
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 20-F

(Mark One)

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, 2023.

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

For the transition period from _____ to _____

Commission file number: 001-41611

Hesai Group

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

Cayman Islands

(Jurisdiction of incorporation or organization)

**9th Floor, Building L2-B
1588 Zhuguang Road, Qingpu District
Shanghai 201702**

People's Republic of China

(Address of principal executive offices)

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(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.

<u>Title of Each Class</u>	<u>Trading Symbol</u>	<u>Name of Each Exchange On Which Registered</u>
American depositary shares, each representing one Class B ordinary share	HSAI	The Nasdaq Stock Market LLC
Class B ordinary share, par value US\$0.0001 per share*		The Nasdaq Stock Market LLC

* Not for trading, but only in connection with the listing on The Nasdaq Global Select Market of American depositary shares.

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None

(Title of Class)

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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:

As of December 31, 2023, there were 127,028,489 ordinary shares outstanding, par value of US\$0.0001 per share, being the sum of 96,995,110 Class B ordinary shares (excluding the 2,631,222 Class B ordinary shares issued to the depository bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plan), par value of US\$0.0001 per share and 30,033,379 Class A ordinary shares, par value of US\$0.0001 per share.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes 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.

Yes No

Note – Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Emerging growth company	<input checked="" type="checkbox"/>

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.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during 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 Other

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

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

Yes No

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INTRODUCTION

Unless otherwise indicated or the context otherwise requires, references in this annual report on Form 20-F to:

- “ADAS” are to advanced driver-assistance systems;
- “ADSs” are to American depositary shares, each of which represents one Class B ordinary share;
- “Autonomous Mobility” are to using driverless vehicles to move passengers or goods autonomously, examples include robotaxis and robotrucks;
- “channel” are to the ranging channel in the context of LiDAR, implicitly referring to a pair of transceiver modules, including one laser and one detector;
- “China” or the “PRC” are to the People’s Republic of China, excluding, for the purposes of this annual report only, Taiwan;
- “Class A ordinary shares” are to our Class A ordinary shares, par value US\$0.0001 per share;
- “Class B ordinary shares” are to our Class B ordinary shares, par value US\$0.0001 per share;
- “design win” are to the number of vehicle models that choose our technology for the ADAS applications to be incorporated into such vehicle models;
- “Hertz Center” are to a dedicated in-house manufacturing facility in Hangzhou, Zhejiang;
- “Hesai,” “we,” “us,” “our company” and “our” are to Hesai Group, our Cayman Islands holding company, and its subsidiaries, including Hesai Technology, and “Hesai Technology” are to Hesai Technology Co., Ltd. and its subsidiaries in mainland China, the U.S. and elsewhere. Unless otherwise specified, in the context of describing business and operations, we are referring to the business and operations conducted by Hesai Technology;
- “Jiading factory” are to our manufacturing facility located in Jiading, Shanghai;
- “LiDAR” are to light detection and ranging, a remote sensing method that uses light to measure the distance or range of objects;
- “Maxwell Center” are to an advanced research and development and intelligent manufacturing center in Jiading, Shanghai;
- “nm” are to nanometer;
- “OEM” are to original equipment manufacturer;
- “ordinary shares” are to our Class A and Class B ordinary shares, par value US\$0.0001 per share;
- “RMB” and “Renminbi” are to the legal currency of mainland China;
- “Robotics” are to last-mile delivery robot, street sweeping robot, and logistics robot in restricted areas;

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- “RX” are to laser receiver;
- “Shanghai Hesai” are to Hesai Technology Co., Ltd.;
- “TX” are to laser transmitter;
- “US\$,” “U.S. dollars,” “\$,” and “dollars” are to the legal currency of the United States; and
- “vertical integration technology” are to a business strategy where we develop core functions and subsystems of LiDAR in-house, including various kinds of chips and TX/RX systems, among others.

Unless otherwise noted, all translations from Renminbi to U.S. dollars and from U.S. dollars to Renminbi in this annual report are made at a rate of RMB7.0999 to US\$1.0000, the exchange rate in effect as of December 29, 2023 as set forth in the H.10 statistical release of The Board of Governors of the Federal Reserve System. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, or at all.

FORWARD-LOOKING INFORMATION

This annual report on Form 20-F contains forward-looking statements that reflect our current expectations and views of future events. All statements other than statements of current or historical facts are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements.

You can identify some of these forward-looking statements by words or phrases such as “may,” “will,” “expect,” “anticipate,” “aim,” “estimate,” “intend,” “plan,” “believe,” “is/are likely to,” “potential,” “continue” or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include statements relating to:

- our goals and strategies;
- our future business development, financial condition and results of operations;
- expected changes in our revenues, costs or expenditures;
- the trends in, expected growth and the market size of the ADAS, Autonomous Mobility and Robotics industries;
- the market for and adoption of LiDAR and related technology;
- our ability to produce high-quality products with wide market acceptance;
- the success of our customers in developing and commercializing products using our solutions, and the market acceptance of those products;
- our ability to introduce new products that meet our customers’ requirement;
- our expectations regarding the effectiveness of our marketing initiatives and the relationship with our third-party partners;
- competition in our industry;
- our ability to recruit and retain qualified personnel;
- government policies and regulations relating to our industry;
- our ability to protect our systems and infrastructures from cyber-attacks;
- general economic and business conditions globally and in China; and
- assumptions underlying or related to any of the foregoing.

These forward-looking statements involve various risks and uncertainties. Although we believe that our expectations expressed in these forward-looking statements are reasonable, our expectations may later be found to be incorrect. Our actual results could be materially different from our expectations. Important risks and factors that could cause our actual results to be materially different from our expectations are generally set forth in “Item 3. Key Information – D. Risk Factors,” “Item 4. Information on the Company – B. Business Overview,” “Item 5. Operating and Financial Review and Prospects,” and other sections in this annual report. You should read thoroughly this annual report and the documents that we refer to with the understanding that our actual future results may be materially different from and worse than what we expect. We qualify all of our forward-looking statements by these cautionary statements.

The forward-looking statements made in this annual report relate only to events or information as of the date on which the statements are made in this annual report. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. You should read this annual report and the documents that we refer to in this annual report and have filed as exhibits to this annual report, completely and with the understanding that our actual future results may be materially different from what we expect.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

Our Holding Company Structure and Risks Related to Doing Business in China

Hesai Group is not a Chinese operating company, but a Cayman Islands holding company with operations mainly conducted by its subsidiaries based in mainland China, and to a lesser extent by its subsidiaries based in the United States and elsewhere. This structure involves unique risks to investors. For more details, see “Item 3. Key Information — D. Risk Factors — Risks Related to Doing Business in China — Uncertainties exist with respect to how the PRC Foreign Investment Law may impact the viability of our current corporate structure and operations.” In this annual report, unless otherwise indicated or the context otherwise requires, references in this annual report to “Hesai,” “we,” “us,” “our company” and “our” are to Hesai Group, our Cayman Islands holding company, and its subsidiaries, including Hesai Technology, and “Hesai Technology” are to Hesai Technology Co., Ltd. and its subsidiaries in mainland China, the U.S. and elsewhere. Unless otherwise specified, in the context of describing business and operations, we are referring to the business and operations conducted by Hesai Technology.

We face various legal and operational risks associated with being based in and having the majority of our operations in mainland China and the complex and evolving mainland China laws and regulations. For example, we face risks associated with the fact that the PRC government has significant oversight in regulating our operations and may influence or intervene in our operations at any time, regulatory approvals on offerings conducted overseas by, and foreign investment in, China-based issuers, anti-monopoly regulatory actions, and oversight on data security, which may impact our ability to conduct certain businesses, accept foreign investments, or continue to list on a United States exchange. These risks could result in a material adverse change in our operations and the value of our ADSs, significantly limit or hinder our ability to offer or continue to offer securities to investors, or cause the value of such securities to significantly decline or become worthless.

Permissions Required from the PRC Authorities for Our Operations

To the extent that the discussions in this section on permissions from mainland China authorities relate to matters of mainland China law, it is the opinion of Fangda Partners, our mainland China counsel. Under mainland China laws and regulations, we are required to obtain or complete a number of licenses, approvals, registrations, filings and other permissions for our operation, including without limitation, the recordation certificate of declaration units or consignor record return receipt for our import and export business, the fixed source discharge registration return receipt for the pollutant emissions from our production process, the permit for discharging sewage into the drainage pipelines, and the type approval certificate for radio transmitting equipment and record-filing of sale of radio transmitting equipment for certain of our products. See “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — If we fail to obtain and maintain the requisite licenses, permits, registrations and filings applicable to our business, or fail to obtain additional licenses, permits, registrations or filings that become necessary as a result of new enactment or promulgation of government policies, laws or regulations or the expansion of our business, our business and results of operations may be materially and adversely affected.” The expansion of our manufacturing facilities is also subject to a number of government supervision and approval procedures. See “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — The expansion of our manufacturing facilities may be subject to delays, disruptions, cost overruns, or may not produce expected benefits.” As of December 31, 2023, we had obtained all required permissions that are material for our current operation.

On November 14, 2021, the Cyberspace Administration of China published the Draft Cyber Data Security Regulations, which provide that data processors conducting the following activities shall apply for cybersecurity review: (i) merger, reorganization or division of internet platform operators that have acquired a large number of data resources related to national security, economic development or public interests affects or may affect national security; (ii) listing abroad of data processors processing over one million users' personal information; (iii) listing in Hong Kong which affects or may affect national security; or (iv) other data processing activities that affect or may affect national security. The Draft Cyber Data Security Regulations further provide that operators of large internet platforms that set up headquarters, operation centers or R&D centers overseas shall report to the national cyberspace administration and competent authorities. The Draft Cyber Data Security Regulations further provide some additional requirements in relation to personal information protection, important data, data cross-broader security management and obligations of internet platform operators. For example, processors of important data shall specify the person responsible for data security, establish a data security management department, and file information regarding processing of important data to the local branch of the Cyberspace Administration of China within fifteen business days after the identification of their important data. In addition, the Draft Cyber Data Security Regulations also require that data processors processing important data or to be listed overseas shall conduct an annual data security self-assessment or entrust a data security service institution to do so, and submit the data security assessment report of the previous year to the local branch of the Cyberspace Administration of China before January 31 each year. Any failure to comply with such requirements may subject the data processors to, among others, suspension of services, fines, revocation of relevant business permits or business licenses, and penalties. As of the date of this annual report, this draft has not been formally adopted. Uncertainties exist with respect to the enactment timetable, final content, interpretation and implementation.

On December 28, 2021, the Cyberspace Administration of China, together with other administrative departments, jointly promulgated the Cybersecurity Review Measures, which became effective on February 15, 2022. Pursuant to the Cybersecurity Review Measures, critical information infrastructure operators that procure internet products and services, and internet platform operators engaging in data processing activities, are subject to the cybersecurity review if their activities affect or may affect national security. The Cybersecurity Review Measures further stipulate that an internet platform operator with personal information of over one million users shall apply with the Cybersecurity Review Office for a cybersecurity review before going to list abroad, and the relevant governmental authorities may initiate a cybersecurity review if they consider that the relevant network products or services or data processing activities affect or may affect national security. As of December 31, 2023, we did not receive any notice that we are a critical information infrastructure operator from any government authority; nor did we receive any request from the Cyberspace Administration of China to undergo a cybersecurity review.

In connection with our initial public offering completed in February 2023, we received confirmation in writing from the China Cybersecurity Review Technology and Certification Center, now called the China Cybersecurity Review, Certification and Market Regulation Big Data Center, the institution designated by the Cyberspace Administration of China to receive application materials for cybersecurity review and conduct examinations of such applications, that we were not required to apply for a cybersecurity review in connection with that offering and the listing on the Nasdaq Stock Market if we did not possess over one million users' personal information prior to the completion of the offering and the listing. As a result, based on the fact that we were not in possession of more than one million users' personal information, we were not subject to cybersecurity review by the Cyberspace Administration of China for our initial public offering. However, in connection with any future overseas capital markets activities, we cannot assure you that we will not be required to undergo a cybersecurity review conducted by the Cyberspace Administration of China, or meet other regulatory requirements that may be adopted in the future by mainland China authorities. To the extent such requirements are or become applicable, we cannot assure you that we would be able to comply with them. For more detailed information, see "Item 3. Key Information — D. Risk Factors — Risks Related to Doing Business in China — Any actual or alleged failure to comply with the various applicable laws and regulations related to personal information protection, data security and cybersecurity could affect our offshore listing and lead to liabilities, penalties or other regulatory actions, which could have a material and adverse effect on our business, financial condition and results of operations."

On July 6, 2021, the PRC government promulgated Opinions on Strictly Cracking Down on Illegal Securities Activities, which, among other things, called for enhanced administration and supervision of overseas-listed mainland China-based companies, proposed to strengthen the supervision of the overseas issuance and listing of shares by mainland China-based companies and clarified the responsibilities of competent domestic industry regulators and government authorities. We do not believe that any provision in these opinions had a material adverse impact on our business operations. Under applicable laws of mainland China, we and our mainland China subsidiaries may be required to complete certain filing procedures with the China Securities Regulatory Commission, or the CSRC, in connection with future offering and listing in an overseas market, including our follow-on offerings, issuance of convertible bonds, offshore relisting after going-private transactions, and other equivalent offering activities. If we fail to complete such filing procedures for any future offshore offering or listing, including our follow-on offerings, issuance of convertible bonds, offshore relisting after going-private transactions, and other equivalent offering activities, we may face sanctions by the CSRC or other mainland China regulatory authorities, which may include fines and penalties on our operations in mainland China, limitations on our operating privileges in mainland China, restrictions on or delays to our future financing transactions offshore, or other actions that could have a material and adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our ADSs. In addition, we are required to file a report to the CSRC after the occurrence and public disclosure of certain material corporate events, including but not limited to, change of control and voluntary or mandatory delisting. For more details, see “Item 3. Key Information — D. Risk Factors — Risks Related to Doing Business in China — If we fail to complete the CSRC filing and other procedures for any future offshore offering or listing, we may be subject to sanctions imposed by the relevant mainland China governmental authority.”

Cash Flows through Our Organization

Hesai Group, our holding company, or the Parent, may transfer cash to Hesai Hong Kong Limited, its wholly owned subsidiary in Hong Kong, through capital injections and intra-group loans. Hesai Hong Kong Limited, in turn, may transfer cash to our mainland China subsidiaries, through capital injections and intra-group loans. Similarly, our mainland China subsidiaries may transfer cash to its wholly owned subsidiaries in mainland China and, upon approval from certain mainland China authorities, to subsidiaries in the U.S. and elsewhere, through capital injections and intra-group loans. If our wholly owned subsidiaries in mainland China realize accumulated after-tax profits, they may, upon satisfaction of statutory conditions and procedures, pay dividends or distribute earnings to Hesai Hong Kong Limited. Hesai Hong Kong Limited, in turn, may transfer cash to the Parent through dividends or other distributions. With necessary funds, the Parent may pay dividends or make other distributions to U.S. investors and service any debt it may have incurred outside of mainland China. In 2021, 2022 and 2023, the Parent transferred US\$472.7 million (upon the incorporation of Hesai Hong Kong Limited and through intra-group loans), nil and US\$50.0 million to Hesai Hong Kong Limited, respectively, Hesai Hong Kong Limited transferred US\$332.1 million (through capital injections), nil and nil to Shanghai Hesai, respectively, and Shanghai Hesai transferred US\$3.0 million (through capital injections), US\$8.2 million (through capital injections) and US\$18.3 million to its subsidiaries, respectively.

Cash is also transferred through our organization by way of intra-group transactions. In 2021, 2022 and 2023, Shanghai Hesai transferred US\$0.8 million, US\$1.4 million and US\$8.3 million through service fees and payments for purchasing materials to its subsidiaries, respectively. In 2021, 2022 and 2023, subsidiaries of Shanghai Hesai transferred US\$1.8 million, US\$0.5 million and nil through payments for purchasing materials or finished goods to Shanghai Hesai, respectively. In 2021, 2022 and 2023, Oxigraf, Inc., a subsidiary in the U.S. until November 2023, transferred US\$1.3 million, nil and US\$0.1 million through payments for purchasing finished goods to a subsidiary of Shanghai Hesai in mainland China, respectively.

In 2021, 2022 and 2023, no assets other than cash were transferred between the Parent and a subsidiary, no subsidiaries paid dividends or made other distributions to the Parent, and no dividends or distributions were paid or made to U.S. investors.

Under mainland China laws and regulations, we are subject to restrictions on foreign exchange and cross-border cash transfers, including to the Parent and U.S. investors. Our ability to distribute earnings to the Parent and U.S. investors is also limited. We are a Cayman Islands holding company and rely on dividends and other distributions on equity from our mainland China subsidiaries for our cash requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders and service any debt we may incur outside of mainland China. Current mainland China regulations permit our mainland China subsidiaries to pay dividends to us only out of their accumulated after-tax profits upon satisfaction of statutory conditions and procedures, if any, determined in accordance with Chinese accounting standards and regulations. In addition, each of our mainland China subsidiaries is required to set aside at least 10% of its after-tax profits each year, if any, to fund certain statutory reserve funds until the total amount set aside reaches 50% of its registered capital. Our mainland China subsidiaries shall not distribute profits before losses are covered and the statutory reserve funds are drawn. Additionally, if our mainland China subsidiaries incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends or make other distributions to us. In addition, the revenue and assets of our mainland China subsidiaries are generally denominated in Renminbi, which is not completely freely convertible into other currencies. As a result, any restriction on currency exchange may limit the ability of our mainland China subsidiaries to pay dividends to us. For more details, see “Item 3. Key Information — D. Risk Factors — Risks Related to Doing Business in China — We may rely on dividends and other distributions on equity paid by our mainland China subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our mainland China subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business” and “Item 3. Key Information — D. Risk Factors — Risks Related to Doing Business in China — Governmental administration of currency conversion may affect our utilization of our revenues and affect the value of your investment.”

We have established stringent controls and procedures for cash flows within our organization. Each transfer of cash among our Cayman Islands holding company and our subsidiaries is subject to internal approval. To effect a cash transfer, a number of steps are needed, including but not limited to the issuance of payment receipt, logging into the online banking system and completing its verification process, inspection of the invoice, and payment execution. A single employee is not permitted to complete each and every stage of a cash transfer, but rather only portions of the whole procedure. Only the finance department is authorized to make cash transfers. Within the finance department, the roles of payment approval, payment execution, record keeping, and auditing are segregated to minimize risk.

The Holding Foreign Companies Accountable Act

Pursuant to the Holding Foreign Companies Accountable Act, which was enacted on December 18, 2020 and further amended by the Consolidated Appropriations Act, 2023 signed into law on December 29, 2022, or the HFCAA, if the Securities and Exchange Commission, or the SEC, determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspections by the Public Company Accounting Oversight Board, or the PCAOB, for two consecutive years, the SEC will prohibit our shares or the ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States. On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong, including our auditor. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determination and removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. For this reason, we were not identified as a Commission-Identified Issuer under the HFCAA after we filed our annual report on Form 20-F for the fiscal year ended December 31, 2022 and do not expect to be so identified after we file this annual report on Form 20-F for the fiscal year ended December 31, 2023. Each year, the PCAOB will determine whether it can inspect and investigate completely audit firms in mainland China and Hong Kong, among other jurisdictions. If the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong and we use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the SEC, we would be identified as a Commission-Identified Issuer following the filing of the annual report on Form 20-F for the relevant fiscal year. There can be no assurance that we would not be identified as a Commission-Identified Issuer for any future fiscal year, and if we were so identified for two consecutive years, we would become subject to the prohibition on trading under the HFCAA. See “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — The PCAOB had historically been unable to inspect our auditor in relation to their audit work.” and “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — Our ADSs may be prohibited from trading in the United States under the HFCAA in the future if the PCAOB is unable to inspect or investigate completely auditors located in China. The delisting of the ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.”

A. [RESERVED]

B. CAPITALIZATION AND INDEBTEDNESS

Not Applicable.

C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not Applicable.

D. RISK FACTORS

Summary of Risk Factors

Investing in our ADSs involves significant risks. You should carefully consider all of the information in this annual report before making an investment in our ADSs. Below please find a summary of the principal risks we face, organized under relevant headings. These risks are discussed more fully in Item 3. Key Information—D. Risk Factors.

Risks Related to Our Business and Industry

- We are an early-stage company with a history of losses, and we may not be able to achieve profitability in the future.
- Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.
- Our LiDAR products used on vehicles are highly complex and may contain defects or otherwise fail to perform in line with expectations. Such defects or failures could reduce the market adoption of our new products, damage our reputation, expose us to product liability and other claims and adversely affect our operating results.
- If our LiDAR products are not selected by automotive or robot OEMs or their suppliers, our business will be materially and adversely affected.
- We currently have and target many customers that are large corporations with substantial negotiating power, exacting product standards and potentially competitive internal solutions. If we fail to engage effectively with these customers, our prospects and results of operations will be adversely affected.
- Our ability to develop, manufacture, and deliver LiDAR products of high quality and appeal to customers, on schedule, and on a large scale is still evolving.
- We are relatively early in our efforts to develop and commercialize our in-house vertical integration technology, and we cannot assure you that such efforts will succeed.
- The current tensions in international trade and rising political tensions, particularly between the United States and China, may adversely impact our business, financial condition, and results of operations.
- We have been added to the list of Chinese companies with alleged ties to the Chinese military issued by the U.S. government agencies and our business and results of operations may be affected.
- We operate in highly competitive markets and some market participants have substantially greater resources. We compete against a large number of both established competitors and new market entrants.
- Although we believe that LiDAR is the industry standard for ADAS, Autonomous Mobility and certain other emerging markets, market adoption of LiDAR is uncertain. If market adoption of LiDAR does not continue to develop, or develops more slowly than we expect, our business will be adversely affected.
- The PCAOB had historically been unable to inspect our auditor in relation to their audit work.

- Our ADSs may be prohibited from trading in the United States under the HFCAA in the future if the PCAOB is unable to inspect or investigate completely auditors located in China. The delisting of the ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

Risks Related to Doing Business in China

- The PRC government has significant oversight in regulating our operations and may influence or intervene in our operations at any time. Actions by the PRC government to exert control over offerings conducted overseas by, and foreign investment in, China-based issuers could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless. Implementation of industry-wide regulations in this nature may also cause the value of such securities to significantly decline or become worthless. For more details, see “— Risks Related to Doing Business in China — The PRC government’s significant oversight and discretion over our business operations could result in a material adverse change in our operations and the value of our ADSs.”
- Changes in China’s economic, political or social conditions or government policies could have a material adverse effect on our business and operations.
- Uncertainties exist with respect to how the PRC Foreign Investment Law may impact the viability of our current corporate structure and operations.
- Risks and uncertainties arising from the legal system in China, including risks and uncertainties regarding the enforcement of laws and the fact that rules and regulations in China may evolve quickly with any public consultation and advanced notice period being relatively short in terms of the time that we may need to fully adapt to such changes, all of which could result in a material adverse change in our operations and the value of our ADSs. For more details, see “— Risks Related to Doing Business in China — Uncertainties in the interpretation and enforcement of laws, rules and regulations, typically existing in the civil law systems, could materially and adversely affect us.”
- If we fail to complete the CSRC filing and other procedures for any future offshore offering or listing, we may be subject to sanctions imposed by the relevant mainland China governmental authority.
- Any actual or alleged failure to comply with the various applicable laws and regulations related to personal information protection, data security and cybersecurity could affect our offshore listing and lead to liabilities, penalties or other regulatory actions, which could have a material and adverse effect on our business, financial condition and results of operations.
- We are subject to mainland China laws and regulations restricting capital flows which may affect our liquidity. See “— Risks Related to Doing Business in China — We may rely on dividends and other distributions on equity paid by our mainland China subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our mainland China subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business” and “— Risks Related to Doing Business in China — Mainland China regulation of loans to and direct investment in mainland China entities by offshore holding companies may delay or prevent us from making loans or additional capital contributions to our mainland China subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.”
- China’s M&A Rules and certain other mainland China regulations establish procedures for certain acquisitions of mainland China companies, which could make it difficult for us to pursue growth through acquisitions in mainland China.

Risks Related to Our ADSs

- The trading price of the ADSs has been and is likely to continue to be volatile, which could result in substantial losses to investors.
- We are an emerging growth company within the meaning of the Securities Act and may take advantage of certain reduced reporting requirements.

- Our dual-class share structure with different voting rights limits your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class B ordinary shares and ADSs may view as beneficial.

Risks Related to Our Business and Industry

We are an early-stage company with a history of losses, and we may not be able to achieve profitability in the future.

We have a history of net losses. We incurred net losses of RMB244.8 million, RMB300.8 million and RMB476.0 million (US\$67.0 million) in 2021, 2022 and 2023, respectively. We may continue to incur operating and net losses in the foreseeable future. Our potential profitability is dependent upon continued increase in customer needs for our LiDAR products and our success in competing against other participants in the markets in which we operate, which may not occur.

Our revenues may not grow sufficiently to offset the increase in our expenses as we:

- continue to invest in the design and upgrading of our LiDAR products;
- expand our production capabilities to produce our LiDAR products, including constructing new manufacturing facilities;
- enhance our efforts to develop and commercialize LiDAR products for Robotics and other emerging markets;
- expand our design, development, installation and servicing capabilities;
- continue to build up inventories of parts and components for our LiDAR products;
- hire additional engineers and other personnel as we expand our business; and
- increase our sales and marketing activities and develop our distribution infrastructure.

Because we will incur the costs and expenses from these efforts before we receive incremental revenues with respect thereto, our losses in future periods could be significant. In addition, we may find that these efforts are more expensive than we currently anticipate or that these efforts may not result in revenues, which would further increase our losses. Such losses may materially and adversely affect our financial condition and the price of our ADSs.

Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.

We have been focused on developing our LiDAR products since 2016. This relatively limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter. Risks and challenges we have faced or expect to face include our ability to:

- produce and deliver LiDAR products of acceptable performance;
- develop and commercialize our in-house vertical integration technology;
- forecast our revenues and budget for and manage our expenses;
- attract new customers and retain existing customers;
- comply with existing and new or modified laws and regulations applicable to our business;
- plan for and manage capital expenditures for our current and future products, and manage our supply chain and supplier relationships related to our current and future products;
- anticipate and respond to macroeconomic changes and changes in the markets in which we operate;
- maintain and enhance the value of our reputation and brand;

- effectively manage our growth and business operations;
- develop and protect intellectual property;
- hire, integrate and retain talented people at all levels of our organization; and
- successfully develop new solutions to enhance the experience of customers.

If we fail to address the risks and difficulties that we face, including those associated with the challenges listed above as well as those described elsewhere in this section, our business, financial condition and results of operations could be adversely affected. Further, because we have limited historical financial data and operate in a rapidly evolving market, any predictions about our future revenues and expenses may not be as accurate as they would be if we had a longer operating history or operated in a more predictable market. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in rapidly changing industries. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations and our business, financial condition and results of operations could be adversely affected.

Our LiDAR products used on vehicles are highly complex and may contain defects or otherwise fail to perform in line with expectations. Such defects or failures could reduce the market adoption of our new products, damage our reputation, expose us to product liability and other claims and adversely affect our operating results.

Our LiDAR products used on vehicles are highly technical and very complex and require high standards to manufacture and have in the past and will likely in the future experience defects, errors or reliability issues at various stages of development. We may be unable to timely release new products, manufacture existing products, correct problems that have arisen or correct such problems to our customers' satisfaction. Additionally, undetected errors, defects or security vulnerabilities, especially as new products are introduced or as new versions are released, could result in serious injury or even death to the end users of technology incorporating our products, or those in the surrounding area, litigation against us, negative publicity and other consequences. These risks are particularly prevalent in the highly competitive Autonomous Mobility and ADAS markets. Some errors or defects in our products may only be discovered after they have been tested, commercialized and deployed by customers, in which case we may incur significant additional development costs and product recall, repair or replacement costs. These problems may also result in claims, including class actions, against us by our customers or others. Our reputation or brand may be damaged as a result of these problems and customers may be reluctant to buy our products, which could adversely affect our ability to retain existing customers and attract new customers and could adversely affect our financial results.

In addition, we could face material legal claims for breach of contract, product liability, fraud, tort or breach of warranty as a result of these problems. Defending a lawsuit, regardless of its merit, could be costly and may divert management's attention and adversely affect the market's perception of us and our products.

Furthermore, any defects in or significant malfunctioning of our LiDAR products may weaken customer confidence in LiDAR products. As the markets for LiDAR products are emerging and evolving, loss of customer confidence in LiDAR products could have a material adverse impact on the future of such markets in general and our business prospects in particular.

If our LiDAR products are not selected by automotive or robot OEMs or their suppliers, our business will be materially and adversely affected.

Automotive and robot OEMs and their suppliers typically design and develop ADAS, Autonomous Mobility, Robotics and other key technologies over several years. These OEMs and suppliers undertake extensive testing or qualification processes prior to placing orders for large quantities of products such as our LiDAR products, because such products will function as part of a larger system or platform and must meet certain other specifications. We spend significant time and resources to have our products selected by automotive and robot OEMs and their suppliers. If our LiDAR products are not selected by an automotive or robot OEM with respect to a particular vehicle or robot model, we may not have an opportunity to supply our products to the OEM for that model for a period of many years. If our LiDAR products are not selected by an OEM or its suppliers for one vehicle or robot model or if our LiDAR products are not successful in that model, it is unlikely that our product will be deployed in other models of that OEM. If we fail to win a significant number of vehicle or robot models from one or more of automotive or robot OEMs or their suppliers, our business, results of operations and financial condition will be materially and adversely affected.

Furthermore, even if our products are selected and we enter into framework agreements with OEMs or their suppliers, as we have with many of our customers, we cannot assure you such framework agreements will always materialize into actual purchase orders, as in such agreements, our counterparties often retain the discretion as to whether and when to place orders for our products, and our supply of products may be subject to other conditions such as meeting certain development milestones.

We currently have and target many customers that are large corporations with substantial negotiating power, exacting product standards and potentially competitive internal solutions. If we fail to engage effectively with these customers, our prospects and results of operations will be adversely affected.

Many of our customers and potential customers are large, multinational corporations with substantial negotiating power relative to us and, in some instances, may have internal solutions that are competitive to our products. These large, multinational corporations also have significant development resources, which may allow them to acquire or develop independently, or in partnership with others, competitive technologies. Meeting the technical requirements of any of these companies and being selected by them for supplying LiDAR products will require a substantial investment of our time and resources. We cannot assure you that our LiDAR products will be selected by these or other companies or that we will generate meaningful revenues or profit from the sales of our products to these key potential customers. If our products are not selected by these large corporations or if these corporations develop or acquire competitive technology, it will have an adverse effect on our business.

Our ability to develop, manufacture, and deliver LiDAR products of high quality and appeal to customers, on schedule, and on a large scale is still evolving.

The sustainability of our business depends, in large part, on our ability to timely execute our plan to develop, manufacture, and deliver on a large scale LiDAR products of high quality and appeal to customers. We have limited LiDAR manufacturing experience to balance production volume and product quality and appeal, and therefore cannot assure you that we will be able to achieve our targeted production volume of commercially viable LiDAR products on a timely basis, or at all.

Our continued development, manufacturing, and delivery of LiDAR products of high quality to achieve our targeted production volume are and will be subject to risks, including with respect to:

- lack of necessary funding;
- delays or disruptions in our supply chain;
- quality control deficiencies;
- compliance with environmental, workplace safety, and relevant regulations; and
- cost overruns.

As we operate in highly competitive and rapidly evolving markets, to remain competitive, we may be required to introduce new LiDAR models earlier or more frequently than originally planned. We cannot assure you that any future models we launch will appeal to the customers as we expect or that any introduction of new models will not affect the sales of existing models.

Furthermore, we rely on third-party suppliers for the provision and development of many of the key components and materials used in our LiDAR products. To the extent our suppliers experience any difficulties in providing us with or developing necessary components, we could experience delays in delivering products. Any delay in the development, manufacturing, and delivery of LiDAR products could subject us to customer complaints and materially and adversely affect our reputation, demand for our products, and our growth prospects.

We are relatively early in our efforts to develop and commercialize our in-house vertical integration technology, and we cannot assure you that such efforts will succeed.

We established a dedicated team within our organization to develop our in-house vertical integration technology at the end of 2017. Since then, we have made significant progress in the development, production and application of our vertical integration technology and products. Our current vertical integration products are sophisticated and technologically advanced in many aspects. However, due to the short history, our in-house vertical integration technology remains in a relatively early developmental and production stage and subject to significant technological and functional limitations. We cannot assure you that we will be able to continue to refine and upgrade our vertical integration technology to achieve market-leading quality and functionality. In addition, we are relatively early in our efforts to apply our vertical integration technology to LiDAR products. We may fail in our efforts to commercialize our vertical integration technology despite the significant research and development and sales and marketing costs we have incurred and expect to incur, in which case our financial performance and business prospects will suffer.

The current tensions in international trade and rising political tensions, particularly between the United States and China, may adversely impact our business, financial condition, and results of operations.

Although we are a primarily China-based company, many of our major customers and suppliers are located in the United States and other countries outside of China. In addition, certain of our technologies, such as technologies relating to autonomous driving applications, could be subject to restrictions by the U.S. government in the future. Therefore, government policies restricting international trade and investment, such as capital controls, economic or trade sanctions, export controls, tariffs or foreign investment filings and approvals, may affect the demand for our products and services, impact the competitive position of our products, or prevent us from being able to sell products in certain countries. If any new tariffs, legislation, or regulations are implemented (including those imposing economic or trade sanctions, export control restrictions or outbound investments restrictions), or if existing trade agreements are renegotiated, such changes could adversely affect our business, financial condition, and results of operations. Recently, there have been heightened tensions in international economic relations, such as that between the United States and China, but also as a result of the conflict in Ukraine and sanctions on Russia. More recently, the U.S. Department of Commerce has published interim final rules that introduce novel restrictions related to semiconductor, semiconductor manufacturing, supercomputer, and advanced computing items and end uses in China. These sanctions and export controls could adversely affect us and/or our supply chain, business partners, or customers.

The U.S. government has imposed, and has proposed to impose additional, new, or higher tariffs on certain products imported from China to penalize China for what it characterizes as unfair trade practices. China has responded by imposing, and proposing to impose additional, new, or higher tariffs on certain products imported from the United States. Following mutual retaliatory actions for months, on January 15, 2020, the United States and China entered into the Economic and Trade Agreement between the United States of America and the People's Republic of China as a phase one trade deal, effective on February 14, 2020. In addition, the U.S. government has issued new rules that expanded the definition of military end use and eliminated the applicability of certain license exceptions for exports to countries including China, thereby expanding the export license requirements for U.S. companies to sell certain items to companies in China that have operations that could support military end uses. Among other regulatory changes, the U.S. government has also expanded the controls on items manufactured outside the United States that are the direct product of certain controlled U.S.-origin technology or software to specific destinations and end-users (such as certain companies on the Entity List), and the end-use restrictions on U.S.-origin semiconductor manufacturing and advanced computing items.

In addition, political tensions between the United States and China have escalated due to, among other things, trade disputes, the COVID-19 outbreak, tensions over Taiwan, sanctions imposed by the U.S. Department of the Treasury on certain officials of the Hong Kong Special Administrative Region and the PRC central government, economic sanctions targeting Chinese Military-Industrial Complex Companies, the executive orders issued by former U.S. President Donald J. Trump in August 2020 that prohibit certain transactions with certain Chinese companies, and various restrictions related to the Chinese semiconductor industry imposed by the U.S. government. Against this backdrop, China has implemented, and may further implement, measures in response to the changing trade policies, treaties, tariffs and sanctions and restrictions against Chinese companies initiated by the U.S. government.

On September 19, 2020, the PRC Ministry of Commerce promulgated the Regulations on the List of Unreliable Entities. A working mechanism composed of certain government agencies will be established to administer the regime of the List of Unreliable Entities. A foreign entity that is designated onto the List of Unreliable Entities may be subject to several measures, including but not limited to: (i) being restricted or prohibited from engaging in import or export activities related to China; and (ii) being restricted or prohibited from investing in China. When an enterprise, organization, or individual of China must conduct business with a designated foreign entity in special circumstances, the enterprise, organization, or individual shall submit an application to the working mechanism for approval, and only when approval is granted may such enterprise, organization, or individual conduct the corresponding transaction.

On January 9, 2021, the PRC Ministry of Commerce promulgated the Rules on Counteracting Unjustified Extra-Territorial Application of Foreign Legislation and Other Measures. Pursuant to the Rules on Counteracting Unjustified Extra-Territorial Application of Foreign Legislation and Other Measures, where a citizen, legal person or other organization of China is prohibited or restricted by foreign legislation and other measures from engaging in normal economic, trade and related activities with a third nation (or region) or its citizens, legal persons or other organizations, they shall truthfully report such matters to the competent department of commerce of the State Council within 30 days. The working mechanism, with the participation of certain departments of central government authorities, will take the following factors into account when assessing whether there exists unjustified extra-territorial application of foreign legislation and other measures: (i) whether international law or the basic principles of international relations are violated; (ii) potential impact on China's national sovereignty, security and development interests; (iii) potential impact on the legitimate rights and interests of the citizens, legal persons or other organizations of China; and (iv) other factors that shall be taken into account. If it is determined that there exists unjustified extra-territorial application of foreign legislation and other measures, the PRC Ministry of Commerce may issue an injunction that the relevant foreign legislation and other measures shall not be accepted, executed, or observed. A citizen, legal person or other organization in China may apply for exemption from compliance with an injunction.

On June 10, 2021, the Standing Committee of National People's Congress passed the Countering Foreign Sanctions Law, which became effective immediately. The Countering Foreign Sanctions Law provides a legal basis not only for the Chinese government to take action in response to foreign sanctions, but also for Chinese citizens and organizations to bring civil actions for injunctive relief or damages. Under the Countering Foreign Sanctions Law, the competent department of the State Council may place any individuals and organizations that are directly or indirectly involved in making, determining, or implementing the discriminatory restrictive measures as provided therein on the Countermeasure List. A foreign individual or organization on the Countermeasure List may be subject to one or several countermeasures, including but not limited to prohibitions or restrictions on commercial transactions, cooperation or such other activities with organizations and individuals within the territory of China. Furthermore, pursuant to the Countering Foreign Sanctions Law, any organization and individual within the territory of China shall comply with the countermeasures. Any organization or individual who fails to comply or cooperate in implementing the countermeasures may be held liable in accordance with law.

There is uncertainty with respect to how the Regulations on the List of Unreliable Entities, the Rules on Counteracting Unjustified Extra-Territorial Application of Foreign Legislation and Other Measures and Countering Foreign Sanctions Law will be interpreted and implemented.

On August 9, 2023, the Biden administration issued Executive Order 14105 directing the U.S. Department of the Treasury to issue regulations to prohibit or require notification by U.S. persons of certain outbound investments to mainland China, Hong Kong and Macau, in sensitive technologies and products in the semiconductors and microelectronics, quantum information technologies, and artificial intelligence sectors that are critical to the military, intelligence, surveillance, or cyber-enabled capabilities of a country of concern to the United States. Subsequently, the U.S. Department of the Treasury issued an advance notice of proposed rulemaking to solicit feedback on certain questions on the scope of the new program to implement the executive order. Under the executive order and the advance notice, a limited set of investments will be outright prohibited and a broader range of investments will require notification to the U.S. Department of the Treasury. This new program, which complements existing U.S. legal authorities, including the review of certain transactions by the Committee on Foreign Investment in the United States, and U.S. sanctions and export control laws, will not go into effect immediately. Although the prohibited transactions are supposed to focus on products and technologies that have military, intelligence, surveillance, or cyber-enabled capabilities, given the nascent nature of the technologies at issue, drawing a distinction between purely civilian and military technology may prove challenging for investors and the U.S. government. We have seen media reports and lobbying efforts opining that LiDAR technology may pose a threat to the national security of the United States. After the release of the executive order and the advance notice, it is uncertain whether and how the U.S. government will regulate LiDAR sensors or whether any new regulations and/or limitations will be promulgated and implemented on the sourcing of LiDAR sensors from China-based entities. There could be regulatory or legislative changes targeting LiDAR sensors that have a material adverse impact on our business and operations, our ability to raise capital and the market price of our ADSs.

In addition, on March 1, 2024, the U.S. Department of Commerce published an advance notice of proposed rulemaking seeking comments on whether and how it should regulate certain transactions involving information and communications technology and services integral to “connected vehicles” designed or produced by certain foreign entities. At this point, no such rules have been proposed, but future regulatory changes in this regard could affect our ability to sell into the United States market.

Rising political tensions could reduce levels of trade, investment, technological exchange, and other economic activities between the two major economies, which would have a material adverse effect on global economic conditions and the stability of global financial markets. Any of these factors could have a material adverse effect on our, our suppliers’ and our customers’ business, prospects, financial condition, and results of operations.

As our business depends on markets and supplies located overseas, tariffs and export control measures taken by the PRC, U.S. or any other government or other trade tensions or unfavorable trade policies may affect the costs and/or marketability of our products. Currently, exports of our LiDAR products to the U.S. are subject to 25% tariffs imposed pursuant to Section 301 of Trade Act of 1974. The current international trade tensions and political tensions between the United States and China, and any escalation of such tensions, may have a material negative impact on our ability to secure the supply of raw materials and key components necessary for our operations and our ability to continue to sell to global customers and further grow our customer base. For example, while we are not currently affected by the Entity List or other U.S. export control laws or regulations in any material respect, as the Entity List and other U.S. export control laws and regulations continue to expand and evolve, future U.S. export controls may materially affect or target some of our significant suppliers or customers, in which event our business may be affected if we fail to promptly secure alternative sources of supply or demand on terms acceptable to us. Our business, financial condition, and results of operations may be significantly affected by the continued international trade and political tensions.

We have been added to the list of Chinese companies with alleged ties to the Chinese military issued by the U.S. government agencies and our business and results of operations may be affected.

On January 31, 2024, the U.S. Department of Defense released an update to its list of “Chinese military companies” that are “operating directly or indirectly in the United States” in accordance with Section 1260H of the National Defense Authorization Act for Fiscal Year 2021, and we were one of the entities added to that list. We believe our inclusion in this list is unjust and are actively challenging it through legal channels. Effective June 30, 2026, entities on this list and their controlled affiliates will be prohibited from entering into contracts with the U.S. Department of Defense for the procurement of goods, services, or technology, and effective June 30, 2027, the U.S. Department of Defense will be prohibited from purchasing goods or services produced or developed by entities on the list indirectly through third parties. In addition, entities on the list and their subsidiaries are prohibited from receiving contracts or other funding from the U.S. Department of Homeland Security. While the legal impact of being included in the list is relatively limited, such inclusion has had and may continue to have a material adverse effect on our reputation, the market price of our ADSs and our business opportunities. If we were included on a more restrictive sanctions list imposed by the U.S. government in the future, our ability to conduct business with U.S. companies could be further affected, which may have a material adverse effect on our business and results of operations.

We operate in highly competitive markets and some market participants have substantially greater resources. We compete against a large number of both established competitors and new market entrants.

The markets for sensing technology applicable to autonomous solutions in the automobile and Robotics industries are highly competitive. Our future success will depend on our ability to remain a leader in our targeted markets by continuing to develop and protect from infringement advanced LiDAR technology in a timely manner and to stay ahead of existing and new competitors. Our competitors are numerous and they compete with us directly by offering LiDAR products and indirectly by attempting to solve some of the same challenges with different technologies. We face competition from camera and radar companies, other developers of LiDAR products, and other technology and automotive and Robotics supply companies, some of which have significantly greater resources than we do. In the automotive market, our competitors have commercialized both LiDAR- and non-LiDAR-incorporated ADAS technology that has achieved market adoption, strong brand recognition and may continue to improve. Other competitors are working towards commercializing Autonomous Mobility technology and either by themselves, or with a partner, have substantial financial, marketing, distribution, R&D and other resources. Some of our customers in the ADAS and Autonomous Mobility markets have announced development efforts or made acquisitions directed at creating their own LiDAR-incorporated or other sensing technologies, which would compete with our solutions, although we do not know how close these competitors are to commercializing novel ADAS applications or Autonomous Mobility systems. In markets outside of the automotive industry, such as the Robotics industry, our competitors, like us, seek to develop new sensing applications. Even in these emerging markets, we face substantial competition from numerous competitors seeking to prove the value of their technology.

Additionally, increased competition may result in pricing pressure and reduced margins and may impede our ability to increase the sales of our products or cause us to lose market share, any of which will adversely affect our business, results of operations and financial condition.

Although we believe that LiDAR is the industry standard for ADAS, Autonomous Mobility and certain other emerging markets, market adoption of LiDAR is uncertain. If market adoption of LiDAR does not continue to develop, or develops more slowly than we expect, our business will be adversely affected.

While our LiDAR products can be applied to different uses across end markets, a substantial part of our revenues are generated from automotive applications. Despite the fact that the automotive industry has engaged in considerable effort to research and test LiDAR products for ADAS and Autonomous Mobility applications, the automotive industry may not introduce LiDAR products in commercially available vehicles or do so on a large scale. We continually study emerging and competing sensing technologies and methodologies and we may add new sensing technologies. However, LiDAR products remain relatively new and it is possible that other sensing modalities, or a new disruptive modality based on new or existing technology, including a combination of technologies, will achieve acceptance or leadership in the ADAS and Autonomous Mobility industries. Even if LiDAR products are used in initial generations of certain ADAS products and Autonomous Mobility technology, we cannot guarantee that LiDAR products will be designed into or included in subsequent generations of such commercialized technology. In addition, we expect that initial generations of autonomous vehicles will be focused on limited applications, such as robotaxis, and that mass market adoption of autonomous technology may lag behind these initial applications significantly. The speed of market growth for ADAS or Autonomous Mobility is difficult if not impossible to predict.

Although we currently believe we are a leader in LiDAR-incorporated systems for the autonomous vehicle market, by the time mass market adoption of autonomous vehicle technology is achieved, we expect competition among providers of sensing technology based on LiDAR and other modalities to increase substantially. If commercialization of LiDAR products is not successful, or not as successful as we or the market expects, or if other sensing modalities gain acceptance by developers of ADAS or Autonomous Mobility systems, automotive OEMs, regulators and safety organizations or other market participants by the time autonomous vehicle technology achieves mass market adoption, our business, results of operations and financial condition will be materially and adversely affected.

We are investing in and pursuing market opportunities outside of the automotive markets, including in the Robotics sector. We believe that our future revenue growth, if any, will depend in part on our ability to expand within new markets such as Robotics and to enter new markets as they emerge. Each of these markets presents distinct risks and, in many cases, requires us to address the particular requirements of that market.

Addressing these requirements can be time-consuming and costly. The market for LiDAR technology outside of automotive applications is relatively new, rapidly developing and unproven in many markets or industries. Some of our customers outside of the automotive industry are still in the testing and development phases and we cannot be certain that they will commercialize products or systems with our LiDAR products or at all. We cannot be certain that LiDAR will be sold into these markets, or any market outside of the automotive market, at scale. Adoption of LiDAR products, including our products, outside of the automotive industry will depend on numerous factors, including: whether the technological capabilities of LiDAR and LiDAR-incorporated products meet users' current or anticipated needs, whether the benefits of designing LiDAR into larger sensing systems outweigh the costs, complexity and time needed to deploy such technology or replace or modify existing systems that may have used other modalities such as cameras and radar, whether users in other applications can move beyond the testing and development phases and proceed to commercializing systems supported by LiDAR technology and whether LiDAR developers such as us can keep pace with rapid technological change in certain developing markets. If LiDAR technology does not achieve commercial success outside of the automotive industry, or if the market develops at a pace slower than we expect, our business, results of operation and financial condition will be materially and adversely affected.

We continue to implement strategic initiatives designed to grow our business, including developing new technologies and products, but our choices of technologies and products to focus on may prove incorrect, and our initiatives may not succeed.

We continue to make investments and implement initiatives designed to grow our business. In particular, we have formulated plans to focus our R&D efforts on certain new technologies and products which we believe will be essential to our future growth. For example, for the ADAS market, we are seeking to pack more laser/detector channels in the AT series at lower cost. Similar upgrades may happen to other product lines to enhance performance while lowering the cost. However, as the LiDAR markets are new and rapidly evolving and we have a short operating history and limited experience, we cannot assure you that our choices of technologies and products to focus on will prove correct. In the event that our new technologies and products fail to be adopted by the market, our business prospects and financial condition could be materially and adversely affected.

In addition, our strategic initiatives may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenues, if at all, in an amount sufficient to offset these higher expenses and to achieve and maintain profitability. The market opportunities we are pursuing are at an early stage of development, and it is difficult to predict the size and growth rate of our target markets, customer demand for our products, commercialization timelines, developments in autonomous sensing and related technology, the entry of competitive products, or the success of existing competitive products and services. If our revenues do not grow over the long term, our ability to achieve and maintain profitability may be adversely affected, and the value of our business may significantly decrease.

We are susceptible to supply shortages, long lead times for components, and supply changes, any of which could disrupt our supply chain and could delay deliveries of our products to customers.

Some of the components that go into the manufacture of our LiDAR products are sourced from third-party suppliers. Our future success will depend in part on our ability to manage our supply chain to manufacture and deliver our products at scale. We are dependent on certain major suppliers. A certain supplier accounted for more than 10% of our purchases of raw materials and consumable items for each of 2021 and 2022. No supplier accounted for more than 10% of our purchases for 2023. We are subject to the risk of shortages and long lead times in the supply of components that come from limited or single source suppliers and the risk that our suppliers discontinue or modify components used in our products. For example, our products depend on lasers and we currently consume a substantial portion of the available market. Any shortage of these lasers could materially and adversely affect our ability to manufacture our LiDAR products. In addition, the lead times associated with certain components are lengthy and preclude rapid changes in quantities and delivery schedules. We have in the past experienced and may in the future experience component shortages and price fluctuations of certain key components and materials, and the predictability of the availability and pricing of these components may be limited. Component shortages or pricing fluctuations could be material in the future. In the event of a component shortage, supply interruption or material pricing change from suppliers of these components, we may not be able to develop alternative sources in a timely manner or at all in the case of sole or limited sources. Developing alternative sources of supply for these components may be time-consuming, difficult, and costly and we may not be able to source these components on terms that are acceptable to us, or at all, which may undermine our ability to meet our requirements or to fill customer orders in a timely manner. Any interruption or delay in the supply of any of these parts or components, or the inability to obtain these parts or components from alternative sources at acceptable prices and within a reasonable amount of time, would adversely affect our ability to meet our scheduled product deliveries to our customers. This could adversely affect our relationships with our customers and channel partners and could cause delays in shipment of our products and adversely affect our operating results. In addition, increased component costs could result in lower gross margins. Even where we are able to pass increased component costs along to our customers, there may be a lapse of time before we are able to do so such that we must absorb the increased cost. If we are unable to buy these components in quantities sufficient to meet our requirements on a timely basis, we will not be able to deliver products to our customers, which may result in such customers using competitive products instead of ours.

Currently, we remain dependent on third-party chips for our LiDAR products. We have and will monitor the availability of our chip supplies, including automotive grade receivers and field-programmable gate array chips. However, if we are not able to mitigate the impact of any future chip shortage, our business operation and financial performance could be negatively affected as a result. We may not be able to obtain adequate supplies of chips on commercially acceptable terms or at all, and as a result we may fail to fulfill our customers' orders. Any failure to fulfill our customers' orders could cause us to record lower sales and lose customers. We may also need to increase the prices of our products in response to the higher chip costs, which could have a negative impact on our competitiveness.

We may be unable to adequately control the costs associated with our operations.

We have devoted significant capital to developing and growing our business, including developing and manufacturing our LiDAR products, our in-house vertical integration technology, purchasing equipment, constructing our manufacturing facilities, procuring required raw materials, and building our sales and servicing infrastructure. We expect to further incur significant costs that will impact our profitability, including R&D expenses as we roll out new LiDAR and vertically integrated models and improve existing models, expenditures in the expansion of our manufacturing capacities, additional operating costs and expenses for production ramp-up, raw material and key component procurement costs, and selling and distribution expenses as we build our brand and market our products. In particular, the prices for raw materials and components fluctuate upon factors beyond our control, and could adversely affect our business and results of operations. Substantial increases in the prices for key raw materials or components such as automotive grade chips would increase our cost of revenues and our operating expenses, and could reduce our margins. Furthermore, currency fluctuations, tariffs and other economic or political conditions may result in significant increases in freight charges and raw material costs. In addition, we may lose control over the increase of costs in connection with our services including after-sale services. Our ability to become profitable in the future will not only depend on our ability to successfully market our LiDAR products and other products and services but also our ability to control our costs. If we are unable to design, develop, manufacture, market, sell, and service our products and provide services in a cost-efficient manner, our margins, profitability, and prospects would be materially and adversely affected.

We expect to incur substantial R&D costs and devote significant resources to identifying and commercializing new products, which could significantly reduce our profitability and may never result in revenues to us.

Our future growth depends on penetrating new markets, adapting existing products to new applications and customer requirements, and introducing new products that achieve market acceptance. We plan to incur substantial, and potentially increasing, R&D costs as part of our efforts to design, develop, manufacture and commercialize new products and enhance existing products. Our R&D expenses were RMB368.4 million, RMB555.2 million and RMB790.5 million (US\$111.3 million) for the years ended December 31, 2021, 2022 and 2023, respectively, and are likely to grow in the future. Because we account for R&D as an operating expense, these expenditures will adversely affect our results of operations in the future.

Further, our R&D program may not produce successful results, and our new products may not achieve market acceptance, create additional revenues or become profitable.

The markets in which we compete are characterized by rapid technological change, which requires us to continue to develop new products and product innovations and could adversely affect market adoption of our products.

While we intend to invest substantial resources to remain on the forefront of technological development, continuing technological changes in sensing technology, LiDAR and the markets for these products, including the ADAS, Autonomous Mobility and Robotics industries, could adversely affect adoption of LiDAR and/or our products, either generally or for particular applications. Our future success will depend upon our ability to develop and introduce a variety of new capabilities and innovations to our existing product offerings, as well as introduce a variety of new product offerings, to address the changing needs of the markets in which we offer our products. For example, we cannot guarantee that the new products we are currently working on will be released in a timely manner, or at all, or will achieve market acceptance. Delays in delivering new products that meet customer requirements could damage our relationships with customers and lead them to seek alternative sources of supply. In addition, our success to date has been based on the delivery of our products to R&D programs in which developers are investing substantial capital to develop new systems. Our continued success relies on the success of the R&D phase of these customers as they expand into commercialized projects. As autonomous technology reaches the stage of large-scale commercialization, we will be required to develop and deliver solutions at price points that enable wider and ultimately mass-market adoption. Delays in introducing products and innovations, failures in choosing correctly among technical alternatives, or failures in offering innovative products or configurations at competitive prices may cause existing and potential customers to purchase our competitors' products or turn to alternative sensing technology.

If we are unable to devote adequate resources to developing products or cannot otherwise successfully develop products or system configurations that meet customer requirements on a timely basis or that remain competitive with technological alternatives, our products could lose market share, our revenues will decline, we may experience operating losses and our business and prospects will be adversely affected.

We may experience difficulties in managing our growth and expanding our operations.

We have expanded our operations, and as we ramp up our development, production and sales, significant expansion will be required. Our future operating results depend to a large extent on our ability to manage this expansion and growth successfully. Risks that we face in undertaking this expansion include, among others:

- managing our supply chain to support fast business growth;
- managing a larger organization with a greater number of employees in different divisions;
- controlling expenses and investments in anticipation of expanded operations;
- establishing or expanding new product development, manufacturing, sales, and service facilities;
- implementing and enhancing administrative infrastructure, systems, and processes;
- improving our operational, financial and management controls, compliance programs and reporting systems; and
- addressing new markets and potentially unforeseen challenges as they arise.

Any failure to manage our growth effectively could materially and adversely affect our business, financial condition, results of operations, and prospects.

Continued pricing pressures may result in lower than anticipated margins, or losses, which may adversely affect our business.

Cost-cutting initiatives adopted by our customers often result in increased downward pressure on pricing. In addition, many of our customers, particularly automotive OEMs, possess significant leverage over their suppliers, including us, because they are large multinational companies with substantial negotiating power and the automotive component supply industry is inherently highly competitive, serves a limited number of customers and has a high fixed cost base. The growing competition among both established players and new market entrants in the industry further exacerbates the pricing pressures we face.

Accordingly, we expect to be subject to substantial continuing pressure from automotive OEMs and other major customers to reduce the price of our products. It is possible that pricing pressures beyond our expectations could intensify as customers including automotive OEMs pursue restructuring, consolidation and cost-cutting initiatives. The change in the pricing and mix of our products, including the launch of new products with lower selling prices, may negatively affect our cost structure and overall margin profile. Our cost structure may be further affected by the underutilization of our manufacturing facilities as we ramp up the production process, and the fluctuating demand for and sales of our products, which are beyond our control. If we are unable to generate sufficient production cost savings in the future to offset price reductions, our gross margin and profitability would be adversely affected.

The PCAOB had historically been unable to inspect our auditor in relation to their audit work.

Our auditor, the independent registered public accounting firm that issues the audit report included elsewhere in this annual report, as an auditor of companies that are traded publicly in the United States and a firm registered with the PCAOB, is subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with the applicable professional standards. The auditor is located in mainland China, a jurisdiction where the PCAOB was historically unable to conduct inspections and investigations completely before 2022. The inability of the PCAOB to conduct inspections of auditors in China in the past has made it more difficult to evaluate the effectiveness of our independent registered public accounting firm's audit procedures or quality control procedures as compared to auditors outside of China that are subject to the PCAOB inspections. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determination and removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. However, if the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong, and we use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the SEC, we and investors in our ADSs would be deprived of the benefits of such PCAOB inspections, which could cause investors and potential investors in the ADSs to lose confidence in our audit procedures and reported financial information and the quality of our financial statements.

Our ADSs may be prohibited from trading in the United States under the HFCAA in the future if the PCAOB is unable to inspect or investigate completely auditors located in China. The delisting of the ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

Pursuant to the HFCAA, if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspections by the PCAOB for two consecutive years, the SEC will prohibit our shares or ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States.

On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong and our auditor was subject to that determination. On December 15, 2022, the PCAOB removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. On December 29, 2022, the Consolidated Appropriations Act, 2023 was signed into law, which amended the HFCAA (i) to reduce the number of consecutive non-inspection years required for triggering the prohibitions under the HFCAA from three years to two, and (ii) so that any foreign jurisdiction could be the reason why the PCAOB does not have complete access to inspect or investigate a company's auditors. As it was originally enacted, the HFCAA applied only if the PCAOB's inability to inspect or investigate because of a position taken by an authority in the foreign jurisdiction where the relevant public accounting firm is located. As a result of the Consolidated Appropriations Act, 2023, the HFCAA now also applies if the PCAOB's inability to inspect or investigate the relevant accounting firm is due to a position taken by an authority in any foreign jurisdiction. The denying jurisdiction does not need to be where the accounting firm is located. We were not identified as a Commission-Identified Issuer under the HFCAA after we filed our annual report on Form 20-F for the fiscal year ended December 31, 2022 and do not expect to be so identified after we file this annual report on Form 20-F for the fiscal year ended December 31, 2023.

Each year, the PCAOB will determine whether it can inspect and investigate completely audit firms in mainland China and Hong Kong, among other jurisdictions. If the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong and we use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the SEC, we would be identified as a Commission-Identified Issuer following the filing of the annual report on Form 20-F for the relevant fiscal year. In accordance with the HFCAA, our securities would be prohibited from being traded on a national securities exchange or in the over-the-counter trading market in the United States if we are identified as a Commission-Identified Issuer for two consecutive years in the future. If our shares and ADSs are prohibited from trading in the United States, there is no certainty that we will be able to list on a non-U.S. exchange or that a market for our shares will develop outside of the United States. A prohibition of being able to trade in the United States would substantially impair your ability to sell or purchase our ADSs when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of our ADSs. Also, such a prohibition would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would have a material adverse impact on our business, financial condition, and prospects.

Our international operations require us to comply with trade restrictions, such as economic sanctions and export controls.

We are subject to trade restrictions, including economic sanctions and export controls, such as those administered and enforced by the Ministry of Foreign Affairs of the People's Republic of China, the U.S. Department of the Treasury's Office of Foreign Assets Control, the U.S. Department of State, the U.S. Department of Commerce, the United Nations Security Council and other relevant authorities. Our global operations expose us to the risk of violating, or being accused of violating economic and trade sanctions and export control laws and regulations. Despite our compliance efforts and activities, there is no assurance that such efforts and activities are effective and we cannot assure compliance by our employees or representatives for which we may be held responsible. Our failure to comply with these laws and regulations may expose us to reputational harm as well as significant penalties, including criminal fines, imprisonment, civil fines, disgorgement of profits, injunctions and other remedial measures. Investigations of alleged violations can be expensive and disruptive. Any such violation could materially adversely affect our reputation, business, financial condition and results of operations.

Fluctuations in exchange rates could have a material and adverse effect on our results of operations and the value of your investment.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. The value of Renminbi against the U.S. dollar and other currencies is affected by changes in global and geographical political and economic conditions, supply and demand in the monetary markets, and economic and political developments domestically and internationally, among other things. We cannot assure you that Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how external factors in respect of markets or policies may impact the exchange rate between Renminbi and the U.S. dollar in the future.

With the development of the foreign exchange market and progress towards interest rate liberalization and Renminbi internationalization, the mainland China government may adopt a more flexible currency policy in the future, and the Renminbi may appreciate or depreciate significantly against the U.S. dollar. Any significant appreciation or depreciation of Renminbi may materially and adversely affect our revenues, earnings and financial position, and the value of, and any dividends payable on, our ADSs in U.S. dollars. As a significant portion of our cash and cash equivalents and short-term investments are denominated in U.S. dollars, fluctuations in exchange rates between Renminbi and U.S. dollars may result in foreign exchange gains or losses. Furthermore, to the extent that we need to convert U.S. dollars into Renminbi to pay our operating expenses, appreciation of Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive from the conversion. Conversely, a significant depreciation of Renminbi against the U.S. dollar may significantly reduce the U.S. dollar equivalent of our earnings, which in turn could adversely affect the price of our ADSs.

Limited hedging options are available in mainland China to reduce our exposure to exchange rate fluctuations. As of the date of this annual report, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedges may be limited and we may not be able to adequately hedge our exposure or at all. In addition, our currency exchange losses may be magnified by mainland China foreign exchange regulations that restrict our ability to convert Renminbi into foreign currency. As a result, fluctuations in exchange rates may have a material adverse effect on your investment.

Changes in PRC government policies relevant to us or our customers could materially and adversely affect our business, financial condition, results of operations, and prospects.

The growth of our business benefits from PRC government policies at central and local levels. Such policies include not only those relevant to us, such as the preferential tax policy for “high and new technology enterprises,” but also those that support the development of new energy vehicles and domestically manufactured vehicles, which apply to many of our domestic automotive customers. Adverse changes in these PRC government policies may materially affect our business, financial condition, results of operations, and prospects.

Under the PRC Enterprise Income Tax Law and its implementation rules, the statutory enterprise income tax rate is 25%, but certain “high and new technology enterprises” are qualified for a preferential enterprise income tax rate subject to certain qualification criteria. A “high and new technology enterprise,” which qualification is reassessed every three years, is entitled to a favorable income tax rate of 15%. Shanghai Hesai obtained the high and new technology enterprise accreditation in 2019, which qualification was renewed in 2022 for another three years, and currently enjoys the preferential tax treatment. However, Shanghai Hesai may fail to renew its status as a high and new technology enterprise when such qualification expires in 2025. In addition, the government authorities may decide to cancel or modify such preferential treatment for high and new technology enterprises in the future. Therefore, we cannot assure you of the continued availability of such tax preference which we currently enjoy. In the event that Shanghai Hesai fails to maintain its qualified status, experiences any increase in the enterprise income tax rate, or faces any discontinuation, reduction, refund or repayment of any of the preferential tax treatments currently or previously enjoyed, our business, financial condition and results of operations could be materially and adversely affected.

Many of our customers in China focus on the development and production of new energy vehicles and have been entitled to certain government incentives or subsidies. For example, producers of extended-range electric vehicles enjoy certain favorable government incentives and subsidies, including exemption from vehicle purchase tax, one-time government subsidies, exemption from license plate restrictions in certain cities, exemption from driving restrictions in certain cities, and preferential utility rates for charging facilities. However, China’s central and local governments have begun to phase out such incentives and subsidies. Any reduction or elimination of government subsidies and economic incentives or different application of government subsidies and economic incentives on different companies because of policy changes, the reduced need for such subsidies and incentives due to the perceived success of new energy vehicles fiscal tightening or other factors may affect government incentives or subsidies and result in diminished competitiveness of the new energy vehicle industry generally. The business of our Chinese new energy vehicle customers may suffer as a result, which in turn may have a material and negative impact on us as a LiDAR supplier.

If we fail to obtain and maintain the requisite licenses, permits, registrations and filings applicable to our business, or fail to obtain additional licenses, permits, registrations or filings that become necessary as a result of new enactment or promulgation of government policies, laws or regulations or the expansion of our business, our business and results of operations may be materially and adversely affected.

Under mainland China laws and regulations, we are required to obtain or complete a number of licenses, approvals, registrations, filings and other permissions for our operation, including without limitation, the recordation certificate of declaration units or consignor record return receipt for our import and export business, the fixed source discharge registration return receipt for the pollutant emissions from our production process, the permit for discharging sewage into the drainage pipelines, the type approval certificate for radio transmitting equipment and record-filing of sale of radio transmitting equipment for certain of our products. As of December 31, 2023, we had obtained all the required permissions that are material to our current operation. As a fast-growing company that is continually exploring new approaches to conduct our business and capture growth opportunities, we may become subject to additional license, approval and other requirements as we develop and expand our business scope and engage in different business activities. We may fail to meet such requirements timely or at all, in which case we may be subject to administrative penalties and our ability to expand our business and sustain our growth may be materially affected.

In addition, certain licenses, permits or registrations we hold are subject to periodic renewal. If we fail to maintain or renew one or more of our licenses and certificates when their current term expires, or obtain such renewals on a timely manner, our operations could be disrupted. Furthermore, mainland China laws and regulations are statute-based and, similar to other civil law jurisdictions, the interpretation and enforcement of statutory laws and regulations involve inherent uncertainties, and additional laws and regulations may be adopted from time to time in the future. Therefore, the licenses, permits, registrations or filings we hold may be deemed insufficient by government authorities, which may restrain our ability to expand our business scope and may subject us to fines or other regulatory actions. If any of these risks materializes, our business and results of operations may be materially and adversely affected.

The expansion of our manufacturing facilities may be subject to delays, disruptions, cost overruns, or may not produce expected benefits.

We have continually expanded our manufacturing facilities in recent years. Hertz Center, our main manufacturing facility located in Hangzhou, achieved mass production in September 2023. In addition, Maxwell Center, our new research and development and intelligent manufacturing center in Jiading, Shanghai, has been in trial operation since December 2023. We may continue to expand our manufacturing facilities. Our expansion plans could experience delays or other difficulties, and will require significant capital. Any failure to complete the expansion on schedule and within budget could adversely affect our financial condition, manufacturing capability, and results of operations.

Under mainland China laws, construction projects are subject to broad and strict government supervision and approval procedures, including but not limited to project approvals and filings, construction land and project planning approvals, construction permits, occupational disease control approvals, environment protection approvals, the pollution discharge permits, drainage license, work safety approvals, fire protection approvals, and the completion of inspection and acceptance by authorities. We received the material regulatory approvals needed at current stage for the expansion projects of Maxwell Center and Hertz Center. To the extent additional approvals or permits are needed for our future construction work and we fail to secure such approvals or permits, our expansion plan may be disrupted or discontinued. In addition, any potential violation of laws and regulations related to construction may subject us to fines, suspension of construction, and other administrative penalties. Any of the foregoing could materially and adversely affect our business operations.

If we fail to comply with environmental protection, fire protection, drainage or health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental protection, fire protection, drainage or health and safety laws and regulations, including but not limited to those governing the emission of hazardous gas, the use of radioisotopes and radiation-emitting devices, the handling, use, storage, treatment and disposal of hazardous materials, drainage and wastes discharge of fixed pollution sources. We have been compliant with such laws and regulations in all material aspects. However, the cost of compliance with such laws and regulations is substantial. In addition, as we continue to expand our manufacturing facilities and capabilities, we cannot assure you that there will not be violations or suspected violations in our facilities that result in us becoming subject to governmental investigations or penalties, which may include cessation of operation, fines, and confiscation of illegal gains. Furthermore, although we believe we take adequate precautions in compliance with regulations with respect to the hazardous gas generated from the welding activities in our manufacturing facilities, we cannot eliminate the risk of such hazardous gas having a negative impact on the health of our employees at the facilities. Any potential failure to comply with environmental, fire protection, drainage or health and safety laws and regulations and/or failure to adequately protect the health of our employees could have a material adverse impact on our business operations and financial performance.

Our leased property interests and title to certain land and buildings we own may be defective and our right to lease and use the properties may be challenged, or we may fail to extend or renew our current leases or locate desirable alternatives for our facilities on commercially acceptable terms, which could materially and adversely affect our business.

We presently lease several premises in China. Some of the lessors of these leases have not provided us with sufficient documents to prove their ownership of the premises or their rights to lease the premises to us for our intended use. Therefore, we cannot assure you that such lessors are entitled to lease certain real properties to us. If the lessors are not entitled to lease the real properties to us and the owners of such real properties decline to ratify the lease agreements between us and the respective lessors, we may not be able to enforce our rights to lease such properties under the respective lease agreements against the owners. If our lease agreements are claimed as null and void by third parties who are the real owners of such leased real properties, we could be required to vacate the properties and have limited recourse. Furthermore, under mainland China laws, all lease agreements are required to be registered with the local housing authorities. Currently our lease agreements have not been registered with the authorities. Failure to complete these required registrations may expose us to potential monetary fines. In addition, some of our leased properties were subject to mortgage when we entered into our lease agreements. If the ownership of such properties changes as a result of foreclosure, we may not be able to enforce our rights to the leased properties under the respective lease agreements against the mortgagees.

