2022, were approved by the Board on April 26, 2023.

Going Concern

The Company has evaluated whether there are conditions and events, considered in the aggregate, that raise significant doubt about the Company's ability to continue as a going concern within one year after the date the consolidated financial statements are issued. From its inception through December 31, 2022, IDEX has incurred significant operating losses and has reported negative cash flows from operations. As of December 31, 2022, the Company has accumulated losses of \$303,401. The Company has no debt to financial institutions. Net equity amounted to \$22,841 and the consolidated statement of financial position solvency amounted to \$13,370 at the end of 2022. The Company does not expect that its existing cash would enable it to fund its operating expenses and capital expenditures requirements for the next twelve months. The future viability of the Company beyond that point is largely dependent on its ability to generate cash from operating activities and to raise additional capital to finance its operations.

The Company plans to undertake a private placement of shares or procure other substantial funding by the end of the third quarter of 2023 to provide additional funding to support research and development and fund working capital. While the Company has been successful in the past in raising funds through private placements of shares, there is no assurance that we will be successful in the future. The Company's failure to raise capital as and when needed could have a negative impact on its financial condition and its ability to pursue its business strategies.

Based on its recurring losses from operations incurred since inception, expectation of continuing losses for the foreseeable future and need to raise additional capital to finance its future operations, the Company has concluded that there is significant doubt about its ability to continue as a going concern.

The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Accordingly, the consolidated financial statements have been prepared on a basis that assumes the Company will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitment in the ordinary course of business.

3. Significant Accounting Policies

Accounting policies that are significant to the Company's results and financial position, in terms of materiality of the items to which the policy is applied, are discussed below.

The statements of profit and loss are presented by the nature of expense. The cash flow statements are presented by the indirect method.

There have not been any changes to the Company's accounting policies applied in the financial statements for 2022 compared to those applied in the annual financial statements for 2021.

Accounting estimates, based on the use of judgment and assumptions

The application of certain accounting standards requires estimates based on considerable judgment and assumptions that may involve high levels of uncertainty at the time the estimates are made. Estimates are continually evaluated. Assumptions are based on historical experience and other factors, including expectations of future events and parameters that are believed to be reasonable under the circumstances. Actual outcomes may deviate from estimates.

Changes in estimates and deviations between estimated result and actual outcome may have a material influence on the financial statements in the periods when estimates or assumptions are changed or when uncertainty is resolved. The following represent the most significant accounting items based on estimates, based on management's judgment and assumptions.

Goodwill

Goodwill represents the future economic value of assets acquired in a business combination above the separately recorded values of the assets. Subsequent impairment testing involves quantitatively comparing the recorded value to the estimated value of the business unit to which the goodwill is assigned. The estimate is based on judgments of when and whether there will be an economic benefit from the business unit, and assumptions about the amounts. As of December 31, 2022, such comparison indicated the carried value of goodwill was appropriate, and no impairment was recorded.

Intangible assets

IDEX's patents and other intellectual property rights created by the Company are capitalized and recorded in the Consolidated Statements of Financial Position only when they satisfy the criteria for capitalization. No development costs have been capitalized in 2022, 2021, or 2020.

Acquired intangible assets are capitalized initially at fair value, normally the purchase price. Intangible assets are amortized over their useful economic lives. An assessment of impairment losses on non-current assets is made when there is an indication of a decrease in value. An intangible asset's carrying amount is compared to the asset's recoverable amount. The recoverable amount is the higher of the fair value (less costs to sell to an independent third party) or the calculated value based on the discounted estimated cash flow from continued use. The estimate is based on judgments of when and whether there will be an economic benefit from the asset, and assumptions about the amounts. As of December 31, 2022, the Company determined that there were no indicators of impairment, and no impairment was recorded.

Inventory

Inventories consist of raw materials, work in process, and finished goods. Inventory is recorded at the lower of cost and net realizable value. Impairment is assessed quarterly, based on management's judgment of when and whether the inventory may be sold, and assumptions about the sales price and selling costs. The estimate is uncertain, because timing of sales are subject to many risks. Selling prices are uncertain in the market for IDEX's products. Reselling components or other commodity raw materials at any value may not be easily achieved, and elements of work in progress and finished goods, if impaired (i.e., considered excess or obsolete inventory), generally have no resale value and are held for disposal.

Share-based compensation

IDEX estimates the fair value of incentive subscription rights ("SRs") at the grant date by using the Black-Scholes option pricing model, and record share-based remuneration cost over the vesting period of the SRs. The valuation is based on share price and exercise price, share price volatility, interest rates, and the expected term of the SRs, based on historical data. The parameters may in the future deviate from the historical observations. The accrued cost of the Company's employment taxes associated with the earned intrinsic value of the SRs will vary with share price, which is a highly unpredictable parameter.

IDEX estimates the fair value of the Employee Share Purchase Plan ("ESPP") at the grant date, i.e. the first date of the contribution period, by using the Black-Scholes option pricing model. The share-based compensation is expensed over the contribution period. The valuation is based on share price and exercise price, share price volatility, interest rates, and the term of the contribution period. The parameters may in the future deviate from the historical observations.

Climate Change

As of December 31, 2022, the possible future financial impact to the Company resulting from climate change is uncertain. Given the nature of the Company's operations and products, the Company believe any such impact not to be material. The Company is monitoring current and expected climate change effects, as well as measures considered or implemented by government and industry, in order to minimize any negative impact and to take advantage of any favorable opportunities that may arise.

COVID-19

The COVID-19 pandemic, including the global emergence of new variants, continues to cause business and economic uncertainties. The full impact of COVID-19 on the Company's business, results of operations, and financial condition may depend on numerous evolving factors that are highly uncertain and cannot be accurately predicted. The Company will continue to monitor the evolving situation and will assess modifying its response to the pandemic, as well as any relevant implications for its operations or financial reporting.

The Company has not experienced significant delays in its development projects, and it has not incurred additional costs as a result of its response to the pandemic. Disruption of supply chains, particularly the semiconductor supply chain, has been attributed to the pandemic. While the Company did not experience supply chain disruptions that were material to its operations or financial results during 2021 or 2022, operational planning and management of inventory levels were challenging, given uncertainties associated with vendor capacity availability and allocations to the Company of such capacity. Because management expects such uncertainties will continue through 2023, the Company may place orders for, and hold balances of, inventory at higher levels than would be expected if such uncertainties did not exist.

Management believes the pandemic has had an adverse influence on the timing of activities of smart card manufacturers and issuers, including delaying product development and the initiation of trials and pilots involving smart cards incorporating our fingerprint authentication solutions.

Financial risks

IDEX emphasizes capital preservation and liquidity in managing its cash, which is held in bank accounts, which are denominated in USD, NOK, GBP, and CNY.

Short-term capital requirements include funding operating losses and supporting net working capital requirements. Reflecting the Company's operating model, investments in property, plant, and equipment are modest, and have been funded with proceeds from issuance of the Company's Ordinary Shares. IDEX has been funded through the issuance of Ordinary Shares since it was established in 1996.

The current cash position and financial forecasts indicate that in 2023, the Company will need significant funding in the form of equity injection, debt or other. The board is considering various funding options and believes that the Company will obtain further financing for its planned operation, growth and working capital requirements. Refer to the comments regarding going concern in Note 2.