When our current leases expire, we may fail to extend or renew our leases for reasons such as unavailability of the premises for a new lease term or substantially higher rent demanded by the owners. We cannot assure you that suitable alternative locations will be readily available on commercially reasonable terms, or at all, and if we are unable to relocate our operations in a timely manner, our operations may be adversely affected.

In addition, our use of the land and buildings we lease or own may not be consistent with their approved usage, and some approvals, licenses and permits may not have been obtained for the construction and continuous use of such buildings. We cannot assure you that we will be able to successfully remedy the defects or obtain all the requisite approvals, licenses or permits. Failure to do so could disrupt our operations and result in significant relocation expenses, which could adversely affect our business, financial condition and results of operations.

We and our suppliers may rely on complex machinery for our production, which involves a significant degree of risk and uncertainty in terms of operational performance and costs.

We, our manufacturing partners and our suppliers may rely on complex machinery for the production, assembly and installation of our LiDAR products, which will involve a significant degree of uncertainty and risk in terms of operational performance and costs. Our production facilities and the facilities of our manufacturing partners and suppliers consist of large-scale machinery combining many components. These components may suffer unexpected malfunctions from time to time and will depend on repairs and spare parts to resume operations, which may not be available when needed. Unexpected malfunctions of these components may significantly affect the intended operational efficiency. Operational performance and costs can be difficult to predict and are often influenced by factors outside of our control, such as, but not limited to, scarcity of natural resources, environmental hazards and remediation, costs associated with decommissioning of machines, labor disputes and strikes, difficulty or delays in obtaining governmental permits, damages or defects in electronic systems, industrial accidents, fire, seismic activity and natural disasters. Should operational risks materialize, they may result in the personal injury or death of workers, the loss of production equipment, damage to production facilities, monetary losses, delays and unanticipated fluctuations in production, environmental damage, administrative fines, increased insurance costs and potential legal liabilities, all of which could have a material adverse effect on our business, prospects, financial condition or operating results.

Our sales and operations in international markets outside of China expose us to operational, financial and regulatory risks.

International sales beyond China comprise a substantial amount of our overall revenues. Sales to international customers accounted for 51.0%, 42.0% and 47.2% of our revenues in 2021, 2022 and 2023, respectively. We are committed to growing our international sales. While we have committed resources, and are working closely with OEMs and other collaborators outside China, to expand our international operations and sales channels, these efforts may not be successful. International operations are subject to a number of other risks, including:

- exchange rate fluctuations;
- political and economic instability, international terrorism and conflicts;
- global or regional health crises, such as health epidemics and outbreaks;
- potential for violations of anti-corruption laws and regulations, such as those related to bribery and fraud;
- preference for locally branded products, and laws and business practices favoring local competition;
- increased difficulty in managing inventory;
- delayed revenue recognition;
- less effective protection of intellectual property;
- stringent regulation of the autonomous or other systems or products using our products and stringent consumer protection and product compliance regulations;
- difficulties and costs of staffing and managing foreign operations;
- import and export laws and the impact of tariffs; and
- changes in local tax and customs duty laws or changes in the enforcement, application or interpretation of such laws.

The occurrence of any of these risks could negatively affect our international business and consequently our business, operating results and financial condition.

We may be subject to product liability or warranty claims that could result in significant direct or indirect costs, which could adversely affect our business and operating results.

Our customers use our products in ADAS and Autonomous Mobility applications, which present the risk of significant injury, including fatalities. We may be subject to claims if a product using our LiDAR technology is involved in an accident and persons are injured or purport to be injured. Similarly, our customers could be subjected to claims as a result of such accidents and bring legal claims against us to attempt to hold us liable. In addition, if lawmakers or governmental agencies were to determine that the use of our products or certain ADAS applications or Autonomous Mobility increased the risk of injury to all or a subset of our customers, they may pass laws or adopt regulations that limit the use of our products or increase our liability associated with the use of our products or that regulate the use of or delay the deployment of ADAS and Autonomous Mobility technology. Any of these events could adversely affect our brand, relationships with customers, operating results or financial condition.

We offer a standard limited-time warranty on our products. The occurrence of any material defects in our products could make us liable for damages and warranty claims. Although we currently maintain product liability insurance, the coverage limits of these policies may not be adequate to cover future claims. In the future, we may be unable to maintain product liability insurance on acceptable terms or at reasonable costs and such insurance may not provide us with adequate coverage against potential liabilities. In addition, we could incur significant costs to correct any defects, warranty claims or other problems, including costs related to product recalls. Any negative publicity related to the perceived quality of our products could affect our brand image, partner and customer demand, and adversely affect our operating results and financial condition. Also, warranty, recall and product liability claims may result in litigation, including class actions, the occurrence of which could be costly, lengthy and distracting and adversely affect our business and operating results.

If we do not maintain sufficient inventory or if we do not adequately manage our inventory, we could lose sales or incur higher inventory-related expenses, which could negatively affect our operating results.

To ensure adequate inventory supply, we must forecast inventory needs and expenses, place orders sufficiently in advance with our suppliers and manufacturing partners and manufacture products based on our estimates of future demand for particular products. Fluctuations in the adoption of LiDAR products may affect our ability to forecast our future operating results, including revenues, gross margins, cash flows and profitability. Our ability to accurately forecast demand for our products could be affected by many factors, including the rapidly changing nature of the ADAS and Autonomous Mobility markets in which we operate, the uncertainty surrounding the market acceptance and commercialization of LiDAR technology, the emergence of new markets, an increase or decrease in customer demand for our products or for products and services of our competitors, product introductions by competitors, health epidemics and outbreaks, and any associated work stoppages or interruptions, unanticipated changes in general market conditions and the weakening of economic conditions or consumer confidence in future economic conditions. As our LiDAR products become or continue to be commercialized in ADAS and Autonomous Mobility applications, both of which are experiencing rapid growth in demand, we may face challenges in acquiring adequate supplies to manufacture our products and we and our manufacturing partners may not be able to manufacture our products at a rate necessary to satisfy the levels of demand, which would negatively affect our revenues. This risk may be exacerbated by the fact that we may not carry or be able to obtain for our manufacturers a significant amount of inventory to satisfy short-term demand increases. If we fail to accurately forecast customer demand, we may experience excess inventory levels or a shortage of products available for sale.

Inventory levels in excess of customer demand may result in inventory write-downs or write-offs and the sale of excess inventory at discounted prices, which would adversely affect our financial results, including our gross margin, and have a negative effect on our brand. Conversely, if we underestimate customer demand for our products, we, or our manufacturing partners, may not be able to deliver products to meet our requirements, and this could result in damage to our brand and customer relationships and adversely affect our revenues and operating results.

Our business plans require a significant amount of capital. In addition, our future capital needs may require us to issue additional equity or debt securities that may dilute our shareholders or introduce covenants that may restrict our operations or our ability to pay dividends.

We will need significant capital to, among other things, conduct R&D, expand our manufacturing capability, and increase our sales and marketing efforts. As we ramp up our manufacturing capability and operations, we may also require significant capital to maintain our property, plant, and equipment and such costs may be greater than what we currently anticipate. We expect that our level of capital expenditures will be significantly affected by customer demand for our products and services. The fact that we have a limited operating history means we have limited historical data on the demand for our products and services. As a result, our future capital requirements may be uncertain and actual capital requirements may be different from what we currently anticipate. We may seek equity or debt financing to finance a portion of our capital expenditures. Such financing might not be available to us in a timely manner or on terms that are acceptable to us, or at all. If we cannot obtain sufficient capital on acceptable terms, our business, financial condition, and prospects may be materially and adversely affected.

Our ability to obtain the necessary financing to carry out our business plan is subject to a number of factors, including general market conditions and investor acceptance of our business plan. These factors may make the timing, amount, terms and conditions of such financing unattractive or unavailable to us. If we are unable to raise sufficient funds, we will have to significantly reduce our spending, delay or cancel our planned activities, or substantially change our corporate structure. We might not be able to obtain any funding or service any of the debts we incurred, and we might not have sufficient resources to conduct our business as projected, either of which could mean that we would be forced to curtail or discontinue our operations.

In addition, our future capital needs could require us to issue additional equity or debt securities or obtain a credit facility. The issuance of additional equity or equity-linked securities could dilute our shareholders. On November 18, 2022, we entered into an agreement with a commercial bank in China for a credit facility of RMB700 million (US\$98.6 million), which will be available in full until December 4, 2024, for the purchasing of property and equipment related to Maxwell Center. The credit facility is secured by the land-use rights of Maxwell Center, including any ongoing and completed constructions thereon. The incurrence of indebtedness would result in an increase in debt service obligations and could result in operating and financing covenants that would restrict our operations or our ability to pay dividends to our shareholders and/or disruptions to our operations as a result of certain lenders' enforcement of mortgages or other security interests on our properties.

Our future growth depends on the successful commercialization of ADAS, Autonomous Mobility and Robotics technologies and products, which may not materialize.

Our LiDAR products serve primarily the ADAS, Autonomous Mobility and Robotics fields, all of which are new and evolving. While we have seen and continue to see rapid and substantial progress made in these fields, how they will continue to evolve, particularly whether and how ADAS, Autonomous Mobility and Robotics technologies and products can be successfully commercialized, remains largely uncertain. Various factors such as technological development, manufacturing costs, market acceptance, regulatory environment, and general economic conditions can affect the future of these new and evolving fields. In the event that any of ADAS, Autonomous Mobility and Robotics fails to develop and mature as expected, and we fail to find additional commercial applications for our LiDAR products, the potential markets for our products could be significantly reduced and our business and prospects may suffer as a result.

Adverse conditions in the automotive industry or the global economy more generally could have adverse effects on our results of operations.

While we make our strategic planning decisions based on the assumption that the markets we are targeting will grow, our business is dependent, in large part on, and directly affected by, business cycles and other factors affecting the global automobile industry and global economy generally. Automotive production and sales are highly cyclical and depend on general economic conditions and other factors, including consumer spending and preferences, changes in interest rates and credit availability, consumer confidence, fuel costs, fuel availability, environmental impact, governmental incentives and regulatory requirements, and political volatility, especially in energy-producing countries and growth markets. For example, the U.S. Federal Reserve and some other central banks have raised interest rates, thus affecting credit availability and consumer spending. Furthermore, the Russia-Ukraine conflict and the imposition of broad economic sanctions on Russia, as well as the Hamas-Israel conflict, could raise energy prices and disrupt global markets, which could affect the automotive industry. In addition, automotive production and sales can be affected by our automotive OEM customers' ability to continue operating in response to challenging economic conditions, labor relations issues, regulatory requirements, trade agreements and other factors. The volume of automotive production in China, the U.S. and the rest of the world has fluctuated, sometimes significantly, from year to year, and we expect such fluctuations to give rise to fluctuations in the demand for our products. Any significant adverse change in any of these factors may result in a reduction in automotive sales and production by our automotive OEM customers and could have a material adverse effect on our business, results of operations and financial condition.

In addition, COVID-19 had a severe and negative impact on the Chinese and the global economy from 2020 through 2022, and the global macroeconomic environment still faces numerous challenges. The Federal Reserve and other central banks outside of China have raised interest rates. The Russia-Ukraine conflict, the Hamas-Israel conflict, and attacks on shipping in the Red Sea have heightened geopolitical tensions across the world. The impact of the Russia-Ukraine conflict on Ukraine food exports has contributed to increases in food prices and thus to inflation more generally. There have also been concerns about the relationship between China and other countries which may potentially have economic effects. In particular, there is significant uncertainty about the future relationship between the United States and China with respect to a wide range of issues including trade policies, treaties, government regulations and tariffs. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China. Any severe or prolonged slowdown in the global or Chinese economy may materially and adversely affect our business, results of operations and financial condition.

The discontinuation, lack of commercial success, or loss of business with respect to a particular vehicle model or technology package for which we are a significant supplier could reduce our sales and adversely affect our profitability.

If we succeed in having our LiDAR products selected, we expect to enter into supply agreements with the customers. Market practice dictates that these supply agreements typically require us to supply for a particular model of ADAS or Autonomous Mobility product. These contracts can be short-term and/or subject to renegotiation, sometimes as frequently as annually, all of which may affect product pricing, and may be terminated by our customers at any time. Therefore, even if we are successful in having our LiDAR products selected, and the systems into which our products are built are successfully commercialized, the discontinuation of, the loss of business with respect to, or a lack of commercial success of a particular vehicle model or technology package for which we are a significant supplier could mean that the expected sales of our products will not materialize, materially and adversely affecting our business.

Since many of the markets in which we compete are new and rapidly evolving, it is difficult to forecast long-term end-customer adoption rates and demand for our products.

We are pursuing opportunities in markets that are undergoing rapid changes, including technological and regulatory changes, and it is difficult to predict the timing and size of the opportunities. For example, LiDAR-incorporated ADAS and Autonomous Mobility applications require complex technology. Because these automotive systems depend on technology from many companies, commercialization of ADAS or Autonomous Mobility products could be delayed or impaired due to certain technological components not being ready to be deployed in vehicles or other applications. The commercial partners with whom we currently have contracts may not be able to commercialize our technology immediately, or at all. Regulatory, safety or reliability developments, many of which are outside of our control, could also cause delays or otherwise impair commercial adoption of these new technologies, which will adversely affect our growth. Our future financial performance will depend on our ability to make timely investments in the correct market opportunities. If one or more of these markets experience a shift in customer or prospective customer demand, our products may not compete as effectively, if at all, and they may not be designed into commercialized products. For instance, if a new regulation or industry standard permits only LiDAR with certain wavelengths to be used on public roads, and our products fall outside that scope, the adoption of and customer demand for our products will be significantly affected. Given the evolving nature of the markets in which we operate, it is difficult to predict customer demand or adoption rates for our products or the future growth of the markets in which we operate. If demand does not develop or if we cannot accurately forecast customer demand, the size of our markets, or inventory requirements, our business, results of operations and financial condition will be adversely affected.

Our results of operations may vary significantly from period to period due to the seasonality of our business and fluctuations in our operating costs.

Our results of operations may vary significantly from period to period due to many factors, including seasonal factors that may affect the demand for our LiDAR products. The sales volume of our LiDAR products is typically higher in the second half of the year than that of the first half. Our limited operating history makes it difficult for us to judge the exact nature or extent of the seasonality of our business. Our results of operations could also suffer if we do not achieve revenues consistent with our expectations for this seasonal demand because many of our expenses are based on anticipated levels of annual revenues.

We also expect our period-to-period results of operations to vary based on our operating costs, which we anticipate will increase significantly in future periods as we, among other things, invest more resources to design, develop, and manufacture our LiDAR products, build new manufacturing facilities, increase our sales and marketing activities, and increase our general and administrative functions to support our growing operations.

As a result of these factors, we believe that period-to-period comparisons of our results of operations are not necessarily meaningful and that these comparisons cannot be relied upon as indicators of future performance. Moreover, our results of operations may not meet expectations of equity research analysts or investors. If this occurs, the trading price of our ADSs could fall substantially either suddenly or over time.

We generate a substantial portion of our revenues from a limited number of customers and products, and the loss of, or a significant reduction in, revenues from such customers or products could materially and adversely affect our results of operations.

Although we have and continue to pursue a broad customer base, we are dependent on a collection of large customers with strong purchasing power. Revenues generated from our five largest customers accounted for 47.2%, 53.1% and 67.5% of our revenues for 2021, 2022 and 2023, respectively. In particular, in 2021, 2022 and 2023, one customer, a leading global OEM headquartered in the United States, accounted for 17.5%, 13.7% and 28.4% of our revenues, respectively. We directly receive purchase orders from this customer. The purchase orders generally provide volumes and prices of the LiDAR products, packaging and delivery arrangements, payment arrangements, inspection requirements and warranty period. In addition, the purchase orders provide that the purchase agreements may be terminated by the customer if we materially breach the agreement or become insolvent, or other events occur that may adversely affect our ability to perform our contractual obligations. If our purchase agreements are otherwise terminated by the customer, we will still be paid an amount calculated based on (i) the price for all goods and services that have been completed in accordance with the purchase agreement and not previously paid for; and (ii) the actual costs of work-in-process and raw materials incurred by us in furnishing the goods or services under the purchase agreement, subject to certain conditions and exceptions. In addition, a leading new energy vehicle manufacturer headquartered in China accounted for 24.3% and 25.6% of our revenues in 2022 and 2023, respectively.

A few customers accounted for more than 10% of our balances of accounts receivable, contract assets and amount due from related parties as of December 31, 2021, 2022 and 2023, respectively. In particular, a leading new energy vehicle manufacturer headquartered in China accounted for 61.0% and 41.3% of our balances of accounts receivable, contract assets and amount due from related parties as of December 31, 2022 and 2023, respectively. The loss of business from any of our major customers (whether by lower overall demand for our products, cancellation of existing contracts or product orders or the failure to award us new business) could have a material adverse effect on our business and results of operations. There is also a risk that one or more of our major customers could be unable to pay our invoices as they become due or that a customer will simply refuse to make such payments if it experiences financial difficulties. If a major customer were to enter into bankruptcy proceedings or similar proceedings whereby contractual commitments are subject to stay of execution and the possibility of legal or other modification, we could be forced to record a substantial loss.

Furthermore, we have been dependent on a limited number of products to generate a substantial portion of our revenues. In 2021, 2022 and 2023, we had six, six and six major product families, respectively, that generated a substantial portion of our revenues. For example, AT128, a popular LiDAR product launched in July 2021 and started shipping in July 2022, accounted for 26.3% and 37.8% of our revenues in 2022 and 2023, respectively, and Pandar128 accounted for 24.9% and 22.5% of our revenues in 2022 and 2023, respectively. The markets for LiDAR products and customers' needs and preferences are rapidly evolving. We, as well as many of our competitors, are constantly upgrading LiDAR products and rolling out new products with higher performance and better quality. To the extent any of our major products loses its appeal to customers and in turn its market share, whether due to competition from our competitors' products or our own alternative products or overall lower demand for LiDAR products, among other things, our business and results of operations could be materially and adversely affected.

If we are unable to establish and maintain confidence in our long-term business prospects among customers and other third parties within our industry or are subject to negative publicity, then our financial condition, operating results, business prospects and access to capital may suffer materially.

Customers may be less likely to purchase our LiDAR products if they are not convinced that our business will succeed or that our service and support and other operations will continue in the long term.

Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers, analysts, ratings agencies and other parties in our products, long-term financial viability and business prospects. Maintaining such confidence may in particular be complicated by certain factors including those that are largely outside of our control, such as our limited operating history, customer unfamiliarity with our LiDAR products, any delays in scaled production, delivery and service operations to meet demand, competition and uncertainty regarding the future of autonomous vehicles or other potential markets and our production and sales performance compared with market expectations.

Developments in alternative technology may adversely affect the demand for our LiDAR technology.

Significant developments in alternative technologies, such as cameras and radar, may materially and adversely affect our business, prospects, financial condition and operating results in ways we do not currently anticipate. Existing and other camera and radar technologies may emerge as customers' preferred alternatives to our products. Any failure by us to develop new or enhanced technologies or processes, or to react to changes in existing technologies, could materially delay our development and introduction of new and enhanced products in the autonomous vehicle industry, which could result in the loss of competitiveness of our LiDAR products, decreased revenues and a loss of market share to competitors. Our R&D efforts may not be sufficient to adapt to changes in technology. As technologies change, we plan to upgrade or adapt our LiDAR products with the latest technology. However, our products may not compete effectively with alternative systems if we are not able to source and integrate the latest technology into our existing LiDAR products.

We may need to defend ourselves against intellectual property right infringement claims, which may be time-consuming and would cause us to incur substantial costs.

Entities or individuals, including our competitors, may hold or obtain patents, copyrights, trademarks, or other proprietary rights that would prevent, limit, or interfere with our ability to make, use, develop, sell or market our LiDAR products or components, which could make it more difficult for us to operate our business. From time to time, we may receive communications from intellectual property right holders regarding their proprietary rights. Companies holding patents or other intellectual property rights may bring suits alleging infringement of such rights or otherwise assert their rights and urge us to take licenses, whether such allegations are true or not. For example, in 2019, Velodyne Lidar, Inc. filed a lawsuit against us with the U.S. District Court for the Northern District of California and the U.S. International Trade Commission for alleged infringement of its patents for mechanical rotational LiDAR registered in the United States. Separately, in April 2023, Ouster, Inc. filed complaints against us with the United States District Court for the District of Delaware and the U.S. International Trade Commission for alleged patent infringement relating to the production, use, sale and/or importation of certain LiDAR systems and/or components thereof. See "Item 8. Financial Information — A. Combined and Consolidated Statements and Other Financial Information — Legal Proceedings." Our applications and uses of trademarks relating to our design, software, or artificial intelligence technology could also be found to infringe upon existing trademark ownership and rights. In addition, if we are determined to have infringed upon a third party's intellectual property rights, we may be required to do one or more of the following:

- cease selling, incorporating certain components into, or using products or offering services that incorporate or use the challenged intellectual property;
- pay substantial damages;
- seek a license from the holder of the infringed intellectual property right, which may not be available on reasonable terms or at all;
- redesign our products or services; or establish and maintain alternative branding for our products and services.

In the event of a successful claim of infringement against us and our failure or inability to obtain a license to the infringed technology or other intellectual property right, our business, financial condition, results of operations, and prospects could be materially and adversely affected. In addition, any litigation or claims, whether or not valid, could result in substantial costs, negative publicity, and diversion of resources and management attention.

We may not be able to prevent others from unauthorized use of our intellectual property, which could harm our business and competitive position.

We regard our trademarks, patents, domain names, trade secrets, proprietary technologies, and similar intellectual property as critical to our success. We rely on trademark and patent law, trade secret protection and confidentiality and license agreements with our employees and others to protect our proprietary rights.

We have invested significant resources to develop our own intellectual property. Failure to maintain or protect these rights could harm our business. In addition, any unauthorized use of our intellectual property by third parties may adversely affect our current and future revenues and our reputation.

Mainland China's legal system relating to intellectual property has been established in recent decades and is still evolving. Accordingly, we have had to adopt measures with the aim of protecting our intellectual property, and may need to adopt many measures to effectively protect our intellectual property rights in mainland China when laws, regulations and rules relating to intellectual property are released in the future. Furthermore, policing unauthorized use of proprietary technology is difficult and expensive. We rely on a combination of patent, copyright, trademark, and trade secret laws and restrictions on disclosure to protect our intellectual property rights. Despite our efforts to protect our proprietary rights, third parties may attempt to copy or otherwise obtain and use our intellectual property or seek court declarations that they do not infringe upon our intellectual property rights. Monitoring unauthorized use of our intellectual property is difficult and costly, and we cannot assure you that the steps we have taken or will take will prevent misappropriation of our intellectual property. From time to time, we may have to resort to litigation to enforce our intellectual property rights, which could result in substantial costs and diversion of our resources.

As our patents may expire and may not be extended, our patent applications may not be granted, and our patent rights may be contested, circumvented, invalidated, or limited in scope, our patent rights may not protect us effectively. In particular, we may not be able to prevent others from developing or exploiting competing technologies, which could materially and adversely affect our business, financial condition, and results of operations.

As of December 31, 2023, we had 406 patents granted and 589 pending patent applications in mainland China, and 58 patents granted and 422 pending patent applications in other jurisdictions, such as the United States and Europe. We cannot assure you that all our pending patent applications will result in issued patents. Even if our patent applications succeed and we are issued patents accordingly, it is still uncertain whether these patents will be contested, circumvented, or invalidated in the future. In addition, the rights granted under any issued patents may not provide us with meaningful protection or competitive advantages. The claims under any patents may not be broad enough to prevent others from developing technologies that are similar or that achieve results similar to ours. It is also possible that the intellectual property rights of others could bar us from licensing and exploiting our patents. Numerous patents and pending patent applications owned by others exist in the fields where we have developed and are developing our technology. These patents and patent applications might have priority over our patent applications and could subject our patent applications to invalidation. Finally, in addition to those who may claim priority, any of our existing patents or pending patent applications may also be challenged by others on the basis that they are otherwise invalid or unenforceable.

We and certain of our directors and officers have been named as defendants in a putative shareholder class action lawsuit, which could have a material adverse impact on our business, financial condition, results of operation, cash flows and reputation.

We will have to defend against the putative shareholder class action lawsuits described in "Item 8. Financial Information — A. Combined and Consolidated Statements and Other Financial Information — Legal Proceedings," including any appeals of such lawsuits should our initial defense be unsuccessful. We are currently unable to estimate the timing, possible outcome or loss or possible range of loss, if any, associated with the resolution of these lawsuits. There can be no assurance that we will be able to prevail in our defense or reverse any unfavorable judgment on appeal, and we may decide to settle such lawsuits on unfavorable terms. Any adverse outcome of these cases, including any plaintiff's appeal of a judgment in these lawsuits, could have a material adverse effect on our business, financial condition, results of operation, cash flows and reputation. We may continue to be subject to lawsuits from time to time in the future, including but not limited to putative class action lawsuits brought by shareholders. The existence of such cases and any potential adverse outcome of these cases, including but not limited to any plaintiff's appeal of a judgment, could have a material adverse effect on our business, reputation, financial condition, results of operations, cash flows as well as the trading price of our ADSs. The litigation process may utilize a significant portion of our resources and divert management's attention from the day-to-day operations of our company, which could harm our results of operations and require us to incur significant expenses to defend the suit. We also may be subject to claims for indemnification related to these matters, and we cannot predict the impact that indemnification claims may have on our business or financial results.

We are subject to risks associated with strategic alliances or acquisitions.

We have entered into and may in the future enter into strategic alliances, including joint ventures or minority equity investments, with various third parties to further our business purpose from time to time. These alliances could subject us to a number of risks, including risks associated with sharing proprietary information, non-performance by third parties, and increases in expenses in establishing new strategic alliances, any of which may materially and adversely affect our business. We may have limited ability to monitor or control the actions of these third parties and, to the extent any of these third parties suffers negative publicity or harm to their reputation from events relating to their businesses, we may also suffer negative publicity or harm to our reputation by virtue of our association with any such third party.

In addition, if appropriate opportunities arise, we may acquire additional assets, products, technologies, or businesses that are complementary to our existing business. In addition to possible shareholder approval, we may have to obtain approvals and licenses from government authorities for the acquisitions and to comply with any applicable laws and regulations of mainland China or other jurisdictions, which could result in increasing delay and costs, and may derail our business strategy if we fail to do so. Moreover, the costs of identifying and consummating acquisitions may be significant. Furthermore, past and future acquisitions and the subsequent integration of new assets and businesses into our own require significant attention from our management and could result in a diversion of resources from our existing business, which in turn could have an adverse effect on our operations. Acquired assets or businesses may not generate the financial results we expect. Acquisitions could result in the use of substantial amounts of cash, potentially dilutive issuances of equity securities, the occurrence of significant goodwill impairment charges, amortization expenses for other intangible assets, and exposure to potential unknown liabilities of the acquired business. Any acquired business may be involved in legal proceedings originating from historical periods prior to the acquisition, and we may not be fully indemnified, or at all, for any damage to us resulting from such legal proceedings, which could materially and adversely affect our financial position and results of operations.

We have granted and will continue to grant options and other types of awards under our share incentive plan, which may result in increased share-based compensation expenses.

We adopted a share incentive plan, or the 2021 Plan, in June 2021 for the purpose of granting share-based compensation awards to employees, directors, and consultants to incentivize their performance and align their interests with ours. Under the 2021 Plan, we are authorized to grant options and other types of awards. The maximum number of ordinary shares that may be issued pursuant to all awards under the 2021 Plan is initially 16,365,047 shares, subject to annual increases as determined by our board of directors starting from the first day of 2024, the year immediately following our initial public offering. See “Item 6. Directors, Senior Management and Employees — B. Compensation of Directors and Executive Officers — Share Incentive Plan.” As of February 29, 2024, awards to purchase or receive an aggregate amount of 11,821,083 Class B ordinary shares had been granted and were outstanding under the 2021 Plan.

We believe the granting of share-based awards is of significant importance to our ability to attract and retain key personnel and employees, and we plan to grant share-based compensation to employees in the future. As a result, our expenses associated with share-based compensation may increase, which may have an adverse effect on our results of operations.

Furthermore, prospective candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. Thus, our ability to attract or retain highly skilled employees may be adversely affected by declines in the perceived value of our equity or equity awards. Furthermore, there are no assurances that the number of shares reserved for issuance under our share incentive plans will be sufficient to grant equity awards adequate to recruit new employees and to compensate existing employees.

Our business depends substantially on the efforts of our founders, executive officers and highly skilled personnel, and our operations may be severely disrupted if we lost their services.

We are highly dependent on Dr. Yifan Li, our co-founder and chief executive officer, Dr. Kai Sun, our cofounder and chief scientist, and Mr. Shaoqing Xiang, our co-founder and chief technology officer. Each of the three co-founders leads different aspects of our business. The loss of any of our co-founders would adversely affect our business because such loss could make it more difficult to, among other things, compete with other market participants, manage our R&D activities and retain existing customers or cultivate new ones. Our other executive officers also play key roles in our business operations, and we rely on their efforts to manage and grow our business.

Our business depends on a variety of other highly skilled personnel as well. Competition for highly skilled personnel is often intense, and we may incur significant costs to attract highly skilled personnel. We may not be successful in attracting, integrating, or retaining qualified personnel to fulfill our current or future needs. We have, from time to time, experienced, and we expect to continue to experience, difficulty in hiring and retaining highly skilled employees with appropriate qualifications. In addition, job candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. If the perceived value of our equity or equity awards declines, it may adversely affect our ability to retain highly skilled employees. If we fail to attract new personnel or fail to retain and motivate our existing personnel, our business and future growth prospects could be adversely affected.

If we fail to develop and maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and materially and adversely affect our business and operating results.

Effective internal control over financial reporting is necessary for us to provide reliable financial reports and, together with adequate disclosure control and procedures, are designed to prevent fraud. In the course of preparing and auditing our combined and consolidated financial statements, we identified one material weakness in our internal control over financial reporting. As defined in the standards established by the SEC, a “material weakness” is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our company’s annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness identified relates to lack of sufficient skilled staff with U.S. GAAP knowledge for the purpose of financial reporting to comply with U.S. GAAP and SEC requirements. The material weakness, if not remediated timely, may lead to material misstatements in our consolidated financial statements in the future. Following the identification of the material weakness, we have been taking remedial measures, and we plan to continue to take measures to address the material weakness. See “Item 15. Controls and Procedures — Internal Control over Financial Reporting.” We cannot assure you, however, that these measures may fully address this material weakness in our internal control over financial reporting or that we may not identify additional material weaknesses or significant deficiencies in the future.

We are subject to the reporting requirements of the Sarbanes-Oxley Act of 2002. Section 404 of the Sarbanes-Oxley Act of 2002 requires us to include a report from management on the effectiveness of our internal control over financial reporting in our annual report on Form 20-F beginning with this annual report. In addition, once we cease to be an “emerging growth company” as such term is defined in the JOBS Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. If we fail to remedy the material weakness that has been identified and continues to exist or other material weaknesses that may be identified in the future, our management may again conclude that our internal control over financial reporting is not effective. In addition, our reporting obligations may place a significant strain on our management, operational, and financial resources and systems for the foreseeable future. We may be unable to complete our evaluation testing and any required remediation in a timely manner.

During the course of documenting and testing our internal control procedures, in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, we may identify other weaknesses and deficiencies in our internal control over financial reporting. In addition, if we fail to maintain adequate and effective internal control over financial reporting, as these standards are modified, supplemented, or amended from time to time, we may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002. If we fail to achieve and maintain an effective internal control environment, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which may cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our ADSs. Additionally, ineffective internal control over financial reporting could expose us to increasing risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations, and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

We may be subject to anti-corruption, anti-bribery, anti-money laundering, financial and economic sanctions, and similar laws, and noncompliance with such laws can subject us to administrative, civil, and criminal penalties, collateral consequences, remedial measures, and legal expenses, all of which could adversely affect our business, results of operations, financial condition, and reputation.

We may be subject to anti-corruption, anti-bribery, anti-money laundering, financial and economic sanctions, and similar laws and regulations in various jurisdictions in which we conduct activities, including the U.S. Foreign Corrupt Practices Act and other anti-corruption laws and regulations. The Foreign Corrupt Practices Act prohibits us and our officers, directors, employees, and business partners acting on our behalf, including agents, from corruptly offering, promising, authorizing, or providing anything of value to a “foreign official” for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. The Foreign Corrupt Practices Act also requires companies to make and keep books, records, and accounts that accurately reflect transactions and dispositions of assets and to maintain a system of adequate internal accounting controls. A violation of these laws or regulations could adversely affect our business, reputation, financial condition, and results of operations.

We have direct or indirect interactions with officials and employees of government agencies and state-owned affiliated entities in the ordinary course of business. These interactions subject us to an increasing level of compliance-related concerns. We have adopted and implemented certain policies and procedures designed to ensure compliance by us and our directors, officers, employees, and business partners with applicable anti-corruption, anti-bribery, anti-money laundering, financial and economic sanctions, and similar laws and regulations. However, our policies and procedures may not be sufficient, and our directors, officers, employees, and business partners could engage in improper conduct for which we may be held responsible.

Non-compliance with anti-corruption, anti-bribery, anti-money laundering, or financial and economic sanctions laws could subject us to whistleblower complaints, adverse media coverage, investigations, and severe administrative, civil and criminal sanctions, collateral consequences, remedial measures, and legal expenses, all of which could materially and adversely affect our business, reputation, financial condition, and results of operations.

We may be subject to legal proceedings in the ordinary course of our business. If the outcomes of these proceedings are adverse to us, it could have a material adverse effect on our business, results of operations, and financial condition.

We may be subject to legal proceedings from time to time in the ordinary course of our business, which could have a material adverse effect on our business, results of operations, and financial condition. Claims arising out of actual or alleged violations of law could be asserted against us by our customers, our competitors, governmental entities in civil or criminal investigations and proceedings, or other entities. These claims could be asserted under a variety of laws, including but not limited to product liability laws, intellectual property laws, labor and employment laws, securities laws, tort laws, contract laws, property laws, and employee benefit laws. There is no guarantee that we will be successful in defending ourselves in legal and administrative actions or in asserting our rights under various laws. Even if we are successful in our attempt to defend ourselves in legal and administrative actions or to assert our rights under various laws, enforcing our rights against the various parties involved may be expensive, time-consuming, and ultimately futile. These actions could expose us to negative publicity and to substantial monetary damages and legal defense costs, injunctive relief, and criminal, civil, and administrative fines and penalties.

We have limited insurance coverage, which could expose us to significant costs and business disruption.

We have limited liability insurance coverage for our products and business operations. A successful liability claim against us, regardless of whether due to injuries suffered by our customers could materially and adversely affect our financial condition, results of operations, and reputation. In addition, we do not have any business disruption insurance. Any business disruption event could result in substantial cost to us and diversion of our resources.

Our business is subject to the risks of earthquakes, fire, floods and other natural catastrophic events, global pandemics, and interruptions by man-made problems, such as terrorism. Material disruptions of our business or information systems resulting from these events could adversely affect our operating results.

A significant natural disaster, such as an earthquake, fire, flood, hurricane or significant power outage or other similar events, such as infectious disease outbreaks or pandemic events, could have an adverse effect on our business and operating results. In addition, natural disasters, acts of terrorism or war could cause disruptions in our manufacturing operations, our delivery of products and other aspects of our business, our customers' or channel partners' businesses, our suppliers' businesses, or the economy as a whole. We also rely on information technology systems to communicate among our workforce and with third parties. Any disruption to our communications, whether caused by a natural disaster or by man-made problems, such as power disruptions, could adversely affect our business. We do not have a formal disaster recovery plan or policy in place and do not currently require that our suppliers' partners have such plans or policies in place. To the extent that any such disruptions result in delays or cancellations of orders or impede our suppliers' ability to timely deliver product components, or the deployment of our products, our business, operating results and financial condition would be adversely affected.

Interruption or failure of our information technology and communications systems could impact our availability and effectiveness of our software systems.

Our LiDAR hardware works with our software systems to fully function. The availability and effectiveness of such systems depend on the continued operation of information technology and communications systems. Our systems will be vulnerable to damage or interruption from, among others, physical theft, fire, terrorist attacks, natural disasters, power loss, war, telecommunications failures, viruses, denial or degradation of service attacks, ransomware, social engineering schemes, insider theft or misuse or other attempts to harm our systems. We utilize reputable third-party service providers or vendors for our data, and these providers could also be vulnerable to harms similar to those that could damage our systems, including sabotage and intentional acts of vandalism causing potential disruptions. Our disaster recovery planning cannot account for all eventualities. Any problems with our third-party cloud hosting providers could result in lengthy interruptions in our business. In addition, our software systems are highly technical and complex technology which may contain errors or vulnerabilities that could result in interruptions in our business or the failure of our systems.

We are subject to cybersecurity risks with respect to operational systems, security systems, infrastructure, integrated software in our LiDAR products and customer data processed by us or third-party vendors or suppliers and any material failure, weakness, interruption, cyber event, incident or breach of security could prevent us from effectively operating our business.

We are at risk for interruptions, outages and breaches of operational systems, including business, financial, accounting, product development, data processing or production processes, owned by us or our third-party vendors or suppliers; facility security systems, owned by us or our third-party vendors or suppliers; in-product technology owned by us or our third-party vendors or suppliers; the integrated software in our LiDAR products; or customer data that we process or our third-party vendors or suppliers process on our behalf. Such cyber incidents could materially disrupt operational systems; result in loss of intellectual property, trade secrets or other proprietary or competitively sensitive information; compromise certain information of customers, employees, suppliers, or others; jeopardize the security of our facilities; or affect the performance of in-product technology and the integrated software in our LiDAR products. A cyber incident could be caused by disasters, insiders (through inadvertence or with malicious intent) or malicious third parties (including nation-states or nation-state supported actors) using sophisticated, targeted methods to circumvent firewalls, encryption and other security defenses, including hacking, fraud, trickery or other forms of deception. The techniques used by cyber attackers change frequently and may be difficult to detect for long periods of time. Although we maintain information technology measures designed to protect us against intellectual property theft, data breaches and other cyber incidents, such measures will require updates and improvements, and we cannot guarantee that such measures will be adequate to detect, prevent or mitigate cyber incidents. The implementation, maintenance, segregation and improvement of these systems requires significant management time, support and cost. Moreover, there are inherent risks associated with developing, improving, expanding and updating current systems, including the disruption of our data management, procurement, production execution, finance, supply chain and sales and service processes. These risks may affect our ability to manage our data and inventory, procure parts or supplies or produce, sell, deliver and service our products, adequately protect our intellectual property or achieve and maintain compliance with, or realize available benefits under, applicable laws, regulations and contracts. We cannot be sure that the systems upon which we rely, including those of our third-party vendors or suppliers, will be effectively implemented, maintained or expanded as planned. If we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and timely report our financial results could be impaired, and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information or intellectual property could be compromised or misappropriated and our reputation may be adversely affected. If these systems do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

A significant cyber incident could impact production capability, harm our reputation, cause us to breach our contracts with other parties or subject us to regulatory actions or litigation, any of which could materially affect our business, prospects, financial condition and operating results.

Risks Related to Doing Business in China

The PRC government's significant oversight and discretion over our business operations could result in a material adverse change in our operations and the value of our ADSs.

We conduct our business primarily in mainland China. Our operations in mainland China are governed by PRC laws and regulations. The PRC government has significant oversight and discretion over the conduct of our business, and it may influence or intervene in our operations at any time. The PRC government has published certain policies that significantly affected certain industries and we cannot rule out the possibility that it will in the future release regulations or policies that directly or indirectly affect our industry or require us to seek additional permission to continue our operation as it is currently carried out, which could result in a material adverse change in our operation and/or the value of our ADSs. Therefore, investors in our securities face potential uncertainty from actions taken by the PRC government affecting our industry or business. Furthermore, the PRC government has exerted more oversight and control over offerings that are conducted overseas and foreign investment in China-based issuers. Such action could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of our ADSs to significantly decline or be worthless. For more details, see “— If we fail to complete the CSRC filing and other procedures for any future offshore offering or listing, we may be subject to sanctions imposed by the relevant mainland China governmental authority.”

Changes in China's economic, political or social conditions or government policies could have a material adverse effect on our business and operations.

We expect that most of our operations will continue to be conducted in China. Accordingly, our results of operations, financial condition and prospects are influenced by economic, political and legal developments in China. The economic, political and social conditions in China differ from those of the countries in other jurisdictions in many respects, including with respect to the role of the government in economic development, level of development, growth rate, administration of the foreign exchange and allocation of resources. Although the PRC government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets, and the establishment of improved corporate governance in business enterprises, the Chinese government continues to play a significant role at all levels to promote economic and social development in China, with schemes including but not limited to, regulating the development of different industries by implementing various industrial policies, holding productive assets that are vital to the country's economy through state-owned enterprises, and resorting to various monetary, fiscal, and other policy tools to guide the economic activities of all enterprises in China including us.

While the Chinese economy has experienced significant growth over the past decades, that growth has been uneven across different regions and between economic sectors. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China. Any severe or prolonged slowdown in the Chinese economy and changes in economic and political policies or laws and regulations in China may materially adversely affect our business, operating results and financial condition, leading to reduction in demand for our products and services and adversely affect our competitive position.

The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may benefit the overall Chinese economy, but may have a negative effect on us. In addition, in the past the Chinese government has implemented certain measures, including interest rate adjustment, aiming to influence the pace of economic growth. These measures may cause decreased economic activity in China, which may adversely affect our business and results of operations.

Uncertainties in the interpretation and enforcement of laws, rules and regulations, typically existing in the civil law systems, could materially and adversely affect us.

The mainland China legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions under the civil law system may be cited for reference but have limited precedential value. The overall effect of legislation over the past four decades has significantly enhanced the protections afforded to various forms of foreign investments in mainland China. However, mainland China's legal system is still developing, and recently enacted laws and regulations are subject to interpretation by the PRC regulatory agencies and new laws and regulations may be promulgated to cover more aspects of economic activities in mainland China. These laws and regulations are relatively new and can change quickly, and the mainland China legal system continues to evolve. Moreover, due to the nonbinding nature of court decisions, and because the laws and regulations give the regulator certain discretion in how to enforce them, it may be difficult for us to predict the interpretation and enforcement of these laws, regulations and rules, as the case may be in other civil law systems, and we cannot assure you that the administrative and court authorities would interpret and implement the statutory and contractual terms in a manner favorable to us. In light of the aforementioned, these uncertainties may affect our judgment on the relevance of legal requirements and our ability to enforce our contractual rights or tort claims. Besides, mainland China is geographically large and divided into various provinces and municipalities and, as such, laws, rules, regulations and policies may have different and varying applications and interpretations in different parts of mainland China. Legislation or regulations, particularly in local applications, are still evolving. In addition, such uncertainties may be exploited through unmerited or frivolous legal actions or threats in attempts to extract payments or benefits from us. The enforcement of agreements that are governed by mainland China laws through legal or arbitral proceedings in mainland China may be different from that in other jurisdictions with different legal systems. In addition, any administrative and court proceedings in the jurisdictions where we operate, including mainland China, may be protracted, resulting in substantial costs and diversion of resources and management attention.

If we fail to complete the CSRC filing and other procedures for any future offshore offering or listing, we may be subject to sanctions imposed by the relevant mainland China governmental authority.

The Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, purport to require offshore special purpose vehicles that are controlled by mainland China companies or individuals and that have been formed for the purpose of seeking a public listing on an overseas stock exchange through acquisitions of mainland China domestic companies or assets to obtain CSRC approval prior to publicly listing their securities on an overseas stock exchange. The interpretation and application of the regulations remain unclear. If CSRC approval is required, it is uncertain how long it will take for us to obtain such approval. Any failure to obtain or a delay in obtaining CSRC approval for our future issuance of securities overseas may subject us to sanctions imposed by the CSRC and other mainland China regulatory agencies, which could include fines and penalties on our operations in mainland China, restrictions or limitations on our ability to pay dividends outside of mainland China, and other forms of sanctions that may materially and adversely affect our business, financial condition, and results of operations.

Furthermore, on July 6, 2021, the PRC government promulgated the Opinions on Strictly Cracking Down on Illegal Securities Activities, which, among other things, called for enhanced administration and supervision of overseas-listed mainland China-based companies, proposed to strengthen the supervision of the overseas issuance and listing of shares by mainland China-based companies and clarified the responsibilities of competent domestic industry regulators and government authorities. On December 28, 2021, the Cyberspace Administration of China, together with other administrative departments, jointly released the Cybersecurity Review Measures, which took effect on February 15, 2022. Pursuant to the Cybersecurity Review Measures, critical information infrastructure operators that purchase network products and services, and network platform operators engaging in data processing activities that affect or may affect national security, are subject to cybersecurity review under the Cybersecurity Review Measures. In addition, network platform operators who possess personal information of more than one million users shall apply for a cybersecurity review before listing in a foreign country. The governmental authorities may initiate a cybersecurity review if they consider relevant network products or services or data processing activities affect or may affect national security. See “— Any actual or alleged failure to comply with the various applicable laws and regulations related to personal information protection, data security and cybersecurity could affect our offshore listing and lead to liabilities, penalties or other regulatory actions, which could have a material and adverse effect on our business, financial condition and results of operations.”

The CSRC promulgated the Trial Administrative Measures of the Overseas Securities Offering and Listing by Domestic Companies and five supporting guidelines, which became effective on March 31, 2023. These measures and guidelines establish a new filing-based regime to regulate overseas offerings and listings by domestic companies. According to these measures and guidelines, (i) an overseas offering and listing by a domestic company, whether directly or indirectly, shall be filed with the CSRC; and (ii) the issuer or its affiliated domestic company, as the case may be, shall file with the CSRC for its initial public offering, follow-on offering, issuance of convertible bonds, offshore relisting after go-private transactions and other equivalent offering activities. In addition, after a domestic company has offered and listed securities in an overseas market, it is required to file a report to the CSRC after the occurrence and public disclosure of certain material corporate events, including but not limited to, change of control and voluntary or mandatory delisting. According to these measures and guidelines, we are deemed to be a domestic enterprise indirectly listed overseas. However, from March 31, 2023, enterprises that have been listed overseas shall constitute existing enterprises and are not required to conduct the overseas listing filing procedures immediately, but shall carry out filing procedures as required if they conduct future offshore offerings or capital raising activities or are involved in other circumstances that require filing with the CSRC. As such, we were not required to complete the CSRC filing procedures for our initial public offering and listing of ADSs on Nasdaq. If we fail to complete the filing procedures for any future offshore offering or listing, including our follow-on offerings, issuance of convertible bonds, offshore relisting after going-private transactions, and other equivalent offering activities, we may face sanctions by the CSRC or other mainland China regulatory authorities, which may include fines and penalties on our operations in mainland China, limitations on our operating privileges in mainland China, restrictions on or delays to our future financing transactions offshore, or other actions that could have a material and adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our ADSs. In addition, we are required to file a report to the CSRC after the occurrence and public disclosure of certain material corporate events, including but not limited to, change of control and voluntary or mandatory delisting.

On February 24, 2023, the CSRC, together with other government authorities, issued the Provisions on Strengthening Confidentiality and Archives Administration of Overseas Securities Offering and Listing by Domestic Companies, which became effective on March 31, 2023. According to these provisions, domestic mainland China companies, whether offering and listing securities overseas directly or indirectly, must strictly abide the applicable laws and regulations when providing or publicly disclosing, either directly or through their overseas listed entities, documents and materials to securities companies, securities services providers such as accounting firms, or overseas regulators in the process of their overseas offering and listing. If such documents or materials contain any state secrets or government authorities work secrets, domestic companies must obtain the approval from competent governmental authorities according to the applicable laws, and file with the secrecy administrative department at the same level with the approving governmental authority. Furthermore, these provisions also provide that securities companies and securities service providers shall also fulfill the applicable legal procedures when providing overseas regulatory institutions and other institutions and individuals with documents or materials containing any state secrets or government authorities work secrets or other documents or materials that, if divulged, will jeopardize national security or public interest. For more details, please refer to “Item 4. Information on the Company — B. Business Overview — Regulations — Regulations Relating to Overseas Listing and M&A.”

Uncertainties exist with respect to how the PRC Foreign Investment Law may impact the viability of our current corporate structure and operations.

Laws regulating foreign investment in China include the PRC Foreign Investment Law, effective from January 1, 2020, and the Regulation on Implementing the PRC Foreign Investment Law, effective from January 1, 2020. The PRC Foreign Investment Law specifies that foreign investments shall be conducted in line with the “negative list” to be issued or approved to be issued by the State Council. The “negative list” proscribes special administrative measures for foreign investment in specific fields or industries, and foreign investments in businesses not included in the negative list will be granted national treatment. While our current businesses are not included in the currently effective negative list and are not otherwise restricted to foreign investment by mainland China laws and regulations, it is uncertain whether our industry will be named in an updated “negative list” to be issued in the future. If our industry is added to the “negative list” or if the mainland China regulatory authorities otherwise decide to limit foreign ownership in our industry, there could be a risk that we would be unable to do business in China as we are currently structured. If any new laws and/or regulations on foreign investments in China are promulgated and implemented, such changes could have a significant impact on our current corporate structure, which in turn could have a material adverse impact on our business and operations, our ability to raise capital and the market price of our ADSs. In such event, despite our efforts to restructure to comply with the then applicable mainland China laws and regulations in order to continue our operations in China, we may experience material changes in our business and results of operations, our attempts may prove to be futile due to factors beyond our control, and the value of the ADSs you invest in may significantly decline or become worthless.

Any actual or alleged failure to comply with the various applicable laws and regulations related to personal information protection, data security and cybersecurity could affect our offshore listing and lead to liabilities, penalties or other regulatory actions, which could have a material and adverse effect on our business, financial condition and results of operations.

On November 14, 2021, the Cyberspace Administration of China issued the Draft Cyber Data Security Regulations, which provide that data processors conducting the following activities shall apply for cybersecurity review: (i) merger, reorganization or division of internet platform operators that have acquired a large number of data resources related to national security, economic development or public interests affects or may affect national security; (ii) listing abroad of data processors processing over one million users’ personal information; (iii) listing in Hong Kong which affects or may affect national security; (iv) other data processing activities that affect or may affect national security. As of the date of this annual report, the Draft Cyber Data Security Regulations have not been officially adopted. On December 28, 2021, the Cyberspace Administration of China, together with other administrative departments, jointly promulgated the Cybersecurity Review Measures which took effect on February 15, 2022. According to the Cybersecurity Review Measures, critical information infrastructure operators that purchase network products and services, and network platform operators engaging in data processing activities that affect or may affect national security, are subject to cybersecurity review under the Cybersecurity Review Measures. In addition, network platform operators who possess personal information of more than one million users shall apply for a cybersecurity review before listing in a foreign country. The governmental authorities may initiate a cybersecurity review if they consider relevant network products or services or data processing activities affect or may affect national security. However, the Cybersecurity Review Measures do not provide any standard for determining the circumstances that would be regarded as “affect or may affect national security.”

The PRC regulatory and enforcement regime with regard to data security and data protection is evolving. See “Item 4. Information on the Company — B. Business Overview — Regulations — Regulations Relating to Cybersecurity, Information Security, Privacy and Data Protection.”

Our business generally does not involve the collection or processing of personal information or data that may affect national security. As of the date of this annual report, we were not in possession of more than one million users’ personal information. As of the date of this annual report, we have not been designated by the PRC authorities as a critical information infrastructure operator, have not been involved in any cybersecurity-related investigation initiated by the Cyberspace Administration of China or any other PRC authority, and have not received any cybersecurity-related warning or sanction from the PRC government, or any notice from authorities specifying us to file for the cybersecurity review. However, as the definitions for terms such as internet platform operator and national security are broad, and the government will retain discretion as to the interpretation and enforcement of the Cybersecurity Review Measures and any implementation rules, we may be subject to related rules. We cannot preclude the possibility that the Cybersecurity Review Measures will subject us to the cybersecurity review by the Cyberspace Administration of China in relation to our operations or require us to adjust our business practices, in which case our business, financial condition and prospects and the price of our ADSs may be materially and negatively affected.

In the event that we are subject to the cybersecurity review by the Cyberspace Administration of China in relation to our operations, we may experience disruptions of our business. Such review could also result in negative publicity with respect to our company and diversion of our managerial and financial resources. Furthermore, if we were found to be in violation of applicable laws and regulations of PRC during such review, we may be subject to administrative penalties, including fines and service suspension, which could have a material and adverse impact on our business, results of operations and financial condition and the value of our ADSs. We also cannot rule out the possibility that certain of our customers may be deemed critical information infrastructure operators, in which case our products or services, if deemed related to national security, will be submitted for cybersecurity review before we can enter into agreements with such customers. If the reviewing authority considers that the use of our products and services by certain of our customers who are critical information infrastructure operators involves risks of disruption, is vulnerable to external attacks, or may negatively affect, compromise, or weaken the protection of national security, we may not be able to provide or distribute our products or services to such customers, which could have a material adverse effect on our results of operations and business prospects.

In addition to the Cybersecurity Review Measures, the PRC government authorities have introduced a wide range of laws and regulations on personal information protection, cybersecurity and data security in recent years, which is still rapidly evolving. For example, the PRC Cyber Security Law came into effect on June 1, 2017 and requires network owners, network managers, and service providers that provide services via network, together or network operators, to perform certain functions related to cyber security protection and the strengthening of network information management through taking technical and other necessary measures to safeguard the operation of networks, responding to network security incidents effectively, preventing illegal and criminal activities, and maintaining the integrity and confidentiality and usability of network data. In addition, the law imposes certain additional requirements on critical information infrastructure operators, including that they should store the personal information and important data collected and produced during their operations in the PRC within the territory of mainland China and perform certain security obligations. On September 12, 2022, the Cyberspace Administration of China proposed a series of draft amendments to the PRC Cyber Security Law, imposing more stringent legal liabilities for certain violations. Such draft amendments were released for soliciting public comments until September 29, 2022 and their final form, interpretation and implementation remain uncertain. The Standing Committee of National People's Congress promulgated the PRC Personal Information Protection Law (effective on November 1, 2021), which outlines the main framework and comprehensive requirements of personal information protection and processing (including but not limited to cross-border transfer). The PRC Data Security Law, on the other hand, was promulgated on June 10, 2021 and took effect in September 2021, and provides for data security and privacy obligations on entities and individuals carrying out data processing activities, including but not limited to the collection, storage, use, processing, transmission, provision, and public disclosure of data. The PRC Data Security Law also requires a national security review procedure for those data activities which may affect national security and imposes export restrictions on certain data and information. Furthermore, Regulations on the Security Protection of Critical Information Infrastructure, which was promulgated by the State Council of PRC on July 30, 2021 and came into effect on September 1, 2021, stipulates the obligations and liabilities of the regulators, society and critical information infrastructure operators in protecting the security of critical information infrastructure. On August 16, 2021, the Cyberspace Administration of China, jointly with other PRC authorities, issued Several Provisions on Regulation of Automobile Data Security (for Trial Implementation), which took effect on October 1, 2021. These provisions regulate, among other things, the processing of auto data that include both personal information and important data involved in the process of automotive design, production, sales, use, operation and maintenance. Since the PRC Data Security Law, the provisions and other applicable laws and rules are newly issued, there exists uncertainty with respect to their interpretations and implementations. As of the date of this annual report, we were in compliance with the currently effective and applicable mainland China laws on personal information protection, cybersecurity and data security in all material respects and those laws do not have a material adverse impact on our business or offshore listing plan. However, we cannot preclude the possibility that new laws, regulations or rules promulgated in the future will impose additional compliance requirements on us, will subject us to the cybersecurity or national security review in relation to our operations, or will require us to change our business practices or incur additional operating expenses, which may have material and negative impacts on our business, financial condition and prospects and the value of our ADSs.

We may rely on dividends and other distributions on equity paid by our mainland China subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our mainland China subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business.

We are a Cayman Islands holding company and rely on dividends and other distributions on equity from our mainland China subsidiaries for our cash requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders and service any debt we may incur outside of mainland China. Current mainland China regulations permit our mainland China subsidiaries to pay dividends to us only out of their accumulated after-tax profits upon satisfaction of statutory conditions and procedures, if any, determined in accordance with Chinese accounting standards and regulations. In addition, each of our mainland China subsidiaries is required to set aside at least 10% of its after-tax profits each year, if any, to fund certain statutory reserve funds until the total amount set aside reaches 50% of its registered capital. For each of our subsidiaries in mainland China, after it makes an allocation to its statutory reserve funds from its after-tax profits, it may make an allocation to its discretionary reserve funds from its after-tax profits upon a resolution approved at the shareholders' general meeting. Under the Company Law of the PRC, a company shall not distribute profits before losses are covered and the statutory reserve funds are drawn. Additionally, if our mainland China subsidiaries incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends or make other distributions to us.

Any limitation on the ability of our mainland China subsidiaries to distribute dividends or other payments to their respective shareholders could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our businesses, pay dividends or otherwise fund and conduct our business.

Mainland China regulation of loans to and direct investment in mainland China entities by offshore holding companies may delay or prevent us from making loans or additional capital contributions to our mainland China subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

Any funds we transfer to our mainland China subsidiaries, either as a shareholder loan or as an increase in registered capital, are subject to approval by or registration with governmental authorities in mainland China. According to the mainland China regulations on foreign-invested enterprises in mainland China, capital contributions to our mainland China subsidiaries are subject to the registration with the State Administration for Market Regulation or its local counterpart, reporting of foreign investment information with the Ministry of Commerce and registration with a local bank authorized by the State Administration of Foreign Exchange, or SAFE.

SAFE promulgated the Notice of the State Administration of Foreign Exchange on Reforming the Administration of Foreign Exchange Settlement of Capital of Foreign-invested Enterprises, or SAFE Circular 19, effective on June 1, 2015 and last amended on March 23, 2023. According to SAFE Circular 19, the flow and use of the RMB capital converted from foreign currency-denominated registered capital of a foreign-invested company is regulated such that RMB capital may not be used for the issuance of RMB entrusted loans, the repayment of inter-enterprise loans or the repayment of bank loans that have been transferred to a third party. Although SAFE Circular 19 allows RMB capital converted from foreign currency-denominated registered capital of a foreign-invested enterprise to be used for equity investments within mainland China, it also reiterates the principle that RMB converted from the foreign currency-denominated capital of a foreign-invested company may not be directly or indirectly used for purposes beyond its business scope. SAFE promulgated the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account, or SAFE Circular 16, effective on June 9, 2016 and recently amended on December 4, 2023, which reiterates some of the rules set forth in SAFE Circular 19, but changes the prohibition against using RMB capital converted from foreign currency-denominated registered capital of a foreign-invested company to issue RMB entrusted loans to a prohibition against using such capital to issue loans to non-associated enterprises. Violations of SAFE Circular 19 and SAFE Circular 16 could result in administrative penalties. SAFE Circular 19 and SAFE Circular 16 may negatively affect our ability to transfer any foreign currency we hold to our mainland China subsidiaries, which may adversely affect our liquidity and our ability to fund and expand our business in mainland China. On October 23, 2019, SAFE promulgated the Circular of the State Administration of Foreign Exchange on Further Promoting the Facilitation of Cross-border Trade and Investment, or SAFE Circular 28, recently amended on December 4, 2023, which permits non-investment foreign-invested enterprises to use their capital funds to make equity investments in mainland China, with genuine investment projects and in compliance with effective foreign investment restrictions and other applicable laws.

In addition, (i) any foreign loan procured by our mainland China subsidiaries is required to be registered with SAFE or its local branches and (ii) any of our mainland China subsidiaries may not procure loans that exceed the statutory limits, which is either the difference between its registered capital and the total investment amount or a multiple of its net assets in the previous year. We may not be able to obtain these government approvals or complete such registrations in a timely manner, or at all, with respect to future capital contributions or foreign loans by us to our mainland China subsidiaries. If we fail to receive such approvals or complete such registration or filing, our ability to use the proceeds from our securities offerings to capitalize our mainland China operations may be negatively affected, which could adversely affect our liquidity and our ability to fund and expand our business.

China's M&A Rules and certain other mainland China regulations establish procedures for certain acquisitions of mainland China companies, which could make it difficult for us to pursue growth through acquisitions in mainland China.

A number of mainland China laws and regulations have established procedures and requirements with respect to merger and acquisition activities in mainland China by foreign investors. In addition to the Anti-monopoly Law, which became effective on August 1, 2008, and was lately amended on June 24, 2022 and came into effect on August 1, 2022, these include the M&A Rules adopted by six mainland China regulatory agencies in 2006 and amended in 2009, the Rules of the Ministry of Commerce on Implementation of Security Review System of Mergers and Acquisitions of Domestic Enterprises by Foreign Investors promulgated in 2011, and the Measures for the Security Review of Foreign Investment promulgated by the National Development and Reform Commission and the Ministry of Commerce in December 2020 and came into force on January 18, 2021. For example, the M&A Rules require that the Ministry of Commerce be notified in advance of any change-of-control transaction in which a foreign investor takes control of a mainland China domestic enterprise when certain criteria are met. The approval from the Ministry of Commerce shall be obtained in circumstances where overseas companies established or controlled by mainland China enterprises or residents acquire affiliated domestic companies. In addition, pursuant to anti-monopoly laws and regulations, the State Administration for Market Regulation should be notified in advance of any concentration of undertaking if certain thresholds are triggered. In light of the uncertainties relating to the interpretation, implementation and enforcement of the anti-monopoly laws and regulations of mainland China, we cannot assure you that the anti-monopoly law enforcement agency will not deem our future acquisitions or investments to have triggered filing requirement for anti-monopoly review. Moreover, the Rules of the Ministry of Commerce on Implementation of Security Review System of Mergers and Acquisitions of Domestic Enterprises by Foreign Investors specify that mergers and acquisitions by foreign investors that raise “national defense and security” concerns and mergers and acquisitions through which foreign investors may acquire de facto control over domestic enterprises that raise “national security” concerns are subject to strict review by the Ministry of Commerce, and prohibit any attempt to bypass a security review, including by structuring the transaction through a proxy or contractual control arrangement. Furthermore, under the Measures for the Security Review of Foreign Investment, investment in certain key areas which results in acquiring the actual control of the assets is required to obtain approval from designated governmental authorities in advance. There still exist uncertainties with respect to the interpretation and implementation of these measures. In the future, we may grow our business by acquiring complementary businesses. Complying with the requirements of the regulations to complete such transactions could be time consuming, and any required approval processes, including clearance from the State Administration for Market Regulation and approval from the Ministry of Commerce and other mainland China regulatory authorities, may affect our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

The custodians or authorized users of our controlling non-tangible assets, including chops and seals, may fail to fulfill their responsibilities, or misappropriate or misuse these assets.

Under mainland China laws, legal documents for corporate transactions are executed using the chop or seal of the signing entity and with the signature of a legal representative whose designation is registered and filed with the relevant branch of the State Administration for Market Regulation. In order to secure the use of our chops and seals, we have established internal control procedures and rules for using these chops and seals. In any event that the chops and seals are intended to be used, the responsible personnel will submit the application which will then be verified and approved by authorized employees in accordance with our internal control procedures and rules. In addition, in order to maintain the physical security of our chops, we generally have them stored in secure locations accessible only to authorized employees. Although we monitor such authorized employees, the procedures may not be sufficient to prevent all instances of abuse or negligence. There is a risk that our employees could abuse their authority, for example, by entering into a contract not approved by us or seeking to gain control of any of our subsidiaries. If any employee obtains, misuses or misappropriates our chops and seals or other controlling non-tangible assets for whatever reason, we could experience disruption to our normal business operations. We may have to take corporate or legal action, which could involve significant time and resources to resolve and divert management from our operations. In addition, the affected entity may not be able to recover corporate assets that are sold or transferred out of our control in the event of such a misappropriation if a transferee relies on the apparent authority of the representative and acts in good faith.

Governmental administration of currency conversion may affect our utilization of our revenues and affect the value of your investment.

The mainland China government imposes laws and regulations on the convertibility of Renminbi into foreign currencies and, in certain cases, the remittance of currency out of mainland China. We receive our revenues primarily in Renminbi. Under our current corporate structure, our Cayman Islands holding company primarily relies on dividend payments from our mainland China subsidiaries to fund any cash and financing requirements we may have. Under existing mainland China foreign exchange regulations, payments of current account items, including profit distributions, interest payments, trade, and service-related foreign exchange transactions, can be made in foreign currencies without prior approval of SAFE by complying with certain procedural requirements. Specifically, under the existing foreign exchange regulations, without prior approval of SAFE, cash generated from the operations of our mainland China subsidiaries in mainland China may be used to pay dividends to our company, subject to the condition that the remittance of such dividends outside of mainland China complies with certain procedures under mainland China foreign exchange regulation, such as the overseas investment registrations by our shareholders or the ultimate shareholders of our corporate shareholders who are mainland China residents. However, approval from or registration with appropriate government authorities or designated banks is required where Renminbi is to be converted into foreign currency and remitted out of mainland China to pay capital expenses such as the repayment of loans denominated in foreign currencies. As a result, we need to obtain approval from SAFE or its designated banks to use cash generated from the operations of our mainland China subsidiaries to pay off their respective debt in a currency other than Renminbi owed to entities outside mainland China, or to make other capital expenditure payments outside mainland China in a currency other than Renminbi. The mainland China government may also restrict access to foreign currencies for current account transactions in the future if we are found failing to meet the procedural requirements. If the foreign exchange restrictions limit our ability to obtain sufficient foreign currencies to satisfy our foreign currency demands, we may not be able to pay dividends in foreign currencies to our shareholders, including holders of our ADSs.

Mainland China regulations relating to the establishment of offshore special purpose companies by mainland China residents may subject our mainland China resident beneficial owners or our mainland China subsidiaries to liability or penalties, limit our ability to inject capital into our mainland China subsidiaries, limit our mainland China subsidiaries' ability to increase their registered capital or distribute profits to us, or may otherwise adversely affect us.

In July 2014, SAFE promulgated the Notice on Issues Relating to Foreign Exchange Administration over the Overseas Investment and Financing and Round-trip Investment by Domestic Residents via Special Purpose Vehicles, or SAFE Circular 37. SAFE Circular 37 requires mainland China residents (including mainland China individuals and mainland China corporate entities) to register with SAFE or its local branches in connection with their establishment or control of an offshore entity established for the purpose of overseas investment or financing with such mainland China residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests. The term "control" under SAFE Circular 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by mainland China residents in the offshore special purpose vehicles by means of acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular 37 is applicable to our shareholders who are mainland China residents and may be applicable to any offshore acquisitions that we make in the future. In addition, such mainland China residents must update their SAFE registrations when the offshore special purpose vehicle undergoes material events relating to any change of basic information (such as change of such mainland China citizens or residents, name and operation term), increases or decreases in investment amount, transfers or exchanges of shares, or mergers or divisions. According to the Circular on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, which became effective on June 1, 2015, local banks will examine and handle foreign exchange registration for overseas direct investment, including the initial foreign exchange registration and amendment registration, under SAFE Circular 37 from June 1, 2015. If any mainland China shareholder of such special purpose vehicles fails to make the required registration or to update the previously filed registration, the subsidiary of such special purpose vehicles in mainland China may be prohibited from distributing their profits or the proceeds from any capital reduction, share transfer or liquidation to the special purpose vehicles, and the special purpose vehicles may also be prohibited from making additional capital contributions into their subsidiary in mainland China. Moreover, failure to comply with the various SAFE registration requirements described above could result in liability under mainland China law for evasion of foreign exchange administration.

Our co-founders Dr. Yifan Li, Dr. Kai Sun, and Mr. Shaoqing Xiang, who indirectly hold shares in our Cayman Islands holding company and are known to us as mainland China residents, have completed the foreign exchange registrations in respect of their respective holding companies as required by SAFE regulations. However, we may not be informed of the identities of all the mainland China individuals or entities holding direct or indirect interest in our company, nor can we compel our beneficial owners to comply with SAFE registration requirements. As a result, we cannot assure you that all of our shareholders or beneficial owners who are mainland China residents have complied with, and will in the future make, obtain or update any applicable registrations or approvals required by SAFE regulations. Failure by such shareholders or beneficial owners to comply with SAFE regulations, or failure by us to amend the foreign exchange registrations of our mainland China subsidiaries, could subject us to fines or legal sanctions, restrict our overseas or cross-border investment activities, limit our mainland China subsidiaries' ability to make distributions or pay dividends to us or affect our ownership structure, which could adversely affect our business and prospects.

Any failure to comply with mainland China regulations regarding the registration requirements for employee stock incentive plans may subject the mainland China plan participants or us to fines and other legal or administrative sanctions.

Pursuant to SAFE Circular 37, mainland China residents who participate in share incentive plans in overseas non-publicly-listed companies due to their position as director, senior management or employees of the mainland China subsidiaries of the overseas companies may submit applications to SAFE or its local branches for the foreign exchange registration with respect to offshore special purpose companies before they obtain the incentive shares or exercise the share options. In addition, in February 2012, SAFE promulgated the Notices on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Publicly Listed Company. Pursuant to these notices, mainland China citizens and non-mainland China citizens who reside in mainland China for a continuous period of not less than one year who participate in any stock incentive plan of an overseas publicly listed company, subject to a few exceptions, are required to register with SAFE through a domestic qualified agent, which could be the mainland China subsidiaries of such overseas-listed company, and complete certain other procedures. See "Item 4. Information on the Company — B. Business Overview — Regulations — Regulations Relating to Stock Incentive Plans." We and our executive officers and other employees who are mainland China citizens or who reside in mainland China for a continuous period of not less than one year and who have been or will be granted incentive shares or options are subject to these regulations. We have designated our mainland China subsidiary, Shanghai Hesai, to handle the registration and other procedures required by these notices. However, failure to comply with these regulations in a timely manner by either us or our domestic optionees may result in fines and legal sanctions imposed on us, our domestic optionees and their local employers. We also face regulatory uncertainties that could restrict our ability to adopt additional incentive plans for our directors, executive officers and employees under mainland China law. See "Item 4. Information on the Company — B. Business Overview — Regulations — Regulation Relating to Stock Incentive Plans."

If we are classified as a mainland China resident enterprise for mainland China enterprise income tax purposes, such classification could result in unfavorable tax consequences to us and our non-mainland China shareholders and ADS holders.

Under the PRC Enterprise Income Tax Law and its implementation rules, an enterprise established outside of the mainland China with its "de facto management body" within the mainland China is considered a "resident enterprise" and will be subject to the enterprise income tax on its global income at the rate of 25%. The implementation rules define the term "de facto management body" as the body that exercises full and substantial control and overall management over the business, productions, personnel, accounts and properties of an enterprise. In 2009, the State Administration of Taxation issued a circular, known as SAT Circular 82, on April 22, 2009, with retroactive effect from January 1, 2008, which was most recently amended on December 29, 2017, which provides certain specific criteria for determining whether the "de facto management body" of a mainland China-controlled enterprise that is incorporated offshore is located in mainland China. Although this circular only applies to offshore enterprises controlled by mainland China enterprises or mainland China enterprise groups, not those controlled by mainland China individuals or foreigners, the criteria set forth in the circular may reflect the State Administration of Taxation's general position on how the "de facto management body" text should be applied in determining the tax resident status of all offshore enterprises. According to SAT Circular 82, an offshore incorporated enterprise controlled by a mainland China enterprise or a mainland China enterprise group will be regarded as a mainland China tax resident by virtue of having its "de facto management body" in mainland China, and will be subject to mainland China enterprise income tax on its global income only if all of the following conditions are met: (i) the primary location of the day-to-day operational management is in mainland China; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in mainland China; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholder resolutions are located or maintained in mainland China; and (iv) at least 50% of voting board members or senior executives habitually reside in mainland China.

We believe none of our entities outside of mainland China is a mainland China resident enterprise for mainland China tax purposes. However, the tax resident status of an enterprise is subject to determination by mainland China tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” If the mainland China tax authorities determine that we are a mainland China resident enterprise for enterprise income tax purposes, we will be subject to mainland China enterprise income tax on our worldwide income at the rate of 25% and we will be required to withhold a 10% withholding tax from dividends we pay to our shareholders that are non-resident enterprises, including the holders of ADSs, unless any such foreign investor’s jurisdiction of incorporation has a tax treaty or similar agreement with mainland China that provides for a different withholding arrangement. In addition, gains realized on the sale or other disposition of our ADSs or ordinary shares may be subject to mainland China tax, at a rate of 10% in the case of non-mainland China enterprises or 20% in the case of non-mainland China individuals (in each case, subject to the clauses of any applicable tax treaty), if such gains are deemed to be from mainland China. It is unclear whether non-mainland China shareholders of our company would be able to claim the benefits of any tax treaties between their jurisdiction of tax residence and mainland China in the event that we are treated as a mainland China resident enterprise. Any such tax may reduce the returns on your investment in the ADSs.

We face uncertainty with respect to indirect transfers of equity interests in mainland China resident enterprises by their non-mainland China holding companies, which may have a material adverse effect on our financial condition and results of operations.

On February 3, 2015, the State Administration of Taxation issued the Public Notice Regarding Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-Tax Resident Enterprises, or SAT Circular 7, as amended in 2017. SAT Circular 7 extends its tax jurisdiction to transactions involving the transfer of mainland China taxable assets through offshore transfer of a foreign intermediate holding company. In addition, SAT Circular 7 provides certain criteria on how to assess reasonable commercial purposes and has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. SAT Circular 7 also brings challenges to both foreign transferor and transferee (or other person who is obligated to pay for the transfer) of taxable assets. On October 17, 2017, the State Administration of Taxation issued the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Circular 37, which came into effect on December 1, 2017, and was most recently amended on June 15, 2018. SAT Circular 37 further clarifies the practice and procedure of the withholding of non-resident enterprise income tax.

Where a non-resident enterprise transfers mainland China taxable assets indirectly by disposing of the equity interests of an overseas holding company, which is an Indirect Transfer, the non-resident enterprise as either transferor or transferee, or the mainland China entity that directly owns the taxable assets, may report such Indirect Transfer to the tax authority. Using a “substance over form” principle, the mainland China tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring mainland China tax. As a result, gains derived from such Indirect Transfer may be subject to mainland China enterprise income tax, and the transferee or other person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of 10% for the transfer of equity interests in a mainland China resident enterprise. Gains derived from the sale of shares by investors through a public stock exchange are not subject to the PRC enterprise income tax pursuant to SAT Circular 7 where such shares were acquired in a transaction through a public stock exchange. As such, the sale of the ADSs or ordinary shares on a public stock exchange will not be subject to PRC enterprise income tax pursuant to SAT Circular 7. However, the sale of our ordinary shares or ADSs by a non-PRC resident enterprise outside a public stock exchange may be subject to PRC enterprise income tax under SAT Circular 7.

We face uncertainties as to the reporting and other implications of certain past and future transactions where mainland China taxable assets are involved, such as offshore restructuring, sale of the shares in our offshore subsidiaries and investments. For transfer of shares in our company by investors who are non-mainland China resident enterprises, our mainland China subsidiaries may be requested to assist in the filing under SAT Circular 7 and/or SAT Circular 37. As a result, we may be required to expend valuable resources to comply with SAT Circular 7 and/or SAT Circular 37, or to establish that we and our non-mainland China resident investors should not be taxed under these circulars, which may have a material adverse effect on our financial condition and results of operations.

There may exist uncertainties with respect to effecting service of legal process, enforcing foreign judgments or bringing actions in mainland China against us or our management based on foreign laws.

We are an exempted company with limited liability incorporated under the laws of the Cayman Islands. We conduct most of our operations in China, and substantially all of our assets are located in mainland China. In addition, most of our senior executive officers reside within mainland China for a significant portion of the time and most of them are mainland China nationals. In addition, mainland China does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts with the Cayman Islands and many other countries and regions. Even if you are successful in bringing an action of this kind, you may face uncertainties with respect to the enforcement of judgments rendered under the laws of the Cayman Islands and mainland China against our assets or the assets of our directors and officers.

It may be difficult for overseas regulators to conduct investigation or collect evidence within mainland China.

Shareholder claims or regulatory investigations that are initiated in or otherwise relevant to jurisdictions outside mainland China may be difficult to pursue as a matter of law or practicality in mainland China. For example, in mainland China, there are many legal requirements to providing information needed for regulatory investigations or litigations initiated outside mainland China. Although the authorities in mainland China may establish a regulatory cooperation mechanism with securities regulatory authorities of another country or region to implement cross-border supervision and administration, such cooperation with securities regulatory authorities in the United States or other jurisdictions may not be efficient in the absence of mutual and practical cooperation mechanism. Furthermore, according to Article 177 of the PRC Securities Law, which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigation or evidence collection activities within the territory of mainland China. While detailed interpretation of or implementation rules under this article have yet to be promulgated, the inability for an overseas securities regulator to directly conduct investigation or evidence collection activities within mainland China may further increase difficulties faced by you in protecting your interests. See also “ — Risks Related to Our ADSs — You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law” for risks associated with investing in us as a Cayman Islands company.

Risks Related to Our ADSs

The trading price of the ADSs has been and is likely to continue to be volatile, which could result in substantial losses to investors.

The trading price of the ADSs has been and is likely to continue to be volatile and could fluctuate widely due to factors beyond our control. This may happen because of broad market and industry factors, including the performance and fluctuation of the market prices of other companies with business operations located mainly in mainland China that have listed their securities in the United States. In addition to market and industry factors, the price and trading volume for the ADSs may be highly volatile for factors specific to our own operations, including but not limited to, the following:

- variations in our net revenues, earnings and cash flow;
- announcements of new investments, acquisitions, strategic partnerships, or joint ventures by us or our competitors;
- announcements of new products and services and expansions by us or our competitors;
- changes in financial estimates by securities analysts;
- fluctuations in operating metrics;
- failure on our part to realize monetization opportunities as expected;
- changes in revenues generated from our significant business partners;
- additions or departures of key personnel;
- release of lock-up or other transfer restrictions on our outstanding equity securities or sales of additional equity securities;
- detrimental negative publicity about us, our management, our competitors or our industry;

- fluctuations of exchange rates between RMB and the U.S. dollar;
- regulatory developments affecting us or our industry;
- potential litigation or regulatory investigations; and
- general economic or political conditions in China or elsewhere in the world.

Any of these factors may result in large and sudden changes in the trading volume and price of the ADSs.

We were named as a defendant in putative lawsuits in the United States, as described in “Item 8. Financial Information—A. Combined and Consolidated Statements and Other Financial Information—Legal Proceedings,” and we may be named in similar lawsuits in the future. Such lawsuits could divert a significant amount of our management’s attention and other resources from our business and operations and require us to incur significant expenses to defend the suit, which could harm our results of operations. Any such class action suit, whether or not successful, could harm our reputation and restrict our ability to raise capital in the future. In addition, if a claim is successfully made against us, we may be required to pay significant damages, which could have a material adverse effect on our financial condition and results of operations.

In addition, the stock market in general, and companies with operations in mainland China in particular, have experienced volatility that often has been unrelated to the operating performance of such companies. The securities of some China-based companies that have listed their securities in the United States have experienced significant volatility since their initial public offerings in recent years, including, in some cases, substantial declines in the trading prices of their securities. The trading performances of these companies’ securities after their offerings may affect the attitudes of investors towards Chinese companies listed in the United States in general, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. In addition, any negative news or perceptions about inadequate corporate governance practices or fraudulent accounting, corporate structure or other matters of other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have engaged in any inappropriate activities. In particular, the global financial crisis, the ensuing economic recessions and deterioration in the credit market in many countries have contributed and may continue to contribute to extreme volatility in the global stock markets. These broad market and industry fluctuations may adversely affect the market price of our ADSs. Volatility or a lack of positive performance in our ADS price may also adversely affect our ability to retain key employees, most of whom have been granted options or other equity incentives.

We are an emerging growth company within the meaning of the Securities Act and may take advantage of certain reduced reporting requirements.

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions from requirements applicable to other public companies that are not emerging growth companies including, most significantly, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 for so long as we remain an emerging growth company. As a result, if we elect not to comply with such auditor attestation requirements, our investors may not have access to certain information they may deem important.

The JOBS Act also provides that an emerging growth company does not need to comply with any new or revised financial accounting standards until such date that a private company is otherwise required to comply with such new or revised accounting standards. This election allows us to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies, and as a result of this election our financial statements may not be comparable to those of companies that comply with public company effective dates, including other emerging growth companies that have not made this election.

Our dual-class share structure with different voting rights limits your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class B ordinary shares and ADSs may view as beneficial.

We have adopted a dual-class voting structure such that our ordinary shares consist of Class A ordinary shares and Class B ordinary shares. In respect of matters requiring the votes of shareholders, holders of Class B ordinary shares are entitled to one vote per share, while holders of Class A ordinary shares are entitled to 10 votes per share based on our dual-class share structure. Each Class A ordinary share is convertible into one Class B ordinary share at any time by the holder thereof, while Class B ordinary shares are not convertible into Class A ordinary shares under any circumstances.

As of February 29, 2024, our founders together beneficially owned all of our issued Class A ordinary shares, which constituted approximately 23.6% of our total issued and outstanding share capital and 75.5% of the aggregate voting power of our total issued and outstanding share capital due to the disparate voting powers associated with our dual-class share structure. As a result of the dual-class share structure and the concentration of ownership, holders of our Class A ordinary shares have considerable influence over matters such as decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions. They may take actions that are not in the best interest of us or our other shareholders. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could have the effect of depriving our other shareholders of the opportunity to receive a premium for their shares as part of a sale of our company and may reduce the price of our ADSs. This concentrated control limits your ability to influence corporate matters and could discourage others from pursuing any potential merger, takeover or other change of control transactions that holders of Class B ordinary shares and ADSs may view as beneficial.

If securities or industry analysts cease to publish research or reports about our business, or if they adversely change their recommendations regarding the ADSs, the market price for the ADSs and trading volume could decline.

The trading market for the ADSs will be influenced by research or reports that industry or securities analysts publish about our business. If one or more analysts who cover us downgrade the ADSs, the market price for the ADSs would likely decline. If one or more of these analysts cease to cover us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which, in turn, could cause the market price or trading volume for the ADSs to decline.

We currently do not expect to pay dividends in the foreseeable future and you must rely on price appreciation of our ADSs for return on your investment.

We currently intend to retain most, if not all, of our available funds and any future earnings to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. Therefore, you should not rely on an investment in our ADSs as a source for any future dividend income.

Our board of directors has complete discretion as to whether to declare dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Our second amended and restated articles of association provide that dividends may be declared and paid out of the funds of the Company lawfully available therefor, which under Cayman Islands law means the profits of our company, realized or unrealized, or from any reserve set aside from profits which the directors determine is no longer needed. Dividends may also be declared and paid out of share premium account or any other fund or account which can be authorized for this purpose in accordance with the Companies Act (As Revised) of the Cayman Islands, or the Companies Act. Under the Companies Act, no distribution or dividend may be paid out of the share premium account unless, immediately following the date on which the distribution or dividend is proposed to be paid, the company shall be able to pay its debts as they fall due in the ordinary course of business. Even if our board of directors decides to declare and pay dividends, the timing, amount and form of future dividends, if any, will depend on our future results of operations and cash flows, our capital requirements and surplus, the amount of distributions, if any, received by us from our subsidiaries, our financial condition, contractual restrictions and other factors deemed relevant by our board of directors. Accordingly, the return on your investment in our ADSs will likely depend entirely upon any future price appreciation of our ADSs. There is no guarantee that our ADSs will appreciate in value or even maintain the price at which you purchased the ADSs in the future. You may not realize a return on your investment in our ADSs and you may even lose your entire investment in our ADSs.

Substantial future sales or perceived potential sales of our ADSs in the public market could cause the price of our ADSs to decline.

Sales of our ADSs in the public market or the perception that these sales could occur, could cause the market price of our ADSs to decline. Such sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. We cannot predict what effect, if any market sales of securities held by a principal shareholder or any other shareholder or the availability of these securities for future sale will have on the market price of our ADSs. In addition, if we issue additional ordinary shares, either through private transactions or in the public markets in the United States or other jurisdiction, your ownership interests in our company would be diluted and this, in turn, would have an adverse effect on the price of our ADSs.

Our memorandum and articles of association contain anti-takeover provisions that could have a material adverse effect on the rights of holders of our ordinary shares and the ADSs.

Our currently effective memorandum and articles of association contain provisions to limit the ability of others to acquire control of our company or cause us to engage in change-of-control transactions. These provisions could have the effect of depriving our shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. Our board of directors has the authority, without further action by our shareholders, to issue preferred shares in one or more series and to fix their designations, powers, preferences, privileges and relative participating, optional or special rights and the qualifications, limitations or restrictions, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights associated with our ordinary shares, including ordinary shares represented by ADSs. Preferred shares could be issued quickly with terms calculated to delay or prevent a change in control of our company or make removal of management more difficult. If our board of directors decides to issue preferred shares, the price of the ADSs may fall and the voting and other rights of the holders of our ordinary shares and the ADSs may be materially and adversely affected.

Our memorandum and articles of association and the deposit agreement provide that the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, the state courts in New York County, New York) is the exclusive judicial forum within the U.S. for the resolution of any complaint asserting a cause of action arising out of or relating in any way to the federal securities laws of the United States, and any suit, action or proceeding arising out of or relating in any way to the ADSs or the deposit agreement, which could limit the ability of holders of our ordinary shares, the ADSs or other securities to obtain a favorable judicial forum for disputes with us, our directors and officers, the depositary, and potentially others.

Our memorandum and articles of association provide that the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, the state courts in New York County, New York) is the exclusive forum within the United States for the resolution of any complaint asserting a cause of action arising out of or relating in any way to the federal securities laws of the United States, regardless of whether such legal suit, action, or proceeding also involves parties other than our company. The deposit agreement provides that, subject to the depositary's right to require a claim to be submitted to arbitration, the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, the state courts in New York County, New York) shall have exclusive jurisdiction to hear and determine any suit, action or proceeding and to settle any dispute between us and the depositary that may arise out of or relate in any way to the deposit agreement including without limitation claims under the Securities Act. The enforceability of similar federal court choice of forum provisions in other companies' organizational documents has been challenged in legal proceedings in the United States, and it is possible that a court could find this type of provision to be inapplicable or unenforceable. If a court were to find the federal choice of forum provision contained in our currently effective memorandum and articles of association or the deposit agreement to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions. If upheld, the forum selection clause in our currently effective memorandum and articles of association, as well as the forum selection provision in the deposit agreement, may limit a security-holder's ability to bring a claim against us, our directors and officers, the depositary, and potentially others in his or her preferred judicial forum, and this limitation may discourage such lawsuits. Holders of our shares or the ADSs will not be deemed to have waived our compliance with the federal securities laws and the regulations promulgated thereunder pursuant to the exclusive forum provision in the currently effective memorandum and articles of association and deposit agreement. In addition, the forum selection provision of the deposit agreement does not affect the right of the depositary to require any claim arising directly or indirectly from the relationship created by the deposit agreement to be submitted to arbitration or to commence an action in any court in aid of that arbitration provision or to enter judgment upon or enforce any arbitration award.

The voting rights of holders of ADSs are limited by the terms of the deposit agreement, and you may not be able to exercise your right to direct the voting of the underlying ordinary shares represented by your ADSs.

Holders of ADSs do not have the same rights as our registered shareholders. As a holder of ADSs, you will not have any direct right to attend general meetings of our shareholders or to cast any votes at such meetings. You will only be able to exercise the voting rights attached to the ordinary shares underlying your ADSs indirectly by giving voting instructions to the depositary in accordance with the provisions of the deposit agreement. Where any matter is to be put to a vote at a general meeting, then upon receipt of your voting instructions, the depositary will try, as far as is practicable, to vote the underlying ordinary shares represented by your ADSs as follows:

- In the event of voting by show of hands, the depositary bank will vote (or cause the custodian to vote) all ordinary shares held on deposit at that time in accordance with the voting instructions received from a majority of holders of ADSs who provide timely voting instructions.
- In the event of voting by poll, the depositary bank will vote (or cause the custodian to vote) the ordinary shares held on deposit in accordance with the voting instructions received from the holders of ADSs.

You will not be able to directly exercise your right to vote with respect to the underlying ordinary shares unless you withdraw the shares represented by the ADSs and become the registered holder of such shares prior to the record date for the general meeting.

When a general meeting is convened, you may not receive sufficient advance notice of the meeting to enable you to withdraw the ordinary shares represented by your ADSs and become the registered holder of such shares to allow you to attend the general meeting and to vote directly with respect to any specific matter or resolution to be considered and voted upon at the general meeting. In addition, under our currently effective memorandum and articles of association, for the purposes of determining those shareholders who are entitled to attend and vote at any general meeting, our directors may close our register of members and/or fix in advance a record date for such meeting, and such closure of our register of members or the setting of such a record date may prevent you from withdrawing the underlying ordinary shares represented by your ADSs and from becoming the registered holder of such shares prior to the record date, so that you would not be able to attend the general meeting or to vote directly. Where any matter is to be put to a vote at a general meeting, upon our instruction the depositary will notify you of the upcoming vote and will arrange to deliver our voting materials to you. We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote the underlying ordinary shares represented by your ADSs.

In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for their manner of carrying out your voting instructions. This means that you may not be able to exercise your right to direct how the underlying ordinary shares represented by your ADSs are voted and you may have no legal remedy if the underlying ordinary shares represented by your ADSs are not voted as you requested. In addition, in your capacity as an ADS holder, you will not be able to call a shareholders' meeting.

Under the deposit agreement, if voting is by poll and the depositary does not timely receive voting instructions from you, the depositary may give us a discretionary proxy to vote the ordinary shares underlying the ADSs at shareholders' meetings if we have timely provided the depositary with notice of meeting and related voting materials and (i) we have instructed the depositary that we wish a discretionary proxy to be given, (ii) we have informed the depositary that there is no substantial opposition as to a matter to be voted on at the meeting, and (iii) a matter to be voted on at the meeting would not have a material adverse impact on shareholders.

The effect of this discretionary proxy is that you cannot prevent the underlying ordinary shares represented by the ADSs from being voted, except under the circumstances described above. This may make it more difficult for ADS holders to influence the management of the company. Holders of ordinary shares are not subject to this discretionary proxy.

An ADS holder's right to pursue claims against the depositary is limited by the terms of the deposit agreement.

Under the deposit agreement, any legal suit, action or proceeding against or involving us or the depositary, arising out of or relating in any way to the deposit agreement or the transactions contemplated thereby or by virtue of owning the ADSs may only be instituted in the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, in the state courts in New York County, New York), and a holder of our ADSs, will have irrevocably waived any objection which such holder may have to the laying of venue of any such proceeding, and irrevocably submitted to the exclusive jurisdiction of such courts in any such action or proceeding. Accepting or consenting to this forum selection provision does not represent you are waiving compliance with the U.S. federal securities laws and the rules and regulations promulgated thereunder. Furthermore, investors cannot waive compliance with the U.S. federal securities laws and rules and regulations promulgated thereunder.

The deposit agreement provides that the depositary may, in its sole discretion, require any dispute or difference arising from the relationship created by the deposit agreement to be referred to and finally settled by an arbitration conducted under the terms described in the deposit agreement, although the arbitration provisions do not preclude you from pursuing any claim under the Securities Act or the Exchange Act in state or federal courts.

We are entitled to amend the deposit agreement and to change the rights of ADS holders under the terms of such agreement, or to terminate the deposit agreement, without the prior consent of the ADS holders.

We are entitled to amend the deposit agreement and to change the rights of the ADS holders under the terms of such agreement, without the prior consent of the ADS holders. We and the depositary may agree to amend the deposit agreement in any way we decide is necessary or advantageous to us. Amendments may reflect, among other things, operational changes in the ADS program, legal developments affecting ADSs or changes in the terms of our business relationship with the depositary. In the event that the terms of an amendment impose or increase fees or charges (other than taxes and other governmental charges, registration fees, cable (including SWIFT) or facsimile transmission costs, delivery costs or other such expenses) or that would otherwise prejudice any substantial existing right of the ADS holders, such amendment will not become effective as to outstanding ADSs until the expiration of 30 days after notice of that amendment has been disseminated to the ADS holders, but no prior consent of the ADS holders is required under the deposit agreement. Furthermore, we may decide to terminate the ADS facility at any time for any reason. For example, terminations may occur when the ADSs are delisted from the stock exchange in the United States on which the ADSs are listed and we do not list the ADSs on another stock exchange in the United States, nor is there a symbol available for over-the-counter trading of the ADSs in the United States. If the ADS facility will terminate, ADS holders will receive at least 90 days' prior notice, but no prior consent is required from them. Under the circumstances that we decide to make an amendment to the deposit agreement that is disadvantageous to ADS holders or terminate the deposit agreement, the ADS holders may choose to sell their ADSs or surrender their ADSs and become direct holders of the underlying ordinary shares, but will have no right to any compensation whatsoever.

You may be subject to limitations on transfer of your ADSs.

Your ADSs are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may close its books from time to time for a number of reasons, including in connection with corporate events such as a rights offering, during which time the depositary needs to maintain an exact number of ADS holders on its books for a specified period. The depositary may also close its books in emergencies, and on weekends and public holidays. The depositary may refuse to deliver, transfer or register transfers of our ADSs generally when our share register or the books of the depositary are closed, or at any time if we or the depositary thinks it is advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

You may experience dilution of your holdings due to inability to participate in rights offerings.

We may, from time to time, distribute rights to our shareholders, including rights to acquire securities. Under the deposit agreement, the depositary will not distribute rights to holders of ADSs unless the distribution and sale of rights and the securities to which these rights relate are either exempt from registration under the Securities Act with respect to all holders of ADSs, or are registered under the provisions of the Securities Act. The depositary may, but is not required to, attempt to sell these undistributed rights to third parties, and may allow the rights to lapse. We may be unable to establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement with respect to these rights or underlying securities or to endeavor to have a registration statement declared effective. Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of their holdings as a result.

You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law.

We are an exempted company with limited liability incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our memorandum and articles of association, as amended from time to time, the Companies Act, and the common law of the Cayman Islands. The rights of shareholders to take action against our directors, actions by our minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from the common law of England, the decisions of whose courts are of persuasive authority, but are not binding, on a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States. Some U.S. states, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. In addition, with respect to Cayman Islands companies, plaintiffs may face special obstacles, including but not limited to those relating to jurisdiction and standing, in attempting to assert derivative claims in state or federal courts of the United States.

Under Cayman Islands law, the address of a Cayman Islands company's registered office in the Cayman Islands, and the name of its registered office provider, are matters of public record. A list of the names of the current directors and alternate directors (if applicable) are made available by the Registrar of Companies in the Cayman Islands for inspection by any person on payment of a fee. A Cayman Islands company is required to maintain a register of mortgages and charges, which is open to inspection by the company's creditors and members. Shareholders of Cayman Islands exempted companies like us have no general rights under Cayman Islands law to inspect corporate records (other than the company's memorandum and articles of association, and any special resolutions subsequently passed by the shareholders of the company, and the register of mortgage and charges as referred to above). Our directors have discretion under our second amended and restated articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

As a result of all of the above, our public shareholders may have more difficulty in protecting their interests in the face of actions taken by our management, members of our board of directors or our controlling shareholders than they would as public shareholders of a company incorporated in the United States.

Certain judgments obtained against us by our shareholders may not be enforceable.

We are a Cayman Islands exempted company and all of our assets are located outside of the United States. Substantially all of our current operations are conducted in mainland China. In addition, a majority of our current directors and officers are nationals and residents of countries other than the United States. Substantially all of the assets of these persons are located outside the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in the United States in the event that you believe that your rights have been infringed under the U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of mainland China may render you unable to enforce a judgment against our assets or the assets of our directors and officers.

ADS holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our ordinary shares provides that, subject to the depository's right to require a claim to be submitted to arbitration, the federal or state courts in the City of New York have exclusive jurisdiction to hear and determine claims arising under the deposit agreement and in that regard, to the fullest extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depository arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws.

If we or the depository opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the U.S. Supreme Court. However, we believe that a pre-dispute contractual waiver of jury trial is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement, by the United States District Court for the Southern District of New York or a state court in New York County, New York. In determining whether to enforce a pre-dispute contractual waiver of jury trial, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before entering into the deposit agreement.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depository in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us and the depository. If a lawsuit is brought against either or both of us and the depository under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have, including results that could be less favorable to the plaintiffs in any such action.

Nevertheless, if this jury trial waiver provision is not enforced, to the extent a court action proceeds, it would proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation or provision of the deposit agreement or ADSs shall relieve us or the depository from our respective obligations to comply with the Securities Act and the Exchange Act.

As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the Nasdaq Stock Market listing standards.

As a Cayman Islands company listed on the Nasdaq Stock Market, we are subject to the Nasdaq Stock Market listing standards, which requires listed companies to have, among other things, a majority of their board members to be independent and independent director oversight of executive compensation and nomination of directors. However, Nasdaq Stock Market rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the Nasdaq Stock Market listing standards.

We are permitted to elect to rely on home country practice to be exempted from the corporate governance requirements. We have relied on home country practice exemption with respect to the requirement of having a majority independent board and an audit committee composed of a minimum of three members. We have also relied on home country practice exemption with respect to the requirement that a majority of the nominating and corporate governance committee members must be independent directors within 90 days of listing. In addition, we follow home country practice with respect to annual meetings and did not hold an annual meeting of shareholders in 2023. We will hold shareholder meetings when there are significant issues that require shareholder approval. We may choose to follow additional home country practice in the future. As a result, our shareholders may be afforded less protection than they would otherwise enjoy if we complied fully with the Nasdaq Stock Market listing standards.

We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to U.S. domestic public companies.

Because we are a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the securities rules and regulations in the United States that are applicable to U.S. domestic issuers, including:

- the rules under the Exchange Act requiring the filing of quarterly reports on Form 10-Q or current reports on Form 8-K with the SEC;
- the sections of the Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time;
- the selective disclosure rules by issuers of material nonpublic information under Regulation FD; and certain audit committee independence requirements in Rule 10A-3 of the Exchange Act; and
- certain audit committee independence requirements in Rule 10A-3 of the Exchange Act.

We are required to file an annual report on Form 20-F within four months of the end of each fiscal year. In addition, we intend to publish our results on a quarterly basis through press releases, distributed pursuant to the rules and regulations of the Nasdaq Stock Market. Press releases relating to financial results and material events are also furnished to the SEC on Form 6-K. However, the information we are required to file with or furnish to the SEC is less extensive and less timely compared to that required to be filed with the SEC by U.S. domestic issuers. As a result, you may not be afforded the same protections or information which would be made available to you were you investing in a U.S. domestic issuer.

There can be no assurance that we will not be classified as a passive foreign investment company for U.S. federal income tax purposes, which could result in adverse U.S. federal income tax consequences to U.S. Holders of our ADSs or ordinary shares.

A non-U.S. corporation, such as our company, will generally be classified as a “passive foreign investment company,” or “PFIC,” for U.S. federal income tax purposes, for any taxable year, if either (i) 75% or more of its gross income for such year consists of certain types of “passive” income or (ii) 50% or more of the value of its assets (generally determined on the basis of a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income. Passive income generally includes dividends, interest, royalties, rents, annuities, net gains from the sale or exchange of property producing such income and net foreign currency gains. For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the company’s goodwill and other unbooked intangibles are generally taken into account when determining the value of its assets.

Based upon our current and projected income and assets and the market price of our ADSs, we do not believe that we were a PFIC for the taxable year ended December 31, 2023. However, no assurance can be given that we will not be or become a PFIC in the current or future taxable years because the determination of whether we will be or become a PFIC is a factual determination made annually that will depend, in part, upon the composition of our income and assets and the value of our assets. Fluctuations in the market price of the ADSs may cause us to be or become a PFIC for the current or future taxable years because the value of our assets for purposes of the asset test, including the value of our goodwill and unbooked intangibles, may be determined by reference to the market price of the ADSs from time to time (which may be volatile). In light of recent declines in the market price of our ADSs, our risk of becoming a PFIC has increased. The market price of our ADSs may continue to fluctuate considerably and, consequently, we cannot assure you of our PFIC status for any taxable year. Furthermore, the composition of our income and assets may also be affected by how, and how quickly, we use our liquid assets. Under circumstances where our revenue from activities that produce passive income significantly increases relative to our revenue from activities that produce non-passive income, or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming a PFIC may substantially increase.

If we are classified as a PFIC for any taxable year during which a U.S. Holder (as defined in “Item 10. Additional Information — E. Taxation — United States Federal Income Tax Considerations”) holds our ADSs or ordinary shares, the PFIC tax rules discussed under “Item 10. Additional Information — E. Taxation — United States Federal Income Tax Considerations — Passive Foreign Investment Company Rules” will generally apply to such U.S. Holder for such taxable year and, unless the U.S. Holder makes a “mark-to-market” election, will apply in future years even if we cease to be a PFIC.

We incur increased costs as a result of being a public company.

We are a public company and expect to incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, as well as rules subsequently implemented by the SEC and Nasdaq Stock Market, impose various requirements on the corporate governance practices of public companies. We expect these rules and regulations to increase our legal and financial compliance costs and to make some corporate activities more time-consuming and costly.

As a public company, we have appointed independent directors and have adopted policies regarding internal controls and disclosure controls and procedures. Operating as a public company also makes it more difficult and more expensive for us to obtain director and officer liability insurance with acceptable policy limits and coverage, should we decide to obtain such insurance. In addition, we incur additional costs associated with our public company reporting requirements. It may also be more difficult for us to find qualified persons to serve on our board of directors or as executive officers.

In addition, after we are no longer an “emerging growth company,” we expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 and the other rules and regulations of the SEC.

ITEM 4. INFORMATION ON THE COMPANY

A. HISTORY AND DEVELOPMENT OF THE COMPANY

We commenced our operations in October 2014 through Hesai Photonics Technology Co., Ltd., now known as Hesai Technology Co., Ltd., or Shanghai Hesai, a limited liability company incorporated under the laws of mainland China. Our initial focus was on high-performance laser sensors used in natural gas and other industries, but we shifted our primary business to the development, manufacturing and sales of LiDAR products in 2016. Since then, we have developed and produced a full range of LiDAR solutions and products for various applications in ADAS, Autonomous Mobility and Robotics.

Through Shanghai Hesai, we established HESAI INC., a California corporation, and Shanghai Hesai Trade Co., Ltd., a mainland China limited liability company, in October 2017 and May 2019, respectively. HESAI INC. and Shanghai Hesai Trade Co., Ltd. serve as our primary sales platforms in the U.S. and China, respectively.

To facilitate our offshore financing, we established Hesai Group, our offshore holding company incorporated under the laws of the Cayman Islands, in April 2021. Shortly following its incorporation, Hesai Group established a wholly owned subsidiary in Hong Kong, Hesai Hong Kong Limited, which now holds 100% interest in Shanghai Hesai.

In May and June 2021, as part of our reorganization, the shareholders of Shanghai Hesai transferred their equity interests in Shanghai Hesai to Hesai Hong Kong Limited, and they or their affiliates subscribed for ordinary shares of Hesai Group in proportion to their respective interests in Shanghai Hesai prior to the reorganization, where entities owned by the three founders subscribed for Class A ordinary shares and other shareholders of Shanghai Hesai subscribed for Class B ordinary shares. Around the same time, we completed a new round of financing, issuing Class B ordinary shares of Hesai Group to a number of new investors. Including this new round of financing, we have raised a total of approximately US\$567 million.

Through Shanghai Hesai, we established Hertz Technology Co., Ltd., a mainland China limited liability company in October 2022.

In February 2023, we completed our initial public offering and listed our ADSs on the Nasdaq Global Select Market under the symbol “HSAI.” We raised approximately US\$174.5 million in net proceeds from the issuance of new shares from the initial public offering and partial exercise of over-allotment option after deducting underwriting commissions and the other offering expenses payable by us.

Our principal executive offices are located at 9th Floor, Building L2-B, 1588 Zhuguang Road, Qingpu District, Shanghai 201702, People's Republic of China. Our telephone number at this address is +86 (21) 3158-8240. Our registered office in the Cayman Islands is located at the offices of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. Our agent for service of process in the United States is Cogency Global Inc., located at 122 East 42nd Street, 18th Floor, New York, NY 10168.

SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC on www.sec.gov. You can also find information on our website <http://investor.hesaitech.com>. The information contained on our website is not a part of this annual report.

B. BUSINESS OVERVIEW

Overview

Hesai Technology Co., Ltd., together with its subsidiaries in China, the U.S. and elsewhere, or Hesai Technology, is the global leader in three-dimensional light detection and ranging (LiDAR) solutions. Its LiDAR products enable a broad spectrum of applications across (i) passenger or commercial vehicles with advanced driver assistance systems, or ADAS, (ii) autonomous vehicle fleets providing passenger and freight mobility services, or Autonomous Mobility, and (iii) other applications such as last-mile delivery robots, street sweeping robots, and logistics robots in restricted areas, or Robotics.

We believe that Hesai Technology is the most commercially successful LiDAR company globally. Its shipment volume and revenue scale validate its global leadership. From our inception and up to December 31, 2023, we recognized revenues from approximately 325,200 LiDAR units shipped. In particular, we recognized revenues from approximately 14,000, 80,400 and 222,100 shipped LiDAR units in 2021, 2022 and 2023, respectively. After volume shipment began in July 2022 and up to December 31, 2023, we shipped approximately 253,300 AT series LiDAR units to the ADAS market, which was groundbreaking in the industry. Hesai Technology paved the way for LiDARs from technology innovation to mass production and wide application, driven by the evolution for more intelligent vehicles. Hesai Technology has also built its leadership in LiDARs for the Autonomous Mobility market with a wide range of mechanical LiDAR products.

We believe there are three attributes critical to the development of LiDARs: Performance¹, Quality², and Cost³. Hesai Technology's current market leadership position demonstrates its widespread recognition of these key factors. Depending on the scenario or the application, its customers have varying needs. Its ADAS customers generally have strict requirements on all three aspects, especially on Cost. LiDAR for Autonomous Mobility requires higher performance and quality, as they are critical to the successful development and safe operation of full autonomous driving solutions, with cost tending to be a secondary consideration. For the Robotics market, its customers have demonstrated varying levels of cost sensitivity depending on the application, including, for example, last-mile delivery robots or street sweeping robots. Hesai Technology designs and manufactures LiDARs to push limits across each of the three elements, while striking what we believe is the optimal balance for different applications and industries, which has led to its continued success.

- *Vertical Integration Technology.* Hesai Technology has designed its proprietary vertical integration technology to integrate the functionality of hundreds of discrete components and greatly simplify the traditional TX/RX architecture, delivering a system that offers greater Performance, higher Quality and consistency at lower Cost. These enable Hesai Technology to develop and manufacture LiDAR products that can meet the various needs of its customers. Its AT128, a breakthrough LiDAR product for the ADAS market, for example, is designed based on vertical integration technology and is able to deliver superior performance at high precision, lower power consumption per channel, in a smaller form factor and at a lower cost compared to legacy LiDAR. Hesai Technology will continue to upgrade its vertical integration technology onwards and leverage the existing advanced manufacturing processes in the semiconductor supply chain to deliver better price-to-performance.
- *In-House Manufacturing.* Hesai Technology's proprietary manufacturing process constitutes another of its major advantages and has contributed to its success to date. Hesai Technology has integrated its LiDAR design and manufacturing into an indivisible and seamless process, enabling it to deliver automotive grade products of superior Quality. As the LiDAR industry continues to evolve quickly, its in-house highly automated and integrated manufacturing capabilities provide instant trial feedback for us to iterate its LiDAR design and manufacturing process, thereby enabling rapid product development and fast iteration cycles. Moreover, in-house manufacturing allows Hesai Technology to better control product quality, ensure product consistency, improve manufacturing efficiency, and safeguard manufacturing process know-how at an affordable cost. The know-how then further strengthens its in-house manufacturing capabilities and helps establish a virtuous cycle to solidify its advantages. Hesai Technology has built multiple manufacturing facilities to manufacture its products in-house for automotive OEMs. For more information on its manufacturing facilities, see “— Manufacturing Process and Supply Chain.”

Hesai Technology's LiDAR solutions and products have been thoroughly tested and validated by its customers' deployments in large volumes. It has accumulatively served over 1,000 customers in the ADAS, Autonomous Mobility and Robotics markets through design wins or product shipment, covering over 40 countries and regions as of December 31, 2023.

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- ¹ “Performance” refers to the explicit specifications of a LiDAR unit that directly reflect its performance, including detection range (for example, 200 meters or longer at 10% reflectivity), point density (number of points generated per second, which is horizontal resolution times vertical resolution, multiplied by frame rate), distance accuracy and precision, reflectivity accuracy, and interference rejection, among others.
 - ² “Quality” refers to the implicit aspects of a LiDAR unit that represent its ability to perform consistently under a variety of circumstances over time, including robustness under extreme operating temperatures, different levels of humidity, waterproof levels, and mechanical shocks and stresses. Quality also represents a product's manufacturing consistency, functional safety (typically ASIL-B), and viability as an automotive-grade component.
 - ³ “Cost” refers to the per unit price for each LiDAR unit. Customers of LiDAR units for different applications and industries have varying levels of cost sensitivity, which is usually influenced by factors such as timeline for mass adoption, volume of units needed and business models of the target application, among others.

Solutions and Products

Based on Hesai Technology’s proprietary technology, it has developed and produced a full range of LiDAR products to suit the various needs of its customers. Its LiDAR products cater to short-, medium-, and long-range applications, with industry-leading detection range, resolution, interference rejection technology, and reliability. In response to our commodity classification requests, the Bureau of Industry and Security of the U.S. Department of Commerce has classified all LiDAR product families that Hesai Technology designs and manufactures as EAR99 under the U.S. Export Administration Regulations. Products classified as EAR99 generally do not require an export license and are not specially designed for military use.

The following table presents its key products:

	AT128	ET25⁽¹⁾	FT120⁽¹⁾	Pandar128	QT128	XT32
						
Application	ADAS — long range detection	ADAS — long range detection	ADAS — blind spot detection	Autonomous Mobility — long range detection	Autonomous Mobility — blind-spot detection	Robotics
Operating principle Type	Time of Flight (ToF) ⁽⁴⁾ Hybrid Solid State	ToF Hybrid Solid State	ToF Solid State	ToF Mechanical	ToF Mechanical	ToF Mechanical
Channel Range⁽²⁾	128 up to 200 m	/ up to 250 m	120 up to 25 m	128 up to 200 m	128 up to 20 m	32 up to 80 m
Data points generated (single return)	1,536,000 points/second	>3,000,000 points/second	192,000 points/second	3,456,000 points/second	864,000 points/second	640,000 points/second
FOV⁽⁵⁾ (vertical)	25.4°	25°	75°	40°	105.2°	31°
FOV (horizontal)	120°	120°	100°	360°	360°	360°
Resolution (vertical)	0.2°	0.05° finest	0.625°	0.125° finest	0.4° finest	1°
Resolution (horizontal)⁽³⁾	0.1° (10 Hz frame rate)	0.05° finest	0.625°	0.1° finest (10 Hz frame rate)	0.4° finest (10 Hz frame rate)	0.18° (10 Hz frame rate)
Interference rejection	Yes	Yes	Yes	Yes	Yes	Yes
Power consumption	18 W	12 W	<12 W	27 W	10 W	10 W

Notes:

- (1) Specifications are customizable per customers’ needs.
- (2) Range data is at 10% reflectivity circumstance. Reflectivity refers to the ratio of the energy of the light reflected from a surface to the energy possessed by the light striking the surface.
- (3) Resolution data is at 10 Hz frame rate circumstance.
- (4) ToF refers to a method for measuring the distance between a sensor and an object, based on the time difference between the emission of the laser pulse and its return to the sensor, after being reflected by an object.
- (5) FOV refers to field of view.

Advanced Driver-Assistance Systems (ADAS)

Today, automobile manufacturers have begun to integrate LiDARs into ADAS to better visualize the changing environments encountered by their vehicles. LiDARs for ADAS share certain requirements with LiDARs for the Autonomous Mobility markets, such as detection range and resolution. At the same time, LiDARs for ADAS normally prefer forward-facing configurations for adaptive cruising and traffic assist functions. In addition, automobile manufacturers and Tier 1 suppliers require LiDARs with proper form factors to be embedded into their vehicles, in addition to automotive grade reliability and robustness.

Hesai Technology's AT series, FT series and ET series are its breakthrough products for the ADAS market.

- *AT128*. Carrying the proprietary vertical integration technology, AT128 features 128 channels, great detection range from 0.5 meters to 200 meters, a robust scanning mirror beam steering system providing a horizontal field of view of 120°, a resolution at 1,536,000 points per second, and interference rejection technology. Hesai Technology launched AT512, the new flagship ultra long-range LiDAR product, in January 2024. AT512 boasts industry-record performance across every key metric, including a detection range of over 300 meters at 10% reflectivity and image quality with a point rate of 12.3 million points per second.
- *ET25*. ET25 is an ultra-thin long-range LiDAR product that is designed to be installed on the inner side of windshield, featuring a height of merely 25 millimeters to accommodate an aesthetically pleasing vehicle outlook. We expect ET25 to carry Hesai Technology's new generation of TX/RX system, have a power consumption of less than 12 watts and feature low acoustic design, thereby delivering a comfortable experience to the driver and passengers.
- *FT120*. FT120, a fully solid-state LiDAR product designed for blind spot detection, carries the upgraded vertical integration technology and features a wide vertical field view of 75°, a compact size of 75 (H)×68 (W)×90 (D) millimeters, and interference rejection technology.

Autonomous Mobility

LiDAR is essential to self-driving cars in the Autonomous Mobility industry, as it is one of the most reliable ways of identifying distances and shapes of objects. In contrast to cameras that require deep learning algorithms to detect objects and determine their distances to vehicles, which may be unreliable, LiDAR can measure distances to objects directly by sending and receiving laser pulses. LiDARs sense and construct a three-dimensional view of the surrounding environment in real time, through measuring millions of points per second. The output is called a point cloud. Self-driving cars analyze the point clouds to accurately perceive the surroundings and safely navigate themselves. The ability to identify objects and gauge their distance is a key benefit of using LiDAR, and LiDAR products with a high level of accuracy and reliability can greatly improve safety.

Hesai Technology's LiDAR product lines for the Autonomous Mobility industry primarily include the Pandar series and the QT series. Its customers generally purchase both LiDAR products for their Autonomous Mobility applications.

- *Pandar128*. Designed for automotive volume production, Pandar128 offers an ideal solution for Autonomous Mobility applications. The 128-channel 360-degree surrounding view LiDAR features unrivaled detection range and point density, enabling superb perception over an extended range and provide Autonomous Mobility systems with longer reaction time that is critical for safe operation at medium-to-high driving speeds. Pandar128 also offers a higher level of ingress protection, helping ensure reliability in all weather conditions. Despite doubling the number of channels of its predecessor, Pandar64, Pandar128 retains a similar compact form factor, enabling seamless integration into a vehicle's exterior for a more aesthetic configuration.
- *QT128*. The wide field-of-view QT128, an upgraded model of QT64, is a cutting-edge answer to blind spot detection. It features a wide vertical field of view of 105.2°, which is ideal for covering vehicle blind spots. It also features superior short-range performance to detect objects as near as 0.1 meters at 10% reflectivity, and an optimized 0.4° finest vertical resolution, as well as Hesai Technology's interference rejection technology.

Robotics

Hesai Technology's customers in the Robotics market install LiDARs on small unmanned vehicles for autonomous navigation, collision avoidance, and mapping to provide services such as last-mile delivery and street sweeping. Its LiDAR products empower participants in the Robotics market by providing superior perception solutions at competitive costs.

The XT series is Hesai Technology's product line for the Robotics market. Launched in October 2020, the 32-channel mid-range XT32 is its first product with vertical integration. The XT series is a cost-effective and power-efficient solution designed for multiple applications, including automated warehousing, logistics, robotics, surveying, mapping, and low-to-medium-speed autonomous driving. For these scenarios, sensors do not require ultra-high resolution and ultra-long range. Rather, they require a careful balance between Performance, Quality, and Cost. The XT series was developed to address these specific industrial needs.

Gas Sensors

In addition to LiDAR products, Hesai Technology offers gas sensors to remotely detect methane leaks. These feature high gas detection sensitivity with configurable detection frequency and support real-time data and visual reports through the corresponding mobile app. It also offers oxygen sensors for high-end medical ventilators using similar technologies.

Innovative LiDAR Technology

Hesai Technology's core LiDAR technologies include its vertical integration technology, system-level know-how, and automotive grade productization.

Vertical Integration Technology

LiDARs are highly sophisticated instruments, consisting of TX/RX system, or the laser transmitter (TX) and receiver (RX) system, signal processing system, beam steering system, optics, mechanical structures, circuits, and firmware, among others. Beam steering refers to the scanning of the laser beam, which changes the emission directions of the laser beam in a LiDAR system. The TX/RX system is the foundation for Hesai Technology's LiDAR products as they determine the key LiDAR specifications such as detection range, precision, and point cloud density, among others. The signal processing system receives the incoming signals and creates an object model. The quality and performance of the signal processing system have an impact on LiDAR's reliability and applicability, among others. Hesai Technology has designed its proprietary vertical integration technology to integrate the functionality of hundreds of discrete components and greatly simplify the traditional TX/RX architecture while lowering the cost. Its vertical integration technology has several key advantages: (i) maximized performance achieved with application customization, reduced power consumption, and optimized signal processing tuning; (ii) enhanced quality as the high level of integration of components and simplified manufacturing process can improve consistency; and (iii) optimized cost as Hesai Technology, through vertical integration, replaces hundreds of discrete off-the-shelf components for manufacturing efficiency and leverage the supply chain to enhance price-to-performance. Leveraging its strength in designing TX/RX systems that can integrate hundreds of addressable channels, Hesai Technology's LiDAR transmits lasers from each channel sequentially to form a one-dimensional solid-state electronic scanning in the vertical direction. Units with an electronic scanning mechanism that does not have any moving parts are used for scanning in vertical direction in its LiDARs and can offer superior reliabilities at high scanning frequency. Hesai Technology combines different electronic systems with its different steering systems for different LiDARs to satisfy different applications. For its directional LiDAR (the AT series), it keeps the TX/RX system static and use a scanning polygon to scan the beam in the horizontal direction. As self-driving cars generally operate in complicated environments with stringent sensing requirements in all horizontal directions, Hesai Technology mainly uses 360-degree surrounding rotation systems in its LiDAR products designed for the Autonomous Mobility markets (the Pandar and the QT series).

System-level Know-how

A LiDAR is a complex system that incorporates many disciplines, such as optics, electronics, mechanical structure, and software, among others. Hesai Technology's interdisciplinary team of engineers, consisting of experts in various areas, have designed and optimized its LiDAR products toward their physical limit through fundamental analysis and extensive experiments. During its years of development of LiDAR products, Hesai Technology has overcome many challenges and has accumulated a broad spectrum of know-how for LiDARs, including laser channel crosstalk reduction, point cloud interference rejection, and LiDAR performance consistency across the full LiDAR operating environment, among others.

Hesai Technology's in-depth system-level know-how supports the development of rich product offerings and the continuous innovation of its next generation LiDARs. It summarizes the know-how that it accumulates from each LiDAR development project, such as the AT series, the Pandar series, the QT series, and the XT series, into design rules and applies them to other projects. Hesai Technology has also created common design and simulation platforms across different LiDAR design projects, such as ranging capability design model with different transmission and receiving system parameters, and common software and field-programmable gate array programs across different LiDAR designs, among others. This accumulation of know-how helps maximize the efficiency in designing its next generation products.

Automotive Grade Productization

Since 2017, Hesai Technology has been working with global OEMs on LiDAR designs that can meet automotive grade requirements, including, but not limited to, viability under a wide range of working conditions, high reliability, long service life, electromagnetic compatibility (EMC), functional safety, and cybersecurity. Its LiDAR products have been running in volume on customers' vehicle fleets across the globe. As the foundation of its automotive design, Hesai Technology makes sure that its LiDAR components fulfill automotive grade requirements. It designs and tests its proprietary vertical integration technology under automotive standards. For other components that it sources from its suppliers, Hesai Technology chooses automotive grade counterparts as long as they are available. During the product and process design phase, Hesai Technology uses tools such as design failure mode and effect analysis and process failure mode and effect analysis to ensure its design is robust. Throughout the years of collaboration with global OEMs, Hesai Technology has established a comprehensive set of automotive grade design verification tests, whose parameters and standards are approved by its OEM customers as sufficient to ensure the reliability of its LiDARs during automotive usage. These tests include, for example, vibration with thermal cycling, mechanical shock, high temperature degradation, humid heat cyclic, salt spray and Xenon lamp aging test. Hesai Technology also established a test center with specialized equipment to conduct these tests in-house. The rigorous test standards, along with its testing capabilities, ensure that the LiDARs it designs and manufactures can be verified against the high standards. Hesai Technology has successfully acquired essential certifications crucial for automotive grade design, including ASPICE CL2, International Organization for Standardization (ISO) 9001, ISO 14001, and IATF 16949. For functional safety and cybersecurity, it also works closely with its OEM customers to ensure that its delivery meets their requirements. Hesai Technology also holds certifications from SGS, a globally renowned third-party certification entity, as the first achiever of ISO 26262 ASIL-B functional safety product certification in the LiDAR sector. Additionally, Hesai Technology has garnered recognition as the first in the LiDAR sector to receive ISO/ Society of Automotive Engineers (SAE) 21434 cybersecurity product certification from TÜV Rheinland, a leading independent technical testing organization in Germany. With a strong focus on the dedication to global automotive information security standards for LiDAR, Hesai Technology has also received ISO 27001 and TISAX AL3 certifications.

Manufacturing Process and Supply Chain

Hesai Technology's LiDAR products are assembled in its own manufacturing facilities from a variety of raw materials and components, some of which, including mechanical parts, optical components, and electrical parts, are procured from trusted third-party suppliers. Its in-house manufacturing and testing capabilities and strict quality control measures enable it to ensure the high performance and reliability of its products.

Manufacturing Facilities

Hesai Technology owns and operates its manufacturing facilities to produce and assemble its LiDAR products. Hertz Center, its main manufacturing facility, is located in Hangzhou and commenced mass production in September 2023. To further elevate its manufacturing capacity to meet the growing market demand for its LiDAR products, Hesai Technology is expanding Hertz Center to accommodate more production lines. Accordingly, it expects to make capital expenditures in connection with the continual construction of Hertz Center. See "Item 5. Operating and Financial Review and Prospects — B. Liquidity and Capital Resources — Material Cash Requirements — Capital Expenditures." Furthermore, prior to the completion of Hertz Center, its Jiading factory in Shanghai has been manufacturing LiDAR products in volume to fulfill customer orders in a timely manner since 2018. To further enhance the cost-efficiency of its production, Hesai Technology expects to transfer some of the production lines in Jiading factory to Hertz Center in 2024.

In addition, Maxwell Center, Hesai Technology's new research and development and intelligent manufacturing center in Jiading, Shanghai, the hub of OEMs and tier-1 suppliers in China, commenced trial operation in December 2023. Maxwell Center is dedicated to new product design, testing and calibration. Currently, Maxwell Center is preparing to manufacture FT120 LiDAR.

Hesai Technology has invested significant time in streamlining and automating its production process. Its manufacturing team, supported by its research and development team and supply chain team, systematically optimizes its production process by designing automated assembly and testing processes. For example, Hesai Technology's automated placement machine helps ensure the alignment accuracy of the laser beams on its LiDAR by placing laser transmitters and receivers on circuit boards with micrometer accuracy. LiDARs assembled on its manufacturing line go through its automated testing stations, which run its own proprietary software to verify the LiDAR's ranging capability, distance measurement accuracy and precision, and reflectivity measurement capability, among others. These automated assembly and testing processes ensure not only good quality control, but also great production efficiency and the ability to scale. Hesai Technology regularly monitors and upgrades its production machinery and equipment with an aim to maximizing production efficiency. All assembly and test data are uploaded to its manufacturing execution system for monitoring, which can be traced back for over 15 years.

We are also dedicated to reducing the environmental impact and ensuring safety throughout the production process. We implement various environmental protection measures, including installation of cotton filters, cartridge dust collectors, and activated carbon adsorption devices to appropriately collect and dispose of manufacturing waste. We work with qualified third-party waste disposal service providers for other waste, including waste glue, waste alcohol, waste filter cotton, waste activated carbon and waste packaging barrels. See "Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — If we fail to comply with environmental protection, fire protection, drainage or health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business."

There are risks or other difficulties associated with the expansion of our manufacturing facility, such as failure to complete the expansion on schedule and within budget. Mass production enjoys economies of scale only when the manufacturing capacity is highly utilized. However, when production lines are at their early stage or when we launch new products, the manufacturing facilities are typically underutilized. The period between completion of product development and full manufacturing capacity utilization is known as production ramp-up. The significant investments found in manufacturing facilities may make this period of particular concern to investors. See "Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — The expansion of our manufacturing facilities may be subject to delays, disruptions, cost overruns, or may not produce expected benefits."

Supply of Raw Materials and Components

We generally have two kinds of procurement needs, one is from our product teams based on their respective production planning, and the other is for our strategic reserves in the future. We have a dedicated team to procure components and raw materials to meet specific requirements of our LiDAR products. The main raw materials used in the production of our LiDAR products include mechanical parts, fasteners, packaging materials and consumables, and the key components used in the production of our LiDAR products include lasers, receivers and chips. The raw materials and key components of our LiDAR products are generally available from multiple suppliers in China and overseas with varying costs. Although most raw materials and key components essential to our products are generally available from multiple sources, a few components, such as automotive grade chips, may at times be subject to industry-wide shortage, significant pricing fluctuations and long supply cycles.

We seek to work with key material and component suppliers directly to foster long-term and in-depth cooperation. We enter into framework agreements with some of our suppliers for our key raw materials and components, such as lasers and receivers, where we may negotiate certain customized needs with such suppliers, and suppliers who have a relatively long production cycle. In general, under the framework agreements, we make separate purchase orders and negotiate the prices and volume of each purchase order. The framework agreements typically have a term of 12 months.

Logistics and Warehouse

We mainly rely on qualified third-party logistics service providers for the transportation of equipment, supply and our products. We leased our warehouse in Shanghai, China, which is within our leased production plants, to store our LiDAR products after they roll off the product line. Products that have passed quality inspections are delivered to the warehouse, where we implement strict inventory management and control measures, and ultimately ship to locations specified by our customers.

Quality Control

Facing customers with world-class standards, we are committed to providing our customers with high-performance products with consistent quality and reliability. With our long history of pioneering LiDAR products, we have cultivated in-house manufacturing and testing capabilities to maintain our high-quality control standards, optimize manufacturing cost structure, speed up the iteration of our product development cycle, and increase the robustness of our supply chain.

We impose rigorous quality control standards at various stages of our manufacturing process. Materials and components are systematically tested at different stages of our manufacturing process to ensure that they meet our technical specifications. Our commercialized LiDAR products undergo more than 60 stringent reliability tests following OEM standards, including mechanical shock, high temperature degradation, thermal shock, power temperature cycle, and salt spray, among others. These tests help ensure excellent and stable performance of our LiDAR products in harsh environments. We also set key metrics to control the operation of our production line. We hold numerous certifications that demonstrate our quality control capabilities, including but not limited to EMARK, ASPICE CL2, IATF 16949, ISO 9001, ISO 14001, ISO 45001, ISO 21434 and ISO 26262 certifications. In terms of suppliers, our supply chain team and research and development team cooperate with each other during the selection process to evaluate the suppliers' capabilities based on factors such as quality, volume delivery, pricing, timeline, and the ability to adapt, among others. With our strict quality control measures, we are able to produce high-quality LiDAR products in-house.

We have received AL3 assessment, the highest level of assessment level by Trusted Information Security Assessment Exchange, or TISAX, in February 2023, which means our information security management has met the highest standards of the European automotive industry, allowing us to provide secure and reliable services to major automotive manufacturers. Additionally, the TISAX assessment is recognized as a "information security access certificate" for entering the German automotive supply chain, giving us a competitive edge to expand our business and collaborate with the leading players in the industry. This assessment can also enhance our credibility and reputation, attracting more clients and partners that value security and quality in their operations.

Research and Development

Our interdisciplinary team of engineers form the foundation for our continued success. As of December 31, 2023, we had approximately 730 experienced engineers, mostly in our research and development department, amounting to over 65% of our total employees. Approximately 58% of our engineers have master's degrees or above, including approximately 9% with doctor's degrees.

Our research and development team consists of three departments: Hesai Research Institute, the vertical integration center, and the research and development center. Hesai Research Institute undertakes very early-stage research, such as developing proof-of-concept prototypes and exploring the feasibility of new concept LiDARs beyond our current product lines. Hesai Research Institute also develops fundamental components that are crucial for our LiDARs, such as narrow linewidth lasers, integrated optical packaging and scanners. Since 2017, we have established a vertical integration center with 150 engineers dedicated to the research and development of vertical integration technologies for our next generation LiDARs according to our overall product strategies and roadway. Our proprietary vertical integration technology is the main driving force for the continued evolution of our LiDAR architecture. The research and development center is responsible for the design and development of our LiDAR products. It consists of experts in various areas, such as optics, electronics, mechanics, software, and functional safety, among others. The research and development center works with our business development team to understand customers' needs and design the LiDAR products according to the desired specifications, and works with our manufacturing team to ensure the manufacturability of our LiDARs. After the development of each product, we summarize the experience and know-how we accumulate during the process into our core technologies, which then expedites the development of our next LiDAR product.

Intellectual Property

We believe that we have significant capabilities in LiDAR design and vertical integration. We regard our patents, trademarks, copyrights, know-how, proprietary technologies, domain names, and similar intellectual property as critical to our success. As of December 31, 2023, we had 406 patents granted and 589 pending patent applications in China, and 58 patents granted and 422 pending patent applications in other jurisdictions, such as the United States and Europe. Our patents cover our key technologies, including LiDAR technologies and applications, vertical integration technologies, and laser-based gas sensor technologies. As of December 31, 2023, we also had 104 registered trademarks, including "禾赛" and "Hesai," in China and overseas countries, and copyrights to 15 software programs in China developed by us relating to various aspects of our operations, and registered domain names, including hesaitech.com. We intend to continue to file additional patent applications with respect to our technology.

We seek to protect our technology and associated intellectual property rights through a combination of know-how, patent, copyright, and trademark laws, as well as internal procedures and policies, and other contractual protections. We enter into confidentiality and non-disclosure agreements with our employees, our suppliers, outsourcing partners, and others to protect our proprietary rights. The agreements we enter into with our employees also provide that all patents, software, inventions, developments, works of authorship, and trade secrets created by them during their employment are our properties. We have employed internal policies, confidentiality agreements, encryptions, and data security measures to protect our proprietary rights. For risks associated with intellectual properties, see “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — We may need to defend ourselves against intellectual property right infringement claims, which may be time-consuming and would cause us to incur substantial costs,” “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — We may not be able to prevent others from unauthorized use of our intellectual property, which could harm our business and competitive position,” and “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — As our patents may expire and may not be extended, our patent applications may not be granted, and our patent rights may be contested, circumvented, invalidated, or limited in scope, our patent rights may not protect us effectively. In particular, we may not be able to prevent others from developing or exploiting competing technologies, which could materially and adversely affect our business, financial condition, and results of operations.”

Business Development

We have a dedicated business development team in each of the business areas in charge of the marketing of our LiDAR products to prospective customers. As an integral part of our marketing strategy, we attend large technology conferences and industry expositions to showcase our products, solutions, and our technology. We also focus our marketing efforts on generating word-of-mouth referrals and creating content for marketing on media platforms with the goal of increasing our product exposure and building our reputation. Our marketing content includes high-quality articles and videos developed in-house, which elaborate on our product specifications and technologies. We believe that the combination of our high-quality content and the optimization of our marketing channels, in addition to our digitalized direct sales system, form a virtuous cycle from content marketing to sales leads, which enables us to achieve continued brand exposure and attract high-quality potential customers at relatively low marketing spending.

We sell our LiDAR products through direct sales, primarily offline, and indirect distribution channels, such as regional distributors and system integrators. Our website showcases our products for potential customers with insightful product descriptions and reaches our customers globally. We have a dedicated team of salespersons, divided by regions including China, Asia Pacific, the Americas, and Europe, the Middle East and Africa, or EMEA, to pursue and maintain relationships with established regional distributors to tap into offline consumer markets. We believe that sales of our products will be enhanced by knowledgeable salespersons who can convey the value of our revolutionary technologies and demonstrate our products’ high performance. Many salespersons have previously worked at renowned technology companies and have years of sales experience and a foundation of technological knowledge to support their sales activities. We promote our products together with our regional distributors through promotional and branding activities, such as attending industry trade shows and making speeches at conferences.

Customer Service and Warranty

In our ongoing efforts to maintain customer satisfaction and improve our products and services, we have a high-quality after-sales team to provide comprehensive after-sales service. We have a dedicated team in China and the United States to provide before- and after-sales services to our customers. They can diagnose issues, either at the customers’ places or remotely, and identify the solutions for the customers’ problems.

We typically offer a standard product warranty to customers of our products. During the warranty period, for any product quality issue on either our software or hardware, we will make repair or replacement free of charge under certain conditions. For product damage caused by the customer’s own improper operation, we will provide repair services with charge.

Our Environmental, Social and Governance Initiatives

We believe our continued growth rests on integrating social values into our business. We endeavor to utilize our LiDAR technology and solutions to offer public welfare resources to everyone. We have established various environmental, social and governance initiatives to comprehensively improve our corporate governance and benefit society.

We recognize the importance of contributing to sustainable development for the benefit of our society and environment. With this in mind, we encourage our employees and partners to reduce their energy consumption and carbon footprint, and we promote the use of environmentally friendly technology. We strive to minimize the impact of our operations on the environment and promote sustainability and environmental awareness at all levels of our organization. We employ internal environmental protection and procedures to help minimize the use of hazardous materials, energy, and other natural resources, and to minimize the generation of waste. In addition, we implement various environmental protection measures to manage our manufacturing processes, including installation of cotton filter, cartridge dust collector, and activated carbon adsorption devices to appropriately dispose of the manufacturing waste. We also cooperate with qualified third-party waste disposal service providers for other waste, including waste glue, waste alcohol, waste filter cotton, waste activated carbon, and waste packaging barrels.

Competition

The major downstream markets for LiDAR applications, including ADAS, Autonomous Mobility and Robotics markets, are rapidly evolving and competitive, with many potential applications under development. As a result, although we believe that we have the market-leading LiDAR technology, we face competition from a range of companies developing LiDAR products for these applications, some of which may have similar offerings. Our primary competitors include Tier 1 suppliers who also provide LiDAR products and existing LiDAR companies.

We believe that we are strategically well-positioned in our market, and we compete with others favorably based on our advanced LiDAR technology that provides superior Performance, Quality, and Cost, automotive grade manufacturing process, and strong research and development capabilities. Additionally, we expect our product costs per unit to continue to decrease over time as production volume expands.

Insurance

In addition to providing social security insurance for our employees as required by mainland China law, we also provide supplemental commercial medical insurance for some of our employees. We maintain a comprehensive general liability insurance covering products liabilities arising from obligations in relation to bodily injury and property damage. In line with general market practice, we do not maintain any business interruption insurance, which is not mandatory under the laws of the mainland China. We do not maintain key-man life insurance or insurance policies covering damages to our IT infrastructure or information technology systems. See “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — We have limited insurance coverage, which could expose us to significant costs and business disruption.”

Regulations

This section sets forth a summary of the most significant rules and regulations that affect our business activities in mainland China or the rights of our shareholders to receive dividends and other distributions from us.

Regulations Relating to Foreign Investment

The PRC Foreign Investment Law was formally adopted by the National People’s Congress on March 15, 2019 and became effective on January 1, 2020. The Foreign Investment Law is formulated to further expand opening-up, vigorously promote foreign investment and protect the legitimate rights and interests of foreign investors. According to the Foreign Investment Law, foreign investment means any foreign investor’s direct or indirect investment in mainland China, including: (i) establishing foreign-invested enterprises in mainland China either individually or jointly with other investors; (ii) obtaining stock shares, stock equity, property shares, other similar interests in Chinese domestic enterprises; (iii) investing in new projects in mainland China either individually or jointly with other investors; and (iv) making investment through other means provided by laws, administrative regulations, or by State Council. Foreign investments are entitled to pre-entry national treatment and are subject to the negative list management system. The pre-entry national treatment means that the treatment given to foreign investors and their investments at the stage of investment access is not lower than that of domestic investors and their investments. The negative list management system means that the State implements special administrative procedures for access to foreign investment in specific fields. Foreign investors shall not invest in any forbidden fields stipulated in the negative list and shall meet the conditions stipulated in the negative list before investing in any restricted fields.

Foreign investors' investment, earnings and other legitimate rights and interests within the territory of mainland China shall be protected in accordance with the law, and all national policies on supporting the development of enterprises shall equally apply to foreign-invested enterprises. The state guarantees that foreign-invested enterprises participate in the formulation of standards in an equal manner and in government procurement activities through fair competition in accordance with the law. The State shall not expropriate any foreign investment except under special circumstances. In special circumstances, the State may levy or expropriate the investment of foreign investors in accordance with the law for the needs of the public interest. The expropriation and requisition shall be conducted in accordance with legal procedures and timely and reasonable compensation shall be given. In carrying out business activities, foreign-invested enterprises shall comply with provisions on labor protection, social insurance, tax, accounting, foreign exchange and other matters stipulated in laws and regulations.

The organization form, organization and activities of foreign-invested enterprises shall be governed by the Company Law of the People's Republic of China and the Partnership Enterprise Law of the People's Republic of China. Foreign-invested enterprises established before the implementation of the Foreign Investment Law may retain the original business organization and so on within five years after the implementation of the Foreign Investment Law.

The Implementation Regulations on the Foreign Investment Law, which was promulgated by the State Council on December 26, 2019, and came into effect on January 1, 2020, further requires that foreign-invested enterprises and domestic enterprises be treated equally with respect to policy making and implementation. Pursuant to the Implementation Regulations on the Foreign Investment Law, if an existing foreign-invested enterprise fails to change its original form pursuant to the Foreign Investment Law as of January 1, 2025, the market regulation departments will not process other registration matters for such enterprise, and may disclose its information to the public.

On December 30, 2019, the Ministry of Commerce and the State Administration for Market Regulation jointly issued the Measures for Reporting of Foreign Investment Information, which came into effect on January 1, 2020. Since January 1, 2020, for foreign investors carrying out investment activities directly or indirectly in mainland China, foreign investors or foreign-invested enterprises shall submit investment information through the Enterprise Registration System and the National Enterprise Credit Information Publicity System operated by the State Administration for Market Regulation. Foreign investors or foreign-invested enterprises shall disclose their investment information by submitting reports for their establishments, modifications and cancellations and their annual reports in accordance with the Foreign Investment Information Measures. If a foreign-invested enterprise investing in mainland China has finished submitting its reports for its establishment, modifications and cancellation and its annual reports, the information will be shared by the competent market regulation department to the competent commercial department, and does not require such foreign-invested enterprise to submit the reports separately. Where a foreign investor or a foreign-invested enterprise fails to submit the investment information as required, and fails to resubmit or correct such information after being notified by the competent commerce authority, the competent commerce authority shall order it to make corrections within 20 business days. Failure to make corrections within the specified period may subject the foreign investor or the foreign-invested enterprise to fines of up to RMB300,000, or a fine up to RMB500,000 if other severe violations exist.

On December 19, 2020, the National Development and Reform Commission, or the NDRC, and the Ministry of Commerce jointly promulgated the Measures on the Security Review of Foreign Investment, effective on January 18, 2021, setting forth provisions concerning the security review mechanism on foreign investment, including the types of investments subject to review, review scopes and procedures, among others. Led by the NDRC and the Ministry of Commerce, the Office of the Foreign Investment Security Review Working Mechanism shall be established under the NDRC to undertake routine work on the security review of foreign investment. Foreign investors or parties in mainland China shall take the initiative to make a declaration on their investments for security review to this office prior to (i) making investments in the military industry, military industrial support and other fields relating to the security of national defense, and investments in areas surrounding military facilities and military industry facilities; and (ii) obtaining control over enterprises involved in important agricultural products, important energy and resources, important equipment manufacturing, important infrastructure, important transport services, important cultural products and services, important information technologies and internet products and services, important financial services, key technologies and other important fields relating to national security. Control exists when a foreign investor (i) holds 50% or more equity interests in the enterprise, (ii) has voting rights that can materially impact on the resolutions of the board of directors or shareholders meeting of the enterprise even when it holds less than 50% equity interests in the enterprise, or (iii) has material impact on the enterprise's business decisions, human resources, finance and technology. Violation of the reporting requirements may result in the order of reporting within a specified period, and, if the aforesaid parties fail to report, the order of disposition of equities or assets or adoption of any other necessary measures to restore the status before the foreign investments were made and eliminate any effect on national security.