Interest Rate Risk

As of December 31, 2022, IDEX had cash of \$16.1 million. The Company's exposure to interest rate sensitivity is influenced primarily by changes in the underlying bank interest rates in the various currencies. IDEX's cash is held in bank accounts, all of which are considered highly liquid. Accordingly, an immediate one percentage point change in interest rates would not have a material effect on the fair market value the Company's cash accounts. As the Company has no debt to financial lenders, it is not exposed interest rate risks associated with variable rate debt. In calculating the recorded and carrying values of leases, interest rates are a variable in the calculations of these values, but do not represent a meaningful level of risk of material changes in these values.

Currency Risk

The Company's trading transactions are commonly denominated in U.S. Dollars ("USD"), which is the Company's consolidation and presentation currency. The functional currency of the parent company, IDEX Biometrics ASA, is USD, while the functional currencies of the subsidiaries are the currency in their respective domiciles. The Company incurs a portion of its expenses in other currencies than the USD, primarily British Pounds ("GBP"), Norwegian Krone ("NOK"), Euro ("EUR"), and Chinese Yuan ("CNY"). The Company's cost level is exposed to changes in the rates of exchange between the USD and these currencies. IDEX seeks to minimize this exposure by maintaining currency cash balances at targeted levels appropriate to meet foreseeable short-term expenses in these other currencies. The Company does not use forward exchange contracts or other hedging strategies to manage exchange rate exposure. Excess cash balances are generally held in USD-denominated accounts.

Each subsidiary's assets and liabilities are naturally hedged by being held and denominated in the functional currency of the subsidiary.

In addition to USD, the parent company holds bank deposits in NOK and GBP; receivables in NOK, GBP and EUR; and payables in NOK, GBP and EUR. A 10% change in the relative value of USD to NOK would not have had a material effect on the carrying value of the Company's net financial assets and liabilities in foreign currencies at December 31, 2022 and December 31, 2021. The same applies to the value of USD to CNY or EUR. A 10% increase in the value of the GBP relative to the USD would have had a corresponding effect on the carrying value of our net financial assets and liabilities in foreign currencies at December 31, 2022 of approximately \$750 thousand.

Credit and Liquidity Risk

IDEX extends customary credit terms to customers, reflecting its assessment of their individual creditworthiness. The Company does not believe it was exposed to significant credit risk associated with its Accounts receivable, trade, balance as of December 31, 2022. (See Note 11 – Accounts receivable.) If revenue continues to increase, such balances from a broadening customer base will expand, potentially increasing the Company's exposure to credit risk.

As of December 31, 2022, the parent company had extended advances to IDEX UK denominated in GBP, in the equivalent to \$7,597. It is expected that IDEX UK will eventually repay these advances.

The Company believes it faces minimal risk on its cash position, as IDEX's cash is on deposit with reputable, regulated banks. The Company has no debt to financial institutions.

The balance sheet solvency amounted to \$13,370 at December 31, 2022. The Company aims to increase revenue generation through sales of its products; however, it does not currently have the cash resources to fully meet its operating commitments for the twelve months following the date of the financial statements. This cast significant doubt on the Company's ability to continue as a going concern.

Other accounting policies

Consolidation

The Company's Consolidated Financial Statements are comprised of the financial statements of IDEX Biometrics ASA and its wholly-owned subsidiaries, with all intercompany transactions, balances, revenue, expenses, and unrealized internal profit or losses eliminated upon consolidation.

Equity

Equity is comprised of the following:

- Share Capital: comprised of the nominal amount of the parent's ordinary shares. This capital is not distributable in the form of dividends under the Norwegian Public Limited Liability Companies Act (the "PLLC Act") (refer to Note 15: Share Capital and Share Premium).
- Share Premium: comprised of: (1) the amount received attributable to Share Capital, in excess of the nominal amount of shares issued by the parent company, reduced by; (2) issuance costs directly attributable to the capital increase and; (3) transfers into the Capital Reduction Reserve, (refer to Note 15: Share Capital and Share Premium).
- Share Based Payment Reserve: comprised of Share-based payment reserve.
- Foreign Currency Translation Effects: comprised of Currency Translation Difference.
- Capital Reduction Reserve: comprised of the absorption of accumulated losses of the Company by the Share Premium, as resolved by the Company's Board of Directors (refer to Note 15: Share Capital and Share Premium).
- Accumulated Loss: is comprised of cumulative historical losses of the Company.

Revenue recognition

Revenue is recognized when control of the promised goods or services is transferred to a customer, in an amount reflecting the consideration the Company expects to be entitled to in exchange for those goods or services. Sales, value add, and other taxes incurred concurrent with revenue producing activities are excluded from revenue. Shipping and handling charges to customers are included in revenue, and costs incurred associated with outbound freight after control over a product has transferred to a customer are accounted for as revenue reductions.

The Company's primary source of revenue comes from the sale of its products, which principally are biometric fingerprint modules, consisting of a sensor and an ASIC in a single package. Each module also contains embedded software. The hardware and the embedded software are interdependent, in that each needs the other to provide the intended fingerprint authentication function to the customer. The primary customers for the Company's products are smart card manufacturers and similar solution integrators. The Company currently does not utilize distributors for the resale of its products.

The Company, from time to time, licenses its intellectual property under right to use licenses, in which royalties due to the Company are based upon a percentage of the licensee's sales and/or unit volumes. For the years ended December 31, 2022, 2021, and 2020, the Company recognized no revenue from licensing its intellectual property.

Certain contracts with customers contain multiple performance obligations, which typically may include a combination of non-recurring engineering ("NRE") services, prototype units, and production units. For these contracts, if the individual performance obligations are distinct, they are accounted for separately. Generally, the Company has determined the NRE services and prototype units represent one distinct performance obligation, and the production units represent a separate distinct performance obligation. For such arrangements, revenue is allocated to each performance obligation based on its relative standalone selling price, based on prices charged to other customers or based on expected cost plus a customary profit margin. The Company generally recognizes revenue for NRE services and prototype units at the point in time when a defined milestone under the arrangement is completed and control is transferred to the customer, which is generally the shipment or delivery of the prototype units. Revenue for production units is recognized upon shipment or delivery, consistent with product revenue recognition summarized above.

The Company also recognizes revenue from contracts with customers associated with the delivery of certain services, ranging from standalone NRE to advisory services. Generally, these contracts include a single performance obligation (i.e., service element), and revenue is recognized upon the completion of the defined service element and final acceptance by the customer of the project deliverable, if any. However, revenue from services may be recognized over time, if recognition of multiple service elements is based on completion of substantive and results-based contractual milestones, and acknowledgement by the customer of such completion.

The Company does not have material obligations or reserves for warranties, returns, or customer refunds. The Company does not have material obligations or reserves for warranties, returns, or customer refunds. There were no contract asset or contract liability balances at December 31, 2020, 2021 or 2022.

Cost of materials, net of inventory change

Cost of materials, net of inventory change, primarily consists of the costs of raw materials, contract manufacturing, and transportation associated with production and storage of products for sale to customers, net of inventory change.

Foreign currencies

The Company's Consolidated Financial Statements are presented in USD. The functional currency of the parent company is USD, while the functional currency for each foreign subsidiary is its local currency. Transactions involving the translation to the respective functional currencies of values denominated in foreign currencies are classified as monetary or non-monetary, thereby defining the measurement and recognition of foreign currency translation gains and losses applicable to a transaction.