Regulations Relating to Foreign Investment Industrial Policy

Investment activities in mainland China by foreign investors are principally governed by the Catalog of Industries for Encouraging Foreign Investment (2022 Version), which became effective on January 1, 2023, and the Special Administrative Measures for Access of Foreign Investments (2021 Version), or the negative list, which became effective on January 1, 2022 and were promulgated and are amended from time to time by the Ministry of Commerce and the NDRC, and together with the Foreign Investment Law and their respective implementation rules and ancillary regulations. The catalog and the negative list lay out the basic regulatory framework for foreign investment in mainland China, classifying businesses into three categories with regard to foreign investment: “encouraged,” “restricted,” and “prohibited.”

According to the current regulations, any industry not listed in the negative list is generally deemed as falling into a fourth category, “permitted” for foreign investment unless specifically prohibited or restricted by mainland China laws and regulations.

Our current businesses, including the production and sale of LiDAR products and gas sensors, are not included in the negative list and are not otherwise restricted to foreign investment by mainland China laws and regulations. We made this determination by considering the nature of our businesses and the fact that Shanghai Hesai, a wholly foreign owned entity, has been approved by the authorities to conduct such businesses without being subject to restrictions on foreign investment. However, as the negative list is amended from time to time, and other mainland China laws and regulations on foreign investment restrictions are subject to change as well, we cannot guarantee that our businesses will not become subject to restrictions on foreign investment in the future.

Regulations Relating to Product Liability

Pursuant to the PRC Product Quality Law, which was promulgated on February 22, 1993 and most recently amended on December 29, 2018 and effective on the same day, a manufacturer is prohibited from producing or selling products that do not satisfy applicable standards and requirements for safeguarding human health and ensuring human and property safety. Products must be free from unreasonable dangers threatening human and property safety. Where a defective product causes personal injury or property damage, the aggrieved party may make a claim for compensation from the manufacturer or the seller of the product. Manufacturers and sellers of non-compliant products may be ordered to cease the production or sale of the products and could be subject to confiscation of the products and fines. Earnings from sales in violation of such standards or requirements may also be confiscated, and in severe cases, an offender’s business license may be revoked.

On May 28, 2020, the National People’s Congress promulgated the PRC Civil Code. Under the PRC Civil Code, if a product is found to be defective and to compromise the personal and property security of others, the victim may require compensation to be made by the manufacturer or the seller of the product. Where any manufacturer or seller knowingly produces or sells defective products or fails to take effective remedial measures in accordance with the PRC Civil Code and thus causes death or serious damage to the health of another person, such person shall be entitled to claim punitive damages. If the transporter or storekeeper is responsible for the matter, the manufacturer or seller shall have the right to demand compensation for its losses.

Regulations Relating to Import and Export of Goods

Pursuant to the Regulations of the PRC on the Administration of Import and Export of Goods promulgated by the State Council on December 10, 2001, which came into effect on January 1, 2002, and was recently amended on March 10, 2024 with effect on May 1, 2024, the import and export of goods are generally allowed by the mainland China government, but the prohibitions or restrictions explicitly stipulated in the laws or administrative regulations shall still be complied with during the conduct of import and export of goods by individuals or entities. According to the Foreign Trade Law of the PRC promulgated by the Standing Committee of National People’s Congress, on May 12, 1994, effective on July 1, 1994 and most recently amended with immediate effect on December 30, 2022, unless otherwise provided by laws and regulations, the mainland China government allows free export and import of goods and technologies, and protects the intellectual property rights associated with international trade. The authorities have canceled the requirements to file records and register formalities for foreign trade operators engaging in the import or export of goods or technology with the Ministry of Commerce or the agency entrusted from December 30, 2022.

Pursuant to the Customs Law of the PRC promulgated by the Standing Committee of National People's Congress, on January 22, 1987, effective on July 1, 1987 and last amended on April 29, 2021, and the Administrative Provisions of the Record-filing of Customs Declaration Entities promulgated by the General Administration of Customs of the PRC on November 19, 2021, effective on January 1, 2022, unless otherwise provided for, the declaration of import or export goods and the payment of duties may be made by the consignees or consignors themselves, or by entrusted customs brokers that have been registered with the customs and such declaration shall be made by filing with the customs.

Regulations Relating to the Control of Radio Transmission Equipment

The Radio Administration Regulation of the PRC was released by the State Council and the Central Military Commission on September 11, 1993, and became effective on the same day, which was subsequently amended and released on November 11, 2016, and came into force on December 1, 2016. Pursuant to the Radio Administration Regulation of the PRC, radio transmission equipment produced or imported for the purpose of sale or use in PRC shall apply to the radio regulatory authority for the model approval, except for micro power short-distance radio transmission equipment. The catalogue of approved models of radio transmitting equipment was published by the radio regulatory authority of the state.

On October 7, 1997, in order to further strengthen the administration of manufacture of radio transmission equipment, the former State Radio Management Committee (the duty of which is now performed by the Ministry of Industry and Information Technology of the PRC) and the State Bureau of Technical Supervision (the predecessor of General Administration of Quality Supervision, Inspection and Quarantine of the PRC) jointly issued the Regulations for the Administration of the Production of Radio Transmission Equipment, which came into force on January 1, 1999. Any manufacture (including pilot production) of radio transmission equipment in mainland China is subject to these regulations. Such regulations specifically require that the model of transmission feature shall be approved by the State Radio Management Committee Office and the Model Approval Certificate of Radio Transmission Equipment and the Model Approval Code shall be obtained for the production of radio transmission equipment in mainland China, in addition, the Model Approval Code shall be marked on the exterior of radio transmission equipment. The above requirements shall be exempted if either of the following two conditions are satisfied, namely: (i) the equipment has passed the model approval according to the Management Regulations of Import of Radio Transmission Equipment and obtained "Model Approval Certificate of Radio Transmission Equipment"; or (ii) the production of radio transmission equipment is for the sole purpose of exporting, and will not be sold and/or used in the domestic market (except otherwise provided by agreements signed with relevant countries). On December 22, 2022, the Ministry of Industry and Information Technology of the PRC promulgated the Provisions on the Administration of Radio Transmission Equipment, which came into effect on July 1, 2023. According to the Provisions on the Administration of Radio Transmission Equipment, the production and import of radio transmission equipment for sale and use in China shall comply with laws and regulations on product quality, national standards, and the state's provisions on radio regulation. For production or importation of radio transmission equipment, except for micro-power short-distance radio transmission equipment, to be sold and used in China, an application shall be made to the radio regulatory authority of the state for model approval of radio transmission equipment. The catalogue for the approved model of radio transmission equipment shall be published by the radio regulatory authority of the state.

On December 26, 2018, the Ministry of Industry and Information Technology promulgated the Interim Measures for the Implementation of Record Filing for the Sale of Radio Transmitting Equipment, which became effective on March 1, 2019. According to the Measures, sales of radio transmitting equipment shall be filed for the record with the provincial radio regulatory authority in the place where the seller is registered through the information platform within 10 working days from the date of commencement of sales. The seller shall be responsible for the authenticity of the filed information, and accept the supervision and administration implemented by the authorities in accordance with the law. The filing information shall include the information of the business entity and equipment to be sold. The business entity information shall include name of the business entity, unified social credit code, contact person and contact information, address of physical business premises or name and website of the online sales platform, and relevant certificates. The information of the equipment to be sold shall include the equipment model, name of the manufacturer, equipment model, and model approval code.

Regulations Relating to Real Estate

Company-Owned Real Properties

According to the PRC Civil Code, properties referred to in this law include real property and personal property. The creation, alteration, alienation, or extinguishment of the property right of a real property shall become effective upon registration in accordance with law.

The certificate of ownership of real property shall be evidence of the right holder's entitlement in the real property. The right to use a land parcel for construction purposes may be created by way of grant, allocation or by other means. A person who has the right to use a land parcel for construction purposes shall make reasonable use of the land parcel and may not change its planned purpose of use.

According to the Land Administration Law of the PRC, adopted by the Standing Committee of National People's Congress on June 25, 1986, and latest amended on August 26, 2019, the PRC implements "socialist public ownership of land," that is, ownership by the whole people or collective ownership by the working masses. The State formulates an overall land utilization plan to stipulate land use, classifying land into agricultural land, construction land, or unused land. Entities or individuals using land must use the land strictly in accordance with the purposes of land use determined in the overall land utilization plan.

Leasing

Pursuant to the PRC Civil Code, the lessee may sublease the leased premises to a third party with the consent of the lessor. Where the lessee subleases the premises, the lease contract between the lessee and the lessor remains valid. However, the lessor is entitled to terminate the lease contract if the lessee subleases the premises without the consent of the lessor. The lessee may terminate the lease contract if the leased property could not be used due to the reasons of the lessors, such as when the ownership of the leased real estate is in dispute.

Pursuant to the PRC Civil Code, if the mortgaged property has been leased and transferred for occupation before the establishment of mortgage rights, the original tenancy shall not be affected by such mortgage rights. According to the Interpretation of the Supreme People's Court on Several Issues concerning the Application of Law in the Trial of Cases about Disputes Over Lease Contracts on Urban Buildings (Revised 2020), which was promulgated by the Supreme People's Court on July 30, 2009, and amended on December 29, 2020, if the ownership of the leased premises changes during the period when the lessee is in possession in accordance with the lease contract, and the lessee requests the assignee to continue to perform the original lease contract, the PRC court shall support it, except when the mortgage right has been established before the premises were leased and the ownership changes due to the mortgagee's realization of the mortgage right occurred.

On December 1, 2010, the Ministry of Housing and Urban-Rural Development promulgated the Administrative Measures for Commodity House Leasing, which became effective on February 1, 2011. Pursuant to the measures, parties shall register and file with the local property administration authority within thirty days after entering the lease contract. Failure to comply with such registration and filing requirements shall result in fines up to RMB10,000. However, according to the PRC Civil Code, failure to register and file with the authority in accordance with the provisions of laws, administrative rules and regulations would not prejudice the validity of the contract.

Construction

Pursuant to the PRC Land Administration Law and the Administrative Measures for Commodity House Leasing, the land shall be used strictly in line with the purposes determined in the general land use plan whether by entities or individuals, and the usage of land defined in the general use plan shall not be changed without the approval of the authority who approved the plan originally.

Pursuant to the Regulation on the Quality Management of Construction Projects promulgated by the State Council on January 30, 2000, and most recently amended on April 23, 2019, and the Measures for the Administration of Filings for Post-Construction Inspection and Acceptance of Housing Building Projects and Municipal Infrastructure Projects promulgated by the Ministry of Construction, which has now been merged into the Ministry of Housing and Urban-Rural Development, on April 7, 2000 and most recently amended by the ministry with immediate effect on October 19, 2009, the construction entity shall organize the entities of design, construction, project supervision, etc. to conduct as-built acceptance check after receiving the project completion report. The construction project could be delivered for use only after it has passed the as-built acceptance check. The construction entity shall, within fifteen days from the date of passing the acceptance check, file with the competent construction department of the local government at or above the county level where the project is located for record.

Regulations Relating to Environmental Protection and Work Safety

Environmental Protection

Pursuant to the PRC Environmental Protection Law promulgated by the Standing Committee of National People's Congress on December 26, 1989, amended on April 24, 2014, and effective on January 1, 2015, any entity which discharges or will discharge pollutants during the course of operations or other activities must implement effective environmental protection safeguards and procedures to control and properly treat waste gas, waste water, waste residue, dust, malodorous gases, radioactive substances, noise, vibrations, electromagnetic radiation, and other hazards produced during such activities.

According to the provisions of the PRC Environmental Protection Law, in addition to other applicable laws and regulations of the PRC, the environmental protection authorities and its local counterparts are responsible for administering and supervising environmental protection matters, and may impose various administrative penalties on persons or enterprises in violation of the Environmental Protection Law. Such penalties include fines, orders to rectify within a prescribed period, orders to cease construction, orders to restrict or suspend production, orders to make recovery, orders to disclose information, imposition of administrative action against responsible persons, and orders to shut down enterprises. Any person or entity that pollutes the environment resulting in damage could also be held liable under the PRC Civil Code. In addition, environmental organizations may also bring lawsuits against any entity that discharges pollutants detrimental to the public welfare.

Environmental Impact Assessment

Pursuant to the PRC Environmental Protection Law, construction projects that have environmental impact shall be subject to environmental impact assessment. Installations for the prevention and control of pollution in construction projects must be designed, built and commissioned together with the principal construction plan of the project. Such installations shall not be dismantled or left idle without authorization from the competent government agencies.

Pursuant to the Law of the PRC on Environment Impact Assessment promulgated by the Standing Committee of National People's Congress on October 28, 2002, and most recently amended with immediate effect on December 29, 2018, the State Council implemented an environmental impact assessment to classify construction projects according to their impact on the environment. Construction entities shall prepare an environmental impact report, or an environmental impact statement according to the following rules: (i) for projects with potentially serious environmental impacts, an environmental impact report shall be prepared to provide a comprehensive assessment of their environmental impacts; (ii) for projects with potentially mild environmental impacts, an environmental impact statement shall be prepared to provide an analysis or specialized assessment of the environmental impacts; and (iii) an environmental impact form shall be completed for projects with minimal environmental impacts that does not require environmental impact assessment.

On November 30, 2020, the Ministry of Ecology and Environment of the PRC promulgated the Classified Administration Catalogue of Environmental Impact Assessments for Construction Projects (2021 version), or Classified Administration Catalogue (2021 version), which became effective on January 1, 2021.

Work Safety

Under the construction safety laws and regulations, including the PRC Work Safety Law, which was promulgated by the Standing Committee of National People's Congress on June 29, 2002, most recently amended on June 10, 2021, and effective on September 1, 2021, production and operating business entities must establish objectives and measures for work safety and improve the working conditions for workers in a planned and systematic way. A work safety protection scheme must also be set up to implement the work safety job responsibility system. In addition, production and operating business entities must arrange work safety training and provide their employees with protective equipment that meets the national or industrial standards. Automobile and components manufacturers are subject to such environment protection and work safety requirements.

Fire Control

Pursuant to the PRC Fire Safety Law, which was promulgated by the Standing Committee of National People's Congress on April 29, 1998, and most recently amended on April 29, 2021, and the Interim Provisions on Administration of Fire Control Design Review and Acceptance of Construction Project promulgated by the Ministry of Housing and Urban-Rural Development on April 1, 2020, and most recently amended on April 21, 2023, with effect on October 30, 2023, the construction entity of a labor-intensive enterprise's manufacturing plant whose size is over 2,500 square meters and other special construction projects must apply for fire prevention design review with fire control authorities, and complete fire assessment inspection and acceptance procedures after the construction project is completed. The construction entity of other construction projects must file with the competent department for record within five business days after passing the construction completion inspection and acceptance. If the construction entity fails to pass the fire safety inspection before such venue is put into use or fails to conform to the fire safety requirements after such inspection, it will be subject to (i) orders to suspend the construction of projects, use of such projects, or operation of relevant business, and (ii) a fine between RMB30,000 and RMB300,000.

Regulations Relating to Intellectual Property

China has adopted comprehensive legislation governing intellectual property rights, including copyrights, trademarks, patents and domain names. China is a signatory to the primary international conventions on intellectual property rights and has been a member of the Agreement on Trade Related Aspects of Intellectual Property Rights since its accession to the World Trade Organization in December 2001.

Copyright

On September 7, 1990, the Standing Committee of National People's Congress promulgated the PRC Copyright Law, most recently amended on November 11, 2020, and effective on June 1, 2021. On August 2, 2002, the State Council promulgated the Implementation Regulations of the PRC Copyright Law, which was most recently amended on January 30, 2013 and came into effect on March 1, 2013. The amended Copyright Law and its implementation rules extend copyright protection to internet activities, products disseminated over the internet and software products. In addition, there is a voluntary registration system administered by the Copyright Protection Centre of China. According to the PRC Copyright Law, Chinese citizens, legal persons, or other organizations shall, whether published or not, own copyright in their copyrightable works, which include, among others, works of literature, art, natural science, social science, engineering technology and computer software. Copyright owners enjoy certain legal rights, including right of publication, right of authorship and right of reproduction. An infringer of the copyrights shall be subject to various civil liabilities, which include ceasing infringement activities, apologizing to the copyright owners and compensating the loss of copyright owner. Infringers of copyright may also be subject to fines and/or administrative or criminal liabilities in severe situations.

In order to further implement the Regulations on Computer Software Protection, promulgated by the State Council on December 20, 2001 and most recently amended on January 30, 2013, the National Copyright Administration issued the Measures for the Registration of Computer Software Copyright on February 20, 2002, which specifies detailed procedures and requirements with respect to the registration of software copyrights.

Under the Order of the State Council on the Issuance of the Regulations on the Protection of Layout-Designs of Integrated Circuits, promulgated on April 2, 2001 and coming into force on October 1, 2001, any layout-design created by a Chinese natural person, legal person or other organization shall be eligible for the exclusive right of layout-design in accordance with these regulations. Any layout-design which is to be protected shall be original in the sense that the layout-design is the result of the creator's own intellectual effort, and it is not commonplace among creators of layout-designs and manufacturers of integrated circuits at the time of its creation. The intellectual property administration department of the State Council is responsible for the administrative work concerning the exclusive right of layout-design in accordance with these regulations.

Trademark

According to the Trademark Law of the People's Republic of China promulgated by the Standing Committee of National People's Congress on August 23, 1982, and most recently amended on April 23, 2019 respectively, the Trademark Office of the State Administration for Industry and Commerce Authority under the State Council is responsible for the registration and administration of trademarks in mainland China. The State Administration for Industry and Commerce Authority under the State Council has established a Trademark Review and Adjudication Board for resolving trademark disputes. Registered trademarks are valid for 10 years from the date the registration is approved. A registrant may apply to renew a registration within twelve months before the expiration date of the registration. If the registrant fails to apply in a timely manner, a grace period of six additional months may be granted. If the registrant fails to apply before the grace period expires, the registered trademark shall be deregistered. Renewed registrations are valid for ten years. On April 29, 2014, the State Council issued the revised Implementing Regulations of the Trademark Law of the People's Republic of China, which specifies the requirements of applying for trademark registration and renewal.

Patent

According to the PRC Patent Law, promulgated by the Standing Committee of National People's Congress on March 12, 1984, most recently amended on October 17, 2020, and effective on June 1, 2021, and the Implementation Rules of the PRC Patent Law, promulgated by the State Council on June 15, 2001 and most recently revised on January 20, 2024, the patent administrative department under the State Council is responsible for the administration of patent-related work nationwide and the patent administration departments of provincial or autonomous regions or municipal governments are responsible for administering patents within the respective administrative areas. The PRC Patent Law and Implementation Rules of the PRC Patent Law provide for three types of patents, namely "inventions," "utility models" and "designs." Invention patents are valid for twenty years, utility model patents are valid for ten years, and since June 1, 2021, the validation period for design patents whose application date is after June 1, 2021 are extended to fifteen years in each case from the date of application. In accordance with the Measures for the Filing of Patent Licensing Agreement, which was issued by the State Intellectual Property Office on June 27, 2011, and came into effect on August 1, 2011, the State Intellectual Property Office is responsible for the filing of patent licensing agreements nationwide. The parties concerned shall complete filing within three months from the effective date of such patent licensing agreement. The Chinese patent system adopts a "first come, first file" principle, which means that where more than one person files a patent application for the same invention, a patent will be granted to the person who files the application first. An invention or a utility model must possess novelty, inventiveness and practical applicability to be patentable. Third Parties must obtain consent or a proper license from the patent owner to use the patent. Otherwise, the unauthorized use constitutes an infringement on the patent rights.

Domain Names

On August 24, 2017, the Ministry of Industry and Information Technology promulgated the Administrative Measures for Internet Domain Names, which became effective on November 1, 2017. The measures regulate the registration of domain names, such as China's national top-level domain name ".CN." The China Internet Network Information Center issued the Implementation Rules for Country Code Top-Level Domain Name Registration and Country Code Top-Level Dispute Resolutions Procedure Rules on June 18, 2019, pursuant to which the China Internet Network Information Center can authorize a domain name dispute resolution institution to decide domain name related disputes.

Regulations Relating to Foreign Exchange

The principal regulations governing foreign currency exchange in mainland China are the Administrative Regulations on Foreign Exchange of the People's Republic of China, which were promulgated by the State Council on January 29, 1996, most recently amended on August 5, 2008 and effective on August 5, 2008, and the Administrative Regulations on Foreign Exchange Settlement, Sales and Payment, which was promulgated by the People's Bank of China, on June 20, 1996 and became effective on July 1, 1996. Under these regulations, payments of current account items, such as profit distributions and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval from the State Administration of Foreign Exchange, or SAFE, by complying with certain procedural requirements. By contrast, approval from or registration with appropriate governmental authorities or the designated banks is required where RMB is to be converted into foreign currency and remitted outside of mainland China to pay capital account items such as the repayment of foreign currency-denominated loans, direct investment overseas and investments in securities or derivative products outside of mainland China. Foreign-invested enterprises are permitted to convert their after-tax dividends into foreign exchange and to remit such foreign exchange out of their foreign exchange bank accounts in mainland China.

The Circular of Further Improving and Adjusting Foreign Exchange Administration Policies on Foreign Direct Investment, which was promulgated by SAFE on December 19, 2012 and amended on May 4, 2015, substantially amends and simplifies the current foreign exchange procedure. Pursuant to this circular, the opening of various special purpose foreign exchange accounts, such as pre-establishment expenses accounts, foreign exchange capital accounts and guarantee accounts, the reinvestment of RMB proceeds derived by foreign investors in the PRC, and remittance of foreign exchange profits and dividends by a foreign-invested enterprise to its foreign shareholders no longer require the approval or verification of SAFE, and multiple capital accounts for the same entity may be opened in different provinces, which was not possible previously. In 2013, SAFE specified that the administration by SAFE or its local branches over direct investment by foreign investors in the PRC must be conducted by way of registration, and that banks must process foreign exchange business relating to the direct investment in the PRC based on the registration information provided by SAFE and its branches. On February 13, 2015, SAFE promulgated the Circular of Further Simplifying and Improving the Administration of the Foreign Exchange Concerning Direct Investment. Instead of applying for approvals regarding foreign exchange registrations of foreign direct investment and overseas direct investment from SAFE, entities and individuals may apply for such foreign exchange registrations from qualified banks. The qualified banks, under the supervision of SAFE, may directly review the applications and conduct the registration.

On March 30, 2015, SAFE promulgated the Notice on Reforming the Administration of Foreign Exchange Settlement of Capital of Foreign-invested Enterprises, or SAFE Circular 19, which took effect on June 1, 2015 and was most recently revised on March 23, 2023. SAFE Circular 19 expands a pilot reform of the administration of the settlement of the foreign exchange capitals of foreign-invested enterprises nationwide. SAFE Circular 19 allows all foreign invested enterprises established in the PRC to settle their foreign exchange capital on a discretionary basis according to the actual needs of their business operation, provides the procedures for foreign invested companies to use RMB converted from foreign currency denominated capital for equity investments, and removes certain other restrictions that had been imposed. However, SAFE Circular 19 continues to prohibit foreign-invested enterprises from, among other things, using RMB funds converted from their foreign exchange capital for expenditure beyond their business scope and providing entrusted loans or repaying loans between non-financial enterprises.

On June 9, 2016, SAFE promulgated the Circular on Reforming and Regulating Policies on the Management of the Settlement of Foreign Exchange of Capital Accounts, or SAFE Circular 16, which was recently amended on December 4, 2023. The SAFE Circular 16 unifies the discretionary foreign exchange settlement for all the domestic institutions. The discretionary foreign exchange settlement refers to the foreign exchange earnings on capital account (including foreign exchange capital, foreign loans and funds remitted from the proceeds from the overseas listing) which have been confirmed by the policies to implement discretionary foreign exchange settlement and can be settled at the banks based on the actual operational needs of the domestic institutions. The proportion of discretionary foreign exchange settlement of the foreign exchange capital is temporarily determined as 100%. Violations of SAFE Circular 19 or SAFE Circular 16 could result in administrative penalties in accordance with the Administrative Regulations on Foreign Exchange and other provisions.

Furthermore, SAFE Circular 16 stipulates that the use of foreign exchange incomes of capital accounts by foreign-invested enterprises shall follow the principles of authenticity and self-use within the business scope of the enterprises. The foreign exchange incomes of capital accounts and capital in RMB obtained by the foreign-invested enterprise from foreign exchange settlement shall not be used for the following purposes: (i) directly or indirectly used for the payment beyond the business scope of the enterprises or the payment prohibited by laws and regulations; (ii) directly or indirectly used for investment in securities or financial schemes other than bank guaranteed products unless otherwise provided by laws and regulations; (iii) used for granting loans to non-affiliated enterprises, unless otherwise permitted by its business scope; and (iv) used for the construction or purchase of real estate that is not for self-use (except for real estate enterprises).

On October 23, 2019, SAFE promulgated the Notice of the State Administration of Foreign Exchange on Further Promoting the Convenience of Cross-border Trade and Investment, or SAFE Circular 28, which was recently amended on December 4, 2023. The SAFE Circular 28 stipulates that non-investment foreign-invested enterprises may use capital to carry out domestic equity investment in accordance with the law under the premise of not violating the negative list and the projects invested are true and in compliance with laws and regulations. In addition, SAFE Circular 28 stipulates that qualified enterprises in certain pilot areas may use their capital income from registered capital, foreign debt and overseas listing, for the purpose of domestic payments, without providing authenticity certifications to the banks in advance for those domestic payments.

On April 10, 2020, SAFE issued the Notice of SAFE on Optimizing Foreign Exchange Administration to Support the Development of Foreign-related Business. This notice provides that under the condition that the use of funds is genuine and compliant with current administrative provisions on use of income relating to capital account, enterprises are allowed to use income under capital account such as capital funds, foreign debts and overseas listings for domestic payment, without submission to banks prior to each transaction of materials evidencing the veracity of such payment.

On December 4, 2023, SAFE issued the Notice on Further Deepening Reforms to Promote the Convenience of Cross-border Trade and Investment, or SAFE Notice 28, which provides that qualified high-tech, “professional, sophisticated, unique and new” and technology-based small and medium-sized enterprises in Shanghai and certain other areas can borrow foreign debt on their own within an amount not exceeding the equivalent of US\$10 million. SAFE Notice 28 abolished the restriction that the cumulative remittance amount of up-front expenses of overseas direct investment by a domestic enterprise shall not exceed the equivalent of US\$3 million, provided that the cumulative remittance amount shall not exceed 15% of the total proposed investment amount by the PRC entity. Additionally, SAFE Notice 28 restructured the asset realization account of capital accounts to the settlement account of capital accounts. The equity transfer consideration funds in foreign currency received by a domestic equity transferor (including institutions and individuals) from domestic parties, as well as the foreign exchange funds raised by domestic enterprises through overseas listing may be directly remitted to the settlement account of capital accounts. Funds in the settlement account of capital accounts may be settled and used at discretion. The equity transfer consideration funds received by a domestic equity transferor from foreign-invested enterprises which are paid with RMB funds derived from the settlement of foreign exchange (i.e., RMB funds derived from direct settlement of foreign exchange or from settlement account for pending payment) may be transferred directly to the RMB account of the domestic equity transferor.

Regulations Relating to Dividend Distribution

The principal regulations governing distribution of dividends of a wholly foreign-owned enterprise include the Company Law of the People’s Republic of China, which was recently amended by the Standing Committee of the National People’s Congress on December 29, 2023 with respect to the company’s capital system, organization, registration, responsibilities of controlling shareholders and management personnel, etc. and will come into force on July 1, 2024. Under these regulations, wholly foreign-owned enterprises in mainland China may pay dividends only out of their accumulated profits, if any, determined in accordance with the mainland China accounting standards and regulations. PRC companies are not permitted to distribute any profits until any losses from prior fiscal years have been offset. Profits retained from prior fiscal years may be distributed together with distributable profits from the current fiscal year. In addition, foreign investment enterprises in mainland China are required to allocate at least 10% of their accumulated profits each year, if any, to fund certain reserve funds unless these reserves have reached 50% of the registered capital of the enterprises. Foreign investment enterprises shall not distribute profits before losses are covered and the statutory reserve funds are drawn.

Regulations Relating to Foreign Debts

A loan made by foreign investors as shareholders in a foreign-invested enterprise is considered to be foreign debt in mainland China and is regulated by various laws and regulations, including the Foreign Exchange Administrative Regulation, the Interim Provisions on the Management of Foreign Debts promulgated by SAFE, the NDRC and the Ministry of Finance, which took effect on March 1, 2003 and was amended on July 26, 2022 with effect on September 1, 2022, and the Administrative Measures for Registration of Foreign Debts promulgated by SAFE on April 28, 2013 and amended by the Notice of SAFE on Abolishing and Amending the Normative Documents Related to the Reform of the Registered Capital Registration System on May 4, 2015. Under these rules, a shareholder loan in the form of foreign debt made to a Chinese entity does not require the prior approval of SAFE. However, such foreign debt must be registered with and recorded by local banks. The SAFE Circular 28 provides that a non-financial enterprise in the pilot areas may register a permitted amount of foreign debts, which is as twice of the non-financial enterprise's net assets, at the local foreign exchange bureau. Such non-financial enterprise may borrow foreign debts within the permitted amount and directly handle the procedures in banks without registration of each foreign debt. However, the non-financial enterprise shall report its international income and expenditure regularly.

Pursuant to the Administrative Measures for Examination and Registration of Medium and Long Term Foreign Debts of Enterprises, which came into force on February 10, 2023, prior to the borrowing of foreign debts, enterprises shall first apply to and obtain from the NDRC the Certificate of Examination and Registration of Foreign Debts Borrowed by Enterprises and shall report the information on the foreign debts to the NDRC within ten business days after completion of each borrowing. In February 2023, the NDRC circulated the Guide to the Examination and Registration of Medium and Long Term Foreign Debts of Enterprises on its official website, according to which, domestic companies (and the overseas companies or branches controlled by them) who borrowed from foreign companies (including overseas shareholders) a loan with a maturity of more than one year need to apply to the NDRC for examination and registration. However, the NDRC has not issued any other further explanation for the implementation of these measures.

Regulations Relating to Offshore Special Purpose Vehicles Held by Mainland China Residents

SAFE promulgated the Circular on Printing and Distributing the Provisions on Foreign Exchange Administration over Domestic Direct Investment by Foreign Investors and the Supporting Documents on May 10, 2013, which was amended on October 10, 2018 and on December 30, 2019 respectively, which specifies that the administration by SAFE or its local branches over direct investment by foreign investors in mainland China shall be conducted by way of registration and banks shall process foreign exchange business relating to the direct investment in mainland China based on the registration information provided by SAFE and its branches.

SAFE promulgated SAFE Circular 37 on July 4, 2014 that requires mainland China residents or entities to register with SAFE or its local branch in connection with their establishment or control of an offshore entity established for the purpose of overseas investment or financing. SAFE Circular 37 regulates foreign exchange matters in relation to the use of special purpose vehicles by PRC residents or entities to seek offshore investment and financing or conduct round trip investment in the PRC. Under SAFE Circular 37, a "special purpose vehicle" refers to an offshore entity established or controlled, directly or indirectly, by PRC residents or entities for the purpose of seeking offshore financing or making offshore investment, using legitimate onshore or offshore assets or interests. "Round trip investment" refers to direct investment in the PRC by PRC residents or entities through special purpose vehicles, namely, establishing foreign-invested enterprises to obtain ownership, control rights and management rights. SAFE Circular 37 provides that, before contributing to a special purpose vehicle, PRC residents or entities are required to complete foreign exchange registration with SAFE or its local branch. In addition, such PRC residents or entities must update their SAFE registrations when the offshore special purpose vehicle undergoes material events relating to any change of basic information (including change of such mainland China citizens or residents, and name and term of operation), capital increase or reduction, transfers or exchanges of shares, or mergers or divisions.

SAFE further enacted the Notice of the State Administration of Foreign Exchange on Further Simplifying and Improving the Foreign Exchange Management Policies for Direct Investment and amended on December 30, 2019 by a notice, which allows mainland China residents or entities to register with qualified banks in connection with their establishment or control of an offshore entity established for the purpose of overseas investment or financing. However, remedial registration applications made by mainland China residents that previously failed to comply with SAFE Circular 37 continue to fall under the jurisdiction of the local branch of SAFE. In the event that a mainland China shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the mainland China subsidiaries of that special purpose vehicle may be prohibited from distributing profits to the offshore parent and from carrying out subsequent cross-border foreign exchange activities, and the special purpose vehicle may be restricted in its ability to contribute additional capital into its mainland China subsidiary.

On January 26, 2017, SAFE issued the Notice on Improving the Check of Authenticity and Compliance to Further Promote Foreign Exchange Administration, which stipulates several capital control measures with respect to the outbound remittance of profit from domestic entities to offshore entities, including (i) under the principle of genuine transaction, banks shall check board resolutions regarding profit distribution, the original version of tax filing records and audited financial statements; and (ii) domestic entities shall hold income to account for previous years' losses before remitting the profits. Moreover, pursuant to the notice, domestic entities shall make detailed explanations of the sources of capital and utilization arrangements, and provide board resolutions, contracts and other proof when completing the registration procedures in connection with an outbound investment.

Regulations Relating to Stock Incentive Plans

According to the Notice of the State Administration of Foreign Exchange on Issues Relating to the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Listed Company, which was issued on February 15, 2012, and other regulations, directors, supervisors, senior management and other employees participating in any share incentive plan of an overseas publicly listed company who are mainland China citizens or non-mainland China citizens residing in mainland China for a continuous period of not less than one year, subject to certain exceptions, are required to register with SAFE or its local branches and complete certain other procedures. All such participants who are PRC residents need to authorize a qualified mainland China agent, such as a mainland China subsidiary of the overseas publicly listed company to register with SAFE and handle foreign exchange matters such as opening accounts, and transfer and settlement of the proceeds. The notice further requires an offshore agent to be designated to handle matters in connection with the exercise of stock options and sales of proceeds for the participants of the stock incentive plans. In addition, the PRC agent is required to amend SAFE registration with respect to the stock incentive plan if there is any material change to the stock incentive plan, the PRC agent or the overseas entrusted institution or other material changes. The PRC agents must, on behalf of the PRC residents who have the right to exercise the employee stock options, apply to SAFE or its local branches for an annual quota for the payment of foreign currencies in connection with the PRC residents' exercise of the employee stock options. The foreign exchange proceeds received by the PRC residents from the sale of stock under the stock incentive plans granted and dividends distributed by the overseas listed companies must be remitted into the bank accounts in the PRC opened by the PRC agents before distribution to such PRC residents. Failure to complete the said SAFE registrations may subject the participating directors, supervisors, senior management and other employees to fines and other legal sanctions.

In addition, the State Administration of Taxation has issued certain circulars concerning employee stock options and restricted shares. Under these circulars, employees working in mainland China who exercise stock options or are granted restricted shares will be subject to mainland China individual income tax. The mainland China subsidiaries of an overseas listed company are required to file documents relating to employee stock options and restricted shares with tax authorities and to withhold individual income taxes of employees who exercise their stock option or purchase restricted shares. If the employees fail to pay or the mainland China subsidiaries fail to withhold income tax in accordance with laws and regulations, the mainland China subsidiaries may face sanctions imposed by the tax authorities or other mainland China governmental authorities.

Regulations Relating to Outbound Direct Investment

On December 26, 2017, the NDRC promulgated the Administrative Measures for the Outbound Investment of Enterprises, which took effect on March 1, 2018. According to these measures, non-sensitive overseas investment projects are required to make record filings with the local branch of the NDRC. On September 6, 2014, the Ministry of Commerce promulgated the Administrative Measures on Overseas Investments, which took effect on October 6, 2014. According to such regulations, overseas investments of PRC enterprises that involve non-sensitive countries and regions and non-sensitive industries must make record filings with a local branch of the Ministry of Commerce. The Notice of the State Administration of Foreign Exchange on Further Improving and Adjusting Foreign Exchange Administration Policies for Direct Investment was issued by SAFE on November 19, 2012 and amended on May 4, 2015, October 10, 2018 and December 30, 2019 respectively, under which mainland China enterprises must register for overseas direct investment with local banks. The shareholders or beneficial owners who are mainland China entities are required to be in compliance with the related overseas investment regulations. If they fail to complete the filings or registrations required by overseas direct investment regulations, the authority may order them to suspend or cease the implementation of such investment and make corrections within a specified time.

Regulations Relating to Taxation

Enterprise Income Tax

According to the PRC Enterprise Income Tax Law, which was promulgated on March 16, 2007, became effective from January 1, 2008 and amended on February 24, 2017 and December 29, 2018, respectively, an enterprise established outside mainland China with de facto management bodies within mainland China is considered a resident enterprise for mainland China enterprise income tax purposes and is generally subject to a uniform 25% enterprise income tax rate on its worldwide income. The Implementing Rules of the PRC Enterprise Income Tax Law defines a de facto management body as a managing body that in practice exercises “substantial and overall management and control over the production and operations, personnel, accounting, and properties” of the enterprise. Non-mainland China resident enterprises without any branches in mainland China pay an enterprise income tax in connection with their income originating from mainland China at the tax rate of 10%.

On February 3, 2015, the State Administration of Taxation issued the Announcement on Several Issues Concerning the Enterprise Income Tax on Indirect Transfer of Assets by Non-Resident Enterprises, or the SAT Circular 7, which was amended in 2017. The SAT Circular 7 repeals certain provisions in the Notice of the State Administration of Taxation on Strengthening the Administration of Enterprise Income Tax on Income from Equity Transfer by Non-Resident Enterprises, issued by the State Administration of Taxation on December 10, 2009 and the Announcement on Several Issues Relating to the Administration of Income Tax on Non-resident Enterprises issued by the State Administration of Taxation on March 28, 2011 and clarifies certain provisions in this notice. The SAT Circular 7 provides comprehensive guidelines relating to, and heightening the Chinese tax authorities’ scrutiny on, indirect transfers by a non-resident enterprise of assets (including assets of organizations and premises in mainland China, immovable property in mainland China, equity investments in mainland China resident enterprises). For instance, when a non-resident enterprise transfers equity interests in an overseas holding company that directly or indirectly holds certain mainland China Taxable Assets and if the transfer is believed by the Chinese tax authorities to have no reasonable commercial purpose other than to evade enterprise income tax, the SAT Circular 7 allows Chinese tax authorities to reclassify the indirect transfer of taxable assets into a direct transfer and therefore impose a 10% rate of mainland China enterprise income tax on the non-resident enterprise. The SAT Circular 7 lists several factors to be taken into consideration by tax authorities in determining if an indirect transfer has a reasonable commercial purpose. However, regardless of these factors, the overall arrangements in relation to an indirect transfer satisfying all the following criteria will be deemed to lack a reasonable commercial purpose: (i) 75% or more of the equity value of the intermediary enterprise being transferred is derived directly or indirectly from mainland China Taxable Assets; (ii) at any time during the one-year period before the indirect transfer, 90% or more of the asset value of the intermediary enterprise (excluding cash) is comprised directly or indirectly of investments in mainland China, or during the one-year period before the indirect transfer, 90% or more of its income is derived directly or indirectly from mainland China; (iii) the functions performed and risks assumed by the intermediary enterprise and any of its subsidiaries and branches that directly or indirectly hold the mainland China Taxable Assets are limited and are insufficient to prove their economic substance; and (iv) the foreign tax payable on the gain derived from the indirect transfer of the mainland China Taxable Assets is lower than the potential mainland China tax on the direct transfer of those assets. On the other hand, indirect transfers falling into the scope of the safe harbors under the SAT Circular 7 may not be subject to mainland China tax. The safe harbors include qualified group restructurings, public market trades and exemptions under tax treaties or arrangements.

On October 17, 2017, the State Administration of Taxation issued the Announcement on Issues Relating to Withholding at Source of Income Tax of Non-resident Enterprises, or the SAT Circular 37, which took effect on December 1, 2017. Certain provisions of the SAT Circular 37 were repealed by the Announcement of the State Administration of Taxation on Revising Certain Taxation Normative Documents. According to the SAT Circular 37, the balance after deducting the equity net value from the equity transfer income shall be the taxable income amount for equity transfer income. Equity transfer income shall mean the consideration collected by the equity transferor from the equity transfer, including various income in monetary form and non-monetary form. Equity net value shall mean the tax computation basis for obtaining the said equity. The tax computation basis for equity shall be: (i) the capital contribution costs actually paid by the equity transferor to a Chinese resident enterprise at the time of investment and equity participation, or (ii) the equity transfer costs actually paid at the time of acquisition of such equity to the original transferor of the said equity. Where there is reduction or appreciation of value during the equity holding period, and the gains or losses may be confirmed pursuant to the rules of the finance and tax authorities of the State Council, the equity net value shall be adjusted accordingly. When an enterprise computes equity transfer income, it shall not deduct the amount in the shareholders' retained earnings, such as undistributed profits, of the investee enterprise, which may be distributed in accordance with the said equity. In the event of partial transfer of equity under multiple investments or acquisitions, the enterprise shall determine the costs corresponding to the transferred equity in accordance with the transfer ratio, out of all costs of the equity.

Under the SAT Circular 7 and the Law of the People's Republic of China on the Administration of Tax Collection promulgated by the Standing Committee of National People's Congress on September 4, 1992 and most recently amended on April 24, 2015, in the case of an indirect transfer, entities or individuals obligated to pay the transfer price to the transferor shall act as withholding agents. Where the withholding agent does not make the withholding, and the transferor of the equity does not pay the tax payable amount, the tax authority may impose late payment interest on the transferor. In addition, the tax authority may also hold the withholding agents liable and impose a penalty of ranging from 50% to 300% of the unpaid tax on them. The penalty imposed on the withholding agents may be reduced or waived if the withholding agents have submitted the materials in connection with the indirect transfer to the mainland China tax authorities in accordance with the SAT Circular 7.

According to the Administrative Measures for Recognition of High-Tech Enterprises amended by the Ministry of Science and Technology, the Ministry of Finance and the State Administration of Taxation on January 29, 2016 with effect since January 1, 2016, upon the accreditation of the qualification of High-tech enterprises, such enterprises may apply for the entitlement of the preferential enterprise income tax treatment since the current year beginning from the valid period approved by the accreditation. A "high and new technology enterprise" is entitled to a favorable statutory tax rate of 15% and such an enterprise should keep all statutory required materials in case of future inspection. This qualification is reassessed by government authorities every three years.

Withholding Tax on Dividend Distribution

The PRC Enterprise Income Tax Law prescribes a standard withholding tax rate of 20% on dividends and other mainland China-sourced income of non-mainland China resident enterprises which have no establishment or place of business in mainland China, or if established, the dividends or other mainland China-sourced income are in fact not associated with such establishment or place of business in mainland China. However, the Implementing Rules of the PRC Enterprise Income Tax Law reduced the rate from 20% to 10%, effective from January 1, 2008. However, a lower withholding tax rate might be applied if there is a tax treaty or similar agreement between mainland China and the jurisdiction of the foreign holding company, for example, pursuant to the Arrangement Between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and Tax Evasion on Income and other applicable mainland China laws, if a Hong Kong resident enterprise is determined by the competent mainland China tax authority to have satisfied the conditions and requirements under the arrangement and other applicable laws, the 10% withholding tax on the dividends that the Hong Kong resident enterprise receives from a mainland China resident enterprise may be reduced to 5% upon receiving approval from the tax authority in charge.

Based on the Notice on Relevant Issues Relating to the Enforcement of Dividend Provisions in Tax Treaties issued on February 20, 2009 by the State Administration of Taxation, if the mainland China tax authorities determine, at their discretion, that a company benefits from such reduced income tax rate due to a structure or arrangement that is primarily tax-driven, such mainland China tax authorities may adjust the preferential tax treatment. The Announcement of the State Administration of Taxation on Issues Concerning "Beneficial Owners" in Tax Treaties, promulgated by the State Administration of Taxation on February 3, 2018 and took effect on April 1 2018 and further provided that comprehensive analysis based on the stipulated factors therein and actual circumstances shall be adopted when recognizing the "beneficial owner". Agents, and designated wire beneficiaries are specifically excluded from being recognized as "beneficial owners."

Furthermore, the Administrative Measures for Convention Treatment for Non-resident Taxpayers, which became effective on January 1, 2020, require that non-resident taxpayers claiming treaty benefits shall be handled in accordance with the principles of “self-assessment, claiming for the enjoyment of treaty benefits, and retention of the materials for future inspection.” Where a non-resident taxpayer self-assesses and concludes that it satisfies the criteria for claiming treaty benefits, it may enjoy treaty benefits at the time of tax declaration or at the time of withholding through a withholding agent, simultaneously gather and retain the materials pursuant to the provisions of these Measures for future inspection, and subject to subsequent administration by competent tax authorities.

Value-Added Tax

Pursuant to the Interim Regulations on Value-Added Tax of the People’s Republic of China, which was promulgated by the State Council on December 13, 1993 and amended on November 10, 2008, February 6, 2016 and November 19, 2017, respectively, and the Implementation Rules for the Interim Regulations on Value-Added Tax of the People’s Republic of China, which was promulgated by the Ministry of Finance and the State Administration of Taxation on December 15, 2008 and became effective on January 1, 2009 and as amended on October 28, 2011, entities or individuals engaging in sale of goods, provision of processing services, repairs and replacement services, selling services, sales of intangible assets or importation of goods within the territory of mainland China shall pay value-added tax. Unless provided otherwise, the rate of value-added tax is 17% on sales and 6% on the services. On April 4, 2018, the Ministry of Finance and the State Administration of Taxation jointly promulgated the Circular of the Ministry of Finance and the State Administration of Taxation on Adjustment of Value-Added Tax Rates, according to which (i) for value-added tax taxable sales acts or import of goods originally subject to value-added tax rates of 17% and 11% respectively, such tax rates shall be adjusted to 16% and 10%, respectively; (ii) for purchase of agricultural products originally subject to tax rate of 11%, such tax rate shall be adjusted to 10%; (iii) for purchase of agricultural products for the purpose of production and sales or consigned processing of goods subject to tax rate of 16%, such tax shall be calculated at the tax rate of 12%; (iv) for exported goods originally subject to tax rate of 17% and export tax refund rate of 17%, the export tax refund rate shall be adjusted to 16%; and (v) for exported goods and cross-border taxable acts originally subject to tax rate of 11% and export tax refund rate of 11%, the export tax refund rate shall be adjusted to 10%. The circular became effective on May 1, 2018 and shall supersede existing provisions which are inconsistent with it.

On March 20, 2019, the Ministry of Finance, the State Administration of Taxation and the General Administration of Customs jointly promulgated the Announcement on Relevant Policies for Deepening Value-Added Tax Reform, which became effective on April 1, 2019 and provides that (i) with respect to value-added tax taxable sales acts or import of goods originally subject to value-added tax rates of 16% and 10% respectively, such tax rates shall be adjusted to 13% and 9%, respectively; (ii) with respect to purchase of agricultural products originally subject to tax rate of 10%, such tax rate shall be adjusted to 9%; (iii) with respect to purchase of agricultural products for the purpose of production or consigned processing of goods subject to tax rate of 13%, such tax shall be calculated at the tax rate of 10%; (iv) with respect to export of goods and services originally subject to tax rate of 16% and export tax refund rate of 16%, the export tax refund rate shall be adjusted to 13%; and (v) with respect to export of goods and cross-border taxable acts originally subject to tax rate of 10% and export tax refund rate of 10%, the export tax refund rate shall be adjusted to 9%.

Regulations Relating to Employment and Social Welfare

According to the PRC Labor Contract Law promulgated by the Standing Committee of National People’s Congress on June 29, 2007 and amended on December 28, 2012, and the Implementation Rules of the PRC Labor Contract Law, promulgated by the State Council on September 18, 2008, a written employment contract shall be concluded in the establishment of an employment relationship. If an employer fails to enter into a written employment contract with an employee within one year from the date on which the employment relationship is established, the employer must rectify the situation by entering into a written employment contract with the employee and pay the employee twice the employee’s salary for the period from the day following the lapse of one month from the date of establishment of the employment relationship to the day prior to the execution of the written employment contract. The PRC Labor Contract Law and its implementation rules also require compensation to be paid upon certain terminations. In addition, if an employer intends to enforce a non-compete provision in an employment contract or non-competition agreement with an employee, it has to compensate the employee on a monthly basis during the term of the restriction period after the termination or expiry of the labor contract. Employers in most cases are also required to provide severance payment to their employees after their employment relationships are terminated.

Employers in the PRC are required to contribute, for and on behalf of their employees, to a series of social insurance funds, including funds for pension, unemployment insurance, medical insurance, work-related injury insurance, maternity insurance, and housing fund. These payments are made to local administrative authorities and employers who fail to contribute may be fined and be ordered to make up for the outstanding contributions. The various laws and regulations that govern the employers' obligations to contribute to the social insurance funds include: the Social Insurance Law of the People's Republic of China, which was promulgated by the Standing Committee of National People's Congress on October 28, 2010 and amended with immediate effect on December 29, 2018, the Interim Regulations on the Collection and Payment of Social Insurance Premiums, which was promulgated by the State Council on January 22, 1999, and amended with immediate effect on March 24, 2019, the Regulations on Work-related Injury Insurance, which was promulgated by the State Council on April 27, 2003 and amended on December 20, 2010, and the Regulations on Management of the Housing Fund, which was promulgated on April 3, 1999, and was most recently amended with immediate effect on March 24, 2019.

According to the Notice Concerning the Safe and Orderly Collection and Administration of Social Insurance Premiums issued by the General Office of the State Administration of Taxation on September 13, 2018, the tax authorities collect all social insurance premiums uniformly from January 1, 2019. Before the completion of the reform of the social insurance collection agency, the local authorities shall continually optimize the payment service and ensure the continuous improvement of the business environment, and shall not organize and carry out the previous year's arrears check without permission.

Regulations Relating to Overseas Listing and M&A

On August 8, 2006, six mainland China regulatory agencies, including the CSRC, promulgated the Rules on the Merger and Acquisition of Domestic Enterprises by Foreign Investors, or the M&A Rules, which became effective on September 8, 2006 and were amended on June 22, 2009. The M&A Rules, and other regulations and rules concerning mergers and acquisitions established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time consuming and complex. For example, the M&A Rules require that the Ministry of Commerce be notified in advance of any change-of-control transaction in which a foreign investor takes control of a mainland China domestic enterprise, if (i) any important industry is concerned, (ii) such transaction involves factors that impact or may impact national economic security, or (iii) such transaction will lead to a change in control of a domestic enterprise which holds a famous trademark or mainland China time-honored brand. The M&A Rules purport, among other things, to require offshore special purpose vehicles, formed for overseas listing purposes through acquisitions of PRC domestic companies and controlled by PRC companies or individuals, to obtain the approval of the CSRC prior to publicly listing their securities on an overseas stock exchange.

In addition, according to the Notice on Establishing the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors issued by the General Office of the State Council on February 3, 2011 and became effective on March 3, 2011, the Rules on Implementation of Security Review System for the Merger and Acquisition of Domestic Enterprises by Foreign Investors issued by the Ministry of Commerce on August 25, 2011 and became effective on September 1, 2011, mergers and acquisitions by foreign investors that raise "national defense and security" concerns and mergers and acquisitions through which foreign investors may acquire de facto control over domestic enterprises that raise "national security" concerns are subject to strict review by the Ministry of Commerce, and the regulations prohibit any activities attempting to bypass such security review, including by structuring the transaction through a proxy, contractual control arrangement or any other methods.

On July 6, 2021, the PRC government promulgated Opinions on Strictly Cracking Down on Illegal Securities Activities, which, among other things, called for the enhanced administration and supervision of China-based overseas-listed companies, and proposed to revise the regulation governing the overseas issuance and listing of shares by joint stock companies and clarified the responsibilities of competent domestic industry regulators and government authorities.

On February 17, 2023, the CSRC released the Trial Administrative Measures of the Overseas Securities Offering and Listing by Domestic Companies and five supporting guidelines, which became effective on March 31, 2023. These measures and guidelines regulate both direct and indirect overseas offering and listing of PRC domestic companies' securities by adopting a filing-based regulatory regime. Pursuant to these measures and guidelines, the principle of "substance over form" shall be followed when determining whether an offering and listing shall be deemed as an indirect overseas offering and listing by a PRC domestic company, and if the issuer meets both the following criteria, the overseas securities offering and listing conducted by such issuer shall be deemed as indirect overseas offering by PRC domestic companies: (i) 50% or more of any of the issuer's operating revenue, total profit, total assets or net assets as documented in its audited consolidated financial statements for the most recent fiscal year is accounted for by domestic companies; and (ii) the main parts of the issuer's business activities are conducted in the PRC or its main place(s) of business are located in the PRC, or the majority of senior management staff in charge of its business operations and management are PRC citizens or have their habitual residence located in the PRC. Where an issuer submits an application for initial public offering or offering in other overseas market to competent overseas regulators after the initial overseas offering and listing, such issuer must file with the CSRC within three business days after such application is submitted. These measures and guidelines also require subsequent reports to be submitted to the CSRC on material events, such as change of control or voluntary or forced delisting of the issuer(s) who have completed overseas offerings and listings.

These measures and guidelines provide that an overseas offering and listing is prohibited under any of the following circumstances: (i) such securities offering and listing is explicitly prohibited by provisions in laws, administrative regulations and state rules; (ii) the intended securities offering and listing may endanger national security as reviewed and determined by competent authorities under the State Council in accordance with laws; (iii) the domestic company intending to make the securities offering and listing, or its controlling shareholder(s) and the actual controller, have committed crimes such as corruption, bribery, embezzlement, misappropriation of property or have undermined the order of the socialist market economy during the latest three years; (iv) the domestic company intending to make the securities offering and listing is currently under investigation for suspicion of criminal offenses or major violations of laws and regulations, and no conclusion has yet been made thereof; or (v) there are material ownership disputes over equities held by the domestic company's controlling shareholder(s) or by other shareholder(s) that are controlled by the controlling shareholder(s) and/or actual controller.

However, enterprises that have been listed overseas as of the implementation of these measures and guidelines are regarded as existing enterprises and are not required to conduct the overseas listing filing procedure immediately, but shall carry out filing procedures as required if they conduct refinancing or are involved in other circumstances that require filing with the CSRC.

On February 24, 2023, the CSRC, together with the Ministry of Finance, the National Administration of State Secrets Protection, and the National Archives Administration of China, issued the Provisions on Strengthening Confidentiality and Archives Administration of Overseas Securities Offering and Listing by Domestic Companies, which came into effect on March 31, 2023. These provisions reiterate that working papers produced in the PRC by securities companies and securities service providers for direct and indirect international offering and listing by domestic companies, should be retained in mainland China, and, without prior approval by competent authorities of mainland China, such working papers shall not be brought, mailed or otherwise transferred to recipients outside of mainland China. Furthermore, these provisions establish a cross-border regulatory cooperation mechanism as prescribed in the PRC Securities Law and strengthen cross-border regulatory cooperation as prescribed in the Trial Administrative Measures of the Overseas Securities Offering and Listing by Domestic Companies and five supporting guidelines, which shifts the overall direction of cross-border supervision of international offering and listing from a "dominated by domestic regulators or depend on the conclusions of inspections by domestic regulators" approach to a "cross-border regulatory cooperation" mechanism.

The Provisions on Strengthening Confidentiality and Archives Administration of Overseas Securities Offering and Listing by Domestic Companies provide that, among other things, (i) in relation to the international offering and listing activities of domestic enterprises, the domestic enterprises are required to strictly comply with the requirements on confidentiality and archives management, establish a sound confidentiality and archives system, and take necessary measures to implement their confidentiality and archives management responsibilities; (ii) during the course of an international offering and listing, if a domestic enterprise needs to publicly disclose or provide to securities companies, accounting firms or other securities service providers and international regulators, any materials that contain state secrets, work secrets of government agencies or that have a sensitive impact (i.e., be detrimental to national security or the public interest if divulged), the domestic enterprise should complete the approval/filing and other regulatory procedures; and (iii) working papers produced in mainland China by securities companies and securities service institutions, which provide domestic enterprises with securities services during their international issuance and listing, should be stored in mainland China, and the transmission of all such working papers to recipients outside of mainland China is required to be approved by competent authorities of mainland China.

Regulations Relating to Cybersecurity, Information Security, Privacy and Data Protection

On May 28, 2020, the NPC promulgated the Civil Code, which came into effect on January 1, 2021. Pursuant to the Civil Code, the personal information of a natural person shall be protected by the law. Any organization or individual that needs to obtain personal information of others shall obtain such information legally and ensure the security of such information, and shall not illegally collect, use, process or transmit personal information of others, or illegally purchase, sell, provide or make public personal information of others.

On August 20, 2021, the Standing Committee of National People's Congress promulgated the PRC Personal Information Protection Law, which became effective on November 1, 2021. Pursuant to the PRC Personal Information Protection Law, personal information shall be processed (including the collection, storage, use, processing, transmission, provision, disclosure and deletion of personal information) following the principles of lawfulness, legitimacy, necessity and good faith, and shall not be processed through misleading, fraudulent, coercive and other means. The PRC Personal Information Protection Law requires, among others, that the processing of personal information should have appropriate legal basis, a clear and reasonable purpose and should be limited to the minimum scope necessary to achieve the processing purpose, adopt a method that has the least impact on personal rights and interests, and shall not process personal information that is not related to the processing purpose. The individual shall be sufficiently informed of the data processing activities before the data collection. Personal information processors shall be responsible for their personal information processing activities and take necessary measures to ensure the security of the personal information processed.

The Interpretations of the Supreme People's Court and the Supreme People's Procuratorate on Several Issues Concerning the Application of Law in the Handling of Criminal Cases Involving Infringement of Citizens' Personal Information was promulgated on May 8, 2017 and became effective on June 1, 2017. The interpretations clarify several concepts regarding the crime of "infringement of citizens' personal information" stipulated by Article 253A of the Criminal Law of the PRC, including "citizens' personal information," "violation of certain national provisions," "provision of citizens' personal information" and "illegally obtaining any citizen's personal information by other methods." In addition, the interpretations specify the standards for determining "serious circumstances" and "extraordinary serious circumstances" of this crime.

The Administrative Measures for the Hierarchical Protection of Information Security which was promulgated by the Ministry of Public Security, National Administration of State Secrecy Protection and State Cryptography Administration Office and the State Council Informatized Office on June 22, 2007, and came into effect on the same day, requires the entities that operate and use information systems in China to fulfill the obligation of the hierarchical protection of information security. The operator or user of information systems at Grade II or above shall, within thirty days since the date when its security protection grade is determined, complete the record filing procedures at the local public security authority at the level of city or above.

On July 1, 2015, the Standing Committee of National People's Congress issued the National Security Law, which became effective on the same day. The National Security Law provides that the state shall safeguard the sovereignty, security and cyber security development interests of the state, and that the state shall establish a national security review and supervision system to review, among other things, foreign investment, specific items and key technologies, internet and information technology products and services, and other important activities that are likely to impact the national security of the PRC.

On November 7, 2016, the Standing Committee of National People's Congress promulgated the PRC Cybersecurity Law, which became effective on June 1, 2017. The PRC Cybersecurity Law provides that network operators shall meet their cyber security obligations and shall take technical measures and other necessary measures to protect the safety and stability of their networks, respond to network security incidents effectively, prevent illegal and criminal activities, and maintain the integrity, confidentiality and usability of network data. Network operators shall not collect personal information irrelevant to the services they provide or collect or use personal information in violation of the provisions of laws or agreements concluded with users. Network operators shall strengthen management of information published by users, and when they discover information prohibited by laws and regulations from publication or dissemination, they shall immediately stop dissemination of that information, including taking measures such as deleting the information, preventing the information from spreading, saving records, and reporting to the governmental agencies. In addition, the PRC Cybersecurity Law requires critical information infrastructure operators shall store within the PRC the personal information and important data collected and produced during their operations in the PRC, and their purchase of network products and services that may affect national security shall be subject to national security review.

On July 22, 2020, the Ministry of Public Security released the Guiding Opinions on Implementing the Multi-level Cyber Security Protection System and Critical Information Infrastructure Security Protection System to further improve the national cyber security prevention and control system. On December 28, 2021, the Cyberspace Administration of China, together with certain other PRC governmental authorities, jointly released the Cybersecurity Review Measures, which took effect on February 15, 2022. Pursuant to the Cybersecurity Review Measures, critical information infrastructure operators that purchase network products and services, and network platform operators engaging in data processing activities that affect or may affect national security are subject to cybersecurity review under the Cybersecurity Review Measures. In addition, network platform operators with personal information of over one million users shall be subject to cybersecurity review before listing abroad. The cybersecurity review will evaluate, among others, the risk of critical information infrastructure, core data, important data, or the risk of a large amount of personal information being influenced, controlled or maliciously used by foreign governments after going public, and cyber information security risk. The Cybersecurity Review Measures set out certain general factors which would be the focus on assessing the national security risk during a cybersecurity review. However, the scope of network product or service or data processing activities that will or may affect national security is still unclear.

On November 14, 2021, the Cyberspace Administration of China published the Draft Cyber Data Security Regulations, which further provide that data processors conducting the following activities shall apply for cybersecurity review: (i) merger, reorganization or division of internet platform operators that have acquired a large number of data resources related to national security, economic development or public interests affects or may affect national security; (ii) listing abroad of data processors processing over one million users' personal information; (iii) listing in Hong Kong which affects or may affect national security; or (iv) other data processing activities that affect or may affect national security. The Draft Cyber Data Security Regulations further provide that operators of large internet platforms that set up headquarters, operation centers or R&D centers overseas shall report to the national cyberspace administration and competent authorities. The Draft Cyber Data Security Regulations further provide some additional requirements in relation to personal information protection, important data, data cross-broader security management and obligations of internet platform operators. For example, processors of important data shall specify the person responsible for data security, establish a data security management department, and file information regarding processing of important data to the local branch of the Cyberspace Administration of China within fifteen business days after the identification of their important data. In addition, the Draft Cyber Data Security Regulations require that data processors processing important data or to be listed overseas shall conduct an annual data security self-assessment or entrust a data security service institution to do so, and submit the data security assessment report of the previous year to the local branch of the Cyberspace Administration of China before January 31 each year. Any failure to comply with such requirements may subject the data processors to, among others, suspension of services, fines, revocation of business permits or business licenses, and penalties. As of the date of this annual report, this draft has not been formally adopted. Uncertainties exist with respect to the enactment timetable, final content, interpretation and implementation.

On July 30, 2021, the State Council promulgated the Regulations on Security Protection of Critical Information Infrastructures, which took effect on September 1, 2021 and provide that "critical information infrastructures" shall mean any important network facilities or information systems of important industries or fields such as public communication and information service, energy, communications, water conservation, finance, public services, e-government affairs and national defense science, and any other important network facilities or information systems which may endanger national security, people's livelihood and public interest in case of damage, function loss or data leakage. In addition, administration departments of each critical industry and sector shall be responsible for formulating eligibility criteria and determining the critical information infrastructure operators in the respective industry or field. The operators shall be informed about the final determination as to whether they are categorized as critical information infrastructure operators. The regulations further require critical information infrastructure operators, among others, (i) to report to the competent administration departments in a timely manner when the identification result may be affected due to material changes in the critical information infrastructures; (ii) to plan, construct or put into use the security protection measures and the critical information infrastructures simultaneously; and (iii) to report to the competent administration departments in a timely manner in the event of merger division or dissolution, and deal with critical information infrastructures as required by the competent administration departments. Operators in violation of the regulations may be ordered to rectify, subject to warnings, fines and other administrative penalties or even criminal liabilities, and the directly responsible personnel in charge may also be imposed on fines or other liabilities.

On June 10, 2021, the Standing Committee of National People's Congress promulgated the PRC Data Security Law, which became effective on September 1, 2021. The PRC Data Security Law provides for data security obligations on entities and individuals carrying out data activities and introduces a data classification and hierarchical protection system based on the importance of data in economic and social development, as well as the degree of harm it will cause to national security, public interests, or legitimate rights and interests of individuals or organizations when such data is tampered with, destroyed, leaked, or illegally acquired or used. Appropriate level of protection measures is required to be taken for each respective category of data. For example, a processor of important data shall designate the personnel and the management body responsible for data security, carry out risk assessments for its data processing activities and file the risk assessment reports with the competent authorities and the national core data is subject to stricter management. In addition, the PRC Data Security Law provides a national security review procedure for those data activities which affect or may affect national security and imposes export restrictions on certain data and information.

On August 16, 2021, the Cyberspace Administration of China, together with the Ministry of Transport, the NDRC, the Ministry of Industry and Information Technology, and the Ministry of Public Security, promulgated Several Provisions on Regulation of Automobile Data Security (for Trial Implementation) to regulate the processing of automobile data, which became effective on October 1, 2021. Automobile data processors, which is broadly defined as organizations engaging in activities related to the processing of automotive data, including automobile manufacturers, component and software providers, dealers, maintenance providers, etc., are required to process personal information and important data in accordance with applicable laws during the design, manufacture, sales, operation, maintenance and management of automobiles. According to these provisions, any automotive data processor that process important data is required to submit a risk assessment report to the provincial cyberspace administration and other competent authorities, and to submit annual report with regards to data security management to the provincial cyberspace administration and other competent authorities. When important data needs to be transferred out of China for business purposes, a security assessment organized by the Cyberspace Administration of China with the relevant departments of the State Council is required, and an automotive data processor shall not transfer any important data overseas to the extent that such transfer is beyond the purpose, scope and method, type and scale of the data, and any other conditions submitted to the Cyberspace Administration of China for security assessment.

On December 8, 2022, the Ministry of Industry and Information Technology released the Administrative Measures for Data Security in the Field of Industry and Information Technology (Trial), which came into effect on January 1, 2023. The measures stipulate that industrial and telecoms data processors shall implement hierarchical management of industrial and telecoms data, which are classified into three levels according to the regulations: general data, important data and core data. The measures also stipulate certain obligations of industrial and telecoms data processors in relation to the data lifecycle security management covering data collection, data storage, data usage, data transmission, data provision, data disclosure, data destruction, data security monitoring and emergency management, data security testing, certification and assessment management, etc.

On July 7, 2022, the Cyberspace Administration of China promulgated the Outbound Data Transfer Security Assessment Measure, which took effect on September 1, 2022. Pursuant to these measures, a data processor shall apply to competent authorities for security assessment prior to transferring any data abroad if the transfer involves (i) important data; (ii) personal information transferred overseas by a critical information infrastructure operator and a data processor that has processed personal information of more than one million individuals; (iii) personal information transferred overseas by a data processor who has already provided personal information of 100,000 persons or sensitive personal information of 10,000 persons overseas since January 1 of the previous year; or (iv) other circumstances as requested by the Cyberspace Administration of China. Furthermore, on August 31, 2022, the Cyberspace Administration of China promulgated the Guidelines for Filing the Outbound Data Transfer Security Assessment (Version 1), which provides that acts of outbound data transfer include (i) overseas transmission and storage by data processors of data generated during PRC domestic operations; (ii) the access to, use, download or export of the data collected and generated by data processors and stored in the PRC by overseas institutions, organizations or individuals; and (iii) other acts as specified by the Cyberspace Administration of China. On March 22, 2024, the Cyberspace Administration of China promulgated the second version of the Guidelines for Filing the Outbound Data Transfer Security Assessment, which provides more clarity on how to apply for the security assessment.

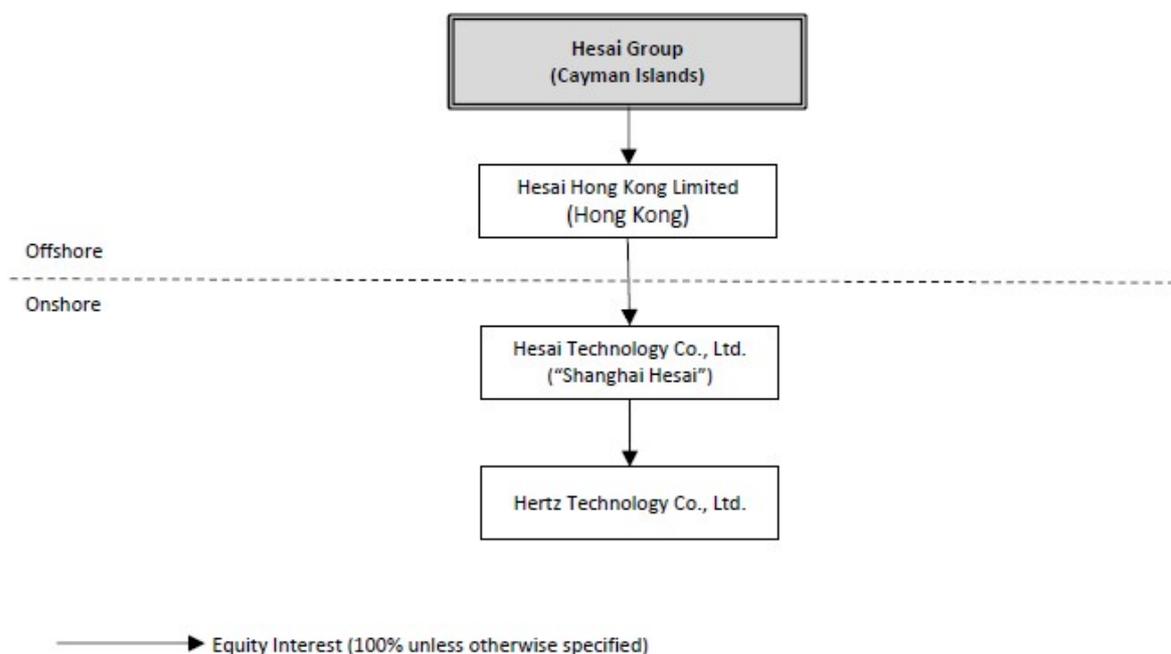
In addition, on February 22, 2023, the Provisions on the Standard Agreement on Cross-border Transfer of Personal Information were promulgated by the Cyberspace Administration of China, which took effect on June 1, 2023. The provisions attach the standard template for cross-border data transfer agreement that could be used as an available option to satisfy the condition for cross-border transfer of personal information under Article 38 of the PRC Personal Information Protection Law.

On December 8, 2023, the Cyberspace Administration of China issued the Administrative Measures for Cybersecurity Incident Reporting (Draft for Comment), and attached the Classification Guide for Cybersecurity Incidents, and the Information Report Form for Cybersecurity Incidents for public comments. Pursuant to these measures, network operators who build, operate networks or provide services through networks in the PRC shall report incidents that endanger network security in accordance with these measures. Cybersecurity incidents refer to incidents that cause harm to the network and information systems or data therein and have an adverse impact on society caused by human factors, software or hardware defects or failures, natural disasters, etc. These measures classify cybersecurity incidents into four levels: general, serious, material or extremely material. Cybersecurity incidents of serious level or above must be reported to the regulators using the Information Report Form for Cybersecurity Incidents. If an operator fails to report a cybersecurity incident according to these measures, the cyberspace administration will impose penalties according to the laws and administrative regulations. If material harmful consequences are caused due to the operator’s delay in reporting, omission, false reporting, or concealment of cybersecurity incidents, the operator and the liable persons will be subject to heavier punishments in accordance with applicable law. As of the date of this annual report, this draft has not been formally adopted. Uncertainties exist with respect to the enactment timetable, final content, interpretation and implementation thereof.

On March 22, 2024, the Cyberspace Administration of China issued the Provisions on Promoting and Standardizing Cross-Border Data Flows, which set forth the circumstances exempted from performing the security assessment or filing procedures for cross-border data transfer and further clarify the thresholds and scenarios for data processors to go through these procedures as stipulated under the aforementioned measures.

C. ORGANIZATIONAL STRUCTURE

The following diagram illustrates our corporate structure, including our principal subsidiaries and other entities that are material to our business, as of the date of this annual report:



D. PROPERTY, PLANT AND EQUIPMENT

We headquarter in Shanghai, China, and have offices across China and in other countries globally. As of December 31, 2023, we leased our production facility in China, and we had leased office space, warehouse and research and development and manufacturing plants. Our material leased properties are summarized as below. We lease our premises under operating lease agreements from independent third parties. We believe that there is sufficient supply of properties in China, and thus we do not rely on existing leases for our business operations.

<u>Location</u>	<u>Approximate Space (square feet)</u>	<u>Use</u>	<u>Lease Term</u>
Shanghai, China	490,000	Office space, warehouse and research and development and manufacturing facility	One to three years
Hangzhou, China	303,000	Research and development and manufacturing facility	Four and a half years

In 2021, we obtained land usage right and construction license to build Maxwell Center, our new research and development and intelligent manufacturing center, in Jiading, Shanghai. In September 2022, we entered into a project investment agreement in connection with Hertz Center, our main manufacturing facility in Hangzhou, Zhejiang. In September 2023, we purchased an industrial raw land in Thailand of approximately 25,686 square meters through Hesai (Thailand) Limited. We believe that our existing facilities are generally adequate to meet our current needs, and we expect to seek additional space as needed to accommodate future growth.

ITEM 4.A. UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our combined and consolidated financial statements and the related notes included elsewhere in this annual report. This report contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under “Item 3. Key Information—D. Risk Factors” and elsewhere in this annual report. See “Forward-Looking Information.”

A. OPERATING RESULTS

Hesai Technology is the global leader in three-dimensional light detection and ranging (LiDAR) solutions. Its LiDAR products enable a broad spectrum of applications across (i) passenger or commercial vehicles with advanced driver assistance systems, or ADAS, (ii) autonomous vehicle fleets providing passenger and freight mobility services, or Autonomous Mobility, and (iii) other applications such as last-mile delivery robots, street sweeping robots, and logistics robots in restricted areas, or Robotics.

Hesai Technology has already started commercializing its technology and has begun shipping its LiDAR units in increasing volumes. We recognized revenues from approximately 14,000, 80,400 and 222,100 shipped LiDAR units in 2021, 2022 and 2023, respectively. Our net revenues increased by 66.9% from RMB720.8 million in 2021 to RMB1,202.7 million in 2022, and further increased by 56.1% to RMB1,877.0 million (US\$264.4 million) in 2023. Our net loss was RMB244.8 million, RMB300.8 million and RMB476.0 million (US\$67.0 million) in 2021, 2022 and 2023, respectively.

Key Factors Affecting Our Results of Operations

Our business and operating results are affected by the general factors that impact our total addressable market, including, among others, overall economic growth in China and globally, the widespread adoption of LiDAR technologies in the ADAS, Autonomous Mobility, and Robotics industries, raw material costs, regulatory, tax and geopolitical environments, the level of cross-border investment, and the competitive landscape for LiDARs. Changes in any of these general factors could affect the demand for our products and solutions and our results of operations.

Despite the general factors mentioned above, we believe our results of operations are more directly affected by the following specific factors:

Our ability to increase sales volume and maintain relationships with customers

Our customers operate across a wide variety of applications for our products. The range of sales volume per customer depends on several factors, including the size of the end market that the product addresses, market penetration, product functionality, our customers' ability to sell their products and the financial stability and reputation of the customer. In addition to end market demand, sales volume further depends on our customers' progression through their evaluation, integration and production processes. Our ability to ultimately achieve profitability is dependent on the progression of existing customers' end-market production and program deployment, and our ability to meet required volumes and required cost targets. Delays of our current and future customers' programs could result in us being unable to achieve our revenue targets and profitability in the time frame we anticipate.

Our ability to expand in domestic and international markets

We value the development of business in both domestic and international markets, and we view international expansion as an important element of our strategy to increase net revenues and achieve profitability.

We have established and are continuing to solidify our leading position in the domestic LiDAR market through our first-mover advantages in the fields of technology, design, development and mass production. At the same time, we have an existing presence in the United States and Europe. We intend to expand our presence in these markets over time. Armed with our insights in LiDAR design, vertical integration approach, integrated and proprietary manufacturing, and our ability to fulfill functional safety requirements for automotive-grade standards, we believe we are well positioned to successfully compete in the surging global LiDAR market. Accordingly, expanded global reach will require continued investment and may expose us to additional foreign currency risk, international taxes and tariffs, legal obligations and additional operational costs, risks and challenges that may impact our ability to meet our projected sales volumes, net revenues and gross margins.

Our ability to optimize the pricing and mix of our LiDAR products

As we offer a diverse set of LiDAR products, our gross margin is affected by the pricing and mix of our products. We expect the average selling price for our LiDAR units and our gross margin to decrease as our shipment increases, especially with the increasing shipment of LiDAR units for the ADAS market and LiDAR units shipped to the United States that incur higher tariffs. The LiDAR products for the ADAS market generally have much lower selling prices than the LiDAR products for the Autonomous Mobility market. Our customers in the LiDAR industry also generally expect that the newer generation of our LiDAR products and our new product lines will have lower selling price. At the same time, we are facing increasing costs related to materials, chips and supply chain globally, which would negatively affect our gross margin. We expect that our gross margin would fluctuate in the foreseeable future as we change our product mix, adjust selling price for our new products, and ramp up our production. See "Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — Continued pricing pressures may result in lower than anticipated margins, or losses, which may adversely affect our business."

Our ability to increase volume production in a cost-efficient manner

We believe that we have the opportunity to increase our cost efficiency when operating at scale. To obtain the economies of scale in a timely and reliable fashion, we invest significantly in in-house manufacturing capabilities, and we plan to further expand. Our future performance depends on our ability to deliver on the economies of scale with lower product costs to enable widespread industry adoption. The material and component, manufacturing, and labor costs of our products accounted for 71.1%, 88.8% and 83.7% of our total cost of revenues in 2021, 2022 and 2023, respectively. Our ability to effectively control material and components, manufacturing and labor costs as we continue to ramp up our production volume has affected and will continue to affect our financial results significantly.

Our ability to effectively leverage our research and development efforts to maintain our leadership in product performance and quality

We invest heavily in the research and development of LiDAR technology. Our research and development expenses were RMB368.4 million, RMB555.2 million and RMB790.5 million (US\$111.3 million) in 2021, 2022 and 2023, respectively, accounting for 51.1%, 46.2% and 42.1% of the net revenues for these periods, respectively. Our financial performance is significantly dependent on our ability to maintain our leading position which is further dependent on our continuous investments in research and development. We believe it is essential that we continue to upgrade our LiDAR products as we successfully implement our research and development roadmap, especially on our proprietary vertical integration technology. If we fail to continue our innovation, our market position and net revenues may be adversely affected, and our investments in that area will not be recovered.

Our ability to maintain and improve operating efficiency

Our results of operations are further affected by our ability to maintain and improve our operating efficiency, as measured by our total operating expenses as a percentage of our net revenues. Our total operating expenses as a percentage of our net revenues was 89.8%, 70.7% and 65.7% for 2021, 2022 and 2023, respectively. This is important to the success of our business and our prospect of gradually achieving profitability. As our business grows, we expect to further improve our operating efficiency and achieve economies of scale.

Key Components of Results of Operations

Net revenues

We primarily generate net revenues from (i) the sales of LiDAR products, gas detection products, and other products, and (ii) engineering design, development and validation service, and solution service, and other services. Other product revenues represent sales of accessories to our LiDAR products. Service revenues are generated from a combination of hardware, software, deployment and professional services and engineering design, development and validation service, and solution service and other service revenues in connection with LiDAR products. Other service revenues represent revenues from extended warranty service.

The following table breaks down our net revenues by amounts and as percentages of our net revenues for the years presented:

	For the Year Ended December 31,						
	2021		2022		2023		
	RMB	%	RMB	%	RMB	US\$	
Product revenues							
— Revenue from LiDAR products	685,333	95.1	1,122,237	93.3	1,735,254	244,405	92.4
— Revenue from gas detection products	19,533	2.7	23,967	2.0	26,863	3,784	1.4
— Other product revenues	1,200	0.2	5,663	0.5	2,773	390	0.1
Service revenues							
— Engineering design, development and validation service, and solution service	14,026	1.9	43,101	3.6	100,493	14,154	5.4
— Other service revenues	676	0.1	7,702	0.6	11,606	1,635	0.6
Total	720,768	100.0	1,202,670	100.0	1,876,989	264,368	100.0

Taxation

Cayman Islands

The Cayman Islands currently levies no taxes on corporations based upon profits, income, gains, or appreciation. There are no other taxes likely to be material to us levied by the government of the Cayman Islands except for stamp duties, which may be applicable on instruments executed in, or brought within the jurisdiction of, the Cayman Islands. In addition, the Cayman Islands does not impose withholding tax on dividend payments.

Hong Kong

Our subsidiary in Hong Kong is subject to an income tax rate of 16.5% on any part of assessable profits over HKD2,000,000 and 8.25% for assessable profits below HKD2,000,000. Additionally, payments of dividends by our subsidiary in Hong Kong to our company are not subject to any Hong Kong withholding tax.

Mainland China

Under the PRC Enterprise Income Tax Law effective from January 1, 2008, which was most recently amended on December 29, 2018, our mainland China subsidiaries are subject to the statutory rate of 25%, subject to preferential tax treatments available to qualified enterprises in certain encouraged sectors of the economy.

Enterprises that qualify as “high and new technology enterprises” are entitled to a preferential rate of 15% subject to renewal every three years. Shanghai Hesai, one of our subsidiaries, was certified as a “high and new technology enterprise” and, therefore, enjoyed a preferential tax rate of 15% rather than the statutory enterprise income tax rate of 25% for each of 2021, 2022 and 2023. Our remaining mainland China entities were subject to enterprise income tax at a rate of 25% in 2021, 2022 and 2023. Pursuant to the PRC Enterprise Income Tax Law, a 10% withholding tax is levied on dividends declared to foreign investors from mainland China effective from January 1, 2008, unless any such foreign investor’s jurisdiction of incorporation has a tax treaty or similar agreement with China that provides for a different withholding arrangement.

If our holding company in the Cayman Islands or any of our subsidiaries outside of mainland China were deemed to be a “resident enterprise” under the PRC Enterprise Income Tax Law, it would be subject to enterprise income tax on its worldwide income at a rate of 25%. See “Item 3. Key Information — D. Risk Factors — Risks Related to Doing Business in China — If we are classified as a mainland China resident enterprise for mainland China enterprise income tax purposes, such classification could result in unfavorable tax consequences to us and our non-mainland China shareholders and ADS holders.”

United States

The applicable income tax rate of the United States where our subsidiaries having had significant operations for the years ended December 31, 2021, 2022 and 2023 is 27.98%, which is a blended state and federal rate.

Gross profit and gross margin

As a result of the foregoing, our gross profit increased by 40.1% from RMB472.0 million in 2022 to RMB661.4 million (US\$93.2 million) in 2023. Our gross margin decreased from 39.2% in 2022 to 35.2% in 2023, primarily due to the increased shipments of lower-priced ADAS LiDAR products.

Operating expenses

Research and development expenses. Our research and development expenses increased by 42.4% from RMB555.2 million in 2022 to RMB790.5 million (US\$111.3 million) in 2023, which was primarily attributable to an increase of RMB210.5 million (US\$29.6 million) in payroll expenses, including share-based compensation, due to (i) increased average headcount for research and development increased from 2022 to 2023 and (ii) increase in share-based compensation expense of RMB92.5 million (US\$13.0 million) primarily due to the share option expense recognized in connection with the completion of our initial public offering, and an increase in material cost of RMB15.5 million (US\$2.2 million).

General and administrative expenses. Our general and administrative expenses increased by 59.3% from RMB201.0 million in 2022 to RMB320.1 million (US\$45.1 million) in 2023, which was primarily due to an increase in professional service expenses of RMB45.6 million (US\$6.4 million), as well as an increase in payroll and share-based compensation expenses of RMB46.1 million (US\$6.5 million).

Sales and marketing expenses. Our sales and marketing expenses increased by 42.0% from RMB104.8 million in 2022 to RMB148.8 million (US\$21.0 million) in 2023, which was primarily due to the increase of RMB25.8 million (US\$3.6 million) in payroll expenses due to (i) our sales and marketing team expanded and (ii) increase in share-based compensation expense of RMB14.4 million (US\$2.0 million) primarily due to the share option expense recognized in connection with the completion of our initial public offering.

Other operating income, net. Our other net operating income was RMB10.8 million in 2022 compared to other net operating income of RMB26.5 million (US\$3.7 million) in 2023.

Loss from operations

As a result of the foregoing, our loss of operations increased by 51.1% from RMB378.2 million in 2022 to RMB571.6 million (US\$80.5 million) in 2023.

Interest income

Interest income represents interest earned on our cash and cash equivalents, as well as our short-term investments. Our interest income increased from RMB58.7 million in 2022 to RMB99.8 million (US\$14.1 million) in 2023 which was mainly due to the increase in average balance of cash and cash equivalents and short-term investments as we received proceeds from our initial public offering in the first quarter of 2023.

Foreign exchange gain (loss), net

We had foreign exchange gain of RMB20.9 million in 2022, in comparison with foreign exchange loss of RMB0.5 million (US\$0.1 million) in 2023, as a result of fluctuations of the exchange rates of Renminbi against U.S. dollars.

Net loss

As a result of the foregoing, our net loss increased by 58.3% from RMB300.8 million in 2022 to RMB476.0 million (US\$67.0 million) in 2023.

Year ended December 31, 2022 compared to year ended December 31, 2021

Net revenues

Our net revenues, which mainly consisted of revenue from LiDAR products and gas detection products, increased by 66.9% from RMB720.8 million in 2021 to RMB1,202.7 million in 2022. Our revenue from LiDAR products increased by 63.8% from RMB685.3 million in 2021 to RMB1,122.2 million in 2022, primarily attributable to the increased LiDAR units sold. We recognized revenue from approximately 14,000 and 80,400 LiDAR units sold with an average selling price of approximately US\$7,700 and US\$2,000 per unit in 2021 and 2022, respectively. The decrease of the unit price per LiDAR sold was primarily attributable to the shift of product mix towards lower-priced QT, XT and AT series LiDAR products. Our revenue from gas detection products increased by 22.7% from RMB19.5 million in 2021 to RMB24.0 million in 2022, which was mainly attributable to the increased gas detection products sold. Our revenue from engineering design, development and validation service, and solution service increased significantly from RMB14.0 million in 2021 to RMB43.1 million in 2022, primarily attributable to the completion of certain engineering service projects.

Cost of revenues

Our cost of revenues increased by 115.6% from RMB339.0 million in 2021 to RMB730.7 million in 2022. The increase was primarily attributable to (i) an increase of RMB278.5 million in materials and components cost associated with the increased sales and (ii) an increase of RMB107.4 million in manufacturing cost due to increased sales.

Gross profit and gross margin

As a result of the foregoing, our gross profit increased by 23.6% from RMB381.8 million in 2021 to RMB472.0 million in 2022. Our gross margin decreased from 53.0% in 2021 to 39.2% in 2022, primarily due to the increased shipments of lower-margin ADAS LiDAR products during the early ramp-up stage with lower in-house plant capacity utilization rate.

Operating expenses

Research and development expenses. Our research and development expenses increased by 50.7% from RMB368.4 million in 2021 to RMB555.2 million in 2022, which was primarily attributable to an increase of RMB153.1 million in payroll expenses as average headcount for research and development increased from 328 in 2021 to 510 in 2022.

General and administrative expenses. Our general and administrative expenses decreased by 15.1% from RMB236.7 million in 2021 to RMB201.0 million in 2022, which was primarily due to the occurrence of one-off expenses of RMB105.9 million related to tax costs on behalf of certain shareholders in connection to our reorganization, partially offset by (i) an increase in payroll expenses of RMB37.2 million, including share-based compensation, in line with the increased average headcount, and (ii) factory suspension loss of RMB30.4 million incurred in 2022 due to the impact of COVID-19 pandemic.

Sales and marketing expenses. Our sales and marketing expenses increased by 51.4% from RMB69.3 million in 2021 to RMB104.8 million in 2022, which was primarily due to the increase of RMB29.6 million in payroll expenses as sales and marketing team expanded.

Other operating income, net. Our other net operating income was RMB27.3 million in 2021 compared to other net operating income of RMB10.8 million in 2022, which was primarily because we received fewer government subsidies.

Loss from operations

As a result of the foregoing, our loss of operations increased by 42.6% from RMB265.3 million in 2021 to RMB378.2 million in 2022.

Interest income

Interest income represents interest earned on our cash and cash equivalents, as well as our short-term investments. Our interest income increased significantly from RMB32.6 million in 2021 to RMB58.7 million in 2022 which was mainly due to increases in average balance of cash and cash equivalents and short-term investments.

Foreign exchange gain (loss), net

We had foreign exchange losses of RMB13.3 million in 2021, in comparison with foreign exchange gains of RMB20.9 million in 2022, as a result of fluctuations of the exchange rates of Renminbi against U.S. dollars.

Net loss

As a result of the foregoing, our net loss increased by 22.8% from RMB244.8 million in 2021 to RMB300.8 million in 2022.

B. LIQUIDITY AND CAPITAL RESOURCES

The following table sets forth a summary of our cash flows for the years presented:

	For the Year Ended December 31,			
	2021	2022	2023	
	RMB	RMB	RMB	US\$
	<i>(in thousands)</i>			
Selected Combined and Consolidated Cash Flows Data:				
Net cash provided by/(used in) operating activities	(228,386)	(696,015)	57,261	8,065
Net cash provided by/(used in) investing activities	(1,980,237)	1,119,646	(1,060,393)	(149,354)
Net cash provided by financing activities	2,403,726	15,176	1,590,356	223,998
Net increase in cash and cash equivalents	195,103	438,807	587,224	82,709
Effect of foreign currency exchange rate changes on cash and cash equivalents	(2,439)	25,118	57,623	8,116
Cash and cash equivalents at the beginning of the year	256,688	449,352	913,277	128,632
Cash and cash equivalents at the end of the year	449,352	913,277	1,558,124	219,457

Our principal source of liquidity has been cash generated by historical equity financing activities. As of December 31, 2021, 2022 and 2023, our cash and cash equivalents, restricted cash, and short-term investments were RMB2.8 billion, RMB1.9 billion and RMB3.1 billion (US\$442.8 million), respectively. Our cash and cash equivalents primarily consist of cash on hand and time deposits with banks with original maturities of less than three months. Our short-term investments primarily consist of time deposits, and structured financial products issued by commercial banks with guaranteed principal and variable rates of return indexed to interest rates, exchange rates, commodities, broad-based index of stock market, and other financial or non-financial underlying assets, all with original maturities less than one year.

We believe that our current cash and cash equivalents, short-term investments and cash provided by our initial public offering will be sufficient to meet our current and anticipated working capital requirements and capital expenditures for at least the next 12 months. We may, however, need additional cash resources in the future if we experience changes in business conditions or other developments. We may also need additional cash resources in the future if we identify and wish to pursue opportunities for investment, acquisition, capital expenditure or similar actions.

As of December 31, 2023, 70.1%, 10.1% and 13.1% of our cash and cash equivalents were held in mainland China, Hong Kong and the United States, respectively, and 37.8% and 60.1% were denominated in Renminbi and U.S. dollars, respectively. As of December 31, 2023, 49.6% of our short-term investments were held in mainland China and denominated in Renminbi, while 38.8% of our short-term investments were held in Hong Kong and denominated in U.S. dollars. For restrictions and limitations on liquidity and capital resources as a result of our corporate structure, see “— Holding Company Structure.”

We had outstanding borrowings of nil, RMB18.5 million, and RMB397.6 million (US\$56.0 million) as of December 31, 2021, 2022 and 2023, respectively.

- We have a standby credit facility of US\$3 million from a commercial bank in China from August 2021 to February 2023. As of December 31, 2023, we have not utilized this credit facility.
- We have a standby credit facility of RMB300 million from a commercial bank in China from November 2022 to November 2023. As of December 31, 2023, we have drawn down borrowings with the amount of RMB109.9 million (US\$15.5 million) with an annual interest rate of 2.85% under this credit facility.
- We have a standby credit facility of RMB500 million from a commercial bank in China from December 2023 to December 2024. As of December 31, 2023, we have not utilized this credit facility.
- On November 18, 2022, we entered into an agreement with a commercial bank in China for a credit facility of RMB700 million, which will be available in full until December 4, 2024. The usage of credit facility is restricted to the purchasing of property and equipment related to the new manufacturing facility under construction in Jiading, Shanghai. The credit facility is secured by the land-use rights of the new manufacturing facility, including any ongoing and completed constructions thereon. As of December 31, 2023, we have drawn down borrowings with the amount of RMB261.3 million (US\$36.8 million) with an annual interest rate from 2.45% to 2.65% under this credit facility.
- On October 17, 2023, we entered into an agreement with a commercial bank in China for a credit facility of RMB110 million, which will be available in full until October 17, 2024. As of December 31, 2023, we have drawn down borrowings with the amount of RMB5.3 million (US\$0.8 million) with an annual interest rate of 2.85% under this credit facility.

Our accounts receivable, our contract assets, and amounts due from related parties represent primarily amounts due from our customers and advances from our customers, which are recorded net of allowance for credit loss. As of December 31, 2021, 2022 and 2023, our accounts receivable, net of allowance for doubtful accounts, was RMB85.8 million, RMB485.0 million and RMB524.8 million (US\$73.9 million), respectively, our contract assets were RMB146.5 million, RMB12.6 million and RMB19.7 million (US\$2.8 million), respectively, and the amounts due from related parties, net of allowance for doubtful accounts, were RMB3.5 million, RMB5.0 million and RMB5.0 million (US\$0.7 million), respectively. The sum of our accounts receivable, contract assets, and amounts due from related parties increased in 2022 and 2023 primarily due to the expansion of our customer base. Our accounts receivable, contract assets, and amounts due from related parties' turnover days increased from 94 days in 2021 to 113 days in 2022, primarily due to the expansion of our customer base, which includes larger customers that prefer longer payment cycles, and decreased to 108 days in 2023, primarily due to accelerated payment from our customers. Accounts receivable, contract assets, and amounts due from related parties' turnover days for a given period are equal to the sum of the average balances of accounts receivable, contract assets and amounts due from related parties at the beginning and the end of the period divided by net revenues during the period and multiplied by the number of days during the period.

Our inventories primarily include raw materials, work-in-process, and finished goods and are stated at lower of cost or net realizable value. Our inventories increased from RMB376.2 million as of December 31, 2021 to RMB646.9 million as of December 31, 2022, mainly due to the increase in raw materials and finished goods, and decreased to RMB495.9 million (US\$69.8 million) as of December 31, 2023, mainly due to increased shipments of LiDAR products to customers. Our inventory turnover days decreased from 304 days in 2021 to 278 days in 2022, primarily because we strategically stocked many electronic components to soften the impact of the general shortage facing by other companies over the world in 2021 while we started volume production of AT128 in 2022. Our inventory turnover days further decreased to 191 days in 2023, primarily because we increased LiDAR shipments to customers and expedited the consumption of our raw material and component inventory. Inventory turnover days for a given period equal to average inventory balances at the beginning and the end of the period divided by cost of revenues during the period and then multiplied by the number of days during the period. Valuation of inventories is based on currently available information about expected recoverable value, dependent upon factors such as market trends, inventory ageing, and historical and forecasted customer demands. Inventory write-down is recorded as cost of revenues, and we recorded RMB16.6 million, RMB39.4 million and RMB9.3 million (US\$1.3 million) inventory write-offs in 2021, 2022 and 2023, respectively.

Our accounts payable represents primarily accounts payable to our suppliers of raw materials and our outsourcing labor force. As of December 31, 2021, 2022 and 2023, our accounts payable was RMB77.3 million, RMB206.7 million and RMB269.4 million (US\$38.0 million), respectively. The increase was primarily due to the increase of raw material and component procurement resulting from greater product demands. Our accounts payable turnover days were 71 days, 72 days and 71 days, in 2021, 2022 and 2023, respectively. The increase in 2022 was primarily due to favorable credit terms granted by suppliers, and the decrease in 2023 was in line with the decrease in inventories. Accounts payable turnover days for a given period are equal to average accounts payable balances at the beginning and the end of the period divided by total cost of revenues during the period and multiplied by the number of days during the period.

In utilizing the proceeds from our initial public offering in February 2023, we may make additional capital contributions to our mainland China subsidiaries, establish new mainland China subsidiaries and make capital contributions to these new mainland China subsidiaries, make loans to our mainland China subsidiaries, or acquire offshore entities with operations in mainland China in offshore transactions. However, most of these uses are subject to mainland China regulations. See “Item 3. Key Information — D. Risk Factors — Risks Related to Doing Business in China — Mainland China regulation of loans to and direct investment in mainland China entities by offshore holding companies may delay or prevent us from making loans or additional capital contributions to our mainland China subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.”

Approximately half of our revenues have been, and we expect will likely to continue to be, denominated in Renminbi. Under existing mainland China foreign exchange regulations, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior SAFE approval as long as certain routine procedural requirements are fulfilled. Therefore, our mainland China subsidiaries are allowed to pay dividends in foreign currencies to us without prior SAFE approval by following certain routine procedural requirements. However, approval from or registration with competent government authorities is required where the Renminbi is to be converted into foreign currency and remitted out of mainland China to pay capital expenses such as the repayment of loans denominated in foreign currencies. The mainland China government may restrict access to foreign currencies for current account transactions in the future if we are found failing to meet the procedural requirements. If the foreign exchange control system affects us from obtaining sufficient foreign currencies to satisfy our foreign currency demands, we may not be able to pay dividends in foreign currencies to our shareholders, including holders of our ADSs.

Operating activities

Net cash provided by operating activities in 2023 was RMB57.3 million (US\$8.1 million). The difference between the net loss of RMB476.0 million (US\$67.0 million) and operating cash flow was primarily due to (i) adjustment of non-cash items of RMB387.6 million (US\$54.6 million) which mainly consisted of share-based compensation expenses of RMB234.6 million (US\$33.0 million), and depreciation and amortization expenses of RMB86.3 million (US\$12.2 million), (ii) a net decrease in operating assets and liabilities by RMB145.6 million (US\$20.5 million), which was primarily attributable to a decrease of RMB146.0 million (US\$20.6 million) in inventories as a result of more shipment of our LiDAR products.

Net cash used in operating activities in 2022 was RMB696.0 million. The difference between the net loss of RMB300.8 million and operating cash flow was primarily due to (i) an increase of RMB305.6 million in inventories due to increased stock level of raw materials for AT128 mass production and (ii) an increase of RMB256.6 million in total in accounts receivable and contract assets of which was in line with our revenue growth, partially offset by adjustment of non-cash items of RMB226.2 million, which mainly consisted of share-based compensation expenses of RMB105.2 million and depreciation and amortization expenses of RMB53.6 million.

Net cash used in operating activities in 2021 was RMB228.4 million. The difference between the net loss of RMB244.8 million and operating cash flow was primarily due to (i) adjustment of non-cash items of RMB105.2 million which mainly consisted of share-based compensation expenses of RMB54.3 million, and depreciation and amortization expenses of RMB28.2 million, (ii) a net increase in operating assets and liabilities by RMB88.7 million, which was primarily attributable to an increase of RMB237.8 million in inventories as we strategically stocked many electronic components to prevent the general shortage faced by other companies around the world, and an increase of RMB140.4 million in total in accounts receivable and contract assets as we continued to expand our customers bases, partially offset by an increase of accrued expenses and other current liabilities of RMB170.1 million due to the increased tax payables of RMB114.1 million and salaries and welfare payables of RMB59.1 million, and an increase of RMB113.3 million in contract liabilities as a result of increased sales orders received.

Investing activities

Net cash used in investing activities in 2023 was RMB1,060.4 million (US\$149.4 million), which was primarily due to (i) the purchase of short-term investments of RMB5,100.9 million (US\$718.4 million), and (ii) the purchase of property and equipment of RMB406.7 million (US\$57.3 million), partially offset by the maturity of short-term investments of RMB4,479.3 million (US\$630.9 million).

Net cash provided by investing activities in 2022 was RMB1,119.6 million, which was primarily due to the maturity of short-term investment of RMB6,978.8 million, partially offset by the purchases of short-term investment of RMB5,586.8 million and the purchases of property and equipment of RMB231.2 million.

Net cash used in investing activities in 2021 was RMB1,980.2 million, which was primarily due to the purchases of short-term investment of RMB4.8 billion, partially offset by the maturity of short-term investment of RMB3.1 billion.

Financing activities

Net cash provided by financing activities in 2023 was RMB1,590.4 million (US\$224.0 million), which primarily include (i) proceeds from issuance of ordinary shares in connection to the initial public offering of RMB1,225.5 million (US\$172.6 million), (ii) proceeds from long-term borrowings of RMB264.9 million (US\$37.3 million) and (iii) proceeds from short-term borrowings of RMB111.7 million (US\$15.7 million).

Net cash provided by financing activities in 2022 was RMB15.2 million, which primarily include proceeds from long-term borrowings.

Net cash provided by financing activities in 2021 was RMB2.4 billion, which primarily include the proceeds from the issuance of convertible loans and ordinary shares.

Material Cash Requirements

Our material cash requirements as of December 31, 2023 primarily includes our capital expenditures and contractual obligations.

Capital Expenditures

Our capital expenditures primarily represent capital payment to Maxwell Center and Hertz Center, electronic equipment, leasehold improvement, machinery and equipment, sample products, and intangible assets. We incurred capital expenditures of RMB281.6 million, RMB240.4 million and RMB406.7 million (US\$57.3 million) in 2021, 2022 and 2023, respectively. We have incurred RMB850.1 million (US\$119.7 million) as of December 31, 2023 and plan to additionally invest approximately RMB0.7 billion (US\$94.3 million) in purchasing equipment, factory buildings, hardware, software and a parcel of land to increase the manufacturing capacity for our LiDAR products. There are, however, risks or other difficulties associated with the expansion of our manufacturing facilities, such as failure to complete the expansion on schedule and within budget. See “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — The expansion of our manufacturing facilities may be subject to delays, disruptions, cost overruns, or may not produce expected benefits.” We will continue to make capital expenditures to meet the expected growth of our business. We intend to fund our future capital expenditures with our existing cash balance, operating cash flow and proceeds.

Contractual Obligations

The following table sets forth our contractual obligations as of December 31, 2023:

	Total	Payment due by December 31,			After
		2024	2025	2026	
		<i>(RMB in thousands)</i>			
Operating lease commitments	165,821	38,305	25,951	24,672	76,893
Capital expenditure commitments ⁽¹⁾	115,813	115,813	—	—	—

Note:

(1) Capital expenditure commitments refer to future minimum capital payment under non-cancelable agreements related to Maxwell Center.

In addition, we are obligated to make royalty payments to a third party from 2020 through 2030. The royalty payment for 2020, 2021 and 2022 is US\$3.0 million annually. For each year from 2023, the royalty payment shall be the greater of US\$3.0 million (except for the year of 2030, where the base payment shall be US\$0.3 million) and a tiered percentage of partial net sales. In particular, the percentage should be 4%, 3% and 2% for the net sales of rotating LiDAR products from US\$0 to US\$425.0 million, from US\$425.0 million to US\$2,925 million, and from US\$2,925 million to above, respectively. Net sales do not include (a) taxes, tariffs, customs duties, excise, or other governmental charges (except income tax) levied and separately stated in an invoice, or (b) reasonable charges for freight or insurance that are separately stated in an invoice and born by us.

Except for those disclosed above, we did not have any significant capital or other commitments, long-term obligations, or guarantees as of December 31, 2023.

Holding Company Structure

Hesai Group is a holding company with no material operations of its own. We conduct our operations primarily through our mainland China subsidiaries. As a result, Hesai Group's ability to pay dividends depends upon dividends paid by our mainland China subsidiaries. If our existing mainland China subsidiaries, or any newly formed ones, incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends to us. In addition, our wholly foreign-owned subsidiaries in mainland China are permitted to pay dividends to us only out of their retained earnings, if any, as determined in accordance with mainland China accounting standards and regulations. Under mainland China law, each of our subsidiaries in mainland China is required to set aside at least 10% of its after-tax profits each year, if any, to fund certain statutory reserve funds until such reserve funds reach 50% of their registered capital. For each of our subsidiaries in mainland China, after it makes an allocation to its statutory reserve funds from its after-tax profits, it may make an allocation to its discretionary reserve funds from its after-tax profits upon a resolution approved at the shareholders' general meeting. Under the Company Law of the PRC, a company shall not distribute profits before losses are covered and the statutory reserve funds are drawn. Remittance of dividends by a wholly foreign-owned company out of mainland China is subject to examination by the banks designated by SAFE. Our mainland China subsidiaries have not paid dividends and will not be able to pay dividends until they generate accumulated profits and meet the requirements for statutory reserve funds.

C. RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES, ETC.

See "Item 4. Information On the Company — B. Business Overview — Research and Development" and "Item 4. Information On the Company — B. Business Overview — Intellectual Property."

D. TREND INFORMATION

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the period from January 1, 2024 that are reasonably likely to have a material effect on our net revenues, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

E. CRITICAL ACCOUNTING ESTIMATES

An accounting policy is considered critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time such estimate is made, and if different accounting estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the combined and consolidated financial statements.

We prepare our financial statements in conformity with U.S. GAAP, which requires us to make judgments, estimates and assumptions. We continually evaluate these estimates and assumptions based on the most recently available information, our own historical experience and various other assumptions that we believe to be reasonable under the circumstances. Since the use of estimates is an integral component of the financial reporting process, actual results could differ from our expectations as a result of changes in our estimates. Some of our accounting policies require a higher degree of judgment than others in their application and require us to make significant accounting estimates.

The following descriptions of critical accounting policies, judgments and estimates should be read in conjunction with our combined and consolidated financial statements and accompanying notes and other disclosures included in this annual report. When reviewing our financial statements, you should consider (i) our selection of critical accounting policies, (ii) the judgments and other uncertainties affecting the application of such policies and (iii) the sensitivity of reported results to changes in conditions and assumptions.

Share-based compensation

We grant share options to eligible employees and accounts for these share-based awards in accordance with ASC 718 Compensation-Stock Compensation.

The fair value of the share options granted to employees is determined with the assistance of an independent third-party valuation firm. The binomial option pricing model was applied in determining the estimated fair value of the options granted to employees.

The fair value of each option that is subject to valuation during the years ended December 31, 2021, 2022 and 2023 was estimated with the assumptions (or ranges thereof) in the following table:

	For the Year ended December 31, 2021
Expected volatility	48.00%—74.00 %
Risk-free interest rate (per annum)	0.97%—1.55 %
Expected dividend yield	0.00 %
Expected multiples	2.50
Expected term	7.00
Fair value of underlying ordinary share (per share)	US\$14.10—18.42
Fair value of option to subscribe 1 ordinary share of Shanghai Hesai	US\$5.84—16.90
	For the Year ended December 31, 2022
Expected volatility	74.00%—80.00 %
Risk-free interest rate (per annum)	1.94%—3.83 %
Expected dividend yield	0.00 %
Expected multiples	2.50
Expected term	7.00
Fair value of underlying ordinary share (per share)	US\$18.11—19.91
Fair value of awards on grant date	US\$12.93—17.11

	For the Year ended December 31, 2023
Expected volatility	82.00%—85.00 %
Risk-free interest rate (per annum)	3.57%—4.47 %
Expected dividend yield	0.00 %
Expected multiples	2.50
Expected term	7.00
Fair value of underlying ordinary share (per share)	US\$7.95—15.47
Fair value of awards on grant date	US\$5.38—10.51

We estimate volatility based on annualized standard deviation of daily stock price return of comparable companies for the period before valuation date and with a similar span as time to expiration. We estimated the risk-free interest rate based on the yield curve of China sovereign bond for employee share options granted under the 2017 Plan and the 2020 Plan, or the risk-free interest rate based on the yield curve of US Government Bond for new employee share options granted under 2021 Plan as at each valuation date. The dividend yield was estimated as zero based on the plan to retain profit for corporate expansion and no dividend will be distributed in the near future. Employee forfeiture rate was estimated by the management using employee resignation statistics. Assumption on exercise multiple is made with reference to academic research. Vesting beginning date is assumed to be the initial public offering date for employee share options granted under 2021 Plan in replacement of the 2017 Plan and the 2020 Plan, or the commencement date of employment for new employee share options granted under 2021 Plan. Prior to our initial public offering in United States in February 2023, we determined the fair value of ordinary share based on estimated equity value and allocation of it to each element of its capital structure. The assumptions used in share-based compensation expenses recognition represent our best estimates, but these estimates involve inherent uncertainties and the application of judgment. If factors change or different assumptions are used, the share-based compensation expenses could be materially different for any period.

Fair value of ordinary shares

Prior to our initial public offering in United States in February, 2023, we have been a private company with no quoted market prices for our ordinary shares. We therefore needed to make estimates of the fair value of our ordinary shares at various dates for the purpose of determining the fair value of our ordinary shares at the date of the grant of share-based compensation award to our employees as one of the inputs.

Valuations of our ordinary shares were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants' Practice Aid, Valuation of Privately Held Company Equity Securities Issued as Compensation, and with the assistance of an independent valuation firm from time to time. The assumptions we use in the valuation model are based on future expectations combined with management judgment, with inputs of numerous objective and subjective factors, to determine the fair value of our ordinary shares, including the following factors:

- conditions in the industry and economy in general;
- stage of development;
- the prices, rights, preferences and privileges of our redeemable shares relative to our ordinary shares;
- the likelihood of occurrence of a liquidity event and redemption event;
- the results of independent third-party valuations.

In determining our equity value before we become a public company, we used back-solve method or discounted cash flow method to determine the fair value of the business enterprise value, and then allocated the business enterprise value to each element of our capital structure using an option pricing method.

If a recent transaction in equities existed, we applied back-solve method, which is a market approach to solve our implied business enterprise value by considering the rights and preferences of each class of equities based on the consideration of the recent equity transaction.

If a recent transaction in equities did not exist, we first applied discounted cash flow analysis to determine our BEV, based on our projected cash flow using management’s best estimate as of the valuation date.

Assumptions and estimates are not necessary to determine the fair value of our ordinary shares after the listing of our ADSs on the Nasdaq.

Mezzanine Equity

In the second quarter of 2021, we signed agreements with certain of our external investors holding Class B ordinary shares, whereby we have agreed to provide an option for these shareholders to re-designate their ordinary shares to preferred shares in the event that we fail to complete an overseas initial public offering within twelve months following the dates of the agreements. Among all the preferred rights associated with the shares, the agreements provide the investors with the right to redeem if a qualified initial public offering has not been consummated by December 31, 2022.

Accordingly, we have accounted for these agreements as material amendments such that extinguishment accounting is applied to these shares at the agreement dates. Given these shares are redeemable upon an event not solely within the control of us, we reclassified such Class B ordinary shares from permanent equity to mezzanine equity at their fair values initially and the difference is recorded as deemed dividend.

In determining the fair value of mezzanine equity, we used back-solve method to determine the fair value of the business enterprise value, and then allocated the business enterprise value to each element of our capital structure using an option pricing method.

Upon the completion of the initial public offering in United States, our mezzanine equity had been reclassified to permanent equity in accordance with the terms stipulated by the agreements.

Recent Accounting Pronouncements

A list of recently issued accounting pronouncements that are relevant to us is included in note 2 of our audited combined and consolidated financial statements included elsewhere in this annual report.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. DIRECTORS AND EXECUTIVE OFFICERS

The following table sets forth information regarding our directors and executive officers as of the date of this annual report.

Directors and Executive Officers	Age	Position/Title
Yifan Li	38	Co-Founder, Director and Chief Executive Officer
Kai Sun	38	Co-Founder, Director and Chief Scientist
Shaoqing Xiang	39	Co-Founder, Director and Chief Technology Officer
Louis T. Hsieh	59	Director and Global Chief Financial Officer
Cailian Yang	33	Director and Vice President of Operations
Bonnie Zhang	50	Independent director
Jie Chen	43	Independent director

Dr. Yifan Li is our co-founder and has served as our chief executive officer and director since our inception. Prior to co-founding Hesai, Dr. Li served as a principal engineer at Western Digital in Silicon Valley from 2013 to 2014. Dr. Li received his bachelor’s degree in mechanical engineering from Tsinghua University in 2009, a master’s degree in mechanical engineering from University of Illinois at Urbana-Champaign in 2009, and a PhD degree in mechanical engineering from University of Illinois at Urbana-Champaign in 2013, with his research focused on robotics. Dr. Li’s numerous accolades include being named as Fortune Magazine’s “40 Under 40 in China,” MIT Technology Review’s “2020 Innovators Under 35 of China,” and a Young Global Leader of the World Economic Forum for the Class of 2021.

Dr. Kai Sun is our co-founder and has served as our chief scientist and director since our inception. Prior to co-founding Hesai, Dr. Sun worked as a research associate at Stanford University in 2014. Dr. Sun's primary research at Stanford University focused on building ultra-fast and high-sensitivity molecular detection systems with lasers and novel detection technologies. These detection systems operate in extreme conditions for the research of reaction kinetics. Several of Dr. Sun's papers were selected to IOP Select (Institute of Physics in the UK), Spotlight of OSA (Optical Society of America), and "100 Years of Combustion Kinetics at Argonne." Dr. Sun also won the Outstanding Paper Award of the journal Measurement Science and Technology in 2013. Dr. Sun received his bachelor's degree in thermal energy and power engineering from Shanghai Jiao Tong University in 2007, a master's degree in mechanical engineering from Stanford University in 2010, and a PhD degree in mechanical engineering and also a PhD minor degree in electrical engineering from Stanford University in 2014.

Mr. Shaoqing Xiang is our co-founder and has served as our chief technology officer and director since our inception. Prior to co-founding Hesai, Mr. Xiang worked at Apple, Inc. as an iPhone hardware systems integration engineer from 2011 to 2014. Mr. Xiang received his bachelor's degree in micro-electromechanical systems from Tsinghua University in 2007. Mr. Xiang received a fellowship award and obtained dual master's degrees in mechanical engineering and electrical engineering from Stanford University in 2009 and 2011, respectively.

Mr. Louis T Hsieh has served as our global chief financial officer since April 2021 and our director since June 2021. Mr. Hsieh also currently serves as a director at New Oriental Education & Technology Group (NYSE: EDU, HKEX: 9901), the leading provider of private educational services in China. Mr. Hsieh joined this company in 2005 and served as its chief financial officer from 2005 to 2015 and its president from 2009 to 2016. He also currently serves as an independent director and chairman of the audit committee of JD.com (NASDAQ: JD, HKEX: 9618) since May 2014. From 2016 to 2023, Mr. Hsieh served as an independent director of YUM China Holdings, Inc. (NYSE: YUMC, HKEX: 9987), the leading restaurant operator in China. From May 2017 to October 2019, Mr. Hsieh served as the chief financial officer of NIO Inc. (NYSE: NIO, HKEX: 9866), a leading Chinese electric vehicle company. From August 2016 to September 2017, Mr. Hsieh served as an independent director and chairman of the audit committee of Nord Anglia Education Inc. (formerly NASDAQ: NORD, taken private in 2017). From 2007 to 2009, Mr. Hsieh served as an independent director and chairman of the audit committee of Perfect World (formerly NASDAQ: PWRD, taken private in 2015). Prior to that, Mr. Hsieh served as the chief financial officers of ARIO Data Networks, Inc. from 2003 to 2005. Before that, Mr. Hsieh held senior executive positions in private equity and investment banking with UBS Capital (Managing Director and Asia Tech/Media/Telecom Head), JP Morgan (vice president) and Credit Suisse, and served as a corporate and securities law attorney at White & Case LLP. Mr. Hsieh received his B.S. degree in engineering and engineering management from Stanford University, an M.B.A. degree from The Harvard Business School, and a J.D. degree from the University of California at Berkeley.

Ms. Cailian Yang has served as our vice president of operations and director since November 2017. Ms. Yang joined us in December 2014 as the first employee of Hesai. Prior to joining us, Ms. Yang served as a customer manager in Shanghai Pudong Development Bank from October 2012 to July 2014, and a customer manager in Citibank from September 2014 to December 2014. Ms. Yang received her bachelor's degree in business English from Yancheng Teachers University in 2012.

Ms. Bonnie Zhang has served as our independent director since February 2023. Ms. Zhang has served as independent non-executive director of Swire Pacific Limited (HKEX: 0019), a Hong Kong based international conglomerate with a diversified portfolio of market leading businesses, since June 2022, and independent director of Yatsen Holding Limited (NYSE: YSG), a Chinese beauty company, since November 2020. Ms. Zhang served as an independent director of TuSimple, Inc. (Nasdaq: TSP), an autonomous driving company, from September 2020 to June 2022 and as independent director of Dada Nexus Limited (Nasdaq: DADA), a local on-demand retail and delivery platform in China, from June 2020 to August 2022. Ms. Zhang has served as the chief financial officer of Sina Corporation (formerly NASDAQ: SINA, taken private in 2021) since March 2015. From March 2014 to March 2015, Ms. Zhang served as the chief financial officer of Weibo Corporation (Nasdaq: WB), a social media platform in China and one of Sina Corporation's subsidiaries. Before joining Weibo, Ms. Zhang was the chief financial officer of AdChina Ltd., an integrated internet advertising platform in China, from May 2011 to February 2014. Prior to that, Ms. Zhang was an audit partner of Deloitte Touche Tohmatsu based in Shanghai, with a focus on serving Chinese companies making initial public offerings in the United States and Chinese companies listed in the United States, from October 2007 to April 2011. Ms. Zhang served as a senior manager in the National Office SEC Services group of Deloitte & Touche, LLP from May 2005 to August 2007, where she was responsible for pre-issuance reviews of securities offering documents and periodic reports to be filed with the SEC with a focus on foreign private issuers. Ms. Zhang received a bachelor's degree in business administration from McDaniel College. Ms. Zhang is a certified public accountant in the State of Maryland and is a member of the American Institution of Certified Public Accountants.

Dr. Jie Chen has served as our independent director since February 2023. Dr. Chen is an associate professor at the School of Entrepreneurship and Management of ShanghaiTech University. Prior to ShanghaiTech, she was an assistant professor at the Lee Kuan Yew School of Public Policy of National University of Singapore. Dr. Chen received her Ph.D. in economics from Yale University in 2012, M.A. in economics from Yale University in 2006, and B.S. in computer science and economics from Washington University in St. Louis, *magna cum laude*, in 2003.

B. COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS

For the year ended December 31, 2023, we paid an aggregate of RMB17.8 million (US\$2.5 million) in cash to our directors and executive officers. We have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our directors and executive officers. Our mainland China subsidiaries are required by law to make contributions equal to certain percentages of each employee's salary for his or her pension insurance, medical insurance, unemployment insurance and other statutory benefits and a housing provident fund.

Employment Agreements and Indemnification Agreements

We have entered into employment agreements with each of our executive officers. Under these agreements, each of our executive officers is employed for a specified time period. We may terminate employment for cause, at any time, without advance notice or remuneration, for certain acts of the executive officer, such as conviction or plea of guilty to a felony or any misdemeanor involving moral turpitude, willful misconduct or gross negligence, or continued failure to perform agreed duties. We may also terminate an executive officer's employment without cause upon a 60-day advance written notice. In such case of termination by us, we will provide severance payments to the executive officer as may be agreed with the executive officer. The executive officer may resign at any time with a 60-day advance written notice.

Each executive officer has agreed to hold, both during and after the termination or expiry of his or her employment agreement, in strict confidence and not to use, except as required in the performance of his or her duties in connection with the employment or pursuant to applicable law, any of our confidential information or trade secrets, any confidential information or trade secrets of our customers or prospective customers, or the confidential or proprietary information of any third-party received by us and for which we have confidential obligations. The executive officers have also agreed to disclose in confidence to us all inventions, designs and trade secrets which they conceive, develop or reduce to practice during the executive officer's employment with us and to assign all right, title and interest in them to us, and assist us in obtaining and enforcing patents, copyrights and other legal rights for these inventions, designs and trade secrets.

In addition, each executive officer has agreed to be bound by non-competition and non-solicitation restrictions during the term of his or her employment and typically for two years following the last date of employment. Specifically, each executive officer has agreed not to (i) approach our suppliers, clients, customers or contacts or other persons or entities introduced to the executive officer in his or her capacity as a representative of us for the purpose of doing business with such persons or entities that will harm our business relationships with these persons or entities; (ii) assume employment with or provide services to any of our competitors, or engage, whether as principal, partner, licensor or otherwise, any of our competitors, without our express consent; or (iii) seek directly or indirectly, to solicit the services of any of our employees who is employed by us on or after the date of the executive officer's termination, or in the year preceding such termination, without our express consent.

We have also entered into indemnification agreements with each of our directors and executive officers. Under these agreements, we agree to indemnify our directors and executive officers against certain liabilities and expenses incurred by such persons in connection with claims made by reason of their being a director or officer of our company.

Share Incentive Plan

2021 Share Incentive Plan

In June 2021, our shareholders and board of directors adopted the 2021 Share Incentive Plan, or the 2021 Plan, to attract and retain the best available personnel, provide additional incentives to directors, officers, employees and consultants, and promote the success of our business. The maximum aggregate number of ordinary shares which may be issued pursuant to all awards under the 2021 Plan is initially 16,365,047, plus commencing no earlier than January 1 of the year immediately following our initial public offering, an increase on the first day of the fiscal year, by an amount decided by our board of directors; *provided* that such increase shall not exceed 1.5% of the then total number of shares issued and outstanding on an as-converted and fully diluted basis on the last day of the immediately preceding fiscal year. The 2021 Plan replaced any share incentive plans or similar arrangements previously adopted by us.

The following paragraphs describe the principal terms of the 2021 Plan.

Types of Awards. The 2021 Plan permits the awards of options, restricted shares, restricted share units or any other type of awards, in the form of cash or otherwise, approved by the committee.

Plan Administration. Our board of directors or a committee of one or more members of the board of directors and/or one or more executive officers administers the 2021 Plan. The committee or the board of directors determines, among other things, the participants to receive awards, the type and number of awards to be granted to each participant, and the terms and conditions of each award.

Award Agreement. Awards granted under the 2021 Plan are evidenced by an award agreement that sets forth the terms, conditions and limitations for each award, which may include the term of the award, the provisions applicable in the event that the participant's employment or service terminates, and our authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind the award.

Eligibility. We may grant awards to employees, consultants and directors of our company.

Vesting Schedule. In general, the committee determines the vesting schedule, if any, which is specified in the relevant award agreement.

Exercise of Options. The exercise price per share subject to an option shall be determined by the committee and set forth in the award agreement which may be a fixed price or a variable price related to the fair market value of the shares.

Transfer Restrictions. Awards may not be transferred in any manner by the participant other than in accordance with the exceptions provided in the 2021 Plan, such as transfers to us or any subsidiary of us, the immediate family members of the eligible participant by gift, by will or the laws of descent and distribution, or as approved by the committee or an executive officer or director authorized by the committee.

Termination and Amendment of the 2021 Plan. Unless terminated earlier, the 2021 Plan has a term of 10 years. Our board of directors has the authority to amend or terminate the plan. However, no such action may adversely affect in any material way any awards previously granted unless agreed by the participant.

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The following table summarizes, as of February 29, 2024, the number of outstanding options and restricted share units we had granted to our directors and executive officers:

Name	Class B Ordinary Shares Underlying Outstanding Awards	Exercise Price (US\$/Share)	Date of Grant	Date of Expiration
Louis T. Hsieh	2,000,000	1.05	July 19, 2021	July 19, 2028
Cailian Yang	*	2.1	July 3, 2021	July 3, 2028
	*	3.3	November 22, 2021	November 22, 2028
	*	1.63	June 5, 2023	June 5, 2030
Bonnie Zhang	* (1)	N/A	March 10, 2023	N/A
Jie Chen	* (1)	N/A	March 10, 2023	N/A
Total	2,388,360	—	—	—

Note:

* Less than 1% of our total ordinary shares on an as-converted basis outstanding as of February 29, 2024.

(1) Represents restricted share units.

As of February 29, 2024, our employees other than directors and executive officers as a group held options to purchase 9,186,837 Class B ordinary shares, with an exercise price ranging from US\$0.72 to US\$18.65, and 245,886 restricted share units.

C. BOARD PRACTICES

Board of Directors

Our board of directors consists of seven directors. A director is not required to hold any shares in our company by way of qualification. A director who is in any way, whether directly or indirectly, interested in a contract or transaction or proposed contract or transaction with our company is required to declare the nature of his or her interest at a meeting of our directors. Subject to the rules of the Nasdaq Stock Market and disqualification by the chairman of the relevant board meeting, a director may vote with respect to any contract or transaction, or proposed contract or transaction, notwithstanding that he or she may be interested therein, and if he or she does so his or her vote shall be counted and he or she may be counted in the quorum at any meeting of our directors at which any such contract or transaction or proposed contract or transaction is considered. Our directors may exercise all the powers of our company to raise or borrow money, and to mortgage or charge its undertaking, property and assets (present and future) and uncalled capital or any part thereof, to issue debentures, debenture stock, bonds, or other securities, whether outright or as collateral security for any debt, liability or obligation of our company or of any third party. None of our non-executive directors has a service contract with us that provides for benefits upon termination of service.

Committees of the Board of Directors

We have established three committees under the board of directors: an audit committee; a compensation committee and a nominating and corporate governance committee. We have adopted a charter for each of the three committees. Each committee's members and functions are described below.

Audit Committee. Our audit committee consists of Bonnie Zhang and Jie Chen. Bonnie Zhang is the chairwoman of our audit committee. We have determined that Bonnie Zhang and Jie Chen satisfy the "independence" requirements of Rule 5605(a)(2) of the Listing Rules of the Nasdaq Stock Market and Rule 10A-3 under the Exchange Act. We have determined that Bonnie Zhang qualifies as an "audit committee financial expert." The audit committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company. The audit committee is responsible for, among other things:

- appointing the independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by the independent auditors;
- reviewing with the independent auditors any audit problems or difficulties and management's response;
- discussing the annual audited financial statements with management and the independent auditors;

- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures and any steps taken to monitor and control major financial risk exposures;
- reviewing and approving all proposed related-party transactions;
- meeting separately and periodically with management and the independent auditors; and
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

Compensation Committee. Our compensation committee consists of Bonnie Zhang and Jie Chen. Bonnie Zhang is the chairwoman of our compensation committee. We have determined that Bonnie Zhang and Jie Chen satisfy the “independence” requirements of Rule 5605(a)(2) of the Listing Rules of the Nasdaq Stock Market. The compensation committee assists the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated. The compensation committee is responsible for, among other things:

- reviewing and approving, or recommending to the board for its approval, the compensation for our chief executive officer and other executive officers;
- reviewing and recommending to the board for determination with respect to the compensation of our non-employee directors;
- reviewing periodically and approving any incentive compensation or equity plans, programs or similar arrangements; and
- selecting a compensation consultant, legal counsel or other adviser only after taking into consideration all factors relevant to that person’s independence from management.

Nominating and Corporate Governance Committee. Our nominating and corporate governance committee consists of Kai Sun, Yifan Li and Bonnie Zhang. Kai Sun is the chairman of our nominating and corporate governance committee. Bonnie Zhang satisfies the “independence” requirements of Rule 5605(a)(2) of the Listing Rules of the Nasdaq Stock Market. The nominating and corporate governance committee assists the board of directors in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The nominating and corporate governance committee is responsible for, among other things:

- selecting and recommending to the board nominees for election by the shareholders or appointment by the board;
- reviewing annually with the board the current composition of the board with regard to characteristics such as independence, knowledge, skills, experience and diversity;
- making recommendations on the frequency and structure of board meetings and monitoring the functioning of the committees of the board; and
- advising the board periodically with regard to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on any remedial action to be taken.

Duties of Directors

Under Cayman Islands law, our directors owe fiduciary duties to our company, including a duty of loyalty, a duty to act honestly, and a duty to act in what they consider in good faith to be in our best interests. Our directors must also exercise their powers only for a proper purpose. Our directors also owe to our company a duty to act with skill and care. It was previously considered that a director need not exhibit in the performance of his or her duties a greater degree of skill than may reasonably be expected from a person of his or her knowledge and experience. However, English and Commonwealth courts have moved towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association, as amended and restated from time to time, and the class rights vested thereunder in the holders of the shares. In certain limited exceptional circumstances, a shareholder may have the right to seek damages in our name if a duty owed by our directors is breached.

Our board of directors has all the powers necessary for managing, and for directing and supervising, our business affairs. The functions and powers of our board of directors include, among others:

- convening shareholders' annual and extraordinary general meetings and reporting its work to shareholders at such meetings;
- declaring dividends and distributions;
- appointing officers and determining the term of office of the officers;
- exercising the borrowing powers of our company and mortgaging the property of our company; and approving the transfer of shares in our company, including the registration of such shares in our share register.

Terms of Directors and Officers

Our directors may be appointed by a resolution of our board of directors, or by an ordinary resolution of our shareholders. A director may be appointed on terms that he or she shall automatically retire from office at the next or a subsequent annual general meeting or upon any specified event or after any specified period in a written agreement between our company and the director, if any; but no such term shall be implied in the absence of express provision. Our directors (other than independent directors) are currently not subject to a term of office and hold office until such time as they are removed from office by ordinary resolution of our shareholders (except with regard to the removal of the chairman, who may only be removed from office by special resolution). Our independent directors are subject to a fixed term of two years and their services may be terminated earlier with advanced notice. A director will cease to be a director if, among other things, the director (i) becomes bankrupt or makes any arrangement or composition with his or her creditors; (ii) dies or is found by our company to be or becomes of unsound mind, (iii) resigns his or her office by notice in writing to our company, (iv) without special leave of absence from our board, is absent from three consecutive board meetings and our directors resolve that his or her office be vacated, or (v) is removed from office pursuant to any other provision of our articles of association.

Our officers are elected by and serve at the discretion of our board of directors.

Board Diversity Matrix

Board Diversity Matrix (As of February 29, 2024)

Country of Principal Executive Offices				PRC
Foreign Private Issuer				Yes
Disclosure Prohibited Under Home Country Law				No
Total Number of Directors				7
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	3	4	N/A	N/A
Part II: Demographic Background				
Underrepresented Individual in Home Country Jurisdiction			0	
LGBTQ+			0	
Did Not Disclose Demographic Background			0	

D. EMPLOYEES

We had 703 and 1,020 employees as of December 31, 2021 and 2022, respectively. We had a total of 1,122 employees as of December 31, 2023, of which 73 held doctorate degrees. The following table sets forth the numbers of our employees categorized by function as of December 31, 2023.

Function	Number of Employees
Research and development	596
Production and supply chain	217
Management	55
Sales and marketing	96
Others	158
Total	1,122

As of December 31, 2023, we had 1,095 employees based in mainland China and 27 employees in the United States and other countries, and we also had 921 contracting workers in our manufacturing facilities in China.

As required by regulations in mainland China, we participate in various employee social security plans that are organized by municipal and provincial governments, including pension, unemployment insurance, work-related injury insurance, medical insurance and housing insurance. We are required under mainland China law to make contributions to employee benefit plans for our mainland China-based employees at specified percentages of the salaries, bonuses and certain allowances of our employees, up to a maximum amount specified by the local government from time to time. Bonuses are generally discretionary and based in part on employee performance and in part on the overall performance of our business. We have granted, and plan to continue to grant, share-based incentive awards to our employees in the future to incentivize their contributions to our growth and development.

We enter into standard labor contracts and confidentiality agreements with our employees. To date, we have not experienced any significant labor disputes. None of our employees are represented by labor unions.

E. SHARE OWNERSHIP

Except as specifically noted, the following table sets forth information with respect to the beneficial ownership of our ordinary shares on an as-converted basis as of February 29, 2024 by:

- each of our directors and executive officers; and
- each of our principal shareholders who beneficially own 5% or more of our total outstanding shares.

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The calculations in the table below are based on 30,033,379 Class A ordinary shares and 97,444,952 Class B ordinary shares (excluding the 2,181,380 Class B ordinary shares issued to the depository bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plan) issued and outstanding on an as-converted basis, as of February 29, 2024.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days, including through the exercise of any option, warrant or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

	Ordinary Shares Beneficially Owned				
	Class A Ordinary shares	Class B Ordinary Shares	Total Ordinary Shares	% of Total Ordinary Shares	% of Aggregate Voting Power ^{***}
Directors and Executive Officers**:					
Yifan Li ⁽¹⁾	9,899,374	1,263	9,900,637	7.8	24.9
Kai Sun ⁽²⁾	10,234,631	22,316	10,256,947	8.0	25.7
Shaoqing Xiang ⁽³⁾	9,899,374	1,263	9,900,637	7.8	24.9
Louis T. Hsieh ⁽⁴⁾	—	2,061,842	2,061,842	1.6	0.5
Cailian Yang ⁽⁵⁾	—	*	*	*	*
Bonnie Zhang	—	*	*	*	*
Jie Chen	—	*	*	*	*
All Directors and Executive Officers as a Group	30,033,379	2,416,170	32,449,549	25.0	75.7
Principal Shareholders:					
ALBJ Limited ⁽¹⁾	9,899,374	—	9,899,374	7.8	24.9
Fermat Star Limited ⁽²⁾	10,234,631	—	10,234,631	8.0	25.7
Galbadia Limited ⁽³⁾	9,899,374	—	9,899,374	7.8	24.9
Lightspeed Opportunity ⁽⁶⁾	—	10,688,294	10,688,294	8.4	2.7
Lightspeed China Partners ⁽⁷⁾	—	8,446,031	8,446,031	6.6	2.1
Bosch ⁽⁸⁾	—	7,653,252	7,653,252	6.0	1.9
Xiaomi ⁽⁹⁾	—	7,272,727	7,272,727	5.7	1.8
Yuanzhan ⁽¹⁰⁾	—	6,711,885	6,711,885	5.3	1.7

Notes:

* Aggregate number of shares accounts for less than 1% of our total outstanding shares.

** Except as indicated otherwise below, the business address of our directors and executive officers is 9th Floor, Building L2-B, 1588 Zhuguang Road, Qingpu District, Shanghai 201702, People's Republic of China. The Business address of Bonnie Zhang is 7F Sina Plaza, No. 8 Courtyard 10, West Xibeiwang Road (E), Beijing 100193, People's Republic of China.

*** For each person or group included in this column, percentage of total voting power represents voting power based on both Class A and Class B ordinary shares held by such person or group with respect to all outstanding shares of our Class A and Class B ordinary shares as a single class. Each holder of our Class A ordinary shares is entitled to 10 votes per share. Each holder of our Class B ordinary shares is entitled to one vote per share. Our Class A ordinary shares are convertible at any time by the holder into Class B ordinary shares on a one-for-one basis, while Class B ordinary shares are not convertible into Class A ordinary shares under any circumstances.

- (1) Represents (i) 9,899,374 Class A ordinary shares held by ALBJ Limited, a company limited by shares incorporated in British Virgin Islands, and (ii) 1,263 Class B ordinary shares in the form of ADSs beneficially owned by Dr. Yifan Li. ALBJ Limited is wholly owned by Asian LBJ Limited, which is wholly owned by Dr. Yifan Li. The registered address of ALBJ Limited is Ritter House, Wickhams Cay II, PO Box 3170, Road Town, Tortola VG1110, British Virgin Islands.
- (2) Represents (i) 10,234,631 Class A ordinary shares held by Fermat Star Limited, a company limited by shares incorporated in British Virgin Islands, and (ii) 22,316 Class B ordinary shares in the form of ADSs beneficially owned by Dr. Kai Sun. Fermat Star Limited is and wholly owned by Rock Ocean Limited, which is wholly owned by Dr. Kai Sun. The registered address of Fermat Star Limited is Ritter House, Wickhams Cay II, PO Box 3170, Road Town, Tortola VG1110, British Virgin Islands.
- (3) Represents (i) 9,899,374 Class A ordinary shares held by Galbadia Limited, a company limited by shares incorporated in British Virgin Islands, and (ii) 1,263 Class B ordinary shares in the form of ADSs beneficially owned by Mr. Shaoqing Xiang. Galbadia Limited is wholly owned by Balamb Limited, which is wholly owned by Mr. Shaoqing Xiang. The registered address of Galbadia Limited is Ritter House, Wickhams Cay II, PO Box 3170, Road Town, Tortola VG1110, British Virgin Islands.

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- (4) Represents (i) 2,000,000 Class B ordinary shares issuable pursuant to options exercisable within 60 days after February 29, 2024 that are held by Mr. Louis T. Hsieh, and (ii) 61,842 Class B ordinary shares in the form of ADSs beneficially owned by Mr. Louis T. Hsieh.
- (5) Represents (i) Class B ordinary shares issuable pursuant to options exercisable within 60 days after February 29, 2024 that are held by Ms. Cailian Yang, and (ii) ADSs beneficially owned by Ms. Cailian Yang.
- (6) Represents Class B ordinary shares held by Lightspeed Opportunity Fund, L.P., a Cayman Islands exempted limited partnership, as reported on the Schedule 13G filed by Lightspeed Opportunity Fund, L.P., Lightspeed General Partner Opportunity Fund, L.P., Lightspeed Ultimate General Partner Opportunity Fund, Ltd., Arif Janmohamed and Ravi Mhatre on February 14, 2024. The general partner of Lightspeed Opportunity Fund, L.P. is Lightspeed General Partner Opportunity Fund, L.P., whose general partner is Lightspeed Ultimate General Partner Opportunity Fund, Ltd. The directors of the Lightspeed Ultimate General Partner Opportunity Fund, Ltd. are Ravi Mhatre and Arif Janmohamed. The business address of Lightspeed Opportunity Fund, L.P. is 2200 Sand Hill Road, Suite 100, Menlo Park, CA 94025, United States.
- (7) Represents (i) 2,428,865 Class B ordinary shares directly held by and 1,868,630 Class B ordinary shares in the form of ADSs beneficially owned by Lightspeed China Partners III, L.P., a Cayman Islands partnership, (ii) 1,715,642 Class B ordinary shares directly held by and 1,715,640 Class B ordinary shares in the form of ADSs beneficially owned by Lightspeed China Partners Select I, L.P., a Cayman Islands partnership, and (iii) 717,254 Class B ordinary shares in the form of ADSs beneficially owned by Guangyi HS Holding Limited, a British Virgin Islands limited company, as reported on the Schedule 13G filed by Lightspeed China Partners III, L.P., Lightspeed China Partners Select I, L.P., Guangyi HS Holding Limited, Lightspeed China Partners III GP, LLC, Lightspeed China Partners Select I GP, LLC, James Qun Mi and Aibao Chai on February 14, 2024. The general partner of Lightspeed China Partners III, L.P. is Lightspeed China Partners III GP, LLC. The general partner of Lightspeed China Partners Select I, L.P. is Lightspeed China Partners Select I GP, LLC. James Qun Mi has 50% voting power of each of Lightspeed China Partners III GP, LLC and Lightspeed China Partners Select I GP, LLC. Aibao Chai holds 50% of the controlling power of Guangyi HS Holding Limited. The business address of Lightspeed China Partners III, L.P. is PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. The business address of Lightspeed China Partners Select I, L.P. is PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. The business address of Guangyi HS Holding Limited is Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands.
- (8) Represents 7,653,252 Class B ordinary shares held by Robert Bosch GmbH, a German company with limited liability, as reported on the Schedule 13G filed by Robert Bosch GmbH and Robert Bosch Industrietechnik KG on February 14, 2024. Approximately 93% of the voting interest in Robert Bosch GmbH is held by Robert Bosch Industrietechnik KG. The business address of Robert Bosch GmbH is Robert Bosch Platz 1, Gerlingen Schillerhohe, Baden Wuerttemberg 70839, Germany.
- (9) Represents (i) 3,030,303 Class B ordinary shares held by Fast Pace Limited, a British Virgin Islands limited company, and (ii) 4,242,424 Class B ordinary shares held by Shanghai Ziyue Enterprise Management Consulting Partnership (Limited Partnership), a PRC limited partnership, as reported on the Schedule 13G filed by Xiaomi Corporation, Shanghai Ziyue Enterprise Management Consulting Partnership (Limited Partnership), Hubei Xiaomi Changjiang Industrial Investment Fund Management Co., Ltd. and Fast Pace Limited on February 9, 2024. Fast Pace Limited is wholly owned by Xiaomi Corporation. The general partner of Shanghai Ziyue Enterprise Management Consulting Partnership (Limited Partnership) is Hubei Xiaomi Changjiang Industrial Investment Fund Management Co., Ltd., a PRC limited liability company controlled by Xiaomi Corporation. The business address of Fast Pace Limited is Start Chambers, Wickham's Cay II, P.O. Box 2221, Road Town, Tortola, British Virgin Islands. The business address of Shanghai Ziyue Enterprise Management Consulting Partnership (Limited Partnership) is Floor 5, Building 7, No. 3601 Dongfang Road, Pudong New Area, Shanghai, People's Republic of China.
- (10) Represents (i) 986,323 Class B ordinary shares held by Lighthouse Blossom Limited, a British Virgin Islands corporation, (ii) 1,436,192 Class B ordinary shares held by Yuanzhan Equity Investment Management (Shanghai) Co., Ltd., a PRC limited liability company, (iii) 3,513,909 Class B ordinary shares held by Shanghai Wenqian Enterprise Management Center L.P., a PRC limited partnership and (iv) 775,461 Class B ordinary shares held by Hangzhou Yuanzhan Huayao Venture Capital L.P., a PRC limited partnership, as reported on the Schedule 13G filed by Lighthouse Blossom Limited, Yuanzhan Equity Investment Management (Shanghai) Co., Ltd., Shanghai Wenqian Enterprise Management Center L.P. and Hangzhou Yuanzhan Huayao Venture Capital L.P. on February 14, 2024. Lighthouse Blossom Limited is wholly owned by Lighthouse Future Establish, which is ultimately controlled by Minglie Hu. The general partner of both Shanghai Wenqian Enterprise Management Center L.P. and Hangzhou Yuanzhan Huayao Venture Capital L.P. is Yuanzhan Equity Investment Management (Shanghai) Co., Ltd., which is ultimately controlled by Minglie Hu. Yuanzhan Equity Investment Management (Shanghai) Co., Ltd. is wholly owned by Minglie Hu, Yuesu Yu and Zhe Li. The business address of Lighthouse Blossom Limited is Ritter House, Wickhams Cay II, PO Box 3170, Road Town, Tortola VG1110, British Virgin Islands. The business address of Yuanzhan Equity Investment Management (Shanghai) Co., Ltd. is Room 1106, No.818, Longhua East Road, Shanghai, People's Republic of China. The business address of Shanghai Wenqian Enterprise Management Center L.P. is Room 328, 3rd Floor, Unit 2, No. 231, Shibocun Road, Free Trade Zone, Pudong New District, Shanghai, People's Republic of China. The business address of Hangzhou Yuanzhan Huayao Venture Capital L.P. is Room 1217, Unit 4, Building 6, No. 1500, Wenyi West Road, Cangqian Street, Hangzhou, Zhejiang Province, People's Republic of China.