Monetary assets and liabilities generally have values fixed by explicit or implicit contract. Examples include bank deposits, debt, accounts receivable, and accounts payable. Monetary assets and liabilities subject to foreign currency adjustments are measured on the initial transaction date using the exchange rates in effect at that date. At each subsequent reporting date and through the date of settlement (i.e., payment) or derecognition, such monetary assets and liabilities are remeasured using the then-current exchange rate, and any foreign currency translation gains or losses are recorded by the entity within Financial income or Financial cost.

Non-monetary assets and liabilities generally are those assets and liabilities for which the recorded values are not subject to contractual or other formal definitions (i.e., those assets and liabilities that are not classified as monetary assets or liabilities). Non-monetary assets and liabilities are not subject to foreign currency adjustments at entity level.

Assets and liabilities in entities with another functional currency than the USD, including goodwill and fair value adjustments, if any, are translated into USD using the exchange rates in effect at the reporting date of the Consolidated Statements of Financial Position. Amounts reported on the Consolidated Statements of Profit and Loss are translated to USD using the average exchange rates in effect for the reporting period. Significant, large transactions may be translated using the rate at the transaction date.

Foreign exchange differences arising on translation from functional currency to presentation currency are reported in Other comprehensive income ("OCI"). Translation gains or losses previously recognized in OCI are reversed and recognized in the Consolidated Statements of Profit and Loss, if and when the entity is disposed.

Research and development expenses

Expenses in this category consist primarily of the costs of services and materials used in engineering activities and certain outsourced development activities. Payroll costs related to research and development employees are classified as Compensation and benefit expenses, not as research and development expenses, on the Consolidated Statement of Profit and Loss. However, the compensation paid to individual contractors serving in engineering roles is included in Research and development expenses.

Research costs are expensed as incurred. Development expenses that do not meet the criteria of capitalization are expensed as incurred. Development expenses are capitalized when (i) the technical feasibility of completing development has been demonstrated, (ii) the costs of development can be measured reliably, (iii) it is probable IDEX will realize future economic benefits from the asset, and (iv) IDEX has committed to complete the development. Once the development is complete and the resulting asset is available for use, the capitalized development cost (i.e., the asset value) is amortized over its expected useful life.

The Company applies for and has received government grants associated with certain research and development projects. The earned (i.e., recognized) value, if any, of government grants applicable to research and development activities are credited against costs. Generally, the applications or claims for such grants are submitted after completion of the qualifying activities. When it is realistic that the application or claim will be successful and the amount can be determined reliably, the Company credit the value of the grant against research and development expenses for that reporting period. Due to the timing difference between the completion of the qualifying activities, the approval of our grant application or claim, and the receipt of the funds associated with the grant, we may record, pending receipt of funds, the value of the grant as an Account receivable, other.

Finance income and finance cost

Finance income and finance cost consists of interest income, interest expense, and net foreign exchange losses (gains) arising from settlement of obligations denominated in foreign currencies during the period and foreign currency translation adjustments recognized at period-end.

Segment reporting

IDEX manages its operations as a single segment for the purposes of assessing performance and making operating decisions. IDEX operates as one operating segment, fingerprint imaging and authentication technology. IDEX has determined that its chief operating decision maker is its Chief Executive Officer. The Company's chief operating decision maker reviews the Company's financial information on an aggregated basis for the purposes of allocating resources and assessing financial performance.

IDEX categorizes customers by geographic region utilizing the addresses to which we invoice our products or services. The Company's product and service revenue by geographic region is as follows:

	_	Year Ended December 31,					
(\$000s)		2022	2020				
Product Revenue:							
Europe, Middle East, and Africa	\$	3,574	\$ 2,807	\$ 952			
Americas		252	0	5			
Asia-Pacific		63	30	56			
Total product revenue		3,889	2,837	1,013			
Service Revenue:							
Europe, Middle East, and Africa		10	3	2			
Americas		193	0	77			
Asia-Pacific		_	0	3			
Total service revenue		203	3	82			
Total Revenue	\$	4,091	\$ 2,840	\$ 1,095			

The Company's revenue has in the past come from a limited number of customers. During 2022, the top two customers accounted for approximately 48% and 24% of the Company's revenue, respectively, and in 2021, the top two customers accounted for 85% and 9% of revenue, respectively. In 2020, the top two customers accounted for 81% and 4% of revenue, respectively.

Accounting standards issued but not effective

The Company will adopt applicable new and amended accounting standards, including interpretations, when they become effective. We do not expect any significant impact on the Company's result or financial position from the new and amended standards issued but not yet effective.

Amendments to IAS 1–Classification of liabilities as current or non-current — The amendments clarify the requirements for classifying liabilities as current or non-current. The amendments are effective for reporting periods beginning on or after January 1, 2023, and must be applied retrospectively. The amendments will not have a material impact on any of the Company's liabilities as of December 31, 2022, 2021 or 2020.

Amendments to IAS 8–Definition of accounting estimates — The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for reporting periods beginning on or after January 1, 2023, and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of such period. The amendments are not expected to have a material impact on the company's financial statements.

Amendments to IAS 1 and IFRS Practice statement 2–Disclosure of accounting policies — The amendments replace the requirement to disclose the 'significant' accounting policies with a requirement to disclose the 'material' accounting policies. The amendments to IAS 1 are applicable for annual periods beginning on or after 1 January 2023. The Company will revise the accounting policy information disclosures for 2023 to become consistent with the amended IAS 1.

Amendments to IAS 12-Deferred tax related to asssets and liabilities arising from a single transaction — The amendments should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. The amendments are not expected to have a material impact on the company's financial statements.

4. Compensation and benefits

Compensation and benefits expenses consist of costs for direct employees of the Company. Compensation of individual contractors is reported as Research and development expenses or Other operating expenses, as applicable, based on the roles assigned to the individuals.

	Year Ended December 31,						
(\$000s)		2022		2021		2020	
Salary, payroll tax, benefits, other	\$	17,389	\$	18,197	\$	14,917	
Share-based compensation		1,824		2,910		2,755	
Total	\$	19,213	\$	21,107	\$	17,672	

The table below sets forth the number of employees and individual contractors by their function, measured in full-time equivalents. Most of the contractors live and work in countries in which the Company does not have a formal business presence.

	December	r 31, 2022	December 31, 2021		Decembe	r 31, 2020
	Employees	Contractors	Employees	Employees Contractors		Contractors
Research and development	64	6	77	8	75	6
Marketing and sales	6	9	6	9	6	5
General and administrative	5	2	8	1	7	1
Supply chain and distribution	7	-	2	_	2	
Total staff	82	17	93	18	90	12

The average number of employees for the years 2022, 2021, and 2020 were 90, 95 and 93 full-time equivalents, respectively.

The Company provides health and other benefits to employees consistent with common practice in the countries in which it operates. No such benefits are provided to individual contractors.

The parent company contributes to a pension insurance plan for all its Norwegian employees. The plan satisfies the Norwegian mandatory service pension rules. The pension plan is a fully insured, defined contribution plan.

Employees of IDEX America may participate in a health, dental, and vision insurance plan. IDEX America also offers employer-funded plans for life insurance, short-term disability, and long-term disability. IDEX America does not offer or plan to offer any pension plans, except for a 401(k) defined-contribution plan. The Company currently does not match participant contributions to this plan.