To our knowledge, as of February 29, 2024, 59,024,079 of our Class B ordinary shares were held by four record holders in the United States, of which 58,175,595 were held by the depository of our ADS program and 848,484 were held by other record holders. As of February 29, 2024, none of our Class A ordinary shares were held by U.S. record holders. The number of beneficial owners of our ADSs in the United States is likely to be much larger than the number of record holders of our Class B ordinary shares in the United States.

We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

F. DISCLOSURE OF A REGISTRANT'S ACTION TO RECOVER ERRONEOUSLY AWARDED COMPENSATION

NOT APPLICABLE.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. MAJOR SHAREHOLDERS

See “Item 6. Directors, Senior Management and Employees—E. Share Ownership.”

B. RELATED PARTY TRANSACTIONS

Employment Agreements and Indemnification Agreements

See “Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Employment Agreements and Indemnification Agreements.”

Share Incentive Plans

See “Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Share Incentive Plan.”

Other Related Party Transactions

Transactions with Baidu entities

For the year ended December 31, 2021, we sold LiDAR products to various entities affiliated with Baidu Holdings Limited, one of our principal beneficial owners, or Baidu entities, for an aggregate amount of RMB49.9 million. We had balance of accounts receivable (net of allowance) due from Baidu entities in an aggregate amount of RMB2.2 million as of December 31, 2021. We had advances from Baidu entities in an aggregate amount of RMB3.7 million as of December 31, 2021. Baidu entities have not been our related parties since 2021 when Baidu Holdings Limited ceased having significant influence over us upon the completion of our reorganization.

On March 1, 2020, we entered into a framework agreement with Beijing Baidu Netcom Science Technology Co., Ltd. The framework agreement specifies that we provide our LiDAR products to Baidu entities in accordance with the key performance parameters and reference targets set forth in the purchase orders. The framework agreement has a two-year term, which will be automatically extended to the agreed period of the applicable product and service prices if the agreed period exceeds the term of the framework agreement. The framework agreement also specifies mutual termination rights due to force majeure. The purchase orders from Baidu entities generally provide the requirements, volumes and prices of the LiDAR products.

Registration Rights

In connection with our Series D financing, we entered into a series of agreements with Series D investors in the first half of 2021. Set forth below is a description of the registration rights granted under these agreements to Series D investors.

Demand Registration Rights. Holders of at least 10 percent or more of the issued and outstanding registrable securities held by all holders (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a share option, share purchase or similar plan), may request in writing that we effect a registration for at least 25% of the registrable securities. We shall, within 10 business days of the receipt of such written request issued by any holder to register its registrable securities, give written notice of such request to all the holders, and thereupon shall use our reasonable best efforts to effect, as soon as practicable, the registration under the Securities Act of all registrable securities for which the requesting shareholder has requested registration and all other registrable securities that other shareholders requested us to register within 15 days after receipt of the written notice. We are obligated to effect no more than a total of three demand registrations, except in certain circumstances.

Form F-3 or Form S-3 Registration Rights. If we qualify for registration on Form F-3 or Form S-3, any holder may request us to file a registration statement on Form F-3 or Form S-3. Upon receipt of such a request, we shall promptly give written notice of such request to all the holders, and thereupon shall use our reasonable best efforts to effect, as soon as practicable, the registration under the Securities Act of all registrable securities for which the requesting shareholder has requested registration and all other registrable securities that other shareholders requested us to register within 15 days after receipt of the written notice, except in certain circumstances.

We are not obligated to effect a demand registration or a Form F-3 or Form S-3 registration if, among other things, (i) we, within 10 days of the receipt of any request of the holders, give notice to the initiating holders of our bona fide intention to effect the filing for our own account of a registration statement within 90 days of receipt of such request; (ii) in any particular jurisdiction in which we would be required to execute a general consent to service of process in effecting such registration or qualification; and (iii) we furnish to the holders a certificate signed by our chief executive officer stating that in the good faith judgment of the board, it would be materially detrimental to us and our shareholders for a registration statement to be filed in the near future. In addition, we have a right to defer filing of a registration statement during the period starting with the date of filing by us, and ending six months following the effective date of any registration statement pertaining to our ordinary shares, provided that the holders are entitled to join such registration pursuant to the piggyback registration rights.

Piggyback Registration Rights. If we propose to register for our own account any of our equity securities in connection with the public offering of such securities, or for the account of any holder of equity securities any of such holder's equity securities, we shall promptly give all the holders notice of such registration in writing, and shall use our reasonable best efforts to afford each such holder an opportunity to include in such registration statement all or any part of the registrable securities then held by such holder.

Each holder desiring to include in any such registration statement all or any part of the registrable securities held by it shall within 15 days after receipt of the above-described notice from us, so notify us in writing, and in such notice shall inform us of the number of registrable securities such holder wishes to include in such registration statement. We shall pay all registration expenses in connection with each of such piggyback registration.

Expenses of Registration. We will bear all registration expenses, other than underwriting discounts, selling commissions incurred in connection with any demand and the attorney's fees of the selling holders applicable to the sale of registrable securities, piggyback or Form F-3 registration, including, without limitation, the fees for the engagement of a special counsel for the holders participating in such registration.

Termination of Obligations. The shareholders' registration rights will terminate on the earlier of (i) February 14, 2028, or (ii) with respect to any holder the date on which such holder may sell without registration, all of such holder's registrable securities under Rule 144 of the Securities Act in any 90-day period.

C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. COMBINED AND CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

We have appended combined and consolidated financial statements filed as part of this annual report.

Legal Proceedings

In August 2019, Velodyne Lidar, Inc., or Velodyne, filed lawsuits against us in the United States District Court for the Northern District of California and the United States International Trade Commission for patent infringement. In November 2019, we also filed a lawsuit against Velodyne in the Regional Court of Frankfurt/Main, Germany, and in April and May 2020, we filed several lawsuits against Velodyne in Shanghai Intellectual Property Court for patent infringement. The aforementioned legal proceedings are collectively referred to as the “Hesai-Velodyne Litigations.” On June 24, 2020, we and Velodyne entered into a settlement and patent cross license agreement, to settle all matters fully and finally in the Hesai-Velodyne Litigations, and to enter a global cross-licensing relationship based on then existing and all future patents and patent applications of both parties. Under the agreement, we agreed to pay Velodyne a one-off settlement fee and an annual royalty fee through 2030. As of the date of this annual report, all legal proceedings concerning the Hesai-Velodyne Litigations were terminated.

On April 11, 2023, Ouster, Inc. filed a complaint against Hesai Group and Hesai Technology Co., Ltd. in the United States District Court for the District of Delaware for alleged patent infringement relating to the production, use, sale and/or importation of certain LiDAR systems and/or components thereof (captioned *Ouster, Inc. v. Hesai Group and Hesai Technology Co., Ltd.*, No. 1:23-cv-00406-CFC). Relatedly, on the same day, Ouster, Inc. filed a complaint with the U.S. International Trade Commission, or the ITC, requesting that the ITC institute an investigation into Hesai Group, Hesai Technology Co., Ltd., and Hesai Inc., pursuant to Section 337 of the Tariff Act of 1930 for substantially similar allegations. On May 30, 2023, the United States District Court for the District of Delaware ordered a stay of case No. 1:23-cv-00406-CFC in response to the defendants motion. On July 14, 2023, the parties filed a joint motion to suspend all case deadlines in the ITC investigation by a period of three months, which the presiding Administrative Law Judge granted on July 17, 2023. On May 12, 2023, the defendants filed a request for arbitration before Judicial Arbitration and Mediation Services against Ouster, Inc. On August 24, 2023, the presiding Administrative Law Judge issued an order granting the defendants’ motion to terminate the ITC investigation. On October 10, 2023, the ITC affirmed the order and terminated the investigation into the alleged patent infringement initiated by Ouster, Inc. The arbitration is in the preliminary stages, and we are unable to predict the outcome of the proceedings.

On April 7, 2023, the Company and certain of its officers, directors, authorized U.S. representative, and IPO underwriters were named as defendants in a putative securities class action filed in federal court, captioned *Pacella v. Hesai Group, et al.*, No. 1:23-cv-02634 (U.S. District Court for the Eastern District of New York). Plaintiff in this case alleges, in sum and substance, that Company’s registration statement and prospectus filed in connection with its February 2023 initial public offering contained false or misleading statements in violation of U.S. federal securities laws. In February 2024, the case was transferred to U.S. District Court for the Southern District of New York, under the case caption *Pacella v. Hesai Group, et al.*, No. 1:24-cv-00876. As the case is still in its preliminary stage, we cannot predict its timing, outcome, potential damages, or expenses that may be incurred.

In addition, we may from time to time be subject to various legal or administrative claims and proceedings arising in the ordinary course of our business. Litigation or any other legal or administrative proceeding, regardless of the outcome, may result in substantial cost and diversion of our resources, including our management’s time and attention. See “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — We may need to defend ourselves against intellectual property right infringement claims, which may be time-consuming and would cause us to incur substantial costs,” and “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — We may be subject to legal proceedings in the ordinary course of our business. If the outcomes of these proceedings are adverse to us, it could have a material adverse effect on our business, results of operations, and financial condition.”

Dividend Policy

Our board of directors has discretion on whether to distribute dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our board of directors. In either case, all dividends are subject to certain restrictions under Cayman Islands law, namely that our company may only pay dividends out of profits or share premium account, and provided always that in no circumstances may a dividend be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business. Even if we decide to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant.

We do not have any present plan to pay any cash dividends on our ordinary shares in the foreseeable future. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

We are a holding company incorporated in the Cayman Islands. We may rely on dividends from our subsidiary in mainland China for our cash requirements, including any payment of dividends to our shareholders. Mainland China regulations may restrict the ability of our mainland China subsidiary to pay dividends to us. See “Item 4. Information on the Company — B. Business Overview — Regulations — Regulations Relating to Dividend Distribution.”

If we pay any dividends on our ordinary shares, we will pay those dividends which are payable in respect of the ordinary shares underlying the ADSs to the depositary, as the registered holder of such ordinary shares, and the depositary then will pay such amounts to the ADS holders in proportion to the ordinary shares underlying the ADSs held by such ADS holders, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. Cash dividends on our ordinary shares, if any, will be paid in U.S. dollars.

B. SIGNIFICANT CHANGES

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited combined and consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

A. OFFERING AND LISTING DETAILS.

See “—C. Markets.”

B. PLAN OF DISTRIBUTION

Not applicable.

C. MARKETS

The ADSs, each representing one Class B ordinary share, have been listed on the Nasdaq Global Select Market under the symbol “HSAI” since February 9, 2023.

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 following are summaries of material provisions of our second amended and restated memorandum and articles of association that we have adopted and of the Companies Act (As Revised) of the Cayman Islands, or the Companies Act in this section, insofar as they relate to the material terms of our ordinary shares. Neither our certificate of incorporation nor our memorandum and articles of association contains any charter of the Chinese Communist party or any text thereof.

Objects of Our Company. Under our memorandum and articles of association, the objects of our company are unrestricted and we have the full power and authority to carry out any object not prohibited by the Companies Act, or any other law of the Cayman Island.

Ordinary Shares. Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of our Class A ordinary shares and Class B ordinary shares will have the same rights except for voting and conversion rights. Our ordinary shares are issued in registered form and are issued when registered in our register of members (shareholders). We may not issue shares to bearer. Our shareholders who are nonresidents of the Cayman Islands may freely hold and vote their shares.

Conversion. Class A ordinary shares may be converted into the same number of Class B ordinary shares by the holders thereof at any time, while Class B ordinary shares cannot be converted into Class A ordinary shares under any circumstances. Upon any direct or indirect sale, transfer, assignment or disposition of Class A ordinary shares by a holder thereof, or the direct or indirect transfer or assignment of the voting power attached to such Class A ordinary shares through voting proxy or otherwise, to any person other than an affiliate of such holder or another holder of Class A ordinary shares or its affiliates, such Class A ordinary shares shall be automatically and immediately converted into the same number of Class B ordinary shares. In addition, upon any direct or indirect sale, transfer, assignment or disposition of a majority of the issued and outstanding voting securities of, or the direct or indirect transfer or assignment of the voting power attached to such voting securities through voting proxy or otherwise, or the direct or indirect sale, transfer, assignment or disposition of all or substantially all of the assets of, a holder of Class A ordinary shares that is an entity to any person other than an affiliate of such holder or another holder of Class A ordinary shares or its affiliates, such Class A ordinary shares shall be automatically and immediately converted into the same number of Class B ordinary shares.

Dividends. The holders of our ordinary shares are entitled to such dividends as may be declared by our board of directors or declared by our shareholders by ordinary resolution (*provided* that no dividend may be declared by our shareholders which exceeds the amount recommended by our directors). Our memorandum and articles of association provide that dividends may be declared and paid out of the funds of our Company lawfully available therefor. Under the laws of the Cayman Islands, our company may pay a dividend out of either profit or share premium account; *provided* that in no circumstances may a dividend be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business.

Voting Rights. Holders of Class A ordinary shares and Class B ordinary shares shall, at all times, vote together as one class on all matters submitted to a vote by the members at any general meeting of the Company. On all matters subject to a vote at general meetings of our company, (1) on a show of hands, each shareholder shall be entitled to one vote, whereas (2), on a poll, each Class B ordinary share shall be entitled to one vote, and each Class A ordinary share shall be entitled to 10 votes. Voting at any meeting of shareholders is by show of hands unless a poll is demanded (before or on the declaration of the result of the show of hands). A poll may be demanded by the chairman of such meeting or any shareholder holding not less than 10% of the voting rights attaching to the shares present at the meeting (whether in person or by proxy, or by means of communications facilities as may be permitted under our memorandum and articles of association).

An ordinary resolution to be passed at a meeting by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast at a meeting, while a special resolution requires the affirmative vote of no less than two-thirds of the votes attaching to the ordinary shares cast at a meeting. A special resolution will be required for important matters such as a change of name or making changes to our memorandum and articles of association. Our shareholders may, among other things, subdivide or consolidate the shares of our company by ordinary resolution.

General Meetings of Shareholders. As a Cayman Islands exempted company, we are not obliged by the Companies Act to call shareholders' annual general meetings. Our memorandum and articles of association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we shall specify the meeting as such in the notices calling it, and the annual general meeting shall be held at such time and place as may be determined by our directors.

Shareholders' general meetings may be convened by the chairman of our board of directors or by a majority of our directors. Advance notice of at least seven calendar days is required for the convening of any general meeting of our shareholders. A quorum required for any general meeting of shareholders consists of at least one shareholder present at the meeting (whether in person or by proxy, or by means of communications facilities as may be permitted under our memorandum and articles of association), holding share which carry in aggregate (or representing by proxy) not less than one-third of all votes attaching to the issued and outstanding shares in our Company entitled to vote at a general meeting.

The Companies Act provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our memorandum and articles of association provide that upon the requisition of any one or more of our shareholders who together hold shares which carry in aggregate not less than one-third of all votes attaching to the issued and outstanding shares of our company entitled to vote at general meetings, our board will convene an extraordinary general meeting and put the resolutions so requisitioned to a vote at such meeting. However, our memorandum and articles of association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

Transfer of Ordinary Shares. Subject to the restrictions as set out below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share that is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of ordinary shares;
- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four; and
- a fee of such maximum sum as the Nasdaq Stock Market may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they shall, within three calendar months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, on 10 calendar days' notice being given by advertisement in such one or more newspapers, by electronic means or by any other means in accordance with the rules of the Nasdaq Stock Market, be suspended and the register of members closed at such times and for such periods as our board of directors may from time to time determine; provided, however, that the registration of transfers shall not be suspended nor the register of members closed for more than 30 calendar days in any calendar year.

Liquidation. On the winding up of our company, if the assets available for distribution amongst our shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus shall be distributed among our shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay the whole of the share capital, the assets will be distributed so that, as nearly as may be, the losses are borne by our shareholders in proportion to the par value of the shares held by them.

Calls on Shares and Forfeiture of Shares. Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 calendar days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption, Repurchase and Surrender of Shares. We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders of these shares, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by our shareholders by ordinary resolutions. Our company may also repurchase any of our shares on such terms and in such manner as have been approved by our board of directors or by an ordinary resolution of our shareholders. Under the Companies Act, the redemption or repurchase of any share may be paid out of our Company's profits or out of the proceeds of a new issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if our company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variations of Rights of Shares. If at any time, our share capital is divided into different classes of shares, the rights attached to any class of shares may, subject to any rights or restrictions the time being attached to any class, only be materially adversely varied with the consent in writing of the holders of at least two-thirds (2/3) of the issued shares of that class or with the sanction of an ordinary resolution passed at a separate meeting of the holders of the shares of that class. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, subject to any rights or restrictions for the time being attached to the shares of that class, be deemed to be materially adversely varied by the creation, allotment or issue of further shares ranking pari passu with or subsequent to them, or the redemption or purchase of any shares of any class by our company. The rights of the holders of shares shall not be deemed to be materially adversely varied by the creation or issue of shares with preferred or other rights including, without limitation, the creation of shares with enhanced or weighted voting rights.

Issuance of Additional Shares. Our memorandum and articles of association authorize our board of directors to issue additional ordinary shares from time to time as our board of directors shall determine, to the extent of available authorized but unissued shares.

Our memorandum and articles of association also authorize our board of directors to establish from time to time one or more series of preference shares and to determine, with respect to any series of preference shares, the terms and rights of that series, including:

- the designation of the series;
- the number of shares of the series;
- the dividend rights, dividend rates, conversion rights, voting rights; and
- the rights and terms of redemption and liquidation preferences.

Our board of directors may issue, out of the authorized share capital of our company (other than the authorized but unissued ordinary shares), series of preference shares in their absolute discretion and without approval of our shareholders. Issuance of these shares may dilute the voting power of holders of ordinary shares.

Inspection of Books and Records. Holders of our ordinary shares have no general right under Cayman Islands law to inspect or obtain copies of our register of members or our corporate records (save for our memorandum and articles of association, as amended from time to time, special resolutions passed by our shareholders, and our register of mortgages and charges). However, we will provide our shareholders with annual audited financial statements.

Anti-Takeover Provisions. Some provisions of our memorandum and articles of association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that:

- authorize our board of directors to issue preference shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preference shares without any further vote or action by our shareholders; and

- limit the ability of shareholders to requisition and convene general meetings of shareholders.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our memorandum and articles of association for a proper purpose and for what they believe in good faith to be in the best interests of our company.

Exempted Company. We are an exempted company with limited liability incorporated under the Companies Act. The Companies Act distinguishes between ordinary resident companies and exempted companies. Any company that is registered in the Cayman Islands but conducts business mainly outside of the Cayman Islands may apply to be registered as an exempted company. The requirements for an exempted company are essentially the same as for an ordinary company except that an exempted company:

- does not have to file an annual return of its shareholders with the Registrar of Companies;
- is not required to open its register of members for inspection;
- does not have to hold an annual general meeting;
- may obtain an undertaking against the imposition of any future taxation (such undertakings are usually given for 30 years in the first instance);
- may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands;
- may register as a limited duration company; and
- may register as a segregated portfolio company.

“Limited liability” means that the liability of each shareholder is limited to the amount unpaid by the shareholder on the shares of the company held by such shareholder (except in exceptional circumstances, such as involving fraud, the establishment of an agency relationship or an illegal or improper purpose or other circumstances in which a court may be prepared to pierce or lift the corporate veil).

Exclusive Forum. Unless we consent in writing to the selection of an alternative forum, the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, the state courts in New York County, New York) shall be the exclusive forum within the United States for the resolution of any complaint asserting a cause of action arising out of or relating in any way to the federal securities laws of the United States, regardless of whether such legal suit, action, or proceeding also involves parties other than us. Any person or entity purchasing or otherwise acquiring any share or other securities in our company, or purchasing or otherwise acquiring American depositary shares issued pursuant to deposit agreements, shall be deemed to have notice of and consented to this exclusive forum provision. Without prejudice to the foregoing, if this exclusive forum provision is held to be illegal, invalid or unenforceable under applicable law, the legality, validity or enforceability of the rest of the articles of association shall not be affected and this exclusive forum provision shall be interpreted and construed to the maximum extent possible to apply in the relevant jurisdiction with whatever modification or deletion may be necessary so as best to give effect to our intention.

C. MATERIAL CONTRACTS

We have not entered into any material contracts other than in the ordinary course of business and other than those described under “Item 4. Information on the Company,” “Item 7. Major Shareholders and Related Party Transactions” or elsewhere in this annual report.

D. EXCHANGE CONTROLS

See “Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Foreign Exchange.”

E. TAXATION

The following summary of Cayman Islands, mainland China and U.S. federal income tax considerations of an investment in the ADSs or ordinary shares is based upon laws and interpretations thereof in effect as of the date of this annual report, all of which are subject to change. This summary does not deal with all possible tax considerations relating to an investment in the ADSs or ordinary shares, such as the tax considerations under U.S. state and local tax laws or under the tax laws of jurisdictions other than the Cayman Islands, the mainland China and the United States. To the extent that the discussion relates to matters of Cayman Islands tax law, it represents the opinion of Maples and Calder (Hong Kong) LLP, our Cayman Islands legal counsel; to the extent it relates to mainland China tax law, it is the opinion of Fangda Partners, our mainland China counsel.

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to holders of our ADSs or ordinary shares levied by the government of the Cayman Islands except for stamp duties, which may be applicable on instruments executed in, or, after execution, brought to, or produced before a court of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of our ordinary shares or ADSs will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of our ordinary shares or ADSs, nor will gains derived from the disposal of our ordinary shares or ADSs be subject to Cayman Islands income or corporate tax.

Mainland China Taxation

Under the PRC Enterprise Income Tax Law and its implementation rules, an enterprise established outside of mainland China with a “de facto management body” within mainland China is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its global income. The implementation rules define the term “de facto management body” as the body that exercises full and substantial control over and overall management of the business, productions, personnel, accounts and properties of an enterprise. The SAT Circular 82 provides certain specific criteria for determining whether the “de facto management body” of a mainland China-controlled enterprise that is incorporated offshore is located in mainland China. Although this circular only applies to offshore enterprises controlled by mainland China enterprises or mainland China enterprise groups, not those controlled by mainland China individuals or foreigners, the criteria set forth in the circular may reflect the State Administration of Taxation’s general position on how the “de facto management body” test should be applied in determining the tax resident status of all offshore enterprises. According to SAT Circular 82, an offshore incorporated enterprise controlled by a mainland China enterprise or a mainland China enterprise group will be regarded as a mainland China tax resident by virtue of having its “de facto management body” in mainland China only if all of the following conditions are met: (i) the primary location of the day-to-day operational management is in mainland China; (ii) decisions relating to the enterprise’s financial and human resource matters are made or are subject to approval by organizations or personnel in mainland China; (iii) the enterprise’s primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in mainland China; and (iv) at least 50% of voting board members or senior executives habitually reside in mainland China.

We believe that Hesai Group is not a mainland China resident enterprise for mainland China tax purposes. Hesai Group is a company incorporated outside of mainland China and is not controlled by a mainland China enterprise or mainland China enterprise group, and we do not believe that Hesai Group meets all of the conditions above. For the same reasons, we believe our other entities outside of mainland China are not mainland China resident enterprises either. However, the tax resident status of an enterprise is subject to determination by the mainland China tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” There can be no assurance that the mainland China government will ultimately take a view that is consistent with us.

If the mainland China tax authorities determine that Hesai Group is a mainland China resident enterprise for enterprise income tax purposes, we may be required to withhold a 10% withholding tax from dividends we pay to our shareholders that are non-resident enterprises, including the holders of the ADSs. In addition, non-resident enterprise shareholders (including the ADS holders) may be subject to a 10% mainland China tax on gains realized on the sale or other disposition of ADSs or ordinary shares, if such income is treated as sourced from within mainland China, subject to any reduction or exemption set forth in applicable tax treaties or under applicable tax arrangements between jurisdictions. It is unclear whether our non-mainland China individual shareholders (including the ADS holders) would be subject to any mainland China tax on dividends or gains obtained by such non-mainland China individual shareholders in the event we are determined to be a mainland China resident enterprise. If any mainland China tax were to apply to such dividends or gains, it would generally apply at a rate of 20% unless a reduced rate is available under an applicable tax treaty, subject to any reduction or exemption set forth in applicable tax treaties or under applicable tax arrangements between jurisdictions. It is also unclear whether non-mainland China shareholders of Hesai Group would be able to claim the benefits of any tax treaties between their jurisdiction of tax residence and mainland China in the event that Hesai Group is treated as a mainland China resident enterprise.

Provided that our Cayman Islands holding company, Hesai Group, is not deemed to be a mainland China resident enterprise, holders of the ADSs and ordinary shares who are not mainland China residents will not be subject to mainland China income tax on dividends distributed by us or gains realized from the sale or other disposition of our ordinary shares or ADSs. However, under SAT Circular 7 and SAT Circular 37, where a non-resident enterprise conducts an “indirect transfer” by transferring taxable assets, including, in particular, equity interests in a mainland China resident enterprise, indirectly by disposing of the equity interests of an overseas holding company, the nonresident enterprise, being the transferor, or the transferee or the mainland China entity that directly owned such taxable assets may report to the tax authority such indirect transfer. Using a “substance over form” principle, the mainland China tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring mainland China tax. As a result, gains derived from such indirect transfer may be subject to mainland China enterprise income tax, and the transferee or other person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of 10% for the transfer of equity interests in a mainland China resident enterprise. We and our non-mainland China resident investors may be at risk of being required to file a return and being taxed under SAT Circular 7 and SAT Circular 37, and we may be required to expend valuable resources to comply with SAT Circular 7 and SAT Circular 37, or to establish that we and our non-mainland China resident investors should not be taxed under these circulars.

United States Federal Income Tax Considerations

The following discussion is a summary of U.S. federal income tax considerations generally applicable to the ownership and disposition of the ADSs or Class B ordinary shares by a U.S. Holder (as defined below) that acquires the ADSs in our initial public offering and holds the ADSs or Class B ordinary shares as “capital assets” (generally, property held for investment) under the U.S. Internal Revenue Code of 1986, as amended, or the Code. This discussion is based upon existing U.S. federal tax law, which is subject to differing interpretations or change, possibly with retroactive effect. There can be no assurance that the Internal Revenue Service, or the IRS, or a court will not take a contrary position. This discussion, moreover, does not address the U.S. federal estate, gift, Medicare, minimum tax and other non-income tax considerations, or any state, local and non-U.S. tax considerations, relating to the ownership or disposition of the ADSs or ordinary shares. The following summary does not address all aspects of U.S. federal income taxation that may be important to particular investors in light of their individual circumstances or to persons in special tax situations such as:

- banks and other financial institutions;
- insurance companies;
- pension plans;
- cooperatives;
- regulated investment companies;
- real estate investment trusts;
- broker-dealers;

- traders that elect to use a mark-to-market method of accounting;
- certain former U.S. citizens or long-term residents;
- tax-exempt entities (including private foundations);
- holders who acquire their ADSs or ordinary shares pursuant to any employee share option or otherwise as compensation;
- investors that will hold their ADSs or ordinary shares as part of a straddle, hedge, conversion, constructive sale or other integrated transaction for U.S. federal income tax purposes;
- investors that have a functional currency other than the U.S. dollar;
- persons that actually or constructively own 10% or more of our stock (by vote or value); or
- partnerships or other entities taxable as partnerships for U.S. federal income tax purposes, or persons holding ordinary shares through such entities;

all of whom may be subject to tax rules that differ significantly from those discussed below.

Each U.S. Holder is urged to consult its tax advisor regarding the application of U.S. federal taxation to its particular circumstances, and the state, local, non-U.S. and other tax considerations of the ownership and disposition of the ADSs or our ordinary shares.

General

For purposes of this discussion, a “U.S. Holder” is a beneficial owner of the ADSs or ordinary shares that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created in, or organized under the laws of the United States or any state thereof or the District of Columbia;
- an estate the income of which is includible in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust (A) the administration of which is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (B) that has otherwise validly elected to be treated as a U.S. person under the Code.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of the ADSs or ordinary shares, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. Partners in a partnership holding the ADSs or ordinary shares are urged to consult their tax advisors regarding an investment in the ADSs or ordinary shares.

For U.S. federal income tax purposes, it is generally expected that a U.S. Holder of ADSs will be treated as the beneficial owner of the underlying shares represented by the ADSs. The remainder of this discussion assumes that a U.S. Holder of the ADSs will be treated in this manner. Accordingly, deposits or withdrawals of ordinary shares for ADSs will generally not be subject to U.S. federal income tax.

Passive Foreign Investment Company Considerations

A non-U.S. corporation, such as our company, will be a PFIC for U.S. federal income tax purposes for any taxable year, if either (i) 75% or more of its gross income for such year consists of certain types of “passive” income or (ii) 50% or more of the value of its assets (generally determined on the basis of a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income. For this purpose, cash and assets readily convertible into cash are categorized as a passive asset and the company’s goodwill and other unbooked intangibles are taken into account. Passive income generally includes, among other things, dividends, interest, rents, royalties, and gains from the disposition of passive assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the stock.

Based upon our current and projected income and assets and the market price of our ADSs, we do not believe that we were a PFIC for the taxable year ended December 31, 2023. However, no assurance can be given that we will not be or become a PFIC in the current or future taxable years because the determination of whether we will be or become a PFIC is a factual determination made annually that will depend, in part, upon the composition of our income and assets and the value of our assets. Fluctuations in the market price of the ADSs may cause us to be or become a PFIC for the current or future taxable years because the value of our assets for purposes of the asset test, including the value of our goodwill and unbooked intangibles, may be determined by reference to the market price of the ADSs from time to time (which may be volatile). In light of recent declines in the market price of our ADSs, our risk of becoming a PFIC has increased. The market price of our ADSs may continue to fluctuate considerably and, consequently, we cannot assure you of our PFIC status for any taxable year. Furthermore, the composition of our income and assets may also be affected by how, and how quickly, we use our liquid assets. Under circumstances where our revenue from activities that produce passive income significantly increases relative to our revenue from activities that produce non-passive income, or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming a PFIC may substantially increase.

If we are a PFIC for any year during which a U.S. Holder holds the ADSs or ordinary shares, the PFIC rules discussed below under “— Passive Foreign Investment Company Rules” generally will apply to such U.S. Holder for such taxable year, and unless the U.S. Holder makes certain elections, will apply in future years even if we cease to be a PFIC.

The discussion below under “— Dividends” and “— Sale or Other Disposition” is written on the basis that we will not be or become a PFIC for U.S. federal income tax purposes. The U.S. federal income tax rules that apply generally if we are treated as a PFIC are discussed below under “— Passive Foreign Investment Company Rules.”

Dividends

Any cash distributions paid on the ADSs or ordinary shares (including the amount of any mainland China tax withheld) out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, will generally be includible in the gross income of a U.S. Holder as dividend income on the day actually or constructively received by the U.S. Holder, in the case of ordinary shares, or by the depository, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of U.S. federal income tax principles, any distribution we pay will generally be treated as a “dividend” for U.S. federal income tax purposes. Dividends received on the ADSs or ordinary shares will not be eligible for the dividends received deduction allowed to corporations in respect of dividends received from U.S. corporations.

Individuals and other non-corporate U.S. Holders will be subject to tax at the lower capital gain tax rate applicable to “qualified dividend income,” *provided* that certain conditions are satisfied, including that (1) the ADSs or ordinary shares are readily tradable on an established securities market in the United States, or, in the event that we are deemed to be a mainland China resident enterprise under the mainland China tax law, we are eligible for the benefit of the United States-mainland China income tax treaty, or the Treaty, (2) we are neither a PFIC nor treated as such with respect to a U.S. Holder (as discussed below) for the taxable year in which the dividend is paid and the preceding taxable year, and (3) certain holding period requirements are met. The ADSs are listed on the Nasdaq Stock Market. We believe that the ADSs are readily tradable on an established securities market in the United States and that we are a qualified foreign corporation with respect to dividends paid on the ADSs. There can be no assurance that the ADSs will continue to be considered readily tradable on an established securities market in later years. Because the ordinary shares will not be listed on a U.S. exchange, dividends received with respect to ordinary shares that are not represented by ADSs may not be treated as qualified dividends. U.S. Holders are urged to consult their tax advisors regarding the availability of the lower rate for dividends paid with respect to the ADSs or ordinary shares.

In the event that we are deemed to be a mainland China resident enterprise under the PRC Enterprise Income Tax Law (see “Item 10. Additional Information — E. Taxation — Mainland China Taxation”), we may be eligible for the benefits of the Treaty. If we are eligible for such benefits, dividends we pay on our ordinary shares, regardless of whether such shares are represented by the ADSs, and regardless of whether the ADSs are readily tradable on an established securities market in the United States, would be eligible for the reduced rates of taxation described in the preceding paragraph.

For U.S. foreign tax credit purposes, dividends paid on the ADSs or ordinary shares generally will be treated as income from foreign sources and generally will constitute passive category income. If mainland China withholding taxes apply to dividends paid to a U.S. Holder with respect to the ADSs or ordinary shares, such U.S. Holder may be able to obtain a reduced rate of mainland China withholding taxes under the Treaty if certain requirements are met. In addition, subject to certain conditions and limitations, mainland China withholding taxes on dividends that are nonrefundable under the Treaty may be treated as foreign taxes eligible for credit against a U.S. Holder’s U.S. federal income tax liability. A U.S. Holder who does not elect to claim a foreign tax credit for foreign tax withheld may instead claim a deduction for U.S. federal income tax purposes, in respect of such withholding, but only for a year in which such holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex and U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Sale or Other Disposition

A U.S. Holder will generally recognize gain or loss upon the sale or other disposition of ADSs or ordinary shares in an amount equal to the difference between the amount realized upon the disposition and the holder’s adjusted tax basis in such ADSs or ordinary shares. The gain or loss will generally be capital gain or loss. Individuals and other non-corporate U.S. Holders who have held the ADSs or ordinary shares for more than one year will generally be eligible for reduced tax rates. The deductibility of a capital loss may be subject to limitations. Any such gain or loss that the U.S. Holder recognizes will generally be treated as U.S. source income or loss for foreign tax credit limitation purposes, which will generally limit the availability of foreign tax credits. However, in the event we are deemed to be a mainland China resident enterprise under the mainland China Enterprise Income Tax Law, U.S. Holders may be eligible for the benefits of the Treaty. In such event, if mainland China tax were to be imposed on any gain from the disposition of the ADSs or ordinary shares, a U.S. Holder that is eligible for the benefits of the Treaty may elect to treat such gain as mainland China source income. Pursuant to Treasury Regulations, however, if a U.S. Holder is not eligible for the benefits of the Treaty or does not elect to apply the Treaty, then such holder may not be able to claim a foreign tax credit arising from any mainland China tax imposed on the disposition of the ADSs or ordinary shares. U.S. Holders are urged to consult their tax advisors regarding the creditability or deduction of any mainland China tax, their eligibility for benefits under the Treaty and the potential impact of the Treasury Regulations.

Passive Foreign Investment Company Rules

If we are a PFIC for any taxable year during which a U.S. Holder holds the ADSs or ordinary shares, and unless the U.S. Holder makes a mark-to-market election (as described below), the U.S. Holder will generally be subject to special tax rules on (i) any excess distribution that we make to the U.S. Holder (which generally means any distribution paid during a taxable year to a U.S. Holder that is greater than 125 percent of the average annual distributions paid in the three preceding taxable years or, if shorter, the U.S. Holder’s holding period for the ADSs or ordinary shares), and (ii) any gain realized on the sale or other disposition of ADSs or ordinary shares. Under the PFIC rules:

- the excess distribution or gain will be allocated ratably over the U.S. Holder’s holding period for the ADSs or ordinary shares;
- the amount allocated to the current taxable year and any taxable years in the U.S. Holder’s holding period prior to the first taxable year in which we are a PFIC (each, a “pre-PFIC year”), will be taxable as ordinary income; and
- the amount allocated to each prior taxable year, other than a pre-PFIC year, will be subject to tax at the highest tax rate in effect for individuals or corporations, as appropriate, for that year, increased by an additional tax equal to the interest on the resulting tax deemed deferred with respect to each such taxable year.

If we are a PFIC for any taxable year during which a U.S. Holder holds the ADSs or ordinary shares and any of our subsidiaries is also a PFIC, such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. U.S. Holders are urged to consult their tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

As an alternative to the foregoing rules, a U.S. Holder of “marketable stock” (as defined below) in a PFIC may make a mark-to-market election with respect to such stock. If a U.S. Holder makes this election with respect to the ADSs, the holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ADSs held at the end of the taxable year over the adjusted tax basis of such ADSs and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of the ADSs over the fair market value of such ADSs held at the end of the taxable year, but such deduction will only be allowed to the extent of the amount previously included in income as a result of the mark-to-market election. The U.S. Holder’s adjusted tax basis in the ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes a mark-to-market election in respect of the ADSs and we cease to be a PFIC, the holder will not take into account the gain or loss described above during any period that we are not a PFIC. If a U.S. Holder makes a mark-to-market election, any gain such U.S. Holder recognizes upon the sale or other disposition of the ADSs in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as ordinary loss, but such loss will only be treated as ordinary loss to the extent of the net amount previously included in income as a result of the mark-to-market election.

The mark-to-market election is available only for “marketable stock,” which is stock that is traded in other than de minimis quantities on at least 15 days during each calendar quarter (“regularly traded”) on a qualified exchange or other market, as defined in applicable United States Treasury regulations. The ADSs, but not our ordinary shares, are traded on the Nasdaq Stock Market which is a qualified exchange. We anticipate that the ADSs should qualify as being regularly traded, but no assurances may be given in this regard.

Because a mark-to-market election cannot technically be made for any lower-tier PFICs that we may own, a U.S. Holder may continue to be subject to the PFIC rules with respect to such U.S. Holder’s indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes.

We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

If a U.S. Holder owns the ADSs or ordinary shares during any taxable year that we are a PFIC, the holder must generally file an annual IRS Form 8621. You should consult your tax advisor regarding the U.S. federal income tax consideration of owning and disposing of the ADSs or ordinary shares if we are or become a PFIC, including the availability and possibility of making a mark-to-market election.

F. DIVIDENDS AND PAYING AGENTS

Not Applicable.

G. STATEMENT BY EXPERTS

Not Applicable.

H. DOCUMENTS ON DISPLAY

We previously filed a registration statement on Form F-1 (Registration No. 333-269247) with the SEC to register the issuance and sale of our Class B ordinary shares represented by ADSs in our initial public offering. We have also filed a registration statement on Form F-6 (Registration No. 333-269524) with the SEC to register the ADSs.

We are subject to periodic reporting and other informational requirements of the Exchange Act as applicable to foreign private issuers, and are required to file reports and other information with the SEC. Specifically, we are required to file annually an annual report on Form 20-F within four months after the end of each fiscal year, which is December 31. All information filed with the SEC can be obtained over the internet at the SEC's website at www.sec.gov. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We will furnish Deutsche Bank Trust Company Americas, the depository of the ADSs, with our annual reports, which will include a review of operations and annual audited combined and consolidated financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depository will make such notices, reports and communications available to holders of ADSs and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depository from us.

In accordance with Nasdaq Stock Market Rule 5250(d), we will post this annual report on Form 20-F on our website at <https://investor.hesaitech.com/>. In addition, we will provide hardcopies of our annual report free of charge to shareholders and ADS holders upon request.

I. SUBSIDIARY INFORMATION

Not applicable.

J. ANNUAL REPORT TO SECURITY HOLDERS

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Exchange Risk

The revenues and expenses of our entities in the mainland China are generally denominated in Renminbi and their assets and liabilities are denominated in Renminbi. Our international revenues are denominated in foreign currencies and expose us to the risk of fluctuations in foreign currency exchange rates against the Renminbi. A significant portion of our cash and cash equivalents and short-term investments are denominated in U.S. dollars, and fluctuations in exchange rates between U.S. dollars and Renminbi may result in foreign exchange gains or losses. We have not used any derivative financial instruments to hedge exposure to such risk. In addition, the value of your investment in our ADSs will be affected by the exchange rate between the U.S. dollar and Renminbi because the value of our business is effectively denominated in Renminbi, while our ADSs will be traded in U.S. dollars.

The conversion of Renminbi into other currencies, including U.S. dollars, is based on rates set by the People's Bank of China. The Renminbi has fluctuated against other currencies, at times significantly and unpredictably. The value of Renminbi against other currencies is affected by changes in China's political and economic conditions and by China's foreign exchange policies, among other things. It is difficult to predict how market forces or government policies may impact the exchange rate between Renminbi and other currencies in the future.

To the extent that we need to convert U.S. dollars into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs or for other business purposes, appreciation of the U.S. dollars against the Renminbi would have a negative effect on the U.S. dollar amounts available to us.

As of December 31, 2023, we had Renminbi-denominated cash and cash equivalents of RMB587.9 million (US\$82.8 million). A 10% depreciation of Renminbi against the U.S. dollar based on the foreign exchange rate on December 31, 2023 would result in a decrease of US\$7.5 million in cash and cash equivalents. A 10% appreciation of Renminbi against the U.S. dollar based on the foreign exchange rate on December 31, 2023 would result in an increase of US\$9.2 million in cash and cash equivalents.

Interest rate risk

Our exposure to interest rate risk primarily relates to the interest income generated by excess cash, which is mostly held in interest-bearing bank deposits, and credit facilities that have a floating rate of interest. We have not been exposed to material risks due to changes in market interest rates, and we have not used any derivative financial instruments to manage our interest risk exposure.

We may invest the net proceeds that we received from our initial public offering in interest-earning instruments. Investments in both fixed-rate and floating rate interest-earning instruments carry a degree of interest rate risk. Fixed-rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating-rate securities may produce less income than expected if interest rates fall.

Our exposure to interest rate risk also arises from our credit facilities that have a floating rate of interest. The costs of floating rate borrowings may be affected by the fluctuations in the interest rates. For example, as of December 31, 2023, we had short-term borrowings of RMB111.7 million (US\$15.7 million) and long-term borrowings of RMB285.9 million (US\$40.3 million). A hypothetical one percentage point (100 basis-point) increase in interest rates would have resulted in an increase of RMB4.0 million (US\$0.6 million) in the costs of floating rate borrowings/interest amount as of December 31, 2023.

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

Fees and Charges Our ADS holders May Have to Pay

As an ADS holder, you will be required to pay the following service fees to the depositary bank and certain taxes and governmental charges (in addition to any applicable fees, expenses, taxes and other governmental charges payable on the deposited securities represented by any of your ADSs):

Service	Fees
• To any person to which ADSs are issued or to any person to which a distribution is made in respect of ADS distributions pursuant to stock dividends or other free distributions of stock, bonus distributions, stock splits or other distributions (except where converted to cash)	Up to US\$0.05 per ADS issued
• Cancellation of ADSs, including in the case of termination of the deposit agreement	Up to US\$0.05 per ADS cancelled
• Distribution of cash dividends	Up to US\$0.05 per ADS held
• Distribution of cash entitlements (other than cash dividends) and/or cash proceeds from the sale of rights, securities and other entitlements	Up to US\$0.05 per ADS held
• Distribution of ADS held ADSs pursuant to exercise of rights.	Up to US\$0.05 per
• Distribution of securities other than ADSs or rights to	Up to US\$0.05 per ADS held

As an ADS holder, you will also be responsible for paying certain fees and expenses incurred by the depositary bank and certain taxes and governmental charges (in addition to any applicable fees, expenses, taxes and other governmental charges payable on the deposited securities represented by any of your ADSs) such as:

- Fees for the transfer and registration of Class B ordinary shares charged by the registrar and transfer agent for the Class B ordinary shares in the Cayman Islands (i.e., upon deposit and withdrawal of Class B ordinary shares).
- Expenses incurred for converting foreign currency into U.S. dollars.
- Expenses for cable, telex and fax transmissions and for delivery of securities.
- Taxes and duties upon the transfer of securities, including any applicable stamp duties, any stock transfer charges or withholding taxes (i.e., when Class B ordinary shares are deposited or withdrawn from deposit).
- Fees and expenses incurred in connection with the delivery or servicing of Class B ordinary shares on deposit.
- Fees and expenses incurred in connection with complying with exchange control regulations and other regulatory requirements applicable to Class B ordinary shares, deposited securities, ADSs and ADRs.
- Any applicable fees and penalties thereon.

The depositary fees payable upon the issuance and cancellation of ADSs are typically paid to the depositary bank by the brokers (on behalf of their clients) receiving the newly issued ADSs from the depositary bank and by the brokers (on behalf of their clients) delivering the ADSs to the depositary bank for cancellation. The brokers in turn charge these fees to their clients. Depositary fees payable in connection with distributions of cash or securities to ADS holders and the depositary services fee are charged by the depositary bank to the holders of record of ADSs as of the applicable ADS record date.

The depositary fees payable for cash distributions are generally deducted from the cash being distributed or by selling a portion of distributable property to pay the fees. In the case of distributions other than cash (i.e., share dividends, rights), the depositary bank charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or uncertificated in direct registration), the depositary bank sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts (via DTC), the depositary bank generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depositary banks.

In the event of refusal to pay the depositary fees, the depositary bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary fees from any distribution to be made to the ADS holder.

Fees and Other Payments Made by the Depositary to Us

The depositary may make payments to us or reimburse us for certain costs and expenses, by making available a portion of the ADS fees collected in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time. For the year ended December 31, 2023, we received reimbursement of US\$0.2 million from the depositary.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Material Modifications to the Rights of Security Holders

None.

Use of Proceeds

The following “Use of Proceeds” information relates to the registration statement on Form F-1, as amended (File Number 333-269247) in relation to our initial public offering, which was declared effective by the SEC on February 8, 2023.

As of December 31, 2023, we had used the proceeds of RMB170.6 million (US\$24.0 million) from our initial public offering, including RMB39.2 million (US\$5.5 million) for investment in our manufacturing capabilities, RMB54.2 million (US\$7.6 million) for research and development, and RMB77.2 million (US\$10.9 million) for general corporate purposes. There is no material change in the use of proceeds as described in our registration statement on Form F-1. We still intend to use the remainder of the proceeds from our initial public offering for purposes as disclosed in our registration statement on Form F-1.

ITEM 15. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our chief executive officer and global chief financial officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this report, as required by Rule 13a-15(b) under the Exchange Act.

Based upon that evaluation, our management, with the participation of our chief executive officer and global chief financial officer, has concluded that, due to the outstanding material weakness described below under “Internal Control over Financial Reporting,” as of December 31, 2023, our disclosure controls and procedures were not effective in ensuring that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and global chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Management’s Annual Report on Internal Control over Financial Reporting and Attestation Report of the Registered Public Accounting Firm

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP and 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 our company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with U.S. GAAP, and that receipts and expenditures of our company are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of the unauthorized acquisition, use or disposition of our company’s assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of our internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules as promulgated by the SEC, our management, including our chief executive officer and global chief financial officer, assessed the effectiveness of internal control over financial reporting as of December 31, 2023, using the criteria set forth in the report “Internal Control—Integrated Framework (2013)” published by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that our internal control over financial reporting was not effective as of December 31, 2023, due to the material weakness identified in our internal control over financial reporting as described below.

Notwithstanding management’s assessment that our internal control over financial reporting was not effective as of December 31, 2023, due to the material weakness identified, we believe that the consolidated financial statements included in this annual report fairly present our financial position, results of operations and cash flows for the fiscal years covered thereby in all material aspects.

Our independent registered public accounting firm will not be required to report on the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act until we are no longer an “emerging growth company” as defined in the JOBS Act.

Internal Control Over Financial Reporting

As defined in the standards established by the SEC, a “material weakness” is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. We have identified one material weakness in our internal control over financial reporting, which relates to lack of sufficient skilled staff with U.S. GAAP knowledge for the purpose of financial reporting, to ensure proper financial reporting to comply with U.S. GAAP and SEC requirements.

We have been in the process of developing and implementing the following measures to address the material weakness that has been identified: including (i) we have hired more accounting personnel to strengthen the financial reporting function and have set up the financial reporting controls, (ii) we implemented U.S. GAAP and SEC financial reporting training programs for our accounting and financial personnel, and (iii) we have developed a set of period-end financial reporting policies and procedures. The aforementioned remediation measures were mostly in the process of being developed and implemented in the fourth quarter of 2023. As our remediation measures have not been sufficiently validated and tested, the previously identified material weakness still existed as of December 31, 2023. We plan to continue to take additional measures to remediate the material weakness, including enhancing an internal audit function to ensure proper design and implementation of our accounting policies and financial reporting procedures. However, we cannot assure you that all these measures will be sufficient to remediate our material weakness in time, or at all. See “Item 3. Key Information — D. Risk Factors — Risks Related to Our Business and Industry — We have identified one material weakness in our internal controls. If we are unable to develop and maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and materially and adversely affect our business and operating results.”

As a company with less than US\$1.235 billion in revenue for the fiscal year of 2023, we qualify as an “emerging growth company” pursuant to the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other requirements that are otherwise applicable generally to public companies. These provisions include exemption from the auditor attestation requirement under Section 404 of the Sarbanes-Oxley Act of 2002 in the assessment of the emerging growth company’s internal control over financial reporting.

Changes in Internal Control over Financial Reporting

Other than as described above, there were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report on Form 20-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16. [RESERVED]

ITEM 16.A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Bonnie Zhang, chairwoman of our audit committee and an independent director (under the standards set forth in Rule 5605(c)(2) of the Nasdaq Stock Market Rules and Rule 10A3 under the Securities Exchange Act of 1934), is an audit committee financial expert.

ITEM 16.B. CODE OF ETHICS

Our board of directors has adopted a code of ethics that applies to all of the directors, officers and employees. We have posted a copy of our code of business conduct and ethics on our website at <http://investor.hesaitech.com>.

ITEM 16.C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Deloitte Touche Tohmatsu Certified Public Accountants LLP, our principal external auditors, for the periods indicated.

	<u>2022</u>	<u>2023</u>
	<u>(RMB in thousands)</u>	
Audit fees ⁽¹⁾	7,081	13,198
All other fees ⁽²⁾	—	68

(1) "Audit fees" means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors for the audit of our annual financial statements and assistance with and review of documents filed or furnished with the SEC and other regulators.

(2) "All other fees" means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors associated with certain permitted tax services.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by Deloitte Touche Tohmatsu Certified Public Accountants LLP, including audit services and other services as described above, other than those for *de minimis* services which are approved by the audit committee prior to the completion of the audit.

ITEM 16.D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16.E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

ITEM 16.F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16.G. CORPORATE GOVERNANCE

As a Cayman Islands exempted company listed on the Nasdaq Global Select Market, we are subject to the Nasdaq Stock Market Rules. However, the Nasdaq Stock Market Rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the Nasdaq listing standards. We have relied on home country practice exemption with respect to the requirement of having a majority independent board and an audit committee composed of a minimum of three members. We have also relied on home country practice exemption with respect to the requirement that a majority of the nominating and corporate governance committee members must be independent directors within 90 days of listing. In addition, we follow home country practice with respect to annual meetings and did not hold an annual meeting of shareholders in 2023. We will hold shareholder meetings when there are significant issues that require shareholder approval. We may choose to follow additional home country practices in the future. As a result, our shareholders may be afforded less protection than they would otherwise enjoy under the Nasdaq Stock Market's corporate governance listing standards applicable to U.S. domestic issuers. See "Item 3. Key Information — D. Risk Factors — Risks Relating to Our ADSs — As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the Nasdaq Stock Market listing standards."

ITEM 16.H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16.I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

ITEM 16.J. INSIDER TRADING POLICIES

Not applicable.

ITEM 16.K. CYBERSECURITY

Risk Management and Strategy

We have implemented comprehensive cybersecurity risk assessment procedures to ensure effectiveness in cybersecurity management, strategy, governance and reporting of cybersecurity risks. We have also integrated cybersecurity risk management into our overall enterprise risk management system.

We have developed a comprehensive cybersecurity management framework to address both internal and external threats. This framework encompasses daily monitoring, incident response and regular review, and spans multiple security domains, including networks, hosts, and application layers. In day-to-day monitoring, we deploy a variety of technical solutions to collect real-time threat information in order to prevent and detect risks and vulnerabilities in cybersecurity. We currently utilize third-party operated tools to detect and control cybersecurity threats. Our Information Security Working Group (as defined below) regularly monitors the performance of our information infrastructure, digital platforms and software to enable us to respond quickly to potential problems, including potential cybersecurity threats.

As of the date of this annual report, we have not experienced any material cybersecurity incidents or identified any material cybersecurity threats that have affected or are reasonably likely to materially affect us, our business strategy, results of operations or financial condition.

Governance

Our nominating and corporate governance committee of our board of directors is responsible for overseeing our cybersecurity risk management and be informed on risks from cybersecurity threats, assuming the following responsibilities: (i) maintaining oversight of the disclosure related to cybersecurity matters in periodic reports of the Company, (ii) reviewing updates to the status of any material cybersecurity incidents or material risks from cybersecurity threats to our company, and the relevant disclosure issues, if any, presented by our chief executive officer, global chief financial officer and cybersecurity officer, if necessary, on a quarterly basis, and (iii) review disclosure concerning cybersecurity matters in our annual report on Form 20-F, along with a report highlighting particular disclosure issues, if any, presented by our chief executive officer, global chief financial officer and cybersecurity officer if necessary. The chief executive officer, global chief financial officer and cybersecurity officer are responsible for assessing, identifying and managing material risks from cybersecurity threats to our company, monitoring the prevention, detection, mitigation and remediation of material cybersecurity incident, and maintaining oversight of the disclosure in Form 6-K for material cybersecurity incidents, if any.

In addition, we have established the information security working group, led by our cybersecurity officer. Several members in our information security working group have three to five years' experience in system building, risk prevention and auditing in the field of cybersecurity and hold relevant certificates. They are equipped with the skill set to identify and analyze a variety of cyber threats, including malware, hacking, phishing, and denial-of-service attacks, and also capable of assessing vulnerabilities for the system and apps, and providing recommendations and solutions to fix these vulnerabilities. If a cybersecurity incident occurs, our information security working group will promptly organize relevant personnel for internal assessment, response and recovery according to the incident control process. If it is determined that the incident could potentially be a material cybersecurity event, our information security working group will promptly report the incident and assessment results to our disclosure committee, the nominating and corporate governance committee and other members of senior management and external legal counsel, to the extent appropriate. Our information security working group will prepare disclosure material on the cybersecurity incident for review and approval by the nominating and corporate governance committee or the board of directors, as appropriate, before it is disseminated to the public.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

The combined and consolidated financial statements of Hesai Group and its subsidiaries are included at the end of this annual report.

ITEM 19. EXHIBITS

Exhibit Number	Description
1.1	Second Amended and Restated Memorandum and Articles of Association of the Registrant (incorporated herein by reference to Exhibit 3.2 to the Form F-1/A filed on February 2, 2023 (File No. 333-269247))
2.1	Registrant's Specimen American Depositary Receipt (included in Exhibit 2.3)
2.2	Registrant's Specimen Certificate for Class B Ordinary Shares (incorporated herein by reference to Exhibit 4.2 to the Form F-1/A filed on February 2, 2023 (File No. 333-269247))
2.3	Form of Deposit Agreement, among the Registrant, the depository and the holders and beneficial owners of American Depositary Shares issued thereunder (incorporated herein by reference to Exhibit 4.3 to the Form F-1/A filed on February 2, 2023 (File No. 333-269247))
2.4*	Description of Securities
4.1	2021 Share Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
4.2	Form of Indemnification Agreement between the Registrant and its directors and executive officers (incorporated herein by reference to Exhibit 10.2 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
4.3	Form of Employment Agreement between the Registrant and its executive officers (incorporated herein by reference to Exhibit 10.3 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
4.4	Form of Agreement by and among the Registrant, Hesai Hong Kong Limited, Hesai Technology Co., Ltd., the founders and each investor, and a schedule of all executed Agreements adopting the same form (incorporated herein by reference to Exhibit 10.5 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
4.5	English translation of the Cooperation Agreement by and between Beijing Baidu Netcom Science Technology Co., Ltd. and Hesai Photonics Technology Co., Ltd. (currently known as Hesai Technology Co., Ltd.) on March 1, 2020 (incorporated herein by reference to Exhibit 10.7 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
4.6	English translation of the Fixed Assets Loan Agreement by and between Hesai Technology Co., Ltd. and China Merchants Bank Corporation, Shanghai Branch, dated November 18, 2022 (incorporated herein by reference to Exhibit 10.10 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
4.7	English translation of the Mortgage Agreement by and between Hesai Technology Co., Ltd. and China Merchants Bank Corporation, Shanghai Branch, dated November 18, 2022 (incorporated herein by reference to Exhibit 10.11 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
4.8	English translation of the Project Investment Agreement by and between Management Committee of Xiaoshan Economic and Technological Development Zone and Hesai Technology Co., Ltd., dated September 21, 2022 (incorporated herein by reference to Exhibit 10.12 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
8.1*	List of Subsidiaries of the Registrant
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated herein by reference to Exhibit 99.1 to the Form F-1 filed on January 17, 2023 (File No. 333-269247))
12.1*	Certification by Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2*	Certification by Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1**	Certification by Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2**	Certification by Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1*	Consent of Maples and Calder (Hong Kong) LLP
15.2*	Consent of Fangda Partners
15.3*	Consent of Deloitte Touche Tohmatsu Certified Public Accountants LLP

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Exhibit Number	Description
97.1*	Clawback Policy
101.INS*	Inline XBRL Instance Document—this instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH*	Inline XBRL Taxonomy Extension Scheme Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Exhibit 101 Inline XBRL document set)

* Filed with this Annual Report on Form 20-F.

** Furnished with this Annual Report on Form 20-F.

SIGNATURES

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

Hesai Group

By: /s/ Yifan Li

Name: Yifan Li

Title: Chief Executive Officer

Date: April 25, 2024

HESAI GROUP

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Hesai Group:

Opinion on the Financial Statements

We have audited the accompanying combined and consolidated balance sheets of Hesai Group and its subsidiaries (the “Company”), as of December 31, 2022 and 2023, the related combined and consolidated statements of operations and comprehensive loss, changes in shareholders’ (deficit) equity, and cash flows for each of the three years in the period ended December 31, 2023, the related notes and the financial statements schedule included in Schedule I (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

Convenience Translation

Our audits also comprehended the translation of Renminbi amounts into United States dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 2. Such United States dollar amounts are presented solely for the convenience of readers outside the People’s Republic of China.

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/ Deloitte Touche Tohmatsu Certified Public Accountants LLP

Shanghai, the People’s Republic of China

April 25, 2024

We have served as the Company’s auditor since 2019.

HESAI GROUP

COMBINED AND CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2022 and 2023
(Amounts in thousands, except share and per share data and otherwise noted)

	As of December 31,		
	2022	2023	
	RMB	RMB	US\$ (Note 2)
ASSETS			
Current assets:			
Cash and cash equivalents	913,277	1,554,583	218,958
Restricted cash	—	3,541	499
Short-term investments	945,865	1,586,005	223,384
Accounts receivable, net (net of allowance of RMB6,249 and RMB49,132 as of December 31, 2022 and 2023, respectively)	485,044	524,818	73,919
Contract assets, net (net of allowance of RMB459 and RMB122 as of December 31, 2022 and 2023, respectively)	12,600	19,688	2,773
Amounts due from related parties	5,021	5,015	706
Inventories	646,852	495,877	69,843
Prepayments and other current assets, net	126,452	208,082	29,308
Total current assets	3,135,111	4,397,609	619,390
Property and equipment, net	504,953	871,611	122,764
Intangible assets, net	20,600	78,730	11,089
Land-use rights, net	41,606	40,743	5,739
Goodwill	3,823	—	—
Long-term investments	31,856	31,811	4,480
Operating lease right-of-use assets	44,349	151,871	21,391
Other non-current assets	57,098	90,168	12,700
Total non-current assets	704,285	1,264,934	178,163
TOTAL ASSETS	3,839,396	5,662,543	797,553
LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS' (DEFICIT) EQUITY			
Current liabilities:			
Short-term borrowings	—	111,682	15,730
Notes payable	—	7,255	1,022
Accounts payable	206,681	269,439	37,950
Contract liabilities	40,378	79,925	11,257
Amounts due to related parties	334,283	340,051	47,895
Accrued warranty liability	17,694	28,425	4,004
Accrued expenses and other current liabilities	356,502	498,324	70,188
Total current liabilities	955,538	1,335,101	188,046
Deferred tax liabilities	439	—	—
Operating lease liabilities	10,139	119,413	16,819
Long-term borrowings	18,472	285,898	40,268
Other non-current liabilities	13,075	59,813	8,424
Total non-current liabilities	42,125	465,124	65,511
TOTAL LIABILITIES	997,663	1,800,225	253,557
Commitments and contingencies (Note 25)			
Mezzanine equity:			
Redeemable shares (US\$0.0001 par value, 54,551,513 and nil shares issued and outstanding as of December 31, 2022 and December 31, 2023, respectively)	5,986,910	—	—
Shareholders' (deficit) equity			
Class A Ordinary shares (US\$0.0001 par value, 35,000,000 and 50,000,000 shares authorized, 30,033,379 shares issued and outstanding as of December 31, 2022 and 2023, respectively)	19	19	3
Class B Ordinary shares (US\$0.0001 par value, 150,000,000 and 900,000,000 shares authorized, 30,949,701 and 99,626,332 shares issued, 30,949,701 and 96,995,110 shares outstanding as of December 31, 2022 and 2023, respectively)	20	67	9
Additional paid-in capital	—	7,423,862	1,045,629
Subscription receivables	(310,227)	(292,721)	(41,229)
Accumulated other comprehensive (loss) income	(3,608)	38,440	5,414
Accumulated deficit	(2,831,381)	(3,307,349)	(465,830)
Total Shareholders' (deficit) equity	(3,145,177)	3,862,318	543,996
TOTAL LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS' (DEFICIT) EQUITY	3,839,396	5,662,543	797,553

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

HESAI GROUP

COMBINED AND CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
FOR THE YEARS ENDED DECEMBER 31, 2021, 2022 and 2023

(Amounts in thousands, except share and per share data and otherwise noted)

	Year ended December 31,			
	2021	2022	2023	US\$
	RMB	RMB	RMB	(Note 2)
Net revenues (including revenues from related parties of RMB15,655, nil and nil for the years ended December 31, 2021, 2022, and 2023, respectively)	720,768	1,202,670	1,876,989	264,368
Cost of revenues	(338,972)	(730,683)	(1,215,611)	(171,215)
Gross Profit	381,796	471,987	661,378	93,153
Operating expenses:				
Sales and marketing expenses	(69,266)	(104,835)	(148,798)	(20,958)
General and administrative expenses	(236,713)	(201,007)	(320,144)	(45,091)
Research and development expenses	(368,435)	(555,179)	(790,547)	(111,346)
Other operating income, net	27,333	10,817	26,520	3,735
Total operating expenses	(647,081)	(850,204)	(1,232,969)	(173,660)
Loss from operations	(265,285)	(378,217)	(571,591)	(80,507)
Interest income	32,584	58,734	99,813	14,058
Interest expenses	—	—	(3,069)	(432)
Foreign exchange (loss) gain, net	(13,275)	20,858	(452)	(64)
Other (loss) income, net.	118	(2,161)	34	5
Net loss before income tax and share of loss in equity method investments	(245,858)	(300,786)	(475,265)	(66,940)
Income tax benefit (expense)	1,115	66	(658)	(93)
Share of loss in equity method investment	(84)	(45)	(45)	(6)
Net loss	(244,827)	(300,765)	(475,968)	(67,039)
Deemed dividend	(2,211,330)	(446,419)	—	—
Net loss attributable to ordinary shareholders of the Company	(2,456,157)	(747,184)	(475,968)	(67,039)
Net loss per share:				
Basic and diluted	(23.39)	(6.47)	(3.81)	(0.54)
Weighted average shares used in calculating net loss per share:				
Basic and diluted	104,987,478	115,534,593	124,783,013	124,783,013
Net loss	(244,827)	(300,765)	(475,968)	(67,039)
Other comprehensive (loss) income, net of tax of nil:				
Foreign currency translation adjustments	9,083	(12,073)	42,048	5,922
Comprehensive loss	(235,744)	(312,838)	(433,920)	(61,117)

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

HESAI GROUP

**COMBINED AND CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' (DEFICIT) EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2021, 2022 and 2023**

(Amounts in thousands, except share and per share data and otherwise noted)

	Class A Ordinary shares		Class B Ordinary shares		Additional paid-in capital RMB	Subscription receivables RMB	Accumulated deficit RMB	Accumulated other comprehensive (loss) income RMB	Total Shareholders' (deficit) equity RMB
	Number	RMB	Number	RMB					
Balance as of December 31, 2020	—	—	—	—	1,193,857	—	(56,046)	(618)	1,137,193
Net loss	—	—	—	—	—	—	(244,827)	—	(244,827)
Foreign currency translation	—	—	—	—	—	—	9,083	—	9,083
Issuance of ordinary shares in connection with the 2021 Reorganization	30,033,379	19	62,834,548	40	(59)	(310,227)	—	—	(310,227)
Reclassification of ordinary shares to redeemable shares	—	—	(31,884,847)	(20)	(1,193,798)	—	(1,862,599)	—	(3,056,417)
Share-based compensation	—	—	—	—	54,283	—	—	—	54,283
Accretion in redemption value of redeemable shares	—	—	—	—	(54,283)	—	(25,475)	—	(79,758)
Balance as of December 31, 2021	30,033,379	19	30,949,701	20	—	(310,227)	(2,188,947)	8,465	(2,490,670)
Net loss	—	—	—	—	—	—	(300,765)	—	(300,765)
Foreign currency translation	—	—	—	—	—	—	—	(12,073)	(12,073)
Share-based compensation	—	—	—	—	104,750	—	—	—	104,750
Accretion in redemption value of redeemable shares	—	—	—	—	(104,750)	—	(341,669)	—	(446,419)
Balance as of December 31, 2022	30,033,379	19	30,949,701	20	—	(310,227)	(2,831,381)	(3,608)	(3,145,177)
Net loss	—	—	—	—	—	—	(475,968)	—	(475,968)
Foreign currency translation	—	—	—	—	—	—	—	42,048	42,048
Share-based compensation	—	—	—	—	233,958	—	—	—	233,958
Issuance of ordinary shares for initial public offering ("IPO"), net of issuance cost of RMB117,774	—	—	10,125,118	7	1,193,290	—	—	—	1,193,297
Reclassification of redeemable shares to ordinary shares upon IPO	—	—	54,551,513	39	5,986,871	—	—	—	5,986,910
Issuance of ordinary shares upon the exercise of share options and vesting of restricted share units	—	—	1,368,778	1	9,743	—	—	—	9,744
Settlement of subscription receivables in connection the 2021 reorganization	—	—	—	—	—	17,506	—	—	17,506
Balance as of December 31, 2023	30,033,379	19	96,995,110	67	7,423,862	(292,721)	(3,307,349)	38,440	3,862,318

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

HESAI GROUP

COMBINED AND CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2021, 2022 and 2023
(Amounts in thousands, except share and per share data and otherwise noted)

	Year ended December 31,			
	2021	2022	2023	US\$
	RMB	RMB	RMB	(Note 2)
Cash flows from operating activities:				
Net loss	(244,827)	(300,765)	(475,968)	(67,039)
<i>Adjustments to reconcile net loss to net cash used in operating activities:</i>				
Depreciation and amortization	28,231	53,634	86,268	12,151
Share-based compensation	54,283	105,219	234,624	33,046
Provision for (reversal of) allowance for credit loss	2,561	(1,810)	43,004	6,057
Loss from disposal of property and equipment	169	369	—	—
Fair value change of short-term investments	(7,717)	4,878	(15,095)	(2,126)
Share of loss in equity method investee	84	45	45	6
Foreign exchange loss (gain), net	10,945	(5,868)	(9)	(1)
Non-cash lease expenses	—	30,260	34,355	4,839
Inventory write-down	16,600	39,431	9,290	1,308
Gain from disposal of subsidiary	—	—	(6,129)	(863)
<i>Changes in operating assets and liabilities:</i>				
Accounts receivable	(31,696)	(390,859)	(90,750)	(12,782)
Contract assets	(108,737)	134,244	(7,088)	(998)
Inventories	(237,755)	(305,553)	145,977	20,560
Prepayments and other current assets	(48,618)	(33,556)	(82,646)	(11,640)
Amounts due from related parties	24,788	—	—	—
Other non-current assets	(5,573)	2,883	(3,178)	(448)
Contract liabilities	113,265	(91,737)	39,545	5,570
Deferred tax liabilities	(113)	(27)	(35)	(5)
Accounts payable	21,834	128,863	61,529	8,666
Income tax payable	(9)	—	—	—
Accrued expenses and other current liabilities	170,125	(41,074)	80,297	11,310
Operating leases liabilities	—	(30,103)	(34,595)	(4,873)
Other non-current liabilities	13,774	5,511	37,820	5,327
Net cash (used in) provided by operating activities	(228,386)	(696,015)	57,261	8,065
Cash flows from investing activities:				
Purchases of short-term investments	(4,812,942)	(5,586,764)	(5,100,868)	(718,442)
Maturity of short-term investments	3,114,287	6,978,764	4,479,302	630,896
Proceeds from disposals of property and equipment	22	—	—	—
Purchases of property and equipment	(220,096)	(231,210)	(406,748)	(57,289)
Purchases of land-use right	(43,188)	—	—	—

HESAI GROUP

COMBINED AND CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)
FOR THE YEARS ENDED DECEMBER 31, 2021, 2022 and 2023
(Amounts in thousands, except share and per share data and otherwise noted)

	Year ended December 31,			US\$ (Note 2)
	2021 RMB	2022 RMB	2023 RMB	
Purchases of intangible assets	(18,320)	(9,180)	(7,925)	(1,116)
Proceeds from government subsidies after capital expenditure	—	—	15,893	2,238
Purchases of equity securities	—	(30,000)	—	—
Advances to a related party	—	(1,964)	—	—
Cash inflow from disposal of subsidiary	—	—	14,407	2,029
Cash outflow from acquisition of subsidiary, net of cash acquired of RMB571	—	—	(54,454)	(7,670)
Net cash (used in) provided by investing activities	(1,980,237)	1,119,646	(1,060,393)	(149,354)
Cash flows from financing activities:				
Cash distribution to shareholders of Shanghai Hesai in connection with the 2021 Reorganization	(507,620)	—	(17,506)	(2,466)
Cash contribution from shareholders in connection with the 2021 Reorganization	507,620	—	17,506	2,466
Proceeds from issuance of convertible loans	1,950,338	—	—	—
Proceeds from issuance of ordinary shares of Hesai Group	453,978	—	1,225,470	172,604
Return of advances to employees in connection with share option grants	(590)	—	—	—
Proceeds from long - term borrowings	—	18,472	264,910	37,312
Proceeds from short-term borrowings	—	—	111,682	15,730
Payment of offering costs	—	(3,296)	(22,828)	(3,215)
Proceeds from issuance of ordinary shares upon the exercise of share options	—	—	2,872	405
Government subsidies received in advance of capital expenditure	—	—	8,250	1,162
Net cash provided by financing activities	2,403,726	15,176	1,590,356	223,998
Net increase in cash and cash equivalents	195,103	438,807	587,224	82,709
Cash, cash equivalents and restricted cash, beginning of the year	256,688	449,352	913,277	128,632
Effect of foreign exchange rate changes on cash, cash equivalents and restricted cash	(2,439)	25,118	57,623	8,116
Cash, cash equivalents and restricted cash, end of the year	449,352	913,277	1,558,124	219,457
Cash paid during the year for:				
Income taxes	213	(1,230)	—	—
Interest (net of capitalized amount of nil, RMB11 and RMB4,433 for the years ended December 31, 2021, 2022 and 2023, respectively)	—	—	3,069	432
Supplemental disclosure of non-cash investing and financing activities:				
Conversion of convertible loans to ordinary shares	1,950,338	—	—	—
Accrued purchases of property and equipment	114,446	102,181	179,839	25,330
Accrued offering cost	—	480	—	—

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the statement of financial position that sum to the total of the same such amounts shown in the statement of cash flows:

Cash and cash equivalents	449,352	913,277	1,554,583	218,958
Restricted cash	—	—	3,541	499
Cash, cash equivalents and restricted cash	449,352	913,277	1,558,124	219,457

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

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

1. ORGANIZATION AND NATURE OF OPERATIONS

Description of Business and Corporate History

Hesai Group (the “Company”) was incorporated under the laws of the Cayman Islands on April 21, 2021. The Company, together with its subsidiaries (collectively, the “Group”) is primarily engaged in the development, manufacture and sales of 3-dimensional light detection and ranging solutions, or LiDAR.

History of the Group

The Group’s history began in October 2014 with the establishment of Shanghai Hesai Photonics Co., Ltd. (“Hesai Photonics”), a limited liability company established in the People’s Republic of China (the “PRC”) by Mr. Kai Sun, Mr. Yifan Li and Mr. Shaoqing Xiang (collectively known as the “Founding Shareholders”). In August 2020, Hesai Photonics was converted by its then shareholders into a joint stock company under the PRC law and changed its name to Hesai Technology Co., Ltd (“Shanghai Hesai”).

2021 Reorganization

In 2021, the Founding Shareholders and all of the investors of Shanghai Hesai undertook an equity restructuring in order to re-domicile its business from the PRC to the Cayman Islands (the “2021 Reorganization”), which was executed in the following steps:

- 1) In April 2021, the Company was incorporated in the Cayman Islands to be the holding company of the Group. On May 6, 2021, the Company established Hesai Hong Kong Limited (“Hesai HK”) in Hong Kong, a wholly owned subsidiary to be the intermediate holding company.
- 2) In June 2021, the Company through Hesai HK acquired 100% of the equity interest of Shanghai Hesai from the Founding Shareholders and its investors, thus Shanghai Hesai became the wholly owned subsidiary of the Company.
- 3) In May and June 2021, the Founding Shareholders subscribed to 30,033,379 Class A ordinary shares and the existing investors subscribed to 62,834,548 Class B ordinary shares of the Company, on an as-converted basis, at the same proportion of the equity interest they held in Shanghai Hesai.

The main purpose of the 2021 Reorganization was to establish a Cayman Islands holding company for the existing business in preparation for an overseas initial public offering. The Group has accounted for the 2021 Reorganization as transaction between entities with common ownership, which is akin to a reorganization of entities under common control. Upon completion of the 2021 Reorganization, per share information of the Company has been retrospectively presented from the earliest period in the combined and consolidated financial statements presented.

Pursuant to a framework agreement entered into by the Founding Shareholders and all of the investors of Shanghai Hesai, the consideration paid by the Company to acquire the equity interest of Shanghai Hesai is to be reinvested in the Company as capital contribution for subscription of ordinary shares at Hesai Group. For the recapitalization in connection with the 2021 Reorganization, only RMB 817,847 was required to be settled through cash redemption by Shanghai Hesai and cash investment at the Company level in accordance with foreign currency control regulations within the PRC. RMB 507,620 has been settled during 2021 and RMB 17,506 has been settled during 2023 with the remaining of RMB 292,721 recorded as subscription receivables as December 31, 2023 pending relevant government approval (See Note 20).

The shareholder further agreed that for certain shareholders, mainly the Founding Shareholders and a few early investors, given that they are liable to make capital gain tax payments to the PRC tax bureau for the sales of their equity interest in Shanghai Hesai, their capital contribution amount at the Cayman Islands level can be done net of the tax liabilities incurred. These tax payments amounted to RMB 82,347, are recorded as general and administrative expenses as they represented tax costs absorbed by the Group as part of the reorganization only for a few investors and not considered to be pro-rata distribution to all shareholders.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

1. ORGANIZATION AND NATURE OF OPERATIONS (continued)

Initial Public Offering (“IPO”)

In February and March 2023, the Group, in connection with its IPO in the United States, issued 10,125,118 Class B ordinary shares with net proceeds of US\$179,786 (equivalent to RMB1,225,470).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

The combined and consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

Basis of Consolidation

The financial statements presented herein represent (1) prior to the 2021 Reorganization, the combined financial statements of Shanghai Hesai and its subsidiaries; (2) subsequent to the 2021 Reorganization, the consolidated financial statements of the Company and its subsidiaries. All transactions and balances among the Company and its subsidiaries have been eliminated upon consolidation.

Use of estimates

The preparation of combined and consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. On an ongoing basis, the Group’s management reviews these estimates based on information that is currently available. Changes in facts and circumstances may cause the Group to revise its estimates. Significant accounting estimates reflected in the Group’s consolidated financial statements mainly include the estimated project progress towards certain services revenue, warranty reserves, inventory write-down, allowance for doubtful accounts, valuation of ordinary shares and share-based compensation.

Fair value measurements

The established fair value hierarchy as defined by U.S. GAAP requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument’s categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The three levels of inputs may be used to measure fair value include:

Level 1 Valuation techniques in which all significant inputs are unadjusted quoted prices from active markets for assets or liabilities that are identical to the assets or liabilities being measured.

Level 2 Valuation techniques in which significant inputs include quoted prices from active markets for assets or liabilities that are similar to the assets or liabilities being measured and/or quoted prices for assets or liabilities that are identical or similar to the assets or liabilities being measured from markets that are not active. Also, model-derived valuations in which all significant inputs and significant value drivers are observable in active markets are Level 2 valuation techniques.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Fair value measurements – continued

Level 3 Valuation techniques in which one or more significant inputs or significant value drivers are unobservable. Unobservable inputs are valuation technique inputs that reflect the Group's own assumptions about the assumptions that market participants would use in pricing an asset or liability.

The Group's financial instruments include cash and cash equivalents, time deposits with maturities between three months and one year included in short-term investments, accounts receivable, contract assets, amounts due from/to related parties, other receivables included in other current assets, accounts payable, notes payable, other current liabilities, and short/long-term borrowings. All carrying amounts of these short-term financial instruments measured at amortized cost approximate their fair values due to their short-term nature. The fair value of long-term borrowings is approximate to their carry amounts because the annual interest rates of such borrowings are the similar to the prevailing market annual interest rate.

Short-term investments also consist of structured financial products with commercial banks in the PRC. The structured financial products are financial instruments with variable interest rates indexed mainly to exchange rates and/or price of commodities. In accordance with ASC 820, Fair Value Measurement, the Group elected the fair value option at the date of initial recognition to measure structured financial products at fair value on a recurring basis with changes in the fair value are recorded as interest income in the combined and consolidated statements of operations and comprehensive loss. The fair values of these structured financial products as of December 31, 2022 and 2023 were determined to be RMB945,865 and RMB857,924 using Level 2 significant other observable input by applying the interest rate implied by the current quotation of underlying indices. For the years ended December 31, 2021, 2022 and 2023, the Group recorded fair value changes of short - term investments of RMB26,351, RMB52,252 and RMB30,158 as interest income in the combined and consolidated statements of operations and comprehensive loss, respectively.

Functional currency and foreign currency translation

The Group uses Renminbi ("RMB") as its reporting currency. The functional currency of the Company and its subsidiary located outside of PRC is the United States dollar ("US\$"), and the functional currency of subsidiaries located in PRC is RMB.

Assets and liabilities are translated from each entity's functional currency to the reporting currency at the exchange rate on the balance sheet date. Equity amounts are translated at historical exchange rates, and revenues, expenses, gains and losses are translated using the average rate for the year. Translation adjustments are reported as cumulative translation adjustments and are shown as a separate component of accumulated other comprehensive (loss) income in the combined and consolidated statements of changes in shareholders' (deficit) equity.

Monetary assets and liabilities denominated in currencies other than the entity's applicable functional currencies are translated into the functional currencies at the prevailing rates of exchange at the balance sheet date. Nonmonetary assets and liabilities are remeasured into the applicable functional currencies at historical exchange rates. Transactions in currencies other than the applicable functional currencies during the year are converted into the functional currencies at the applicable rates of exchange prevailing at the transaction dates. Transaction gains and losses are recognized as foreign exchange (loss) gain, net in the combined and consolidated statements of operations and comprehensive loss.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Cash and cash equivalents

The Group classifies cash on hand and cash in bank with original maturities of three months or less, and are unrestricted as to withdrawal or use, as cash and cash equivalents.

Restricted cash

Restricted cash mainly represents the Group's security deposits with respect to the Group's credit card account, withdrawal or use is contractually restricted of these cash balance.

Accounts receivable, net

Accounts receivable mainly consists of amount due from the Group's customers, which are recorded net of allowance for credit losses. The Group divides its portfolio into four pools — domestic PRC automotive original equipment manufacturer ("OEM") customers, domestic PRC other customers, overseas automotive OEM customers and overseas other customers for the purposes of performing ongoing credit evaluation by reviewing their credit rating and industry geographic distribution and assessing allowance for credit loss based on expected credit loss model for each pool of the portfolio. The Group develops a current expected credit loss ("CECL") model based on historical collection experience, the age of the accounts receivable balances, current economic conditions, reasonable and supportable forecasts of future economic conditions, and other factors that may affect its ability to collect from customers. Account receivable balances are written off after all collection efforts have been exhausted.

Inventories

Inventories consists of raw materials, work-in-process, and finished goods and are stated at lower of cost or net realizable value. Costs are computed under the weighted average method. Net realizable value is determined as estimated selling prices in the ordinary course of business, less reasonably predictable costs to sell. Valuation of inventories is based on currently available information about expected recoverable value. The estimate is dependent upon factors such as market trends, inventory ageing, and historical and forecasted customer demands. Inventory write-down is recorded as cost of revenues.

Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation and impairment. Property and equipment except land are depreciated at rates sufficient to write off its costs less impairment, if any, over the estimated useful lives on a straight-line basis. The estimated useful lives are as follows:

Electronic equipment	3 – 5 years
Machinery and equipment	10 years
Furniture and fixture	5 years
Transportation vehicles	4 years
Leasehold improvements	Over the shorter of the expected lease term or useful lives

Land held by the Group in perpetuity is not depreciated and is stated at cost less impairment.

Interest expenses on outstanding debt are capitalized during the period of significant capital asset construction. Capitalized interest on construction in progress is included within Property, plant and equipment, net and is amortized over the life of the related assets.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Intangible assets, net

Intangible assets are recognized and measured at cost upon acquisition. Following the initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses. The identifiable intangible assets acquired are amortized on a straight-line basis over the respective useful lives as follows:

Software	3 – 10 years
Technology	3 – 8 years

Land-use rights, net

Land-use rights are recognized and measured at cost upon acquisition. Following the initial recognition, land-use rights are carried at cost less any accumulated amortization and any accumulated impairment losses. According to the land-use rights policy in the PRC, the useful life of land-use rights is 50 years.

Goodwill

Goodwill is not amortized but is tested for impairment on an annual basis, or more frequently if events or changes in circumstances indicate that it might be impaired. The Group's annual testing date is December 31.

The Group recognized goodwill of US\$1,982,033, which was assigned to Oxigraf, Inc. as a reporting unit. On November 15, 2023, the Group disposed Oxigraf, Inc., the corresponding goodwill was derecognized as part of the disposal.

Long-term investments

Investment in equity method investee

The Group uses equity method to account for common stock investments in entities over which it has significant influence but does not have controlling interests. Under the equity method of accounting, the Group's share of the earnings or losses of the investee companies, impairments, and other adjustments required by the equity method are reflected in the combined and consolidated statements of operations and comprehensive loss. When the Group's share of losses in an investee equals or exceeds its carrying amount of the investment in the investee, the Group does not recognize further losses, unless the Group has guaranteed the obligations of the investee or is otherwise committed to provide further financial support for the investee. An impairment loss is recorded when there has been a loss in value of the investment that is other than temporary.

An impairment charge is recorded if the carrying amount of the investment exceeds its fair value and this condition is determined to be other-than temporary. The Group estimated the fair value of investments in equity investees under discounted cash flow analysis which requires significant judgments, including the estimation of future cash flows, which is dependent on internal forecasts, the estimation of long-term growth rate of a company's business, the estimation of the useful life over which cash flows will occur, and the determination of the weighted average cost of capital. The Group did not record any impairment on its equity method investment during the years ended December 31, 2021, 2022 and 2023.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Equity securities without readily determinable fair value

The Group has elected to measure the investment in equity securities without readily determinable fair values at cost minus impairment, if any, adjusted up or down for observable price changes. Any adjustment to the carrying amount is recorded in other income (loss), net. At each reporting period end, the Group makes a qualitative assessment considering impairment indicators to evaluate whether any of these investments is impaired. If the assessment indicates that the fair value of an investment is less than the carrying value, the investment in equity securities will be written down to its fair value, with the difference between the fair value of the investment and its carrying amount as an impairment loss. No fair value adjustment was recognized for the year ended December 31, 2022 and 2023.

Revenue recognition

The Group recognizes revenue from sales of LiDAR products and gas detection products at a point in time when control of the products is transferred to the customers, which generally occurs upon delivery according to the terms of the underlying contracts. Product sales to certain customers may require customer acceptance due to performance acceptance criteria that is considered more than a formality. For these product sales, revenue is recognized upon the expiration of the customer acceptance period. The Group's standalone selling prices are based on the prices charged to customers for the single performance obligation which is transfer of control of products upon delivery to the customers or upon expiration of the customer acceptance period. The Group's general terms and conditions for its contracts do not contain a right of return that allows the customer to return products and receive a credit, and therefore the Group does not estimate returns. Amounts billed to customers for shipping and handling are included in revenue. Taxes collected from customers and remitted to governmental authorities are excluded from revenue on the net basis of accounting. Accounts receivables are due under normal trade terms, typically within 30 to 90 days.

For LiDAR solution that the Group offers customers with a combination of hardware, software, deployment and professional services and engineering design, development and validation service projects, control of the goods and services may be transferred over time or at a point in time depending on the terms of the contract. Control of the goods and services is transferred over time when the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date. The Group recognizes revenue over time using an input method based on contract cost incurred to date compared to total estimated contract cost (cost-to-cost) as the services are provided. Otherwise, revenue is recognized at a point in time when the customer obtains control of the goods and services.

The Group typically provides standard product warranties on LiDARs. For LiDARs used in autonomous mobility sector, such warranties last one year. For those used in advanced driver assistance system sector, such warranties cover five years or 100 thousand kilometers, whichever comes first. Standard warranties are considered to be assurance type warranties and are not accounted for as separate performance obligations. The Group accrues estimated future warranty costs and charges to cost of revenues in the period that the related revenue is recognized. These estimates are based on historical warranty experience and any known or expected changes in warranty exposure, such as trends of product reliability and costs of repairing and replacing defective products. The Group also provides extended warranties as a service for an additional term ranging one to two additional years. For service type extended warranty contracts, the Group allocates revenue to this performance obligation on a relative standalone selling price basis and recognizes the revenue ratably over time during the effective period of the services. The Group recognized RMB676, RMB7,702 and RMB10,413 for extended warranty services, for the years ended December 31, 2021, 2022 and 2023, respectively.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue recognition(continued)

Changes in the Group's accrued warranty liability was as follows:

	<u>For the Year ended December 31,</u>		
	<u>2021</u>	<u>2022</u>	<u>2023</u>
	<u>RMB</u>	<u>RMB</u>	<u>RMB</u>
Balance as of the beginning of the year	10,042	13,932	17,694
Warranty provision	10,766	8,467	26,247
Consumption	<u>(6,876)</u>	<u>(4,705)</u>	<u>(15,516)</u>
Balance as of the end of the year	<u>13,932</u>	<u>17,694</u>	<u>28,425</u>

A contract asset is recorded when the Group has transferred products or services to the customer before payment is received or is due, and the Group's right to consideration is conditional on future performance in the contract. The Group records a contract asset for unbilled receivables for certain customers where the control of the goods or services has been transferred. A contract liability exists when the Group has received consideration but has not transferred the related goods or services to the customer. The Group's contract liabilities mainly consist of payments received from customers before they received the products.

Cost of revenues

Cost of revenues for our products includes the manufacturing cost of LiDAR sensors and gas detection products, which primarily consists of direct material costs, personnel-related costs, purchasing costs, depreciation, amortization and overhead associated with manufacturing operations, accrued warranty costs, shipping costs, licensing fees, and write-downs of excess inventories and obsolete inventories. Cost of revenues for our services includes cost of LiDAR solution and direct labor costs and related material costs relating to the fulfillment of services.

Research and development expenses

Research and development expenses consist primarily of personnel-related costs directly associated with research and development organization, with the remainder being prototype expenses, third-party engineering and contractor costs, an allocated portion of facility and IT costs and depreciation. The Group's research and development costs are related to enhancing and developing additional functionality for its existing products and on new product development, including new releases and upgrades to LiDAR sensors. The Group expenses research and development costs as incurred.

Government grants

Government grants consist of cash subsidies received by the Group from PRC local governments. Grants received as incentives for conducting business in certain local districts with no performance obligation or other restriction as to the use are recognized when cash is received. Grants received with government specified performance obligations are recognized when all the obligations have been fulfilled. Government grants received related to the purchases of long-term assets are used to net the cost of the respective assets.

The grants related to unfulfilled obligations of nil, nil and RMB53,668 were included in the other non-current liabilities as of December 31, 2021, 2022 and 2023, respectively. The Group recorded government grants RMB27,446, RMB10,825 and RMB14,280 in other operating income, net for the years ended December 31, 2021, 2022 and 2023, respectively.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Loss per share

Basic loss per share is computed by dividing net loss attributable to the holders of ordinary shares by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share reflect the potential dilution that could occur if securities or other contracts to issue ordinary shares were exercised or converted into ordinary shares. The Group had share options, which could potentially dilute basic earnings per ordinary share in the future. To calculate the number of shares for diluted earnings per ordinary share, the effect of the share options is computed using the treasury stock method.

Share-based compensation

The Group grants share-based awards of the Company to eligible employees and accounts for these share-based awards in accordance with ASC 718, Compensation - Stock Compensation.

Share-based awards that are subject to both the service period and the occurrence of a Qualified IPO as performance condition are measured at the grant date fair value and share-based compensation expenses are recognized for the cumulatively vested amount upon the completion of the Qualified IPO first and then over the remaining requisite service period, net of actual forfeitures, if any.

Share-based awards that are subject to only the service period are measured at the grant date fair value and share-based compensation expenses are recognized on a straight-line basis over the requisite service period of the individual grants. The Group recognizes share-based compensation expenses based on the target number of Class B ordinary shares that may be earned pursuant to the award. Forfeitures are recognized as reductions to share-based compensation when they occur.

Prior to IPO, the fair value of the share options granted to employees is determined with the assistance of an independent valuation specialist using widely accepted valuation techniques, including discounted cash flow analysis on the expected future free cash flows and binomial option pricing model.

The Group accounts for the effects of a modification as described in ASC 718. The Group calculates incremental compensation cost of a modification as the excess of the fair value of the modified option over the fair value of the original option immediately before its terms are modified. For vested options, the Group would recognize incremental compensation cost on the date of modification and for unvested options, the Group would recognize, prospectively and over the remaining requisite service period, the sum of the incremental compensation cost and the remaining unrecognized compensation cost for the original award.

Share-based compensation with cash settlement features is classified as liabilities. The percentage of the fair value that is recorded as compensation cost at the end of each period is based on the percentage of the requisite service that has been rendered at that date. Changes in fair value of the liability classified award that occurs during the requisite service period are recognized as compensation costs ratably over time during the services to be rendered.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Income Taxes

Current income taxes are provided for in accordance with the laws of the relevant tax authorities.

Deferred income taxes are provided using assets and liabilities method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Deferred tax assets are recognized to the extent that these assets are more likely than not to be realized. In making such a determination, the management consider all positive and negative evidence, including future reversals of projected future taxable income and results of recent operation. Deferred tax assets are then reduced by a valuation allowance through a charge to income tax expense when, in the opinion of management, it is more likely than not that a portion of or all of the deferred tax assets will not be realized.

The Group accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of the benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained (defined as a likelihood of more than fifty percent of being sustained upon an audit, based on the technical merits of the tax position), the tax position is then assessed to determine the amount of benefits to recognize in the combined and consolidated financial statements. The amount of the benefits that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement.

Interest and penalties on income taxes will be classified as a component of the provisions for income taxes. The Group did not recognize any income tax due to uncertain tax position or incur any interest and penalties related to potential underpaid income tax expenses for the years ended December 31, 2021, 2022 and 2023.

Leases

The Group leases office space, manufacturing plants and warehouses in Shanghai, PRC and California, USA under non-cancellable operating lease agreements that expire at various dates through October 31, 2025.

Before January 1, 2022, the Group used the Accounting Standards Codification, Leases (“ASC 840”), in which each lease is classified at the inception date as either a capital lease or an operating lease. All the Group’s leases are classified as operating lease under ASC 840. The Group’s reporting for periods prior to January 1, 2022 continued to be reported in accordance with Leases (ASC 840).

Effective from January 1, 2022, the Group adopted ASU No. 2016-02 “Leases” (“ASC 842”) using the modified retrospective approach. The Group elected the transition package of practical expedients permitted within the standard, which allowed it not to reassess initial direct costs, lease classification, or whether the contracts contain or are leases for any leases that existed prior to January 1, 2022. The Group also elected the short-term lease exemption for all contracts with an original lease term of 12 months or less. Upon the adoption, the Group recognized operating lease right-of-use (“ROU”) assets of RMB36,030 with corresponding lease liabilities of RMB36,599 on the combined and consolidated balance sheets. The operating lease ROU assets include adjustments for prepayments. The adoption did not impact the Group’s beginning retained earnings as of January 1, 2022, or the Group’s prior years’ financial statements.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Leases - continued

The impact on the combined and consolidated balance sheets upon adoption of ASC842 was as follows:

	<u>December 31, 2021</u>	<u>January 1, 2022</u>	
	<u>As reported</u>	<u>Effect of the</u>	<u>After adoption</u>
	<u>RMB</u>	<u>adoption of ASC 842</u>	<u>of ASC 842</u>
		<u>RMB</u>	<u>RMB</u>
ASSETS			
Right-of-use assets	—	36,030	36,030
TOTAL ASSETS	—	36,030	36,030
LIABILITIES AND SHAREHOLDERS' EQUITY			
Accrued expenses and other current liabilities	569	12,566	13,135
Lease liabilities, non-current	—	23,464	23,464
TOTAL LIABILITIES	569	36,030	36,599
TOTAL LIABILITIES AND SHAREHOLDERS' DEFICIT	569	36,030	36,599

Under ASC 842, the Group determines whether an arrangement constitutes a lease and records lease liabilities and ROU assets on its combined and consolidated balance sheets at the lease commencement date. The Group measures the operating lease liabilities at the commencement date based on the present value of remaining lease payments over the lease term, which is computed using the Group's incremental borrowing rate, an estimated rate the Group would be required to pay for a collateralized borrowing equal to the total lease payments over the lease term. The Group measures the operating lease ROU assets based on the corresponding lease liability adjusted for payments made to the lessor at or before the commencement date, and initial direct costs it incurs under the lease. The Group begins recognizing operating lease expense based on lease payments on a straight-line basis over the lease term after the lessor makes the underlying asset available to the Group. Some of the Group's lease contracts include options to extend the leases for an additional period which has to be agreed with the lessors based on mutual negotiation. After considering the factors that create an economic incentive, the Group does not include renewal option periods in the lease term for which it is not reasonably certain to exercise.

Comprehensive income (loss)

Comprehensive income (loss) is defined as the change in equity of the Group during a period arising from transactions and other events and circumstances excluding transactions resulting from investments by shareholders and distributions to shareholders. Comprehensive income(loss) is reported in the consolidated statement of operations and comprehensive income(loss). Accumulated other comprehensive (loss) income, as presented on the accompanying combined and consolidated balance sheets consists of accumulated foreign currency translation adjustments.

Segment

The Chief Executive Officer, Chief Scientist and Chief Technology Officer (collectively referred to the "founders") are identified as the chief operating decision maker (CODM).

The Group organized its operations into two segments: LiDAR segment and gas detection segment. The financial information of the respective segments is disclosed in Note 22.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Concentration of risks

Concentration of credit risk

Financial instruments that potentially expose the Group to concentration of credit risk consist primarily of cash and cash equivalents, short-term investments, accounts receivable, contract assets, amount due from related parties, and prepayments and other current assets.

The Group places its cash and cash equivalents and short-term investments in various financial institutions in the PRC, Hong Kong Special Administrative Region, and the United States. The Group believes that no significant credit risk exists as all of the Group's cash and cash equivalents are held with financial institutions that Group's management believes to be high credit quality.

Accounts receivable and contract assets are typically unsecured and are derived from revenue earned from the customers. The Group conducts credit evaluations of customers to whom credit terms are extended. The Group establishes an allowance for doubtful accounts based on CECL model developed by the Group, which considers historical collection experience, the age of the accounts receivable balances, current economic conditions, reasonable and supportable forecasts of future economic conditions, and other factors that may affect its ability to collect from customers.

Prepayments and other current assets mainly consist of deposits of rent, and prepaid expenses, which can be applied for deduction of future payments for expenses. The Group has no significant concentrations of credit risk with respect to its prepayments and other current assets.

Concentration of customers

The following customers accounted for 10% or more of revenue for the years ended December 31, 2021, 2022 and 2023:

	For the Year ended December 31,		
	2021	2022	2023
Customer A	*	24.3 %	25.6 %
Customer B	17.5 %	13.7 %	28.4 %
Customer C	12.7 %	*	*

The following customers accounted for 10% or more of the Group's accounts receivable, contract assets and amount due from related parties as of December 31, 2022 and 2023:

	As of December 31,	
	2022	2023
Customer A	61.0 %	41.3 %
Customer B	15.3 %	10.2 %
Customer D	*	11.2 %

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Concentration of suppliers

The Group has one supplier accounted for 10% or more of purchases for the years ended December 31, 2021 and 2022:

	<u>For the Year ended December 31,</u>		
	<u>2021</u>	<u>2022</u>	<u>2023</u>
Supplier A	13.7 %	12.3 %	*

Foreign currency risk

A significant portion of Group's cash and cash equivalents and short-term investments are denominated in US\$, fluctuations in exchange rates between US\$ and RMB may result in foreign exchange gains or losses. The value of US\$ is subject to changes in central government policies and to international economic and political developments affecting supply and demand in the China Foreign Exchange Trading System market. The Group has cash and cash equivalents that are denominated in US\$, totaling US\$51,351 and US\$131,832 as of December 31, 2022 and 2023, respectively.

Recent accounting pronouncements

Under the Jumpstart Our Business Startups Act of 2012, as amended ("the JOBS Act"), the Group meets the definition of an emerging growth company, or EGC as of December 31, 2023, and has elected the extended transition period for complying with new or revised accounting standards, which delays the adoption of these accounting standards until they would apply to private companies. Once the Group ceases to qualify as EGC, it will immediately adopt the new and revised accounting standards already effective for public companies. There are no recent accounting pronouncements which are expected to have a material effect on the Company's consolidated financial statements in the current or any future periods.

Convenience translation

The Group's business is primarily conducted in China and most of its revenues are denominated in RMB. However, periodic reports made to shareholders will include current period amounts translated into US\$ using the then current exchange rates, for the convenience of the readers. Translations of balances in the combined and consolidated balance sheet, consolidated statements of operations and comprehensive loss and consolidated statements of cash flows from RMB into US\$ as of and for the year ended December 31, 2023 are solely for the convenience of the readers and were calculated at the rate of US\$1.00=RMB7.0999 representing the noon buying rate set forth in the H.10 statistical release of the United States as of December 29, 2023.

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3. ACCOUNTS RECEIVABLE, NET

Accounts receivable and expected credit losses as of December 31, 2022 and 2023 are as follows:

	As of December 31,	
	2022	2023
	RMB	RMB
Accounts receivable	491,293	573,950
Less: allowance for expected credit losses	(6,249)	(49,132)
Total accounts receivable, net	485,044	524,818

The roll-forward of the allowance for credit losses related to accounts receivable for the years ended December 31, 2022 and 2023 consists of the following activity:

	For the Year ended December 31,	
	2022	2023
	RMB	RMB
Balance at beginning of year	7,294	6,249
(Reversal) provision for expected credit losses	(1,045)	42,883
Balance at end of year	6,249	49,132

4. INVENTORIES

	As of December 31,	
	2022	2023
	RMB	RMB
Raw materials	290,121	126,347
Work-in-process	180,367	199,153
Finished goods	176,364	170,377
Inventories	646,852	495,877

Inventory write-off were RMB16,600, RMB39,431 and RMB9,290, respectively, for the years ended December 31, 2021, 2022 and 2023.

5. PREPAYMENTS AND OTHER CURRENT ASSETS

Prepayments and other current assets, as of December 31, 2022 and 2023 were as follows:

	As of December 31,	
	2022	2023
	RMB	RMB
Advances to suppliers	82,419	120,556
Deposits	11,998	22,042
Prepaid expenses	10,108	16,372
Value-added tax recoverable	6,748	21,888
Others	15,179	27,224
Total	126,452	208,082

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6. PROPERTY AND EQUIPMENT, NET

Property and equipment, as of December 31, 2022 and 2023 are as follows:

	<u>As of December 31,</u>	
	<u>2022</u>	<u>2023</u>
	<u>RMB</u>	<u>RMB</u>
Cost		
Land	—	39,312
Electronic equipment	79,663	114,237
Leasehold improvements	63,995	67,677
Machinery and equipment	121,614	186,890
Furniture and fixture	54,851	78,169
Transportation vehicles	4,411	5,400
Total cost	324,534	491,685
Less: Accumulated depreciation	(84,329)	(154,473)
Property and equipment, net	240,205	337,212
Construction in Progress	264,748	534,399
Total	504,953	871,611

Depreciation expenses were RMB21,187, RMB44,856 and RMB77,701 for the years ended December 31, 2021, 2022 and 2023, respectively.

Construction in progress as of December 31, 2022 and 2023 mainly represents the Company's new research and development and intelligent manufacturing center in Shanghai, PRC, which was ready for use since January 2024.

In September 2023, the Group acquired an industrial raw land at a total cost of Thai baht189.4 million, equivalent to RMB39,312, covering a total area of 25,686 square meters in Chachoengsao Province, Thailand, for the construction of a new factory.

7. INTANGIBLE ASSETS, NET

Intangible assets, as of December 31, 2022 and 2023 are as follows:

	<u>As of December 31,</u>	
	<u>2022</u>	<u>2023</u>
	<u>RMB</u>	<u>RMB</u>
Software	30,095	38,143
Technology	8,390	65,235
Total cost	38,485	103,378
Less: Accumulated amortization	(17,885)	(24,648)
Intangible assets, net	20,600	78,730

Amortization expenses related to intangible assets were RMB6,326, RMB7,914 and RMB7,704 for the years ended December 31, 2021, 2022 and 2023, respectively.

On December 15, 2023, the Group acquired a Swiss company, which designed image sensors for spatial awareness for industrial and automotive applications. In connection with this acquisition, the Group acquired patent rights to certain technologies valued of RMB59,351 with an amortization period of 8 years.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
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7. INTANGIBLE ASSETS, NET (continued)

The estimated amortization expenses for each of the five succeeding fiscal years and thereafter are as follows:

	Years ended December 31,
	RMB
2024	11,678
2025	10,416
2026	9,866
2027	9,866
2028 and years after	36,904
Total	78,730

8. LAND-USE RIGHTS, NET

In March 2021, the Group acquired a land-use right at a total cost of RMB43,188 for approximately 26,615 square meters of land in Shanghai, the PRC for the construction of a factory. According to the land-use rights policy in the PRC, the Group has a 50-year use right over the land, and it is amortized over this period on a straight - line basis. The Group recorded amortization expenses of RMB718, RMB864, and RMB863 for the years ended December 31, 2021, 2022 and 2023, respectively. The weighted average remaining lease term was 47.19 years as of December 31, 2023.

9. LONG-TERM INVESTMENTS

	As of December 31,	
	2022	2023
	RMB	RMB
Investments in equity securities	30,000	30,000
Investments in equity method investee	1,856	1,811
Total	31,856	31,811

In July 2022, the Group made investment in Vertilite Co., Ltd. (“Vertilite”) with total consideration RMB30,000 without control, joint control or significant influence.

10. OTHER NON-CURRENT ASSETS

Other non-current assets as of December 31, 2022 and 2023 are as follows:

	As of December 31,	
	2022	2023
	RMB	RMB
Prepayments for purchase of property and equipment	46,083	77,596
Demonstration fleet	4,936	3,819
Long-term deposits	3,836	8,612
Others	2,243	141
Other non-current assets	57,098	90,168

Long-term deposits mainly consist of rental deposit for offices and production capacity which will not be collectible within one year.

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11. NOTES PAYABLE

The Group issued short-term note payables to settle part of the payments for the construction of new research and development and intelligent manufacturing center in Shanghai, PRC. As of December 31, 2022 and 2023, the remaining balance was nil and RMB7,255, respectively.

12. BORROWINGS

The short-term and long-term borrowings as of December 31, 2022 and 2023 were as follows:

	As of December 31,	
	2022	2023
	RMB	RMB
Short-term borrowings:		
Short-term bank borrowings	—	109,900
Long-term bank borrowings, current portion	—	1,782
Total	—	111,682
Long-term borrowings:		
Long-term bank borrowings	18,472	285,898

Short-term bank borrowings

In November 2022 and December 2023, the Group entered into two short-term bank credit facility agreements for up to RMB300,000 and RMB500,000 with an annual interest rate of China's one-year loan prime rate ("LPR") minus 80 bps, respectively. The facility of RMB300,000 was expired on November 23, 2023, and the facility of RMB500,000 will expire on December 12, 2024. During the year ended December 31, 2023, the Group drew down RMB109,900 under the credit facility of RMB 300,000 with an annual interest rate of 2.85% and a maturity date of January 16, 2024. The Group has RMB500,000 unused short-term bank facility as of December 31, 2023.

Long-term bank borrowings

In November 2022, Shanghai Hesai entered into a two-year facility of RMB700,000 with an annual interest rate of China's LPR minus 100 bps. The facility will expire on December 4, 2024. The usage of credit facility is restricted to the purchasing of property and equipment for the production facility under construction in Jiading, Shanghai. The credit facility is secured by Shanghai Hesai's land-use rights, ongoing and completed constructions of the new manufacturing facility with a total book value of RMB561,201 as of December 31, 2023. Shanghai Hesai drew down long-term borrowings amounting to RMB18,472 and RMB261,345 as of December 31, 2022 and 2023, respectively. The interest rate for the borrowings in 2022 was 2.45% per annum, the interest rate range for the borrowings in 2023 was from 2.45% to 2.65% per annum. The maturity dates ranged from June 4, 2025 to December 3, 2027.

In October 2023, Zhejiang Hertz entered into a one-year facility of RMB110,000 with an annual interest rate of China's LPR minus 60 bps. The facility will expire on October 17, 2024. The usage of credit facility is restricted to the purchasing of property and equipment for Hertz factory in Hangzhou, Zhejiang, the borrowing was guaranteed by Shanghai Hesai. As of December 31, 2023, Zhejiang Hertz drew down long-term borrowings amounting to RMB5,347, of which RMB1,782 will be repaid within one year and had been reclassified to short-term borrowings. The interest rate was 2.85% per annum. The maturity dates of the remaining long-term portion ranged from April 17, 2025 to October 17, 2026.

In December 2023, the Group acquired a Swiss company and assumed the long-term borrowings of CHF299 (equivalent to RMB2,516) the company borrowed in 2020, which will mature in 2030.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

12. BORROWINGS (continued)*Long-term bank borrowings - continued*

The Group has RMB524,836 unused bank facilities in connection to borrowings for the purpose of purchasing property and equipment as of December 31, 2023.

The principal maturities of the long-term borrowings as of December 31, 2022 and 2023 are as follows:

	<u>As of</u> <u>December 31,</u> <u>2022</u>	<u>As of</u> <u>December 31,</u> <u>2023</u>
	RMB	RMB
2025	5,542	85,728
2026	5,542	85,728
2027	7,388	111,926
2028 and after	—	2,516
Total	<u>18,472</u>	<u>285,898</u>

13. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities as of December 31, 2022 and 2023 are as follows:

	<u>As of December 31,</u>	
	<u>2022</u>	<u>2023</u>
	RMB	RMB
Salaries and welfare payables	166,923	195,014
Payables for purchase of property and equipment	102,181	179,839
Accrued expenses	41,558	65,159
Current portion of operating lease liabilities	34,975	34,993
VAT and other tax payables	5,903	19,847
Advances from employees	4,962	3,472
Total	<u>356,502</u>	<u>498,324</u>

14. LEASES

The Group has operating leases for offices and factories. The Group recognized ROU assets of RMB44,349 and RMB151,871 and corresponding current liabilities of RMB34,975 and RMB34,993 in accrued expenses and other current liabilities, and long-term operating lease liabilities of RMB10,139 and RMB119,413, as of December 31, 2022 and 2023, respectively. The weighted average remaining lease term was approximately 5.48 years as of December 31, 2023, and the weighted average discount rate were 4.25% and 2.85% for the years ended December 31, 2022 and 2023, respectively.

For the years ended December 31, 2021, 2022 and 2023, Operating lease expenses were RMB21,792, RMB34,596 and RMB37,878 (including RMB2,136 for short-term leases not capitalized as ROU assets), respectively.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
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14. LEASES (continued)

The maturities of lease liabilities in accordance with Leases (ASC 842) as of December 31, 2022 and December 31, 2023 were as follows:

	<u>As of</u> <u>December 31, 2022</u>	<u>As of</u> <u>December 31, 2023</u>
	RMB	RMB
2023	36,025	—
2024	7,145	38,305
2025	3,282	25,951
2026	—	24,672
2027	—	24,877
2028	—	27,139
2029	—	24,877
Total lease payment	46,452	165,821
Less: imputed interest	(1,338)	(11,415)
Present value of minimum operating lease payments	45,114	154,406
Less: Current operating lease liabilities	(34,975)	(34,993)
Long-term operating lease liabilities	10,139	119,413

Cash paid for amounts included in the measurement of operating lease liabilities for the years ended December 31, 2022 and 2023 were RMB28,136 and RMB35,982, respectively. Right-of-use assets obtained in exchange for the operating lease liabilities in non-cash transactions for the years ended December 31, 2022 and 2023 were RMB37,414 and RMB133,661, respectively.

15. REDEEMABLE SHARES

Since its establishment, Hesai Photonics has received several rounds of equity financing in the form of Series A+/B/B+/C-1/C-2/C-3 redeemable equity from external investors from March 2017 to July 2019. On August 1, 2020, in conjunction with the conversion of Hesai Photonics into a joint stock company Shanghai Hesai, all the outstanding redeemable equity was converted into ordinary shares of Shanghai Hesai at no consideration, all in the same proportion as the percentage of equity interest they held in Hesai Photonics. In the second quarter of 2021, the Group signed agreements (the "Side Letters") with its external shareholders holding 54,551,513 Class B ordinary shares, whereby the Group has agreed to provide an option for these shareholders to re-designate their ordinary shares to preferred shares in the event that the Company fails to complete an overseas IPO within twelve months following the dates of the agreements. Among all the preferred rights associated with the shares, the agreements provide the investors with the right to redeem if a Qualified-IPO has not been consummated by December 31, 2022. The redemption price of the redeemable shares shall be the issue price plus a compound interest rate of 8% per annum for each year such redeemable shares was outstanding, calculated from the date of payment of consideration for subscription through the date of redemption thereof (and calculated on a pro rata basis in case of a partial year) plus all declared but unpaid dividends thereon up to the date of actual payment of such redemption price, proportionally adjusted for share subdivisions, share dividends, reorganizations, reclassifications, consolidations or mergers. The redemption right is exercised in the sequence of Series D, Series C+, Series C-1/C-2/C-3, Series B+, Series B, and Series A+ redeemable shares.

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15. REDEEMABLE SHARES (continued)

The Company has accounted for these agreements as material amendments such that extinguishment accounting is applied to these shares at the agreement dates. Given these shares are redeemable upon an event not solely within the control of the Company, the Company has reclassified the 54,551,513 Class B ordinary shares from permanent equity to mezzanine equity at their current fair values and the difference is recorded as deemed dividend in the amount of RMB2,131,572, by charging against retained earnings, or in the absence of retained earnings, by charges against additional paid-in capital. Once additional paid-in-capital has been exhausted, additional charges are recorded by increasing the accumulated deficit. Except for Series D shares, all of the other series shares have carrying value higher than their respective redemption value, as such, no accretion to redemption value is recorded. For Series D shares, the change in redemption value is RMB79,758 and RMB446,419, which are recorded as deemed dividends for the years ended December 31, 2021 and 2022, respectively.

Upon the completion of the Company's IPO in United States on February 9, 2023, 54,551,513 redeemable shares were reclassified into 54,551,513 Class B ordinary shares on a one-on-one basis in accordance with the terms stipulated by the Side Letters.

16. ORDINARY SHARES

Holders of Class A ordinary shares and Class B ordinary shares of the Company have the same rights, except for voting rights. Holders of Class A ordinary shares are entitled to ten votes per share in all shareholders' meetings, while holders of Class B ordinary shares are entitled to one vote per share.

In February and March 2023, 54,551,513 redeemable shares were reclassified into Class B ordinary shares upon IPO and the Company issued 10,125,118 Class B ordinary shares in connection with its IPO in the United States.

In August 2023, 4,000,000 Class B ordinary shares were issued to the Company's depository bank, Deutsche Bank, reserved for future issuances of shares upon the exercises of share options or vesting of restricted shares under the 2021 Share Incentive Plan. These shares are considered to be issued and not outstanding until such a time when the issuance occur for the exercise of share options or vesting of restricted shares. As of December 31, 2023, 2,631,222 shares are remained to be issued and not outstanding.

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17. NET REVENUES

The following table presents the Group's net revenues for the years ended December 31, 2021, 2022 and 2023.

	For the Year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Product revenues			
Revenue from LiDAR products	685,333	1,122,237	1,735,254
Revenue from gas detection products	19,533	23,967	26,863
Other revenues	1,200	5,663	2,773
Service revenues			
Engineering design, development and validation service and solution revenue	14,026	43,101	100,493
Other service revenues	676	7,702	11,606
Total	<u>720,768</u>	<u>1,202,670</u>	<u>1,876,989</u>

The following table summarizes the Group's revenues recognized at a point in time or over time.

	For the Year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Revenue recognized at a point of time	706,066	1,175,758	1,783,803
Revenue recognized over time	14,702	26,912	93,186
Total	<u>720,768</u>	<u>1,202,670</u>	<u>1,876,989</u>

The following table summarizes the Group's revenues disaggregated by the different geographic location.

	For the Year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Revenue by geographic location			
Mainland China	269,634	697,294	991,912
North America	352,981	358,549	748,147
Europe	67,912	86,153	70,500
Other regions	30,241	60,674	66,430
Total	<u>720,768</u>	<u>1,202,670</u>	<u>1,876,989</u>

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
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17. NET REVENUES (continued)

The movements of the Group's accounts receivable and contract balances are as follows:

	<u>Accounts Receivable</u>	<u>Contract assets</u>	<u>Contract liabilities</u>
	<u>RMB</u>	<u>RMB</u>	<u>RMB</u>
Opening Balance as of January 1, 2021	56,319	38,337	9,357
Increase, net	29,502	108,200	113,246
Ending Balance as of December 31, 2021	85,821	146,537	122,603
Increase(decrease), net	399,223	(133,937)	(82,225)
Ending Balance as of December 31, 2022	485,044	12,600	40,378
Increase(decrease), net	39,774	7,088	39,547
Ending Balance as of December 31, 2023	524,818	19,688	79,925

Revenues with amount of RMB8,048, RMB109,120, and RMB37,111 were recognized in the years ended December 31, 2021, 2022 and 2023, respectively, that were included in the balance of contract liabilities at the beginning of each year.

18. INCOME TAXES*United States*

The applicable income tax rate of United States where the Company's subsidiaries having significant operations for the years ended December 31, 2021, 2022 and 2023 is 27.98%, which is a blended state and federal rate.

PRC

The PRC Enterprise Income Tax Law ("EIT Law"), which became effective on January 1, 2008, applies a uniform enterprise income tax ("EIT") rate of 25% to both foreign-invested enterprises ("FIEs") and domestic enterprises. Certified High and New Technology Enterprises ("HNTE") are entitled to a favorable statutory tax rate of 15%, but need to re-apply every three years. During this three-year period, an HNTE must conduct a qualification self-review each year to ensure it meets the HNTE criteria and is eligible for the 15% preferential tax rate for that year. If an HNTE fails to meet the criteria for qualification as an HNTE in any year, the enterprise cannot enjoy the 15% preferential tax rate in that year, and must instead use the regular 25% EIT rate.

Shanghai Hesai applied for the HNTE qualification and received approval in December 2019, and such qualification was renewed in November 2022 for year 2022 to 2024. Shanghai Hesai was entitled to continue to enjoy the beneficial tax rate of 15% as an HNTE for the years ended December 2021, 2022 and 2023.

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18. INCOME TAXES (continued)**PRC - continued**

According to relevant laws and regulations promulgated by the State Administration of Tax of the PRC, enterprises engaging in R&D activities are entitled to claim 200% of their qualified research and development expenses so incurred as tax deductible expenses when determining their assessable profits for 2021 and afterwards (“Super Deduction”) when enterprise engage in manufacturing business. The additional deduction of qualified research and development expenses can only be claimed directly in the annual EIT filing and subject to the approval from the relevant tax authorities.

Withholding tax on undistributed dividends

Under the EIT Law enacted by the National People’s Congress of the PRC, dividends generated after January 1, 2008 and payable by a foreign investment enterprise in the PRC to its foreign investors who are non-resident enterprises are subject to a 10% withholding tax, unless any such foreign investor’s jurisdiction of incorporation has a tax treaty with the PRC that provides for a different withholding arrangement.

In accordance with accounting guidance, all undistributed earnings are presumed to be transferred to the parent company and are subject to the withholding taxes. All FIEs are subject to the withholding tax from January 1, 2008. The presumption may be overcome if the Group has sufficient evidence to demonstrate that the undistributed dividends will be re-invested and the remittance of the dividends will be postponed indefinitely. The Group did not record any dividend withholding tax, as it has no retained earnings for any of the years presented.

The EIT Law also provides that an enterprise established under the laws of a foreign country or region but whose “de facto management body” is located in the PRC be treated as a resident enterprise for PRC tax purposes and consequently be subject to the PRC income tax at the rate of 25% for its global income. The Implementing Rules of the EIT Law merely define the location of the “de facto management body” as “the place where the exercising, in substance, of the overall management and control of the production and business operation, personnel, accounting, properties, etc., of a non-PRC company is located.” Based on a review of surrounding facts and circumstances, the Group does not believe that it is likely that its operations outside of the PRC will be considered a resident enterprise for PRC tax purposes. However, due to limited guidance and implementation history of the EIT Law, there is uncertainty as to the application of the EIT Law. Should the Company be treated as a resident enterprise for PRC tax purposes, the Company will be subject to PRC income tax on worldwide income at a uniform tax rate of 25%. The Company is not subject to any other uncertain tax position.

The current and deferred portion of income tax expenses included in the combined and consolidated statements of operations and comprehensive loss are as follows:

	For the Year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Current tax expenses	—	2	13
Over-provision in prior year	(1,057)	—	—
Deferred tax (benefits) expense	(58)	(68)	645
Income tax (benefits) expenses	(1,115)	(66)	658

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18. INCOME TAXES (continued)

Withholding tax on undistributed dividends - continued

Net Loss before income tax by tax jurisdiction:

	For the Year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Net loss before income tax from PRC operations	(92,498)	(251,302)	(480,479)
Net (loss) gain before income tax from non-PRC operations	(153,444)	(49,529)	5,168
Total net loss before income tax	(245,942)	(300,831)	(475,311)

A reconciliation between the effective income tax rate and the PRC statutory income tax rate is as follows:

	For the Year ended December 31,		
	2021	2022	2023
Statutory income tax rate	25.00 %	25.00 %	25.00 %
Effect of different tax rate of different jurisdictions	(4.39)%	(3.14)%	(0.79)%
Non-deductible expenses	(17.98)%	(6.12)%	(12.42)%
Effect of super deduction on R&D expenses	34.83 %	41.00 %	37.21 %
Tax-free income	—	—	0.32 %
Effect of change of valuation allowance	(37.44)%	(56.76)%	(49.46)%
Over provision for prior years	0.43 %	—	—
Income tax expenses	0.45 %	(0.02)%	(0.14)%

Deferred tax assets and deferred tax liabilities

	As of December 31,	
	2022	2023
	RMB	RMB
Deferred tax assets		
– Net operating loss carry forwards	373,215	705,249
– Deductible temporary differences	31,348	72,625
– Deferred revenue	6,294	19,620
Less: valuation allowance	(410,857)	(797,494)
Net deferred tax assets	—	—
Deferred tax liabilities		
– Identifiable intangible assets from business combination.	439	—
Total deferred tax liabilities	439	—

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

18. INCOME TAXES (continued)*Movement of valuation allowance*

Movement of valuation allowance is as follow:

	<u>For the Year ended December 31,</u>		
	<u>2021</u>	<u>2022</u>	<u>2023</u>
	<u>RMB</u>	<u>RMB</u>	<u>RMB</u>
Balance at beginning of the year	136,269	241,485	410,857
Addition	105,216	169,372	386,637
Total	<u>241,485</u>	<u>410,857</u>	<u>797,494</u>

For the years ended December 31, 2021, 2022 and 2023, the Group had net operating loss carry forwards of approximately RMB881,256, RMB1,492,808 and RMB2,850,909, respectively, which mainly arose from the subsidiaries established in the PRC and United States. The loss carry forwards will expire during the period from 2024 to 2033, while the federal loss carry forwards for US entities do not expire and can be carried forward indefinitely. The Group had provided a full valuation allowance for the deferred tax assets as of December 31, 2022, and 2023, as management determined that deferred tax assets were not more likely than not to be realizable in future tax years based on all available evidence.

19. SHARE-BASED COMPENSATION*Employee share options*

In March 2023, the Company's board of directors approved a modification on the vesting schedule of 1,136,631 share options that previously issued under the 2021 Plan. As the result of the modification, there was no incremental value conveyed to the holder of the award, no incremental compensation cost was recognized, the Group recognized RMB6,690 share-based compensation expenses at the date of modification.

On March 10, March 21, May 30, June 30, August 18, November 17 and December 20, 2023 under the 2021 Plan, the Company granted 2,422,714 share options to certain employees, the vesting schedule of the awards include:

- 1) Twenty-five percent (25%) of the 2,069,592 options to be vested on each of the first, second, third and fourth anniversaries of the vesting commencement date.
- 2) Thirty-three percent (33%) of the 2,833 options to be vested on each of the first, second, and third anniversaries of the vesting commencement date.
- 3) One forty-eighth (1/48) of the 195,881 options to be vested on each calendar month, from the first full calendar month following the vesting commencement date though the forty-eighth (48th) month.
- 4) Twenty-five percent (25%) of the 154,408 options to be vested on the each of the vesting commencement date, and another twenty-five percent (25%) to be vested on each of the first, second and third anniversaries of the vesting commencement date.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

19. SHARE-BASED COMPENSATION (continued)

Employee share options - continued

The binomial option pricing model was applied in determining the estimated fair value of the options granted. The model requires the input of subjective assumptions. The following table presents the assumptions used to estimate the fair values of the share options granted for the years ended December 31, 2021, 2022 and 2023:

	For the year ended December 31,		
	2021	2022	2023
Expected volatility	48.00% - 74.00 %	74.00% – 80.00 %	82.00% - 85.00 %
Risk-free interest rate (per annum)	0.97% - 1.55 %	1.94% – 3.83 %	3.57% - 4.47 %
Expected dividend yield	0.00 %	0.00 %	0.00 %
Employee forfeiture rate (per annum)	3.80 %	3.80% – 3.92 %	2.40% - 7.50 %
Exercise multiples	2.50	2.50	2.50
Expected term	7.00	7.00	7.00
Fair value of underlying ordinary share (per share)	US\$14.10 - 18.42	US\$18.11 – 19.91	US\$7.95 - 15.47
Fair value of awards on valuation date	US\$5.84 - 19.90	US\$12.93 – 17.11	US\$5.38 - 10.51

1) Expected volatility:

Expected volatility was estimated based on historical volatility of comparable companies for the period before the valuation date with length commensurate to contractual life of the share options.

2) Risk-free interest rate (per annum):

Risk-free interest rate was estimated based on the US Government Bond around the valuation date.

3) Expected dividend yield

The dividend yield was estimated as zero based on the plan to retain profit for corporate expansion and no dividend will be distributed in the near future.

4) Employee forfeiture rate (per annum):

Employee forfeiture rate was estimated by the management using employee resignation statistics.

5) Exercise multiple

Assumption on exercise multiple is made with reference to academic research.

6) Expected term:

The expected term was the life of options extracted from option agreements.

7) Fair value of underlying ordinary share (per share)

The fair value before the completion the initial public offering in the United States considered discounted cash flow method which converts future amounts to a single present value amount and requires significant judgements on the expected future free cash flows and other assumptions including appropriate discount rate and estimate of long-term growth rate of the Group's business and was the Group's stock price on grant date after the initial public offering in the United States.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

19. SHARE-BASED COMPENSATION (continued)

Employee share options - continued

The following table summarizes the activities of the Group's share options classified as equity for the years ended December 31, 2022 and 2023:

	Number of options	Weighted average exercise price RMB	Weighted average grant date fair value RMB	Weighted average remaining contract life Years	Aggregate intrinsic value RMB
Outstanding at December 31, 2022	9,608,634	12.51	65.93	5.46	1,141,255
Granted	2,422,714	14.49	55.08	—	—
Forfeited	506,540	44.32	—	—	—
Exercised	1,333,087	16.59	—	—	74,380
Outstanding at December 31, 2023	10,191,721	16.07	62.08	4.97	517,605
Vested and expected to vest as of December 31, 2023	10,191,721	16.07	62.08	4.97	517,605
Exercisable as of December 31, 2023	5,335,293	15.74	50.36	4.34	287,997

The weighted-average grant-date fair value of options granted during the years 2021, 2022, and 2023 was RMB102.74, RMB121.62, and RMB55.08, respectively. The total intrinsic value of options exercised during the years ended December 31, 2021, 2022, and 2023, was nil, nil and RMB74,380 respectively.

The Group did not record any compensation expenses related to options awarded with IPO condition prior to the completion of IPO during the years 2021 and 2022. The Share-based compensation expense of RMB79,804 related to the vested portion of these options has been recognized upon the effectiveness of the registration statements on February 8, 2023. Total compensation expense recognized for the years ended December 31, 2021, 2022 and 2023 was RMB54,283, RMB104,750 and RMB228,312, respectively.

As of December 31, 2023, there was RMB291,247 of unrecognized compensation expenses, which is expected to be recognized over a weighted average period of 2.35 years.

Restricted share units ("RSUs")

On March 10, March 21, May 30, August 18 and November 17, 2023 under the 2021 Plan, the Company granted 189,012 RSUs to eligible management team, the vesting schedule of the awards include:

- 1) Fifty percent (50%) of the 54,775 RSUs to be vested on each of the first and second anniversaries of the vesting commencement date.
- 2) Twenty-five percent (25%) of the 120,143 RSUs to be vested on each of the first, second, third and fourth anniversaries of the vesting commencement date.
- 3) One eighth (1/8) of the 14,094 RSUs shall vest every six months from the vesting commencement date.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

19. SHARE-BASED COMPENSATION (continued)*Restricted share units (“RSUs”) - continued*

The Group did not grant RSUs during the years 2021 and 2022. The following table summarizes the activities of the Group’s RSUs classified as equity for the year ended December 31, 2023:

	Numbers of RSUs	Weighted average grant date fair value RMB
Outstanding at January 1, 2023	—	—
Granted	189,012	76.52
Forfeited	—	
Exercised	35,691	
Outstanding at December 31, 2023	153,321	76.06
Vested and expected to vest as of December 31, 2023	153,321	76.06
Exercisable as of December 31, 2023	—	—

The weighted-average grant-date fair value of share units granted during the year 2023 was RMB76.52. The total intrinsic value of share units exercised during the years ended December 31, 2023, was RMB2,252. Total compensation expense recognized for the year ended December 31, 2023 was RMB5,646.

As of December 31, 2023, there was RMB8,816 of unrecognized compensation expenses, which is expected to be recognized over a weighted average period of 2.47 years.

Tandem award

In May 2022, the Company granted an employee with a share option award of 60,000 shares with a per share exercise price of US\$18.65, which is based on the fair value of the ordinary share at the date of the grant. The options will vest rateably over a four-year period with 25% vested every year. The option agreement includes a provision whereby the grantee can choose to receive cash payment at US\$8 per share for any options that are vested but not exercised if his employment upon termination of employment when such grantee continuously work for the Group for four years. Exercise of share options cancels the cash award, and the cash redemption cancels all the vested share options. The Company considered this award as a combination grant of a cash settlement component with compensation cost measured based on the combined value.

This tandem award was classified as liabilities. Total compensation expense recognized for the years ended December 31, 2022 and 2023 was RMB469 and RMB666, respectively.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

19. SHARE-BASED COMPENSATION (continued)*Share-based compensation for all employee share options, restricted share units and tandem award*

The Group recorded share-based compensation expense of RMB54,283, RMB105,219 and RMB234,624 for the years ended December 31, 2021, 2022 and 2023, respectively, which were classified in the accompanying consolidated statements of operations as follows:

	For the Year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Cost of revenues	1,813	8,037	16,245
Sales and marketing expenses	1,488	6,291	20,682
General and administrative expenses	38,892	48,998	63,326
Research and development expenses	12,090	41,893	134,371
Total	54,283	105,219	234,624

20. RELATED PARTY TRANSACTIONS

Major related parties that transacted with the Group and their respective relationship to the Group listed as below:

Name of the related parties	Relationship
Mr. Kai Sun	Founding Shareholders
Mr. Yifan Li	Founding Shareholders
Mr. Shaoqing Xiang	Founding Shareholders
Mr. Minglie Hu	Shareholder
Mr. Min Ai	Shareholder
Shanghai Leyi Technology L.P.	An affiliate of the shareholder of the Group
Baidu USA LLC (Note)	An affiliate of the shareholder of the Group
Beijing Baidu Netcom Technology Co., Ltd.	An affiliate of the shareholder of the Group
Apollo Intelligent Transportation Technology (Guangzhou) Co., Ltd.	An affiliate of the shareholder of the Group
Baidu Smart Travel Information Technology (Chongqing) Co., Ltd.	An affiliate of the shareholder of the Group
Apollo Intelligent Transportation Technology (Hefei) Co., Ltd.	An affiliate of the shareholder of the Group
Luobo Yunli (Beijing) Technology Co., Ltd.	An affiliate of the shareholder of the Group
Apollo Intelligent Transportation Technology (Dalian) Co., Ltd.	An affiliate of the shareholder of the Group
Apollo Intelligent Technology (Beijing) Co., Ltd.	An affiliate of the shareholder of the Group
Apollo Intelligent Connection (Beijing) Co., Ltd.	An affiliate of the shareholder of the Group

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

20. RELATED PARTY TRANSACTIONS (continued)

Note: Started from June 30, 2021, Baidu (China) Co., Ltd and its affiliates (collectively as “Baidu”) was no longer treated as the Group’s related parties as Baidu no longer has significant influence over the Group after the consummation of 2021 Reorganization.

For the years ended December 31, 2021, 2022 and 2023, significant related party transactions were as follows:

	For year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Net revenues			
Affiliates of the shareholders of the Group	15,655	—	—
Total	15,655	—	—

	For year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Payment for equity acquisition consideration			
Founding Shareholders and certain shareholders	—	—	17,506
Total	—	—	17,506

	For year ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Subscription consideration received from shareholders			
Founding Shareholders and certain shareholders	—	—	17,506
Total	—	—	17,506

The balances due to related parties of financing are as follows:

	As of December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Amounts due to related parties, net of allowance			
Founding Shareholders and certain shareholders	307,498	334,283	326,028
An affiliate of the shareholder of the Group	—	—	14,023
Total	307,498	334,283	340,051

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

20. RELATED PARTY TRANSACTIONS (continued)

In May 2021, as an integrated step of the 2021 Reorganization, in order to comply with certain PRC foreign currency control rules and regulations, the Founding Shareholders and certain investors are in the process of applying for permissions to pay the subscription consideration to the Company. Once they obtained the approval to pay the subscription receivables at Cayman Company level, the Group will then settle the consideration payable for the acquisition of their equity interests in Shanghai Hesai to facilitate their payment of the subscription receivable for the ordinary shares of the Company as part of the reorganization. In December 2023, the Group settled the consideration payable of RMB17,506 to one shareholder, and subscription receivable of this shareholder of RMB17,506 was received at Cayman Company level.

21. LOSS PER SHARE

For the purpose of calculating net loss per share, the number of shares used in the calculation reflects the outstanding shares of the Company as if the 2021 Reorganization as described in Note 1 took place at the earliest period presented.

	For the year ended December 31,		
	2021 RMB	2022 RMB	2023 RMB
Numerator			
Net loss	(244,827)	(300,765)	(475,968)
Deemed dividend	(2,211,330)	(446,419)	—
Net loss attributable to ordinary shareholders	(2,456,157)	(747,184)	(475,968)
Denominator			
Weighted average number of ordinary shares outstanding-basic and diluted	104,987,478	115,534,593	124,783,013
Basic and diluted net loss per share attributable to ordinary shareholders	(23.39)	(6.47)	(3.81)

For the years ended December 31, 2021, 2022 and 2023, the following share options were excluded from the calculation of diluted net loss per ordinary share, as their inclusion would have been anti-dilutive for the period prescribed.

	For the year ended December 31,		
	2021 Number	2022 Number	2023 Number
Shares issuable upon exercise of share options	9,173,623	9,608,634	10,191,721
Shares issuable upon exercise of restricted share units	—	—	153,321
Shares issuable upon exercise of tandem award	—	60,000	60,000
Total	<u>9,173,623</u>	<u>9,668,634</u>	<u>10,405,042</u>

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

22. SEGMENT

The Group organized its operations into two segments: LiDAR segment and gas detection segment.

The table below provides a summary of the Group's operating segment results for the years ended December 31, 2021, 2022 and 2023:

	Year ended December 31,		
	2021 RMB	2022 RMB	2023 RMB
LiDAR segment			
Revenue:			
Product revenues	686,533	1,127,900	1,738,027
Service revenues	14,702	50,803	112,099
Cost:			
Cost of products sold	326,160	707,617	1,176,472
Cost of service revenues	4,609	12,683	30,329
Segment profit	370,466	458,403	643,325
Gas detection segment			
Gas detection product revenues	19,533	23,967	26,863
Cost of products sold	8,203	10,383	8,810
Segment profit	11,330	13,584	18,053
Total segment profit	381,796	471,987	661,378

On November 15, 2023, the Group disposed 100% equity interest of its subsidiary, Oxigraf, Inc. which consisted of the gas detection segment, and related US intellectual property right at a total consideration of US\$3.7 million. The gain on disposal was US\$0.9 million (equivalent to RMB6.1 million) and has been recognized in other operating income of the combined and consolidated statement of comprehensive income. This disposal did not meet the criteria to be presented as a discontinued operation. Upon this disposal, the Company will no longer report in the gas detection segment.

The following is a reconciliation of the reportable segments' measures of profit or loss to the Group's consolidated loss before income taxes:

	Year ended December 31,		
	2021 RMB	2022 RMB	2023 RMB
Total profit for reportable segments	381,796	471,987	661,378
Unallocated amounts*			
Sales and marketing expenses	(69,266)	(104,835)	(148,798)
General and administrative expenses	(236,713)	(201,007)	(320,144)
Research and development expenses	(368,435)	(555,179)	(790,547)
Other operating income, net	27,333	10,817	26,520
Interest income	32,584	58,734	99,813
Interest expenses	—	—	(3,069)
Foreign exchange (loss) gains	(13,275)	20,858	(452)
Other (loss) income, net	118	(2,161)	34
Loss before income tax	(245,858)	(300,786)	(475,265)

* The Group does not distinguish expenses between segments in its internal reporting, and reports expenses by nature as a whole.

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

22. SEGMENT (continued)

The following table summarizes the Group's long-term assets, including property and equipment, net, land-use rights, net, long-term investments, right-of-use assets, and other non-current assets by geographical region:

	As of December 31,	
	2022	2023
	RMB	RMB
Mainland China	665,511	1,144,643
Thailand	—	39,312
North America	14,351	2,146
Switzerland	—	103
Total long-term assets	679,862	1,186,204

23. EMPLOYEE BENEFIT*Mainland China Contribution Plan*

Full time employees of the Group in the PRC participate in a government-mandated defined contribution plan pursuant to which certain pension benefits, unemployment insurance, employee housing fund and other welfare benefits are provided to employees. PRC labor regulations require that the Group to accrue for these benefits based on a certain percentage of the employees' salaries. The total contribution for such employee benefits were RMB50,648, RMB82,877 and RMB122,844 for the years ended December 31, 2021, 2022 and 2023, respectively. The Group has no ongoing obligation to its employees subsequent to its contributions to the PRC plan.

24. STATUTORY RESERVES AND RESTRICTED NET ASSETS

The Group's entities in the PRC are required under PRC laws to distribute its after-tax profits of the current year and set aside at least 10% of its after-tax profits each year, if any, to fund certain statutory reserve funds until such reserve funds reach 50% of their registered capital. The statutory reserve funds are not distributable as cash dividends. The Group has no statutory reserve balance for the years ended December 31, 2022 and 2023.

The PRC entities with the Group are restricted from transferring their net assets to the Company, which include paid-in capital and statutory reserves. As of December 31, 2023, the balance of restricted net assets was RMB3,121,808.