IDEX China contributes to the mandatory social security plans in China, including contribution of 21% of eligible salary to each employee's personal retirement fund.

IDEX UK contributes up to 6% of an employee participant's base salary to IDEX UK's pension plan, subject to the employee contributing the same percentage through a salary reduction arrangement. The pension plan is a fully insured, defined-contribution plan.

Share-based compensation includes non-cash expenses associated with the recognition of the costs of share-based awards granted pursuant to the Company's subscription rights plans and its employee share purchase plan ("ESPP"). See Note 16.

Compensation of Key Management

For 2022 and 2021 key management consisted of the Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO"), Chief Technology Officer ("CTO"), and Chief Commercial Officer ("CCO"). For 2020, key management consisted of the CEO, CFO, and CTO.

	Year Ended December 31,							
	2022		2021			2020		
			(in t	housands)				
Compensation and short-term benefits	\$	1,362	\$	1,425	\$	906		
Medical and similar benefits, contributions to pension								
schemes		62		73		66		
Share-based compensation		271		443		449		
Total compensation of key management	\$	1,695	\$	1,941	\$	1,421		

Compensation and other short-term benefits, whether cash or in kind, are the amounts declared for tax purposes for the respective years. Pension cost and share-based remuneration are expensed amounts in the respective years. Gains on exercise of incentive subscription rights, if any, are not included. Employers' tax is not included. The variable incentive pay paid in one year relate to achievements in the previous year. No officers exercised incentive subscription rights in 2022 or 2020. One former officer exercised options in 2021, after employment was terminated.

Key management held the following subscription rights to Ordinary Shares under the subscription rights incentive plans with the following expiration dates and exercise prices:

			tstanding as of Dec	ecember 31,		
Grant Date	Expiration Date	Exercise Price (NOK)	2022	2021	2020	
August 14, 2019	May 9, 2024	1.65	327,800	327,800	2,327,800	
February 26, 2020	May 9, 2024	1.11	5,000,000	5,000,000	5,000,000	
June 17, 2020	May 15, 2025	1.71	1,125,000	1,125,000	1,125,000	
April 20, 2021	May 15, 2025	2.71	, .,	2,750,000	, .,	
June 3, 2021	May 12, 2026	2.38	2,000,000	2,000,000		
August 11, 2021	May 12, 2026	2.40	1,420,700	1,668,100		
March 23, 2022	May 12, 2026	2.08	836,900	, ,		
August 10, 2022	May 12, 2027	1.18	1,631,000			
Total			12,341,400	12,870,900	8,452,800	

Compensation paid to the Board is presented in Note 17.

5. Research and development expenses

Research costs are expensed when incurred. Development costs are capitalized and held in the balance sheet only if they satisfy the criteria for capitalization. The same applies to IDEX's patents and other intellectual property rights created by IDEX. IDEX has not capitalized any development costs in 2022, 2021 or 2020. Development costs related to creation of intellectual property have been expensed when incurred.

Research and development expenses include the cost of independent contractors assigned to engineering roles.

Government grants earned by the Company in support of research and development activities are credited against research and development costs when it is realistic that the application or claim will be successful and the amount can be determined reliably.

	Year Ended December 31,					
(\$000s)		2022		2021		2020
Gross research and development expenses	\$	3,959	\$	3,356	\$	4,196
Government grants credited		(709)		(676)		(2,301)
Net research and development expenses	\$	3,250	\$	2,680	\$	1,895

Government grants

		Year Ended December 31,				
(\$000s)	2022			2021		2020
Norway	\$	312	\$	538	\$	506
United Kingdom		397		138		1,795
Total	\$	709	\$	676	\$	2,301

The Norwegian SkatteFUNN is a government program supporting research and development activities in Norway. Under the program, the Company, in its current loss position, is eligible for a cash grant in support of approved projects, subject to meeting the requirements of the Research Council of Norway.

The Company's IDEX UK subsidiary participates in a program by which the government of the United Kingdom offers financial support for qualifying research and development activities of small and medium-sized enterprises, SME R&D tax relief. Under the program, the Company, in its current loss position, is eligible for a cash grant in support of approved projects, subject to approvals and meeting program requirements.

6. Income tax provision

The Company is subject to income taxes in the jurisdictions in which it operates. The Company's provision for income taxes (i.e., expense (benefit)) is based on income tax rates in the tax jurisdictions in which it operates, tax credits available in these jurisdictions, and reconciliation of differences between financial reporting values and tax reporting values.

As of December 31, 2022, the Company has a tax loss carryforward balance in Norway of \$252.8 million, representing a potential deferred tax asset, if recognized and calculated at the current corporate tax rate of 22.0%, of \$55.6 million. The Company also has a tax loss carryforward balance in the United Kingdom of \$3.4 million, representing a potential deferred tax asset, if recognized and calculated at the current corporate tax rate of 19.0%, of \$0.6 million. The Company does not have a tax loss carryforward balance or a deferred tax liability in China. In the United States, the Company has tax credits, associated with research and development activities in the United States, totaling \$1.4 million.

Because the Company has concluded there is not sufficiently convincing evidence the Company will generate sufficient taxable profit, against which the unused tax losses could be applied, the Company has not recognized to date any deferred tax assets in its statement of financial position, consistent with IFRS standards. A deferred tax asset will be recognized when the Company determines it is more likely than not it will have sufficient future taxable profit to apply the tax loss carryforward against future income taxes.

The major components of income tax provision for the years shown are:

Tax expense (benefit) for the year		Year Ended December 31,					
(\$000s)			2022		2021		2020
Taxes payable on the result of the year		\$	33	\$	90	\$	44
Adjustment in respect to prior years			(69)				(112)
Change in recorded deferred tax liability			_		_		(31)
Income tax expense (benefit)	9	\$	(36)	\$	90	\$	(99)

Elements of deferred tax	Year Ended December 31,					
(\$000s)		2022		2021		2020
Employer's tax on share-based compensation	\$	(24)	\$	(371)	\$	(216)
Fixed Assets differences		987		1,154		675
Inventory differences		(131)		(5)		(213)
Accruals differences		(993)		(1,152)		(1,144)
Research and development tax credits		(1,404)		(1,563)		(1,787)
Losses carried forward		(256,201)		(253,300)		(225,951)
Basis for calculation of deferred tax asset		(257,766)		(255,237)		(228,636)
Calculated net deferred tax expense (benefit), local tax rates 5-22%		(56,592)		(55,953)		(51,251)
Unrecognized deferred tax asset *		56,592		55,953		51,251
Deferred tax liability (asset) in the balance sheet	\$		\$		\$	

Reconciliation of tax expense (benefit)	Year Ended December 31,					
(\$000s)		2022		2021		2020
Loss before tax	\$	(32,698)	\$	(32,552)	\$	(26,853)
Norway statutory tax, calculated at rate of 22%		(7,194)		(7,132)		(5,908)
Difference in subsidiary taxes, using local rates vs 22%		68		(179)		22
Estimated tax on permanent differences		(267)		(568)		389
Adjustment in respect of prior years		(69)		_		(112)
Use of and change in tax loss carried forward		7,426		7,969		5,510
Income tax expense (benefit)	\$	(36)	\$	90	\$	(99)

^{*} As of December 31, 2022, there was not sufficiently convincing evidence the Company will generate sufficient taxable profit, against which the unused tax losses could be applied. Consequently, no deferred tax asset has been recognized. There are no restrictions as to how long tax losses may be carried forward in Norway or the United Kingdom. In China, the tax loss carryforwards that had not been utilized by the end of 2022, expired as of Dec 31, 2022. Tax credits associated with research and development activities in the United States, totaling \$1.4 million as of December 31, 2022, can be applied against taxable income for the following for 20 years.

There are no deferred tax charges included in other comprehensive income in 2022, 2021, or 2020.

7. Loss per share calculation

The loss per share is the quotient of the net loss for the period divided by the weighted average number of Ordinary Shares outstanding for the year.

	Year Ended December 31,						
		2022	2021		2020		
Net loss for the year (\$000s)	\$	(32,662)	\$	(32,552)	\$	(26,754)	
Number of ordinary shares issued at December 31		1,166,326,584	1	,010,388,454		832,146,748	
Weighted average basic number of ordinary shares		1,026,932,569		918,847,427		767,069,645	
Dilution effect (treasury stock method)		5,058,154		21,586,108		6,323,417	
Weighted average diluted number of shares		1,031,990,723		940,433,535		773,393,062	
Loss per share for the year (basic and diluted*)	\$	(0.03)	\$	(0.04)	\$	(0.03)	

^{*} The effects of potentially dilutive Ordinary Shares issuable upon exercise of outstanding subscription rights are not included in the calculation due to the Company's net losses for the periods presented, as their effect would be anti-dilutive.

^{**} The various deferred tax assets that have not been recognized are denominated in their respective local currencies. As such, the change in the year-end value in USD of these unrecognized deferred tax assets includes foreign currency translation adjustments arising from changes in the exchange rates between USD and these local currencies from the prior year-end.

8. Goodwill and other intangible assets

Goodwill is the recorded difference between the consideration paid and the net value of identifiable assets acquired and held, less impairment charges, if any. Goodwill balances as of December 31, 2022, and December 31, 2021, reflected the following activity:

	<u></u>	Year Ended I	ecen	ıber 31,
(\$000s)		2022		2021
Cost at the beginning of the year	\$	968	\$	968
Cost at the end of the year	\$	968	\$	968

There is only one cash generating unit in the Company and goodwill is allocated to this. IDEX performed the annual impairment test on December 31, 2022. Based on the 2022 assessment, no impairment charge has been made. The Company used a discounted cash flow model which utilized Level 3 measures that represent unobservable inputs. Key assumptions used to determine the estimated fair value include: (a) internal cash flows forecasts for 4 years following the assessment date, including expected revenue growth, costs to produce, operating profit margins and estimated capital needs; (b) an estimated terminal value using a terminal year long-term future growth rate of 3.0% determined based on the long-term expected prospects of the Company; and (c) a discount rate (post-tax) of 12 % which reflects the weighted-average cost of capital adjusted for the relevant risk associated with the Company's operations. No reasonably possible changes in any key assumptions would cause the carrying amount to exceed the recoverable amount.

Acquired identifiable intangible assets, consisting primarily of patents, are held at cost, less accumulated amortization and impairment charges. Other intangible asset balances as of December 31, 2022, and December 31, 2021, reflected the following activity:

		Year Ended	Decem	ber 31,	
(\$000s)		2022	2021		
Amortization period (straight-line, in years)		10 - 17		10 - 17	
Cost at the beginning of the year	\$	5,173	\$	5,173	
Additions				_	
Impact of currency translation				<u> </u>	
Cost at the end of the year	\$	5,173	\$	5,173	
Accumulated Amortization at the beginning of the year	\$	3,208	\$	2,731	
Amortization		477		477	
Impact of currency translation					
Accumulated Amortization at the end of the year		3,685		3,208	
Carrying amount at the end of the year	\$	1,488	\$	1,965	

Acquired patents are capitalized and amortized over the estimated useful life, which is the lifetime of the respective patent(s).

9. Property, plant, and equipment

Property, plant, and equipment is held at cost, less accumulated depreciation and impairment charges. When assets are sold or retired, such assets are no longer recorded in the Consolidated Statements of Financial Position. Any gain or loss on the sale or retirement is recognized in the Consolidated Statements of Profit and Loss.

The capitalized amount of property, plant, and equipment is the purchase price, including freight, installation, duties, taxes, and direct acquisition costs related to preparing the asset for use. Costs related to training and commissioning are expensed as incurred. Subsequent costs, such as expenses for repair and maintenance, are recognized as incurred in the Consolidated Statements of Profit and Loss. Subsequent enhancements creating future economic benefits are recognized in the Consolidated Statements of Financial Position as additions to property, plant, and equipment.

These assets are depreciated using the straight-line method over each asset's useful life. The depreciation period and method are assessed each year to ensure that the method and period used is consistent with the status of the non-current asset.

Property, plant, and equipment balances as of December 31, 2022, and December 31, 2021, reflected the following activity:

2022 (\$000s)	mach fixtur	nt and ninery, res and nings	furnitı off	fice are and ice oment	e	nstruments and lab quipment, software tools	Total
Depreciation period (straight line, in years)		3-5		3-5		3-5	
Accumulated cost at December 31, 2021	\$	855	\$	782	\$	2,281	\$ 3,918
Additions		125		38		104	267
Impact of currency translation		(11)		(18)		(37)	(66)
Accumulated cost at December 31, 2022		969		803		2,348	4,120
Accumulated depreciation at December 31, 2021	\$	367	\$	671	\$	1,579	\$ 2,617
Depreciation		125		73		246	443
Impact of currency translation		(6)		(10)		(33)	(48)
Accumulated depreciation at December 31, 2022		486		734		1,793	3,012
Carrying amount at December 31, 2022	\$	483	\$	69	\$	556	\$ 1,107

2021 (\$000s)	mac fixtu	ant and chinery, ares and ttings	furnit of	fice ure and fice oment	eq	struments and lab Juipment, oftware tools	Total
Depreciation period (straight line, in years)		3-5		3-5		3-5	
Accumulated cost at December 31, 2020	\$	855	\$	710	\$	2,217	\$ 3,782
Additions		_		74		67	141
Impact of currency translation				(2)		(3)	(5)
Accumulated cost at December 31, 2021		855		782		2,281	3,918
Accumulated depreciation at December 31, 2020	\$	236	\$	572	\$	1,307	\$ 2,115
Depreciation		131		101		275	507
Impact of currency translation				(2)		(3)	(5)
Accumulated depreciation at December 31, 2021		367		671		1,579	2,617
Carrying amount at December 31, 2021	\$	488	\$	111	\$	712	\$ 1,301

There were no assets under construction at the end of 2022 or 2021.

10. Leases

The Company's leases are for office and laboratory space occupied by employees. There are no exposure to future variable lease payments that are not reflected in the measurement of lease liabilities. Activity during 2022 and 2021 related to right-of-use assets are shown below.

	Year Ended December 31,					
(\$000s)		2022		2021		
Depreciation periods (straight-line, in years)		3-5		3-5		
Cost at the beginning of the year	\$	2,691	\$	2,543		
Additions		1,654		158		
Disposal of right to use assets		(1,569)				
Impact of currency translation		(133)		(10)		
Cost at the end of the year	\$	2,643	\$	2,691		
Accumulated depreciation at the beginning of the year	\$	2,334	\$	1,527		
Depreciation		431		818		
Accumulated depreciation of disposed right of use assets		(1,566)		_		
Impact of currency translation		(101)		(11)		
Accumulated depreciation at the end of the year		1,098		2,334		
Recorded value at the end of the year	\$	1,545	\$	357		

Costs related to right-of-use assets included in the Consolidated Statements of Profit and Loss include the following:

Leases in the Consolidated Statements of Profit and Loss

		Year Ended December 31,								
(\$000s)	2022		2021		2020					
Depreciation	\$	431 \$	818	\$	810					
Finance cost		33	31		63					

Lease liabilities included in the Consolidated Statements of Financial Position and related activity in the Consolidated Statements of Profit and Loss and Consolidated Statements of Cash Flows include the following:

Leases in the Consolidated Statements of Financial Position

(\$000s)	 2022	2021
Balance at January 1	\$ 373	\$ 1,058
Additions	1,575	158
Accretion of interest	33	31
Payments	(437)	(874)
Balance at December 31	1,544	373
Non-current	1,142	11
Current	402	362
Total lease liabilities	\$ 1,544	\$ 373

11. Accounts receivable

Accounts receivable, trade, includes amounts billed and currently due from customers. The amounts due are stated at their estimated realizable value. The Company's payment terms vary by the type and location of its customers and the products or services offered, although terms generally include a requirement of payment within 30 to 60 days. When necessary, the Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments, based on assessments of customers' credit-risk profiles and payment histories. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. The Company does not require collateral from its customers, although there have been circumstances when the Company has required cash in advance (i.e., a partial down-payment) to facilitate orders in excess of a customer's established credit limit. To date, such amounts have not been material.

The balances reported as Accounts receivable, other, consist primarily of amounts due to the Company associated with Value Added Tax refund activity and amounts due to the Company from governments associated with approved research and development grants.

Balances of accounts receivable at December 31, 2022, and December 31, 2021, are as follows:

Year ended December 31, 2022

	Maturity								
(\$000s)	ess than 3 months	3-6 m	onths	6-12 Months			Total		
Accounts receivable, trade	\$ 1,349	\$		\$		\$	1,349		
Accounts receivable, other	198		33		698		929		
Total	\$ 1,547	\$	33	\$	698	\$	2,278		

Year ended December 31, 2021

	Maturity								
	Less	than 3							
(\$000s)	m	onths	3-6 n	nonths	6-12	Months		Total	
Accounts receivable, trade	\$	801	\$	0	\$	0	\$	801	
Accounts receivable, other		133		31		539		703	
Total	\$	934	\$	31	\$	539	\$	1,504	

There were no provisions for bad debts at December 31, 2022, and December 31, 2021.

12. Accounts payable and other financial liabilities

The Company did not have any liabilities at December 31, 2022, or December 31, 2021, which represented debt to financial institutions. The Company's monetary liabilities at December 31, 2022, and December 31, 2021, were as follows:

Year ended December 31, 2022

					Ma	turity			
	Le								
	th	an			(5-12			
(\$000s)	3 mo	onths	3-6	months	m	onths	1-:	5 years	Total
Non-current lease liabilities	\$	_	\$	_	\$	_	\$	1,142	\$ 1,142
Accounts payable		1,540							1,540
Current lease liabilities		125		105		172			402
Other liabilities		838		1,400		459			2,697
Total	\$	2,503	\$	1,505	\$	631	\$	1,142	\$ 5,781

Year ended December 31, 2021

					Ma	iturity			
	Le					(12			
(\$000s)	tha 3 mo		3-6 m	onths		5-12 onths	1-5	years	Total
Non-current lease liabilities	\$		\$		\$		\$	11	\$ 11
Accounts payable		685							685
Current lease liabilities		132		107		123			362
Other liabilities		1,640		251		588		371	2,850
Total	\$	2,457	\$	358	\$	711	\$	382	\$ 3,908

Other current liabilities include accruals for earned compensation, earned vacation days not taken, potential employer's tax on share-based compensation, and accruals for goods and services received but not yet invoiced by the supplier.

The estimated employer's payroll tax liability related to share-based compensation amounted to \$24 on December 31, 2022, and \$371 on December 31, 2021. It will be due only when the associated subscription rights are exercised. The exercise will, in all likely circumstances, fund the payable employer's payroll tax.

Interest expense including interest on lease liabilities in the Consolidated Statement of Profit and Loss in Finance expense was \$33 in 2022 and \$31 in 2021.

IDEX had no other significant current or non-current monetary obligations at the end of 2022 or 2021. Also, the Company had no contingent liabilities at the end of 2022 or 2021.

13. Inventory

Inventories consist of raw materials, work in process, and finished goods. Materials and components purchased for use in research and development activities are expensed at the time of purchase and excluded from inventory. Inventory is recorded at the lower of cost and net realizable value, less impairment, if any. Impairment is assessed quarterly, based on management's estimates of future consumption of inventories by category.

	December 31,												
				2022			2021						
(\$000s)		Cost	Re	eserves		Net		Cost	Re	eserves		Net	
Raw materials	\$	2,280	\$	_	\$	2,280	\$	562	\$	_	\$	562	
Work in progress		1,486				1,486		107				107	
Finished goods		812		(130)		681		570		(5)		565	
Total Inventory	\$	4,577	\$	(130)	\$	4,447	\$	1,239	\$	(5)	\$	1,234	

In 2022, 2021, and 2020, materials with values of \$154, \$124, and \$32 respectively, were consumed in new product development and charged to development expense.

14. Cash and cash equivalents

USD-valued cash and cash equivalent balances by currency were as follows:

	 Year Ended December 31,							
(\$000s)	2022		2021					
Denominated in USD	\$ 14,917	\$	28,217					
Denominated in NOK	990		3,707					
Denominated in GBP	128		978					
Denominated in CNY	90		857					
Total	\$ 16,124	\$	33,759					

Of the amounts above, employees' withheld payroll tax deposits amounted to \$26 and \$31 at the end of 2022 and 2021, respectively. Only the withheld payroll tax deposits were restricted. Deposits for facilities rent or utilities have not been included in cash quivalents.

15. Share capital and Share Premium

There is one class of shares, and all such Ordinary Shares have equal rights. The par value of an Ordinary Share is NOK 0.15 per share. IDEX does not hold any of its own Ordinary Shares.

During the years ended December 31, 2022 and December 31, 2021, the Board of Directors approved the transfer of \$18.0 million and \$46.0 million, respectively, of Share Premium to absorb uncovered losses as allowed under Norwegian law. As a result, Share Premium has been reduced by a cumulative amount of \$287.5 million as of the year ended December 31, 2022 and \$269.5 million as of the year ended December 31, 2021 against Capital Reduction Reserve. The transfer has no impact on the total equity, comprehensive income (loss), assets (including cash) nor liabilities.

	Number of
	Ordinary Shares
Balance at December 31, 2020	832,146,748
Private placement of Ordinary Shares on February 15	83,214,674
Share issue (exercise of subscription rights)	1,767,606
Share issue (in lieu of Board compensation)	535,583
Private placement of Ordinary Shares on November 12	89,777,824
Share issue (Employee Share Purchase Plan)	2,946,019
Balance at December 31, 2021	1,010,388,454
Share issues (Employee Share Purchase Plan)	4,947,546
Share issue (exercise of subscription rights)	990,584
Private placement of Ordinary Shares on November 16	150,000,000
Balance at December 31, 2022	1,166,326,584

Costs related to share issuance have been charged against equity and amounted to \$737 in 2022, \$2,827 in 2021, and \$689 in 2020.

16. Share-based compensation

Subscription rights plans

IDEX follows the practice of renewing its subscription rights plan at each Annual General Meeting, when the preceding plan is closed for further grants and a new plan is established. On May 12, 2022, at the Annual General Meeting, the shareholders resolved to adopt the 2022 Subscription Rights Incentive Plan (the "2022 Plan"). The Board is responsible for administration of subscription rights plans and approves grants under the plans and the terms of each grant.

Under the 2022 Plan, the Board may grant up to 101,254,865 subscription rights, provided the total number of grants does not exceed 10 percent of the number of registered (i.e., issued and outstanding) Ordinary Shares.

Subscription rights may be granted to employees and individuals rendering services to the Company. The exercise price shall be, at a minimum, the higher of the average closing price of an Ordinary Share, as reported on the Oslo Børs, for the ten trading days preceding the date of the grant, or the closing price of an Ordinary Share, as reported on the Oslo Børs, on the trading day preceding the date of the grant. Unless resolved otherwise by the Board, 25% of each grant of subscription rights vests per year. The annual vesting dates are the latest of the following dates before the date of grant of the subscription rights; (i) January 15, (ii) April 15, (iii) July 15 or (iv) October 15. The subscription rights expire on the fifth anniversary of the Annual General Meeting at which the shareholders resolved to establish the plan under which the subscription rights were granted. Unvested subscription rights terminate on the holder's last day of employment or, in the case of non-employees, the last day of the individual's service to the Company. Vested subscription rights may be exercised up to 90 days after the holder's last day of employment or, in the case of non-employees, the last day of the individual's service to the Company. There are no cash settlement alternatives for exercising subscription rights.

The fair value of the subscription rights granted is calculated, for recognition of share-based compensation expenses, using the Black-Scholes option pricing model, applying the following assumptions:

	Year Ended December 31,					
	2022	2021	2020			
Exercise price (NOK)	1.03 - 2.08	2.38 - 3.10	1.10 - 1.80			
Weighted average exercise price per share	1.54	2.53	1.62			
Weighted average share price at date of grant	1.42	2.45	1.42			
Expected term (years)	4.45	4.62	4.77			
Weighted average term (years)	3.27	3.35	2.96			
Share price volatility (percent)	72 - 100	85 - 112	78 - 113			
Risk-free interest rate	2.653 %	0.983 %	0.354 %			
Expected dividend payment	-	-	-			
Forfeiture	None	None	None			

Replacement of subscription rights

On June 17, 2020, the Board approved a subscription rights replacement program whereby eligible employees could exchange existing subscription rights, granted under Subscription Rights Incentive Plans from 2016 to 2018, that were of no value, with new subscription rights granted under the 2020 Subscription Rights Incentive Plan. On October 2, 2020, a combined total of 25,962,800 subscription rights under the Company's 2020 Subscription Rights Incentive Plan were granted at an exercise price of NOK 1.71 per share. The subscription rights vest by 1/3 on each of April 15, 2021, 2022, and 2023, and expire on May 15, 2025.

	Number of Subscription Rights	Weighted Average Exercise Price (NOK)
Outstanding as of December 31, 2020	56,344,093	1.66
Granted	21,885,200	2.53
Exercised	(1,767,879)	1.33
Forfeited	(3,165,015)	1.97
Expired	(1,540,000)	5.22
Outstanding as of December 31, 2021	71,756,399	1.84
Granted	19,342,900	1.54
Exercised	(930,184)	0.29
Forfeited	(8,987,484)	2.25
Expired	(75,000)	8.42
Outstanding as of December 31, 2022	81,106,631	1.74

Composition of outstanding and exercisable subscription rights at December 31, 2022

Outstanding Subscription Rights					Vested (Exercisable) Subscription Rig				
Exercise Price (in NOK)	Number of Subscription Rights Outstanding	Weighted Average Exercise Price (NOK)	Weighted Average Remaining Term (Years)	Weighted Average Remaining Time to Vest (Years)	Number of Vested Subscription Rights	Weighted Average Exercise Price (NOK)	Weighted Average Remaining Term (Years)		
0.00 - 0.49	3,486,882	0.15	1.36	0.00	3,486,882	0.15	1.35		
0.50 - 0.99	720,800	0.71	1.36	0.22	515,600	0.71	0.97		
1.00 - 1.49	16,507,000	1.14	3.34	1.48	2,759,850	1.11	0.68		
1.50 - 1.99	36,300,174	1.70	2.15	0.16	24,589,220	1.70	1.42		
2.00 - 2.49	17,218,050	2.28	3.37	1.27	2,732,625	2.40	0.87		
2.50 - 2.99	5,412,900	2.65	3.37	1.34	1,353,225	2.65	0.84		
3.00 - 4.99	960,825	3.34	1.96	0.48	479,200	3.52	0.79		
5.00 - 9.99	500,000	5.10	0.36	0.00	500,000	5.10	0.35		
Total	81,106,631	1.74	2.68	0.74	36,416,602	1.65	1.27		

Composition of outstanding and exercisable subscription rights at December 31, 2021

Outstanding Subscription Rights					Vested (Ex	xercisable) Subscripti	on Rights
Exercise Price (in NOK)	Number of Subscription Rights Outstanding	Weighted Average Exercise Price (NOK)	Weighted Average Remaining Term (Years)	Weighted Average Remaining Time to Vest (Years)	Number of Vested Subscription Rights	Weighted Average Exercise Price (NOK)	Weighted Average Remaining Term (Years)
0.00 - 0.50	4,330,366	0.15	2.36	0.04	2,165,186	0.15	2.36
0.50 - 1.00	720,800	0.71	2.36	1.29	310,400	0.71	2.36
1.00 - 1.50	5,542,500	1.11	2.36	1.04	1,385,625	1.11	2.36
1.50 - 2.00	38,760,433	1.70	3.14	0.96	14,045,131	1.69	3.14
2.00 - 3.00	20,588,700	2.51	4.24	2.04	_	_	4.24
3.00 - 5.00	1,238,600	3.29	3.05	1.32	175,775	3.94	3.05
5.00 - 10.00	575,000	5.53	1.23	0.00	575,000	5.53	1.23
Total	71,756,399	1.84	3.32	1.22	18,657,117	1.59	3.32

Employee Share Purchase Plan

The Employee Share Purchase Plan ("ESPP") is revolved each year at the Annual General Meeting. The current ESPP was approved by shareholders at the 2022 Annual General Meeting. Under the ESPP, an IDEX employee based in Norway, the United Kingdom, or the United States may contribute up to 20% (subject to statutory limits) of his or her annual base salary, through payroll deductions, toward periodic purchases of newly issued Ordinary Shares. Under the ESPP, an option for the purchase of an Ordinary Share is granted to a participating employees on the first day of a 6-months' "offering period" to purchase new issued Ordinary Shares at the end of that offering period at a purchase price equal to 85% of the lesser of the fair market value, based on the closing price of an Ordinary Share reported by the Oslo Børs, on either the first day or the last day of that offering period. The offering periods occur from March through August, and from September through February. The shares are not restricted.

The ESPP is intended to qualify as an "employee stock purchase plan" under Section 423 of the U.S. Internal Revenue Code, thereby affording certain tax advantages to employees who are taxpayers in the United States. There are no tax advantages for ESPP participants who are taxpayers in Norway or the United Kingdom.

The share-based remuneration cost of the ESPP is calculated at the start of each contribution period, and amortized over that period. The cost is based on the contribution amount and amounts to the discount of 15% at the beginning of the period, plus the option value of an 85% call and 15% put option granted at the beginning of the period. The option value is based on a Black-Scholes option pricing model applying prevailing interest rates and share price volatility at the beginning of the period.

ESPP cost calculation parameters	September 1, 2022	March 1, 2022	September 1, 2021
Expected contribution amount (NOK 1,000)	2,025	2,307	3,009
Share price on start date (NOK per share)	0.83	1.96	2.65
Share price volatility	68%	66%	64%
Risk-free interest rate	2.82%	0.95%	0.25%
Expected dividend payment	_	_	_
Expected number of shares	2,854,899	1,385,049	1,335,810
Share-based compensation cost per expected share	0.32	0.75	1.01

In the two offering periods completed within 2022, an average of 43 employees (2021: 53) participated in the ESPP and purchased a total of 4,947,546 Ordinary Shares at a weighted average price of NOK 1.08 (2021: 2,946,019 shares at average NOK 2.00 per share).

17. Related party transactions

The Company's significant shareholders, Board members, and management, as well as their related parties, are considered related parties of the Company.

Compensation of key management is disclosed in Note 4 – Compensation and benefits.

Board compensation

Board compensation is paid in arrears after being approved by the shareholders, generally at the Annual General Meeting. The following amounts were paid in 2022, 2021 and 2020:

	Year Ended December 31, 2022					
	Cash	Shared-based				
(\$000s)	Compensation	Compensation	Total			
Morten Opstad, Board chair	\$ 53	\$ —	\$ 53			
Lawrence J. Ciaccia, Board deputy chair	53		53			
Deborah Davis	68		68			
Hanne Hovding	55	_	55			
Annika Olsson	44		44			
Thomas M. Quindlen	55	_	55			
Stephen A. Skaggs	62	_	62			
	\$ 390	\$	\$ 390			

	Year Ended December 31, 2021					
	Cash Shared-based					
(\$000s)	Comper	<u>ısation</u>	Compensation			Total
Morten Opstad, Board chair	\$	59	\$	_	\$	59
Lawrence J. Ciaccia, Board deputy chair		28		33		61
Deborah Davis		67		_		67
Hanne Hovding		52				52
Annika Olsson				_		
Thomas M. Quindlen		2		32		34
Stephen A. Skaggs		4		58		62
	\$	212	\$	123	\$	335

	Year Ended December 31, 2020					
	Cash	Shared-based				
(\$000s)	Compensation	Compensation	Total			
Morten Opstad, Board chair	\$ 40	\$ —	\$ 40			
Lawrence J. Ciaccia, Board deputy chair	38		38			
Deborah Davis	10	36	46			
Hanne Hovding	32		32			
Stephen A. Skaggs	4	34	38			
	\$ 124	\$ 70	\$ 194			

Outstanding subscription rights awarded to members of the Board under the Company's subscription rights plans have the following expiration dates and exercise prices. For further information describing these plans, see Note 16 – Share-based compensation.

			Subscription rights outstanding as of December 31,				
Grant Date	Expiration Date	Exercise Price (NOK per share)	2022	2021	2020		
June 17, 2020	May 15,				<u> </u>		
	2025	1.71	600,000	600,000	600,000		

The subscription rights granted on August 15, 2018, were replaced by the grant on June 17, 2020, as part of an exchange of subscription rights approved at the 2020 Annual General Meeting. This exchange was offered to all eligible holders.

Related party transactions

Morten Opstad, Board chair, is a partner at Advokatfirmaet Ræder AS, the Company's primary law firm, which provided services to the Company resulting in charges of \$234 in 2022, \$338 in 2021, and \$477 in 2020.

Lawrence J. Ciaccia, who was elected to the Board at the Annual General Meeting on May 12, 2015, has served on the Company's Strategy Advisory Council ("SAC") since January 2014. The SAC was discontinued effective June 30, 2022. From time to time, Mr. Ciaccia also provides consulting services to IDEX. The fees paid to Mr. Ciaccia for his services totaled \$58 in 2022, \$65 in 2021, and \$65 in 2020.

In connection with our November 2022 private placement, we entered into a share lending agreement with three shareholders in order to facilitate settlement of the new shares in the private placement. As a fixed fee for the share lending, each lender received a fee equaling 5% per annum of the sum of the subscription price per new share in the private placement multiplied by the number of borrowed shares lent by the respective lender. In total, we paid approximately \$14 thousand under the share lending agreement with approximately \$6 thousand paid to Sundt AS and approximately \$4 thousand each paid to Sundvall Holding AS and Mr. Robert Keith.

There were no overdue balances with any related parties at the end of 2022, 2021 or 2020.

18. Other Operating Expenses

	Year Ended December 31,					
(\$000s)		2022		2021	2020	
Sales and marketing activities	\$	2,840	\$	1,387	\$	764
Legal, audit, accounting and other services		2,073		2,332		2,906
IT expenses		1,894		2,047		1,621
Travel expenses		230		132		125
Other operating expenses		1,364		1,449		520
Total other operating expenses	\$	8,402	\$	7,347	\$	5,936

Auditor remuneration

The following table sets out the aggregate fees related to professional services rendered by the Company's independent auditor, Ernst & Young AS ("EY"), for the calendar years 2022, 2021, and 2020:

	Year Ended December 31,					1,		
(\$000s)	202	2		2021		2020		
Audit services	\$	447	\$	352	\$	235		
Audit-related services		43		22		8		
Tax services		7		7		0		
Other services		4		24		12		
	\$	501	\$	405	\$	255		

Audit services represents the fees for the audit that must be performed by EY in order to issue an opinion on the Company's consolidated financial statements and to issue reports on the Company's statutory financial statements. The definition also includes fees for certain other audit services, which are services only the designated independent auditor reasonably can provide, such as the auditing of non-recurring transactions, the application of new accounting policies, and limited reviews of quarterly financial results.

Audit-related services represents fees for other assurance and related services provided by EY, but not limited to those that only reasonably can be provided by EY, which are reasonably related to the performance of the audit.

Tax services represent fees, approved by our Audit Committee, for tax services not related to the audit provided by EY, pursuant to the provisions of the Sarbanes-Oxley Act.

Other services represent other fees, approved by our Audit Committee, for services not related to the audit provided by EY, pursuant to the provisions of the Sarbanes-Oxley Act.

19. Subsequent Events

The Board resolved on February 21, 2023, to grant 1,423,800 incentive subscription rights to five new employees and individual contractors. The grant was made under the Company's 2022 Subscription Rights Incentive Plan. The exercise price of the subscription rights is NOK 0.72 per share. The grants vest by 25% per year and expire on May 15, 2027. Following the grants, there were 82,065,247 subscription rights outstanding.

The Board resolved on February 28, 2023, to issue 2,648,336 Ordinary Shares at NOK 0.71 per share to employees participating in the Company's ESPP.

There have been no events between December 31, 2022, and the date of these financial statements that have had any material impact on the Company's results for 2022, or the value of the Company's assets and liabilities as of December 31, 2022.