25. COMMITMENTS AND CONTINGENCIES*Capital expenditure commitments related to the new manufacturing facility in Shanghai*

Future minimum capital payment under non-cancellable agreements are as follow:

	As of December 31,	
	2023	
	RMB	
2024	115,813	
Total	115,813	

NOTES TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data and otherwise noted)

25. COMMITMENTS AND CONTINGENCIES (continued)

Royalty fee commitments

The Group is obligated to make royalty payments to a third party from 2020 through 2030. The royalty payments for 2021 and 2022 should be US\$3.0 million. For each year starting from 2023, the royalty payment is determined to be the greater amount of a base payment of US\$3.0 million (except for the year of 2030, where the base payment shall be US\$0.3 million) or amount calculated based on a tiered percentage of net revenues. In particular, the percentage should be 4%, 3% and 2% for the net revenues of rotational scanning product from US\$0 to US\$425,000, from US\$425,000 to US\$2,925,000, and from US\$2,925,000 to above, respectively. Net sales do not include (a) taxes, tariffs, customs duties, excise, or other governmental charges (except income tax) levied and that are separately stated in an invoice, (b) reasonable charges for freight or insurance that are separately stated in an invoice and borne by the Group or its affiliates.

The actual royalty fees for the years ended December 31, 2021, 2022 and 2023 were RMB18,542, RMB18,044 and RMB35,288, respectively.

Contingencies

The Group may from time to time be subject to various legal or administrative claims and proceedings arising in the ordinary course of business.

On April 7, 2023, the Company and certain of its officers, directors, authorized U.S. representative, and IPO underwriters were named as defendants in a putative securities class action filed with federal court, alleging that the Company made false and misleading statements in its IPO registration statement.

On April 11, 2023, Ouster Inc. (“Ouster”) filed a complaint against the Company with the United States District Court for the District of Delaware (“Delaware Action”) for alleged patent infringement relating to the production, use, sale and/or importation of certain LiDAR systems and/or components thereof.

As these matters are in their preliminary stage, the Company cannot reasonably determine the outcome of these litigations and regulatory proceeding and potential loss, if any.

ADDITIONAL INFORMATION OF THE PARENT COMPANY
FINANCIAL STATEMENTS SCHEDULE I
HESAI GROUP
CONDENSED BALANCE SHEETS
AS OF DECEMBER 31, 2022 and 2023
(Amounts in thousands, except share and per share data and otherwise noted)

	As of December 31,		
	2022	2023	
	RMB	RMB	US\$ (Note 2)
ASSETS			
Cash and cash equivalents	35,411	363,778	51,237
Short-term investments	—	581,962	81,968
Prepayments and other current assets	1,041	8,005	1,127
Investments in subsidiaries	2,806,201	2,929,800	412,653
Property and equipment, net	7	5	1
TOTAL ASSETS	<u>2,842,660</u>	<u>3,883,550</u>	<u>546,986</u>
LIABILITIES AND SHAREHOLDERS' (DEFICIT) EQUITY			
Amounts due to subsidiaries	—	14,024	1,975
Accrued expenses and other current liabilities	927	7,208	1,015
TOTAL LIABILITIES	<u>927</u>	<u>21,232</u>	<u>2,990</u>
MEZZANINE EQUITY			
Redeemable shares (US\$0.0001 par value, 54,551,513 and nil shares issued and outstanding as of December 31, 2022 and December 31, 2023, respectively)	5,986,910	—	—
TOTAL MEZZANINE EQUITY	<u>5,986,910</u>	<u>—</u>	<u>—</u>
Shareholders' (deficit) equity			
Class A Ordinary shares (US\$0.0001 par value, 35,000,000 and 50,000,000 shares authorized, 30,033,379 shares issued and outstanding as of December 31, 2022 and 2023, respectively)	19	19	3
Class B Ordinary shares (US\$0.0001 par value, 150,000,000 and 900,000,000 shares authorized, 30,949,701 and 99,626,332 shares issued, 30,949,701 and 96,995,110 shares outstanding as of December 31, 2022 and 2023, respectively)	20	67	9
Additional paid-in capital	—	7,423,862	1,045,629
Subscription receivables	(310,227)	(292,721)	(41,229)
Accumulated other comprehensive (loss) income	(3,608)	38,440	5,414
Accumulated deficit	(2,831,381)	(3,307,349)	(465,830)
Total shareholders' (deficit) equity	<u>(3,145,177)</u>	<u>3,862,318</u>	<u>543,996</u>
TOTAL LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS' (DEFICIT) EQUITY	<u>2,842,660</u>	<u>3,883,550</u>	<u>546,986</u>

ADDITIONAL INFORMATION OF THE PARENT COMPANY
FINANCIAL STATEMENTS SCHEDULE I
HESAI GROUP
CONDENSED STATEMENTS OF
OPERATIONS AND COMPREHENSIVE LOSS
FOR THE YEARS ENDED DECEMBER 31, 2021, 2022 and 2023
(Amounts in thousands, except share and per share data and otherwise noted)

	For the years ended December 31,			
	2021	2022	2023	
	RMB	RMB	RMB	US\$ (Note 2)
Net revenues	—	—	—	—
General and administrative expenses	(146,838)	(37,105)	(98,099)	(13,817)
Interest income	—	—	42,402	5,972
Foreign exchange (loss) gain	(2,324)	2	(12)	(2)
Other income, net	34	—	—	—
Equity in deficit of subsidiaries	(95,699)	(263,662)	(420,259)	(59,192)
Net Loss	(244,827)	(300,765)	(475,968)	(67,039)
Deemed dividend	(2,211,330)	(446,419)	—	—
Net loss attributable to ordinary shareholders of the Company	(2,456,157)	(747,184)	(475,968)	(67,039)
Net Loss	(244,827)	(300,765)	(475,968)	(67,039)
Comprehensive loss, net of tax of nil:				
Foreign currency translation adjustments	9,083	(12,073)	42,048	5,922
Comprehensive loss	(235,744)	(312,838)	(433,920)	(61,117)

ADDITIONAL INFORMATION OF THE PARENT COMPANY
FINANCIAL STATEMENTS SCHEDULE I
HESAI GROUP
CONDENSED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2021, 2022 and 2023
(Amounts in thousands, except share and per share data and otherwise noted)

	Year ended December 31,			
	2021 RMB	2022 RMB	2023 RMB	US\$ (Note 2)
Cash flows from operating activities:				
Net loss	(244,827)	(300,765)	(475,968)	(67,039)
<i>Adjustments to reconcile net loss to net cash used in operating activities:</i>				
Depreciation and amortization	—	2	3	1
Loss from equity in earnings of subsidiaries	95,699	263,662	420,259	59,192
Share-based compensation	35,056	33,342	42,379	5,969
Fair value change of short-term investments	—	—	(12,500)	(1,761)
Foreign exchange loss (gain), net	2,324	(2)	12	2
<i>Changes in operating assets and liabilities:</i>				
Prepayments and other current assets	(496)	(545)	(1,544)	(217)
Amounts due from related parties	(255)	—	—	—
Accrued expenses and other current liabilities	24,746	2,611	6,281	885
Net cash used in operating activities	(87,753)	(1,695)	(21,078)	(2,968)
Cash flows from investing activities:				
Purchases of short-term investments	—	—	(742,287)	(104,552)
Maturity of short-term investments	—	—	176,302	24,832
Purchases of property and equipment	—	(10)	—	—
Investments in subsidiaries	(2,787,570)	—	(379,237)	(53,414)
Net cash used in investing activities	(2,787,570)	(10)	(945,222)	(133,134)
Cash flows from financing activities:				
Cash contribution from shareholders in connection with the 2021 Reorganization	507,620	—	17,506	2,466
Proceeds from issuance of convertible loans	1,950,338	—	—	—
Proceeds from issuance of ordinary shares	453,978	—	1,225,470	172,604
Payment of offering costs	—	—	(22,828)	(3,215)
Proceeds from issuance of ordinary shares upon the exercise of stock options	—	—	2,872	405
Collection of payments due to subsidiaries	—	—	14,024	1,975
Net cash provided by financing activities	2,911,936	—	1,237,044	174,235
Net increase (decrease) in cash and cash equivalents	36,613	(1,705)	270,744	38,133
Cash and cash equivalents, beginning of the year	—	36,160	35,411	4,988
Effect of foreign exchange rate changes on cash and cash equivalents	(453)	956	57,623	8,116
Cash and cash equivalents, end of the year	36,160	35,411	363,778	51,237
Supplemental disclosure of non-cash financing activities:				
Accrued purchases of property and equipment	1,950,338	—	—	—
Accrued offering cost	—	480	—	—

**ADDITIONAL FINANCIAL INFORMATION OF PARENT COMPANY
FINANCIAL STATEMENTS SCHEDULE I
HESAI GROUP
FINANCIAL INFORMATION OF PARENT COMPANY
NOTES TO SCHEDULE I**

1. Schedule I has been provided pursuant to the requirements of Rule 12-04(a) and 5-04(c) of SEC Regulation S-X, which requires condensed financial information as to the financial position, changes in financial position and results of operations of a parent company as of the same date and for the same period for which audited financial statements have been presented when the restricted net assets of consolidated subsidiaries exceed 25 percent of consolidated net assets as of the end of the most recently completed fiscal year. The Company does not include condensed financial information as to the changes in deficit as such financial information is the same as the consolidated statements of changes in shareholders' deficit.

2. The condensed financial information has been prepared using the same accounting policies as set out in the financial statements except that the equity method has been used to account for investments in its subsidiaries. For the parent company, the Company records its investments in subsidiaries under the equity method of accounting as prescribed in ASC 323, Investments - Equity Method and Joint Ventures. Such investments are presented on the Condensed Balance Sheet as "Investment in subsidiaries" and the subsidiaries' profit or loss as "Loss from equity in earnings of subsidiaries" on the Condensed Statements of Comprehensive Loss. Ordinarily under the equity method, an investor in an equity method investee would cease to recognize its share of the losses of an investee once the carrying value of the investment has been reduced to nil absent an undertaking by the investor to provide continuing support and fund losses. For the purpose of this Schedule I, the parent company has continued to reflect its share, based on its proportionate interest, of the losses of subsidiaries regardless of the carrying value of the investment even though the parent company is not obligated to provide continuing support or fund losses.

3. As of December 31, 2022 and 2023, there were no material contingencies, significant provisions of long-term obligations, guarantees of the Company.

4. Translations of balances from RMB into US\$ as of and for the year ended December 31, 2023 are solely for the convenience of the readers and were calculated at the rate of US\$1.00= RMB7.0999, as set forth in H.10 statistical release of the Federal Reserve Board on December 29, 2023. The translation is not intended to imply that the RMB amounts could have been, or could be, converted, realized or settled into United States dollars at that rate on December 31, 2023, or at any other rate.

Description of Rights of Each Class of Securities
Registered under Section 12 of the Securities Exchange Act of 1934 (the “Exchange Act”)

Class B ordinary shares, par value US\$0.0001 per share, of Hesai Group (“we,” “our,” “our company,” or “us”) are registered under Section 12(b) of the Exchange Act, and our American depositary shares (“ADSs”), each representing one Class B ordinary share, are listed and traded on the Nasdaq Global Select Market. This exhibit contains a description of the rights of (i) the holders of Class B ordinary shares and (ii) the holders of ADSs. Class B ordinary shares underlying the ADSs are held by Deutsche Bank Trust Company Americas, as depositary, and holders of ADSs will not be treated as holders of the Class B ordinary shares.

Description of Class B Ordinary Shares

The following is a summary of material provisions of our currently effective second amended and restated memorandum and articles of association (the “Memorandum and Articles of Association”), as well as the Companies Act (As Revised) of the Cayman Islands (the “Companies Act”) insofar as they relate to the material terms of our ordinary shares. Notwithstanding this, because it is a summary, it may not contain all the information that you may otherwise deem important. For more complete information, you should read the entire Memorandum and Articles of Association, which has been filed with the SEC as an exhibit to our Registration Statement on Form F-1, as amended (File No. 333-269247), initially filed with the Securities and Exchange Commission on January 17, 2023.

Type and Class of Securities (Item 9.A.5 of Form 20-F)

Each Class B ordinary share has US\$0.0001 par value. The number of Class B ordinary shares that have been issued as of the last day of the financial year ended December 31, 2022 is provided on the cover of the annual report on Form 20-F filed in April, 2023 (the “2022 Form 20-F”). Our Class B ordinary shares may be held in either certificated or uncertificated form.

Preemptive Rights (Item 9.A.3 of Form 20-F)

Our shareholders do not have preemptive rights.

Limitations or Qualifications (Item 9.A.6 of Form 20-F)

We have a dual-class voting structure such that our authorized and issued ordinary shares consist of Class B ordinary shares and Class A ordinary shares (with certain shares remaining undesignated, with power for our directors to designate and issue such classes of shares as they think fit). In respect of matters requiring the votes of shareholders, holders of Class B ordinary shares are entitled to one vote per share, while holders of Class A ordinary shares are entitled to ten votes per share based on our dual-class share structure. Each Class A ordinary share is convertible into one Class B ordinary share at any time by the holder thereof, while Class B ordinary shares are not convertible into Class A ordinary shares under any circumstances. Upon any direct or indirect sale, transfer, assignment or disposition of Class A ordinary shares by a holder thereof, or the direct or indirect transfer or assignment of the voting power attached to Class A ordinary shares through voting proxy or otherwise, to any person or entity that is neither an affiliate of such holder nor another holder of Class A ordinary shares or an affiliate of such another holder, such Class A ordinary shares shall be automatically and immediately converted into the same number of Class B ordinary shares. In addition, Class A ordinary shares will also be automatically and immediately converted into the same number of Class B ordinary shares upon any direct or indirect sale, transfer, assignment or disposition of a majority of the issued and outstanding voting securities of, or the direct or indirect transfer or assignment of the voting power attached to such voting securities through voting proxy or otherwise, or the direct or indirect sale, transfer, assignment or disposition of all or substantially all of the assets of, a holder of Class A ordinary shares that is an entity to any person that is neither an affiliate of such holder nor another holder of Class A ordinary shares or an affiliate of such holder.

Rights of Other Types of Securities (Item 9.A.7 of Form 20-F)

Not applicable.

Rights of Class B Ordinary Shares (Item 10.B.3 of Form 20-F)

Ordinary Shares

Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of our Class A ordinary shares and Class B ordinary shares will have the same rights except for voting and conversion rights. Our ordinary shares are issued in registered form and are issued when registered in our register of members (shareholders). We may not issue shares to bearer. Our shareholders who are nonresidents of the Cayman Islands may freely hold and vote their shares.

Conversion

Class A ordinary shares may be converted into the same number of Class B ordinary shares by the holders thereof at any time, while Class B ordinary shares cannot be converted into Class A ordinary shares under any circumstances. Upon any direct or indirect sale, transfer, assignment or disposition of Class A ordinary shares by a holder thereof, or the direct or indirect transfer or assignment of the voting power attached to such Class A ordinary shares through voting proxy or otherwise, to any person other than an affiliate of such holder or another holder of Class A ordinary shares or its affiliates, such Class A ordinary shares shall be automatically and immediately converted into the same number of Class B ordinary shares. In addition, upon any direct or indirect sale, transfer, assignment or disposition of a majority of the issued and outstanding voting securities of, or the direct or indirect transfer or assignment of the voting power attached to such voting securities through voting proxy or otherwise, or the direct or indirect sale, transfer, assignment or disposition of all or substantially all of the assets of, a holder of Class A ordinary shares that is an entity to any person other than an affiliate of such holder or another holder of Class A ordinary shares or its affiliates, such Class A ordinary shares shall be automatically and immediately converted into the same number of Class B ordinary shares.

Dividends

The holders of our ordinary shares are entitled to such dividends as may be declared by our board of directors or declared by our shareholders by ordinary resolution (*provided* that no dividend may be declared by our shareholders which exceeds the amount recommended by our directors). Our Memorandum and Articles of Association provide that dividends may be declared and paid out of the funds of our Company lawfully available therefor. Under the laws of the Cayman Islands, our company may pay a dividend out of either profit or share premium account; *provided* that in no circumstances may a dividend be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business.

Voting Rights

Holders of Class A ordinary shares and Class B ordinary shares shall, at all times, vote together as one class on all matters submitted to a vote by the members at any general meeting of our company. On all matters subject to a vote at general meetings of our company, (1) on a show of hands, each shareholder shall be entitled to one vote, whereas (2), on a poll, each Class B ordinary share shall be entitled to one vote, and each Class A ordinary share shall be entitled to 10 votes. Voting at any meeting of shareholders is by show of hands unless a poll is demanded (before or on the declaration of the result of the show of hands). A poll may be demanded by the chairman of such meeting or any shareholder holding not less than 10% of the voting rights attaching to the shares present at the meeting (whether in person or by proxy, or by means of communications facilities as may be permitted under our Memorandum and Articles of Association).

An ordinary resolution to be passed at a meeting by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast at a meeting, while a special resolution requires the affirmative vote of no less than two-thirds of the votes attaching to the ordinary shares cast at a meeting. A special resolution will be required for important matters such as a change of name or making changes to our Memorandum and Articles of Association. Our shareholders may, among other things, subdivide or consolidate the shares of our company by ordinary resolution.

General Meetings of Shareholders

As a Cayman Islands exempted company, we are not obliged by the Companies Act to call shareholders' annual general meetings. Our Memorandum and Articles of Association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we shall specify the meeting as such in the notices calling it, and the annual general meeting shall be held at such time and place as may be determined by our directors.

Shareholders' general meetings may be convened by the chairman of our board of directors or by a majority of our directors. Advance notice of at least seven calendar days is required for the convening of any general meeting of our shareholders. A quorum required for any general meeting of shareholders consists of at least one shareholder present at the meeting (whether in person or by proxy, or by means of communications facilities as may be permitted under our Memorandum and Articles of Association), holding share which carry in aggregate (or representing by proxy) not less than one-third of all votes attaching to the issued and outstanding shares in our Company entitled to vote at a general meeting.

The Companies Act provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our Memorandum and Articles of Association provide that upon the requisition of any one or more of our shareholders who together hold shares which carry in aggregate not less than one-third of all votes attaching to the issued and outstanding shares of our company entitled to vote at general meetings, our board will convene an extraordinary general meeting and put the resolutions so requisitioned to a vote at such meeting. However, our Memorandum and Articles of Association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

Transfer of Ordinary Shares

Subject to the restrictions as set out below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share that is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of ordinary shares;
- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four; and
- a fee of such maximum sum as the Nasdaq Stock Market may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they shall, within three calendar months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, on 10 calendar days' notice being given by advertisement in such one or more newspapers, by electronic means or by any other means in accordance with the rules of the Nasdaq Stock Market, be suspended and the register of members closed at such times and for such periods as our board of directors may from time to time determine; provided, however, that the registration of transfers shall not be suspended nor the register of members closed for more than 30 calendar days in any calendar year.

Liquidation

On the winding up of our company, if the assets available for distribution amongst our shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus shall be distributed among our shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay the whole of the share capital, the assets will be distributed so that, as nearly as may be, the losses are borne by our shareholders in proportion to the par value of the shares held by them.

Calls on Shares and Forfeiture of Shares.

Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 calendar days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption, Repurchase and Surrender of Shares

We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders of these shares, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by our shareholders by ordinary resolutions. Our company may also repurchase any of our shares on such terms and in such manner as have been approved by our board of directors or by an ordinary resolution of our shareholders. Under the Companies Act, the redemption or repurchase of any share may be paid out of our Company's profits or out of the proceeds of a new issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if our company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Requirements to Change the Rights of Holders of Class B Ordinary Shares (Item 10.B.4 of Form 20-F)

Variations of Rights of Shares

If at any time, our share capital is divided into different classes of shares, the rights attached to any class of shares may, subject to any rights or restrictions the time being attached to any class, only be materially adversely varied with the consent in writing of the holders of at least two-thirds (2/3) of the issued shares of that class or with the sanction of an ordinary resolution passed at a separate meeting of the holders of the shares of that class. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, subject to any rights or restrictions for the time being attached to the shares of that class, be deemed to be materially adversely varied by the creation, allotment or issue of further shares ranking *pari passu* with or subsequent to them, or the redemption or purchase of any shares of any class by our company. The rights of the holders of shares shall not be deemed to be materially adversely varied by the creation or issue of shares with preferred or other rights including, without limitation, the creation of shares with enhanced or weighted voting rights.

Limitations on the Rights to Own Class B Ordinary Shares (Item 10.B.6 of Form 20-F)

There are no limitations under the laws of the Cayman Islands or under the Memorandum and Articles of Association that limit the right of non-resident or foreign owners to hold or vote Class B ordinary shares.

Provisions Affecting Any Change of Control (Item 10.B.7 of Form 20-F)

Anti-Takeover Provisions. Some provisions of our Memorandum and Articles of Association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that:

- authorize our board of directors to issue preference shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preference shares without any further vote or action by our shareholders; and
- limit the ability of shareholders to requisition and convene general meetings of shareholders.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our Memorandum and Articles of Association for a proper purpose and for what they believe in good faith to be in the best interests of our company.

Ownership Threshold (Item 10.B.8 of Form 20-F)

There are no provisions under Cayman Islands law applicable to us, or under the Memorandum and Articles of Association, that require us to disclose shareholder ownership above any particular ownership threshold.

Differences Between the Law of Different Jurisdictions (Item 10.B.9 of Form 20-F)

The Companies Act of the Cayman Islands is derived, to a large extent, from the older Companies Acts of England but does not follow recent English statutory enactments and, accordingly, there are significant differences between the Companies Act of the Cayman Islands and the current Companies Act of England. In addition, the Companies Act of the Cayman Islands differs from laws applicable to U.S. corporations and their shareholders. Set forth below is a summary of certain significant differences between the provisions of the Companies Act applicable to us and the laws applicable to companies incorporated in the United States and their shareholders.

Mergers and Similar Arrangements

The Companies Act permits mergers and consolidations between Cayman Islands companies and between Cayman Islands companies and non-Cayman Islands companies. For these purposes, (i) “merger” means the merging of two or more constituent companies and the vesting of their undertaking, property and liabilities in one of such companies as the surviving company, and (ii) a “consolidation” means the combination of two or more constituent companies into a consolidated company and the vesting of the undertaking, property and liabilities of such companies to the consolidated company. In order to effect such a merger or consolidation, the directors of each constituent company must approve a written plan of merger or consolidation, which must then be authorized by (a) a special resolution of the shareholders of each constituent company, and (b) such other authorization, if any, as may be specified in such constituent company’s articles of association. The written plan of merger or consolidation must be filed with the Registrar of Companies of the Cayman Islands together with a declaration as to the solvency of the surviving or consolidated company, a declaration as to the assets and liabilities of each constituent company and an undertaking that a copy of the certificate of merger or consolidation will be given to the members and creditors of each constituent company and that notification of the merger or consolidation will be published in the Cayman Islands Gazette. Court approval is not required for a merger or consolidation that is effected in compliance with these statutory procedures.

A merger between a Cayman parent company and its Cayman subsidiary or subsidiaries does not require authorization by a resolution of shareholders of that Cayman subsidiary if a copy of the plan of merger is given to every member of that Cayman subsidiary to be merged unless that member agrees otherwise. For this purpose a company is a “parent” of a subsidiary if it holds issued shares that together represent at least 90.0% of the votes at a general meeting of the subsidiary.

The consent of each holder of a fixed or floating security interest over a constituent company is required unless this requirement is waived by a court in the Cayman Islands.

Save in certain limited circumstances, a shareholder of a Cayman constituent company who dissents from the merger or consolidation is entitled to payment of the fair value of his shares (which, if not agreed between the parties, will be determined by the Cayman Islands court) upon dissenting to the merger or consolidation; provided that the dissenting shareholder complies strictly with the procedures set out in the Companies Act. The exercise of dissenter rights will preclude the exercise by the dissenting shareholder of any other rights to which he or she might otherwise be entitled by virtue of holding shares, save for the right to seek relief on the grounds that the merger or consolidation is void or unlawful.

Separate from the statutory provisions relating to mergers and consolidations, the Companies Act also contains statutory provisions that facilitate the reconstruction and amalgamation of companies by way of schemes of arrangement; provided that the arrangement is approved by (a) 75% in value of the shareholders or class of shareholders, or (b) a majority in number representing 75% in value of the creditors or class of creditors, as the case may be, that are present and voting either in person or by proxy at a meeting, or meetings, convened for that purpose. The convening of the meetings and subsequently the arrangement must be sanctioned by the Grand Court of the Cayman Islands. While a dissenting shareholder has the right to express to the court the view that the transaction ought not to be approved, the court can be expected to approve the arrangement if it determines that:

- the statutory provisions as to the required majority vote have been met;
- the shareholders have been fairly represented at the meeting in question and the statutory majority are acting bona fide without coercion of the minority to promote interests adverse to those of the class;
- the arrangement is such that may be reasonably approved by an intelligent and honest man of that class acting in respect of his interest; and
- the arrangement is not one that would more properly be sanctioned under some other provision of the Companies Act.

The Companies Act also contains a statutory power of compulsory acquisition, which may facilitate the “squeeze out” of dissentient minority shareholders upon a tender offer. When a tender offer is made and accepted by holders of 90.0% of the shares affected within four months, the offeror may, within a two-month period commencing on the expiration of such four-month period, require the holders of the remaining shares to transfer such shares to the offeror on the terms of the offer. An objection can be made to the Grand Court of the Cayman Islands but this is unlikely to succeed in the case of an offer that has been so approved unless there is evidence of fraud, bad faith or collusion.

If an arrangement and reconstruction by way of scheme of arrangement is thus approved and sanctioned, or if a tender offer is made and accepted, in accordance with the foregoing statutory procedures, a dissenting shareholder would have no rights comparable to appraisal rights, which would otherwise ordinarily be available to dissenting shareholders of Delaware corporations, providing rights to receive payment in cash for the judicially determined value of the shares.

Shareholders' Suits

In principle, we will normally be the proper plaintiff to sue for a wrong done to us as a company, and as a general rule a derivative action may not be brought by a minority shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority in the Cayman Islands, the Cayman Islands court can be expected to follow and apply the common law principles (namely the rule in *Foss v. Harbottle* and the exceptions thereto) so that a non-controlling shareholder may be permitted to commence a class action against or derivative actions in the name of the company to challenge actions where:

- a company acts or proposes to act illegally or ultra vires (and is therefore incapable of ratification by the shareholders);
- the act complained of, although not ultra vires, could only be effected duly if authorized by more than a simple majority vote that has not been obtained; and

those who control the company are perpetrating a “fraud on the minority.”

Indemnification of Directors and Executive Officers and Limitation of Liability

Cayman Islands law does not limit the extent to which a company’s memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. Our Memorandum and Articles of Association provide that we shall indemnify our directors and officers against all actions, proceedings, costs, charges, expenses, losses, damages or liabilities incurred or sustained by such directors or officer, other than by reason of such person’s dishonesty, willful default or fraud, in or about the conduct of our company’s business or affairs (including as a result of any mistake of judgment) or in the execution or discharge of his duties, powers, authorities or discretions, including, without prejudice to the generality of the foregoing, any costs, expenses, losses or liabilities incurred by such director or officer in defending (whether successfully or otherwise) any civil proceedings concerning our company or its affairs in any court whether in the Cayman Islands or elsewhere. This standard of conduct is generally the same as permitted under the Delaware General Corporation Law for a Delaware corporation.

In addition, we have entered into indemnification agreements with our directors and executive officers that provide such persons with additional indemnification beyond that provided in our Memorandum and Articles of Association.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Directors’ Fiduciary Duties

Under Delaware corporate law, a director of a Delaware corporation has a fiduciary duty to the corporation and its shareholders. This duty has two components: the duty of care and the duty of loyalty. The duty of care requires that a director act in good faith, with the care that an ordinarily prudent person would exercise under similar circumstances. Under this duty, a director must inform himself of, and disclose to shareholders, all material information reasonably available regarding a significant transaction. The duty of loyalty requires that a director act in a manner he reasonably believes to be in the best interests of the corporation. He must not use his corporate position for personal gain or advantage. This duty prohibits self-dealing by a director and mandates that the best interest of the corporation and its shareholders take precedence over any interest possessed by a director, officer or controlling shareholder and not shared by the shareholders generally. In general, actions of a director are presumed to have been made on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the corporation. However, this presumption may be rebutted by evidence of a breach of one of the fiduciary duties. Should such evidence be presented concerning a transaction by a director, the director must prove the procedural fairness of the transaction, and that the transaction was of fair value to the corporation.

As a matter of Cayman Islands law, a director of a Cayman Islands company is in the position of a fiduciary with respect to the company and therefore it is considered that he owes the following duties to the company — a duty to act bona fide in the best interests of the company, a duty not to make a profit based on his position as director (unless the company permits him to do so), a duty not to put himself in a position where the interests of the company conflict with his personal interest or his duty to a third party, and a duty to exercise powers for the purpose for which such powers were intended. A director of a Cayman Islands company owes to the company a duty to act with skill and care. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands.

Shareholder Action by Written Consent

Under the Delaware General Corporation Law, a corporation may eliminate the right of shareholders to act by written consent by amendment to its certificate of incorporation. Cayman Islands law and our Memorandum and Articles of Association provide that our shareholders may approve corporate matters by way of a unanimous written resolution signed by or on behalf of each shareholder who would have been entitled to vote on such matter at a general meeting without a meeting being held.

Shareholder Proposals

Under the Delaware General Corporation Law, a shareholder has the right to put any proposal before the annual meeting of shareholders; provided that it complies with the notice provisions in the governing documents. A special meeting may be called by the board of directors or any other person authorized to do so in the governing documents, but shareholders may be precluded from calling special meetings.

The Companies Act provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our Memorandum and Articles of Association allow any one or more of our shareholders who together hold shares that carry in aggregate not less than one-third of the total number of votes attaching to all issued and outstanding shares of our company entitled to vote at general meetings to requisition an extraordinary general meeting of our shareholders, in which case our board is obliged to convene an extraordinary general meeting and to put the resolutions so requisitioned to a vote at such meeting. Other than this right to requisition a shareholders' meeting, our Memorandum and Articles of Association do not provide our shareholders with any other right to put proposals before annual general meetings or extraordinary general meetings. As an exempted Cayman Islands company, we are not obliged by law to call shareholders' annual general meetings.

Cumulative Voting

Under the Delaware General Corporation Law, cumulative voting for elections of directors is not permitted unless the corporation's certificate of incorporation specifically provides for it. Cumulative voting potentially facilitates the representation of minority shareholders on a board of directors since it permits the minority shareholder to cast all the votes to which the shareholder is entitled on a single director, which increases the shareholder's voting power with respect to electing such director. There are no prohibitions in relation to cumulative voting under the laws of the Cayman Islands but our Memorandum and Articles of Association do not provide for cumulative voting. As a result, our shareholders are not afforded any less protections or rights on this issue than shareholders of a Delaware corporation.

Removal of Directors

Under the Delaware General Corporation Law, a director of a corporation with a classified board may be removed only for cause with the approval of a majority of the issued and outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. Under our Memorandum and Articles of Association, directors may be removed with or without cause, by an ordinary resolution of our shareholders (except with regard to the removal of the chairman, who may only be removed from office by a special resolution). A director will also cease to be a director if he (i) becomes bankrupt or makes any arrangement or composition with his creditors; (ii) dies or is found to be or becomes of unsound mind; (iii) resigns his office by notice in writing; (iv) without special leave of absence from our board, is absent from meetings of our board for three consecutive meetings and our board resolves that his office be vacated; or (v) is removed from office pursuant to any other provision of our Memorandum and Articles of Association.

Transactions with Interested Shareholders

The Delaware General Corporation Law contains a business combination statute applicable to Delaware corporations whereby, unless the corporation has specifically elected not to be governed by such statute by amendment to its certificate of incorporation, it is prohibited from engaging in certain business combinations with an "interested shareholder" for three years following the date that such person becomes an interested shareholder. An interested shareholder generally is a person or a group who or which owns or owned 15% or more of the target's outstanding voting shares within the past three years. This has the effect of limiting the ability of a potential acquirer to make a two-tiered bid for the target in which all shareholders would not be treated equally. The statute does not apply if, among other things, prior to the date on which such shareholder becomes an interested shareholder, the board of directors approves either the business combination or the transaction that resulted in the person becoming an interested shareholder. This encourages any potential acquirer of a Delaware corporation to negotiate the terms of any acquisition transaction with the target's board of directors.

Cayman Islands law has no comparable statute. As a result, we cannot avail ourselves of the types of protections afforded by the Delaware business combination statute. However, although Cayman Islands law does not regulate transactions between a company and its significant shareholders, the directors of our Company are required to comply with fiduciary duties, which they owe to our Company under Cayman Islands laws, including the duty to ensure that, in their opinion, any such transactions must be entered into bona fide in the best interests of the company and not with the effect of constituting a fraud on the minority shareholders.

Restructuring

A company may present a petition to the Grand Court of the Cayman Islands for the appointment of a restructuring officer on the grounds that the company:

- (a) is or is likely to become unable to pay its debts; and
- (b) intends to present a compromise or arrangement to its creditors (or classes thereof) either pursuant to the Companies Act, the law of a foreign country or by way of a consensual restructuring.

The Grand Court may, among other things, make an order appointing a restructuring officer upon hearing of such petition, with such powers and to carry out such functions as the court may order. At any time (i) after the presentation of a petition for the appointment of a restructuring officer but before an order for the appointment of a restructuring officer has been made, and (ii) when an order for the appointment of a restructuring officer is made, until such order has been discharged, no suit, action or other proceedings (other than criminal proceedings) shall be proceeded with or commenced against the company, no resolution to wind up the company shall be passed, and no winding up petition may be presented against the company, except with the leave of the court. However, notwithstanding the presentation of a petition for the appointment of a restructuring officer or the appointment of a restructuring officer, a creditor who has security over the whole or part of the assets of the company is entitled to enforce the security without the leave of the court and without reference to the restructuring officer appointed.

Dissolution; Winding Up

Under the Delaware General Corporation Law, unless the board of directors approves the proposal to dissolve, dissolution must be approved by shareholders holding 100% of the total voting power of the corporation. Only if the dissolution is initiated by the board of directors may it be approved by a simple majority of the corporation's outstanding shares. Delaware law allows a Delaware corporation to include in its certificate of incorporation a supermajority voting requirement in connection with dissolutions initiated by the board.

Under Cayman Islands law, a company may be wound up by either an order of the courts of the Cayman Islands or by a special resolution of its members or, if the company is unable to pay its debts as they fall due, by an ordinary resolution of its members. The court has authority to order winding up in a number of specified circumstances including where it is, in the opinion of the court, just and equitable to do so. Under the Companies Act, our company may be voluntarily wound up by a special resolution of our shareholders, or by an ordinary resolution of our shareholders, if our company is unable to pay its debts as they fall due.

Variation of Rights of Shares

Under the Delaware General Corporation Law, a corporation may vary the rights of a class of shares with the approval of a majority of the outstanding shares of such class, unless the certificate of incorporation provides otherwise. Under our Memorandum and Articles of Association, if our share capital is divided into more than one class of shares, we may materially adversely vary the rights attached to any class only with the written consent of the holders of at least two-thirds of the issued shares of that class or with the sanction of a resolution passed by a majority of the votes cast at a separate meeting of the holders of the shares of that class.

Amendment of Governing Documents

Under the Delaware General Corporation Law, a corporation's governing documents may be amended with the approval of a majority of the outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. Under the Companies Act and our Memorandum and Articles of Association, our Memorandum and Articles of Association may only be amended by a special resolution of our shareholders.

Rights of Non-Resident or Foreign Shareholders

There are no limitations imposed by our Memorandum and Articles of Association on the rights of non-resident or foreign shareholders to hold or exercise voting rights on our shares. In addition, there are no provisions in our Memorandum and Articles of Association that require our Company to disclose shareholder ownership above any particular ownership threshold.

Changes in Capital (Item 10.B.10 of Form 20-F)

Our shareholders may from time to time by ordinary resolution:

- increase our share capital by such sum, to be divided into shares of such classes and amount, as the resolution shall prescribe;
- consolidate and divide all or any of our share capital into shares of a larger amount than our existing shares;
- sub-divide our existing shares, or any of them into shares of a smaller amount, provided that in the subdivision the proportion between the amount paid and the amount, if any, unpaid on each reduced share shall be the same as it was in case of the share from which the reduced share is derived; or
- cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person and diminish the amount of our share capital by the amount of the shares so canceled.

Our shareholders may by special resolution reduce our share capital or any capital redemption reserve in any manner permitted by law.

Debt Securities (Item 12.A of Form 20-F)

Not applicable.

Warrants and Rights (Item 12.B of Form 20-F)

Not applicable.

Other Securities (Item 12.C of Form 20-F)

Not applicable.

Description of American Depositary Shares (Items 12.D.1 and 12.D.2 of Form 20-F)

Deutsche Bank Trust Company Americas, as depositary, registers and delivers the ADSs. Each ADS represents ownership of one Class B ordinary shares, deposited with Deutsche Bank AG, Hong Kong Branch, as custodian for the depositary. Each ADS also represents ownership of any other securities, cash or other property which may be held by the depositary. The depositary's corporate trust office at which the ADSs are administered is located at 1 Columbus Circle, New York, NY 10019, USA. The principal executive office of the depositary is located at 1 Columbus Circle, New York, NY 10019, USA.

The Direct Registration System, or DRS, is a system administered by The Depository Trust Company, or DTC, pursuant to which the depositary may register the ownership of uncertificated ADSs, which ownership shall be evidenced by periodic statements issued by the depositary to the ADS holders entitled thereto.

We will not treat ADS holders as our shareholders and accordingly, our ADS holders will not have shareholder rights. Cayman Islands law governs shareholder rights. The depositary will be the holder of the Class B ordinary shares underlying the ADSs. ADS holders will have ADS holder rights. A deposit agreement among us, the depositary and ADS holders, and the beneficial owners of ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. The laws of the State of New York govern the deposit agreement and the ADSs.

The following is a summary of the material provisions of the deposit agreement. For more complete information, you should read the entire deposit agreement and the form of American Depositary Receipt.

Holding the ADSs***How will you hold your ADSs?***

You may hold ADSs either (1) directly (a) by having an American Depositary Receipt, or ADR, which is a certificate evidencing a specific number of ADSs, registered in your name, or (b) by holding ADSs in DRS, or (2) indirectly through your broker or other financial institution. If you hold ADSs directly, you are an ADS holder. This description assumes you hold your ADSs directly. ADSs will be issued through DRS, unless you specifically request certificated ADRs. If you hold the ADSs indirectly, you must rely on the procedures of your broker or other financial institution to assert the rights of ADS holders described in this section. You should consult with your broker or financial institution to find out what those procedures are.

Dividends and Other Distributions

How will you receive dividends and other distributions on the shares?

The depositary has agreed to pay you the cash dividends or other distributions it or the custodian receives on Class B ordinary shares or other deposited securities, after deducting its fees and expenses. You will receive these distributions in proportion to the number of Class B ordinary shares your ADSs represent as of the record date (which will be as close as practicable to the record date for our Class B ordinary shares) set by the depositary with respect to the ADSs.

Cash. The depositary will convert or cause to be converted any cash dividend or other cash distribution we pay on the Class B ordinary shares or any net proceeds from the sale of any Class B ordinary shares, rights, securities or other entitlements under the terms of the deposit agreement into U.S. dollars if it can do so on a practicable basis, and can transfer the U.S. dollars to the United States and will distribute promptly the amount thus received. If the depositary shall determine in its judgment that such conversions or transfers are not practical or lawful or if any government approval or license is needed and cannot be obtained at a reasonable cost within a reasonable period or otherwise sought, the deposit agreement allows the depositary to distribute the foreign currency only to those ADS holders to whom it is possible to do so. It will hold or cause the custodian to hold the foreign currency it cannot convert for the account of the ADS holders who have not been paid and such funds will be held for the respective accounts of the ADS holders. It will not invest the foreign currency and it will not be liable for any interest for the respective accounts of the ADS holders.

Before making a distribution, any taxes or other governmental charges, together with fees and expenses of the depositary, that must be paid, will be deducted. It will distribute only whole U.S. dollars and cents and will round down fractional cents to the nearest whole cent. If the exchange rates fluctuate during a time when the depositary cannot convert the foreign currency, you may lose some or all of the value of the distribution.

Shares. For any Class B ordinary shares we distribute as a dividend or free distribution, either (1) the depositary will distribute additional ADSs representing such Class B ordinary shares or (2) existing ADSs as of the applicable record date will represent rights and interests in the additional Class B ordinary shares distributed, to the extent reasonably practicable and permissible under law, in either case, net of applicable fees, charges and expenses incurred by the depositary and taxes and/or other governmental charges. The depositary will only distribute whole ADSs. It will try to sell Class B ordinary shares which would require it to deliver a fractional ADS and distribute the net proceeds in the same way as it does with cash. The depositary may sell a portion of the distributed Class B ordinary shares sufficient to pay its fees and expenses, and any taxes and governmental charges, in connection with that distribution.

Elective Distributions in Cash or Shares. If we offer holders of our Class B ordinary shares the option to receive dividends in either cash or shares, the depositary, after consultation with us and having received timely notice as described in the deposit agreement of such elective distribution by us, has discretion to determine to what extent such elective distribution will be made available to you as a holder of the ADSs. We must first timely instruct the depositary to make such elective distribution available to you and furnish it with satisfactory evidence that it is legal to do so. The depositary could decide it is not legal or reasonably practicable to make such elective distribution available to you. In such case, the depositary shall, on the basis of the same determination as is made in respect of the Class B ordinary shares for which no election is made, distribute either cash in the same way as it does in a cash distribution, or additional ADSs representing Class B ordinary shares in the same way as it does in a share distribution. The depositary is not obligated to make available to you a method to receive the elective dividend in shares rather than in ADSs. There can be no assurance that you will be given the opportunity to receive elective distributions on the same terms and conditions as the holders of Class B ordinary shares.

Rights to Purchase Additional Shares. If we offer holders of our Class B ordinary shares any rights to subscribe for additional shares, the depositary shall, having received timely notice as described in the deposit agreement of such distribution by us, consult with us, and we must determine whether it is lawful and reasonably practicable to make these rights available to you. We must first instruct the depositary to make such rights available to you and furnish the depositary with satisfactory evidence that it is legal to do so. If the depositary decides it is not legal or reasonably practicable to make the rights available but that it is lawful and reasonably practicable to sell the rights, the depositary will endeavor to sell the rights and in a riskless principal capacity or otherwise, at such place and upon such terms (including public or private sale) as it may deem proper distribute the net proceeds in the same way as it does with cash. The depositary will allow rights that are not distributed or sold to lapse. In that case, you will receive no value for them.

If the depositary makes rights available to you, it will establish procedures to distribute such rights and enable you to exercise the rights upon your payment of applicable fees, charges and expenses incurred by the depositary and taxes and/or other governmental charges. The depositary shall not be obliged to make available to you a method to exercise such rights to subscribe for Class B ordinary shares (rather than ADSs).

U.S. securities laws may restrict transfers and cancellation of the ADSs represented by Class B ordinary shares purchased upon exercise of rights. For example, you may not be able to trade these ADSs freely in the United States. In this case, the depositary may deliver restricted depositary shares that have the same terms as the ADSs described in this section except for changes needed to put the necessary restrictions in place.

There can be no assurance that you will be given the opportunity to exercise rights on the same terms and conditions as the holders of Class B ordinary shares or be able to exercise such rights.

Other Distributions. Subject to receipt of timely notice, as described in the deposit agreement, from us with the request to make any such distribution available to you, and provided the depositary has determined such distribution is lawful and reasonably practicable and feasible and in accordance with the terms of the deposit agreement, the depositary will distribute to you anything else we distribute on deposited securities by any means it may deem practicable, upon your payment of applicable fees, charges and expenses incurred by the depositary and taxes and/or other governmental charges. If any of the conditions above are not met, the depositary will endeavor to sell, or cause to be sold, what we distributed and distribute the net proceeds in the same way as it does with cash; or, if it is unable to sell such property, the depositary may dispose of such property in any way it deems reasonably practicable under the circumstances for nominal or no consideration, such that you may have no rights to or arising from such property.

The depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADS holders. We have no obligation to register ADSs, shares, rights or other securities under the Securities Act. We also have no obligation to take any other action to permit the distribution of ADSs, shares, rights or anything else to ADS holders. This means that you may not receive the distributions we make on our shares or any value for them if we and/or the depositary determines that it is illegal or not practicable for us or the depositary to make them available to you.

Deposit, Withdrawal and Cancellation

How are ADSs issued?

The depositary will deliver ADSs if you or your broker deposit Class B ordinary shares or evidence of rights to receive Class B ordinary shares with the custodian. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will register the appropriate number of ADSs in the names you request and will deliver the ADSs to or upon the order of the person or persons entitled thereto.

How do ADS holders cancel an American Depositary Share?

You may turn in your ADSs at the depositary's corporate trust office or by providing appropriate instructions to your broker. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will deliver the Class B ordinary shares and any other deposited securities underlying the ADSs to you or a person you designate at the office of the custodian. Or, at your request, risk and expense, the depositary will deliver the deposited securities at its corporate trust office, to the extent permitted by law.

How do ADS holders interchange between Certificated ADSs and Uncertificated ADSs?

You may surrender your ADR to the depositary for the purpose of exchanging your ADR for uncertificated ADSs. The depositary will cancel that ADR and will send you a statement confirming that you are the owner of uncertificated ADSs. Alternatively, upon receipt by the depositary of a proper instruction from a holder of uncertificated ADSs requesting the exchange of uncertificated ADSs for certificated ADSs, the depositary will execute and deliver to you an ADR evidencing those ADSs.

Voting Rights

How do you vote?

You may instruct the depository to vote the Class B ordinary shares or other deposited securities underlying your ADSs at any meeting at which you are entitled to vote pursuant to any applicable law, the provisions of our Memorandum and Articles of Association, and the provisions of or governing the deposited securities. Otherwise, you could exercise your right to vote directly if you withdraw the Class B ordinary shares. However, you may not know about the meeting sufficiently enough in advance to withdraw the Class B ordinary shares.

If we ask for your instructions and upon timely notice from us by regular, ordinary mail delivery, or by electronic transmission, as described in the deposit agreement, the depository will notify you of the upcoming meeting at which you are entitled to vote pursuant to any applicable law, the provisions of our Memorandum and Articles of Association, and the provisions of or governing the deposited securities, and arrange to deliver our voting materials to you. The materials will include or reproduce (a) such notice of meeting or solicitation of consents or proxies; (b) a statement that the ADS holders at the close of business on the ADS record date will be entitled, subject to any applicable law, the provisions of our Memorandum and Articles of Association, and the provisions of or governing the deposited securities, to instruct the depository as to the exercise of the voting rights, if any, pertaining to the Class B ordinary shares or other deposited securities represented by such holder's ADSs; and (c) a brief statement as to the manner in which such instructions may be given to the depository or deemed given in accordance with the second to last sentence of this paragraph if no instruction is received by the depository to give a discretionary proxy to a person designated by us. Voting instructions may be given only in respect of a number of ADSs representing an integral number of Class B ordinary shares or other deposited securities. For instructions to be valid, the depository must receive them in writing on or before the date specified. The depository will try, as far as practical, subject to applicable law and the provisions of our Memorandum and Articles of Association, to vote or to have its agents vote the Class B ordinary shares or other deposited securities (in person or by proxy) as you instruct. The depository will only vote or attempt to vote as you instruct. If we timely requested the depository to solicit your instructions but no instructions are received by the depository from an owner with respect to any of the deposited securities represented by the ADSs of that owner on or before the date established by the depository for such purpose, the depository shall deem that owner to have instructed the depository to give a discretionary proxy to a person designated by us with respect to such deposited securities, and the depository shall give a discretionary proxy to a person designated by us to vote such deposited securities. However, no such instruction shall be deemed given and no such discretionary proxy shall be given with respect to any matter if we inform the depository we do not wish such proxy given, substantial opposition exists or the matter materially and adversely affects the rights of holders of the Class B ordinary shares.

We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depository to vote the Class B ordinary shares underlying your ADSs. In addition, there can be no assurance that ADS holders and beneficial owners generally, or any holder or beneficial owner in particular, will be given the opportunity to vote or cause the custodian to vote on the same terms and conditions as the holders of our Class B ordinary shares.

The depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. This means that you may not be able to exercise your right to vote and you may have no recourse if the Class B ordinary shares underlying your ADSs are not voted as you requested.

In order to give you a reasonable opportunity to instruct the depositary as to the exercise of voting rights relating to deposited securities, if we request the depositary to act, we will give the depositary notice of any such meeting and details concerning the matters to be voted at least 30 business days in advance of the meeting date.

Compliance with Regulations

Information Requests

Each ADS holder and beneficial owner shall (a) provide such information as we or the depositary may request pursuant to law, including, without limitation, relevant Cayman Islands law, any applicable law of the United States of America, our Memorandum and Articles of Association, any resolutions of our board of directors adopted pursuant to such Memorandum and Articles of Association, the requirements of any markets or exchanges upon which the Class B ordinary shares, ADSs or ADRs are listed or traded, or to any requirements of any electronic book-entry system by which the ADSs or ADRs may be transferred, regarding the capacity in which they own or owned ADRs, the identity of any other persons then or previously interested in such ADRs and the nature of such interest, and any other applicable matters, and (b) be bound by and subject to applicable provisions of the laws of the Cayman Islands, our Memorandum and Articles of Association, and the requirements of any markets or exchanges upon which the ADSs, ADRs or Class B ordinary shares are listed or traded, or pursuant to any requirements of any electronic book-entry system by which the ADSs, ADRs or Class B ordinary shares may be transferred, to the same extent as if such ADS holder or beneficial owner held Class B ordinary shares directly, in each case irrespective of whether or not they are ADS holders or beneficial owners at the time such request is made.

Disclosure of Interests

Each ADS holder and beneficial owner shall comply with our requests pursuant to Cayman Islands law, the rules and requirements of the Nasdaq and any other stock exchange on which the Class B ordinary shares are, or will be, registered, traded or listed or our Memorandum and Articles of Association, which requests are made to provide information, inter alia, as to the capacity in which such ADS holder or beneficial owner owns ADS and regarding the identity of any other person interested in such ADS and the nature of such interest and various other matters, whether or not they are ADS holders or beneficial owners at the time of such requests.

Payment of Taxes

You will be responsible for any taxes or other governmental charges payable, or which become payable, on your ADSs or on the deposited securities represented by any of your ADSs. The depository may refuse to register or transfer your ADSs or allow you to withdraw the deposited securities represented by your ADSs until such taxes or other charges are paid. It may apply payments owed to you or sell deposited securities represented by your ADSs to pay any taxes owed and you will remain liable for any deficiency. If the depository sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay you any net proceeds, or send you any property, remaining after it has paid the taxes. You agree to indemnify us, the depository, the custodian and each of our and their respective agents, directors, employees and affiliates for, and hold each of them harmless from, any claims with respect to taxes (including applicable interest and penalties thereon) arising from any refund of taxes, reduced rate of withholding at source or other tax benefit obtained for you. Your obligations under this paragraph shall survive any transfer of ADRs, any surrender of ADRs and withdrawal of deposited securities or the termination of the deposit agreement.

Reclassifications, Recapitalizations and Mergers

<u>If we:</u>	<u>Then:</u>
Change the nominal or par value of our Class B ordinary shares	The cash, shares or other securities received by the depository will become deposited securities.
Reclassify, split up or consolidate any of the deposited securities	Each ADS will automatically represent its equal share of the new deposited securities.
Distribute securities on the Class B ordinary shares that are not distributed to you, or recapitalize, reorganize, merge, liquidate, sell all or substantially all of our assets, or take any similar action	The depository may distribute some or all of the cash, shares or other securities it received. It may also deliver new ADSs or ask you to surrender your outstanding ADRs in exchange for new ADRs identifying the new deposited securities.

Amendment and Termination

How may the deposit agreement be amended?

We may agree with the depository to amend the deposit agreement and the form of ADR without your consent for any reason. If an amendment adds or increases fees or charges, except for taxes and other governmental charges or expenses of the depository for registration fees, facsimile costs, delivery charges or similar items, including expenses incurred in connection with foreign exchange control regulations and other charges specifically payable by ADS holders under the deposit agreement, or materially prejudices a substantial existing right of ADS holders, it will not become effective for outstanding ADSs until 30 days after the depository notifies ADS holders of the amendment. *At the time an amendment becomes effective, you are considered, by continuing to hold your ADSs, to agree to the amendment and to be bound by the ADRs and the deposit agreement as amended.* If any new laws are adopted which would require the deposit agreement to be amended in order to comply therewith, we and the depository may amend the deposit agreement in accordance with such laws and such amendment may become effective before notice thereof is given to ADS holders.

How may the deposit agreement be terminated?

The depository will terminate the deposit agreement if we ask it to do so, in which case the depository will give notice to you at least 90 days prior to termination. The depository may also terminate the deposit agreement if the depository has told us that it would like to resign, or if we have removed the depository, and in either case we have not appointed a new depository within 90 days. In either such case, the depository must notify you at least 30 days before termination.

After termination, the depositary and its agents will do the following under the deposit agreement but nothing else: collect distributions on the deposited securities, sell rights and other property and deliver Class B ordinary shares and other deposited securities upon cancellation of ADSs after payment of any fees, charges, taxes or other governmental charges. Six months or more after the date of termination, the depositary may sell any remaining deposited securities by public or private sale. After that, the depositary will hold the money it received on the sale, as well as any other cash it is holding under the deposit agreement, for the pro rata benefit of the ADS holders that have not surrendered their ADSs. It will not invest the money and has no liability for interest. After such sale, the depositary's only obligations will be to account for the money and other cash. After termination, we shall be discharged from all obligations under the deposit agreement except for our obligations to the depositary thereunder.

Books of Depositary

The depositary will maintain ADS holder records at its depositary office. You may inspect such records at such office during regular business hours but solely for the purpose of communicating with other holders in the interest of business matters relating to our company, the ADRs and the deposit agreement.

The depositary will maintain facilities in the Borough of Manhattan, The City of New York to record and process the issuance, cancellation, combination, split-up and transfer of ADRs.

These facilities may be closed at any time or from time to time when such action is deemed necessary or advisable by the depositary in connection with the performance of its duties under the deposit agreement or at our reasonable written request.

Limitations on Obligations and Liability

Limits on our Obligations and the Obligations of the Depositary and the Custodian; Limits on Liability to Holders of ADSs

The deposit agreement expressly limits our obligations and the obligations of the depositary and the custodian. It also limits our liability and the liability of the depositary. The depositary and the custodian:

- are only obligated to take the actions specifically set forth in the deposit agreement without gross negligence or willful misconduct;
- are not liable if any of us or our respective controlling persons or agents are prevented or forbidden from, or subjected to any civil or criminal penalty or restraint on account of, or delayed in, doing or performing any act or thing required by the terms of the deposit agreement and any ADR, by reason of any provision of any present or future law or regulation of the United States or any state thereof, of the Cayman Islands or any other country, or of any other governmental authority or regulatory authority or stock exchange, or on account of the possible criminal or civil penalties or restraint, or by reason of any provision, present or future, of our Memorandum and Articles of Association or any provision of or governing any deposited securities, or by reason of any act of God or war or other circumstances beyond its control (including, without limitation, nationalization, expropriation, currency restrictions, work stoppage, strikes, civil unrest, revolutions, rebellions, explosions and computer failure);

- are not liable by reason of any exercise of, or failure to exercise, any discretion provided for in the deposit agreement or in our Memorandum and Articles of Association or provisions of or governing deposited securities;
- are not liable for any action or inaction of the depository, the custodian or us or their or our respective controlling persons or agents in reliance upon the advice of or information from legal counsel, any person presenting Class B ordinary shares for deposit or any other person believed by it in good faith to be competent to give such advice or information;
- are not liable for the inability of any holder of ADSs to benefit from any distribution on deposited securities that is not made available to holders of ADSs under the terms of the deposit agreement;
- are not liable for any special, consequential, indirect or punitive damages for any breach of the terms of the deposit agreement, or otherwise;
- may rely upon any documents we believe in good faith to be genuine and to have been signed or presented by the proper party;
- disclaim any liability for any action or inaction or inaction of any of us or our respective controlling persons or agents in reliance upon the advice of or information from legal counsel, accountants, any person presenting Class B ordinary shares for deposit, holders and beneficial owners (or authorized representatives) of ADSs, or any person believed in good faith to be competent to give such advice or information; and
- disclaim any liability for inability of any holder to benefit from any distribution, offering, right or other benefit made available to holders of deposited securities but not made available to holders of ADS.

The depository and any of its agents also disclaim any liability (i) for any failure to carry out any instructions to vote, the manner in which any vote is cast or the effect of any vote or failure to determine that any distribution or action may be lawful or reasonably practicable or for allowing any rights to lapse in accordance with the provisions of the deposit agreement, (ii) for the failure or timeliness of any notice from us, the content of any information submitted to it by us for distribution to you or for any inaccuracy of any translation thereof, (iii) for any investment risk associated with the acquisition of an interest in the deposited securities, the validity or worth of the deposited securities, the credit-worthiness of any third party, (iv) for any tax consequences that may result from ownership of ADSs, Class B ordinary shares or deposited securities, or (v) for any acts or omissions made by a successor depository whether in connection with a previous act or omission of the depository or in connection with any matter arising wholly after the removal or resignation of the depository, provided that in connection with the issue out of which such potential liability arises the depository performed its obligations without gross negligence or willful misconduct while it acted as depository.

Jurisdiction and Arbitration

The laws of the State of New York govern the deposit agreement and the ADSs and we have agreed with the depository that the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, state courts in New York County, New York) shall have exclusive jurisdiction to hear and determine any dispute arising from or relating in any way to the deposit agreement and that the depository will have the right to refer any claim or dispute arising from the relationship created by the deposit agreement to arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The arbitration provisions of the deposit agreement do not preclude you from pursuing claims under the Securities Act or the Exchange Act in federal or state courts.

Jury Trial Waiver

The deposit agreement provides that each party to the deposit agreement (including each holder, beneficial owner and holder of interests in the ADRs) irrevocably waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in any lawsuit or proceeding against us or the depository arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws. If we or the depository opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable law

Requirements for Depository Actions

Before the depository will issue, deliver or register a transfer of an ADS, split up, subdivide or combine ADSs, make a distribution on an ADS, or permit withdrawal of Class B ordinary shares, the depository may require:

- payment of stock transfer or other taxes or other governmental charges and transfer or registration fees charged by third parties for the transfer of any Class B ordinary shares or other deposited securities and payment of the applicable fees, expenses and charges of the depository;
- satisfactory proof of the identity and genuineness of any signature or any other matters contemplated in the deposit agreement; and
- compliance with (A) any laws or governmental regulations relating to the execution and delivery of ADRs or ADSs or to the withdrawal or delivery of deposited securities and (B) such reasonable regulations and procedures as the depository may establish, from time to time, consistent with the deposit agreement and applicable laws, including presentation of transfer documents.

The depositary may refuse to issue and deliver ADSs or register transfers of ADSs generally when the register of the depositary or our transfer books are closed or at any time if the depositary or we determine that it is necessary or advisable to do so.

Your Right to Receive the Shares Underlying Your ADSs

You have the right to cancel your ADSs and withdraw the underlying Class B ordinary shares at any time except:

- when temporary delays arise because: (1) the depositary has closed its transfer books or we have closed our transfer books; (2) the transfer of Class B ordinary shares is blocked to permit voting at a shareholders' meeting; or (3) we are paying a dividend on our Class B ordinary shares;
- when you owe money to pay fees, taxes and similar charges;
- when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of Class B ordinary shares or other deposited securities, or other circumstances specifically contemplated by Section I.A.(1) of the General Instructions to Form F-6 (as such General Instructions may be amended from time to time); or
- for any other reason if the depositary or we determine, in good faith, that it is necessary or advisable to prohibit withdrawals

The depositary shall not knowingly accept for deposit under the deposit agreement any Class B ordinary shares or other deposited securities required to be registered under the provisions of the Securities Act, unless a registration statement is in effect as to such Class B ordinary shares.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Direct Registration System

In the deposit agreement, all parties to the deposit agreement acknowledge that the DRS and Profile Modification System, or Profile, will apply to uncertificated ADSs upon acceptance thereof to DRS by DTC. DRS is the system administered by DTC pursuant to which the depositary may register the ownership of uncertificated ADSs, which ownership shall be evidenced by periodic statements issued by the depositary to the ADS holders entitled thereto. Profile is a required feature of DRS which allows a DTC participant, claiming to act on behalf of an ADS holder, to direct the depositary to register a transfer of those ADSs to DTC or its nominee and to deliver those ADSs to the DTC account of that DTC participant without receipt by the depositary of prior authorization from the ADS holder to register such transfer.

List of Principal Subsidiaries of Hesai Group**Subsidiaries**

Hesai Hong Kong Limited
Hesai Technology Co., Ltd.
Hertz Technology Co., Ltd.

Place of Incorporation

Hong Kong
People's Republic of China
People's Republic of China

**Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Yifan Li, certify that:

1. I have reviewed this annual report on Form 20-F of Hesai Group;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 25, 2024

By: /s/ Yifan Li

Name: Yifan Li

Title: Chief Executive Officer

**Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Louis T. Hsieh, certify that:

1. I have reviewed this annual report on Form 20-F of Hesai Group;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 25, 2024

By: /s/ Louis T. Hsieh

Name: Louis T. Hsieh

Title: Global Chief Financial Officer

**Certification by the Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Hesai Group (the "Company") on Form 20-F for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Yifan Li, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 25, 2024

By: /s/ Yifan Li
Name: Yifan Li
Title: Chief Executive Officer

**Certification by the Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Hesai Group (the "Company") on Form 20-F for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Louis T. Hsieh, Global Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 25, 2024

By: /s/ Louis T. Hsieh

Name: Louis T. Hsieh

Title: Global Chief Financial Officer

Our ref SQG/790004-000001/29005135v1

Hesai Group
PO Box 309, Uglan House
Grand Cayman, KY1-1104
Cayman Islands

25 April 2024

Dear Sir or Madam

Hesai Group

We have acted as legal advisers as to the laws of the Cayman Islands to Hesai Group, an exempted company with limited liability incorporated in the Cayman Islands (the “**Company**”), in connection with the filing by the Company with the United States Securities and Exchange Commission (the “**SEC**”) of an annual report on Form 20-F for the year ended 31 December 2023 (the “**Annual Report**”).

We hereby consent to the reference to our firm under the heading “Item 10. Additional Information—E. Taxation—Cayman Islands Taxation” in the Annual Report, and we further consent to the incorporation by reference of the summary of our opinions under these headings into the Company’s Registration Statement on Form S-8 (File No. 333-272757) that was filed on 20 June 2023, pertaining to the Company’s 2021 Share Incentive Plan.

We also consent to the filing with the SEC of this consent letter as an exhibit to the Annual Report. In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours faithfully

/s/ Maples and Calder (Hong Kong) LLP
Maples and Calder (Hong Kong) LLP

To: Hesai Group
9th Floor, Building L2-B, 1588 Zhuguang Road
Qingpu District
Shanghai 201702
People's Republic of China

Dear Sir/Madam,

We hereby consent to the references to our firm's name under the headings "Item 3. Key Information—Permissions Required from the PRC Authorities for Our Operations" and "Item 10. Additional Information—E. Taxation" in Hesai Group's annual report on Form 20-F for the year ended December 31, 2023 (the "**Annual Report**"), which will be filed with the Securities and Exchange Commission (the "**SEC**") on the date hereof, and further consent to the incorporation by reference in Hesai Group's Registration Statements on Form S-8 (File No. 333-272757) of the summary of our opinion under the headings "Item 3. Key Information—Permissions Required from the PRC Authorities for Our Operations" and "Item 10. Additional Information—E. Taxation" in this Annual Report. We also consent to the filing of this consent letter with the SEC as an exhibit to the Annual Report.

In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours sincerely,

/s/ Fangda Partners
Fangda Partners

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement No. 333-272757 on Form S-8 of Hesai Group of our report dated April 25, 2024, relating to the financial statements of Hesai Group, appearing in this Annual Report on Form 20-F for the year ended December 31, 2023.

/s/ Deloitte Touche Tohmatsu Certified Public Accountants LLP
Shanghai, the People's Republic of China
April 25, 2024

HESAI GROUP

CLAWBACK POLICY

The Compensation Committee (the “Committee”) of the Board of Directors (the “Board”) of Hesai Group (the “Company”) believes that it is appropriate for the Company to adopt this Clawback Policy (the “Policy”) to be applied to the Executive Officers of the Company and adopts this Policy to be effective as of the Effective Date.

1. Definitions

For purposes of this Policy, the following definitions shall apply:

- a) “Company Group” means the Company and each of its subsidiaries or consolidated affiliated entities, as applicable.
- b) “Covered Compensation” means any Incentive-Based Compensation granted, vested or paid to a person who served as an Executive Officer at any time during the performance period for the Incentive-Based Compensation and that was Received (i) on or after October 2, 2023 (the effective date of the Nasdaq listing standards), (ii) after the person became an Executive Officer, and (iii) at a time that the Company had a class of securities listed on a national securities exchange or a national securities association such as Nasdaq.
- c) “Effective Date” means December 1, 2023.
- d) “Erroneously Awarded Compensation” means the amount of Covered Compensation granted, vested or paid to a person during the fiscal period when the applicable Financial Reporting Measure relating to such Covered Compensation was attained that exceeds the amount of Covered Compensation that otherwise would have been granted, vested or paid to the person had such amount been determined based on the applicable Restatement, computed without regard to any taxes paid (i.e., on a pre-tax basis). For Covered Compensation based on stock price or total shareholder return, where the amount of Erroneously Awarded Compensation is not subject to mathematical recalculation directly from the information in a Restatement, the Committee will determine the amount of such Covered Compensation that constitutes Erroneously Awarded Compensation, if any, based on a reasonable estimate of the effect of the Restatement on the stock price or total shareholder return upon which the Covered Compensation was granted, vested or paid and the Committee shall maintain documentation of such determination and provide such documentation to Nasdaq.
- e) “Exchange Act” means the U.S. Securities Exchange Act of 1934.
- f) “Executive Officer” means the Company’s president, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice-president of the Company in charge of a principal business unit, division, or function (such as sales, administration, or finance), any other officer who performs a policy-making function, or any other person (whether or not an officer or employee of the Company) who performs similar policy-making functions for the Company. “Policy-making function” does not include policy-making functions that are not significant. Both current and former Executive Officers are subject to the Policy in accordance with its terms.

- g) “Financial Reporting Measure” means (i) any measure that is determined and presented in accordance with the accounting principles used in preparing the Company’s financial statements, and any measures derived wholly or in part from such measures and may consist of IFRS/U.S. GAAP or non-IFRS/non-U.S. GAAP financial measures (as defined under Regulation G of the Exchange Act and Item 10 of Regulation S-K under the Exchange Act), (ii) stock price or (iii) total shareholder return. Financial Reporting Measures need not be presented within the Company’s financial statements or included in a filing with the SEC.
- h) “Home Country” means the Company’s jurisdiction of incorporation, i.e., the Cayman Islands.
- i) “Incentive-Based Compensation” means any compensation that is granted, earned or vested based wholly or in part upon the attainment of a Financial Reporting Measure.
- j) “Lookback Period” means the three completed fiscal years (plus any transition period of less than nine months that is within or immediately following the three completed fiscal years and that results from a change in the Company’s fiscal year) immediately preceding the date on which the Company is required to prepare a Restatement for a given reporting period, with such date being the earlier of: (i) the date the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare a Restatement, or (ii) the date a court, regulator or other legally authorized body directs the Company to prepare a Restatement. Recovery of any Erroneously Awarded Compensation under the Policy is not dependent on whether or when the Restatement is actually filed.
- k) “Nasdaq” means the Nasdaq Stock Market.
- l) “Received”: Incentive-Based Compensation is deemed “Received” in the Company’s fiscal period during which the Financial Reporting Measure specified in or otherwise relating to the Incentive-Based Compensation award is attained, even if the grant, vesting or payment of the Incentive-Based Compensation occurs after the end of that period.
- m) “Restatement” means a required accounting restatement of any Company financial statement due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including (i) to correct an error in previously issued financial statements that is material to the previously issued financial statements (commonly referred to as a “Big R” restatement) or (ii) to correct an error in previously issued financial statements that is not material to the previously issued financial statements but that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period (commonly referred to as a “little r” restatement). Changes to the Company’s financial statements that do not represent error corrections under the then-current relevant accounting standards will not constitute Restatements. Recovery of any Erroneously Awarded Compensation under the Policy is not dependent on fraud or misconduct by any person in connection with the Restatement.

n) “SEC” means the U.S. Securities and Exchange Commission.

2. Recovery of Erroneously Awarded Compensation

In the event of a Restatement, any Erroneously Awarded Compensation Received during the Lookback Period prior to the Restatement (a) that is then-outstanding but has not yet been paid shall be automatically and immediately forfeited and (b) that has been paid to any person shall be subject to reasonably prompt repayment to the Company Group in accordance with Section 3 of this Policy. The Committee must pursue (and shall not have the discretion to waive) the forfeiture and/or repayment of such Erroneously Awarded Compensation in accordance with Section 3 of this Policy, except as provided below.

Notwithstanding the foregoing, the Committee (or, if the Committee is not a committee of the Board responsible for the Company’s executive compensation decisions and composed entirely of independent directors, a majority of the independent directors serving on the Board) may determine not to pursue the forfeiture and/or recovery of Erroneously Awarded Compensation from any person if the Committee determines that such forfeiture and/or recovery would be impracticable due to any of the following circumstances: (i) the direct expense paid to a third party (for example, reasonable legal expenses and consulting fees) to assist in enforcing the Policy would exceed the amount to be recovered, including the costs that could be incurred if pursuing such recovery would violate local laws other than the Company’s Home Country laws (following reasonable attempts by the Company Group to recover such Erroneously Awarded Compensation, the documentation of such attempts, and the provision of such documentation to Nasdaq), (ii) pursuing such recovery would violate the Company’s Home Country laws adopted prior to November 28, 2022 (provided that the Company obtains an opinion of Home Country counsel acceptable to Nasdaq that recovery would result in such a violation and provides such opinion to Nasdaq), or (iii) recovery would likely cause any otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company Group, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and regulations thereunder.

3. Means of Repayment

In the event that the Committee determines that any person shall repay any Erroneously Awarded Compensation, the Committee shall provide written notice to such person by email or certified mail to the physical address on file with the Company Group for such person, and the person shall satisfy such repayment in a manner and on such terms as required by the Committee, and the Company Group shall be entitled to set off the repayment amount against any amount owed to the person by the Company Group, to require the forfeiture of any award granted by the Company Group to the person, or to take any and all necessary actions to reasonably promptly recover the repayment amount from the person, in each case, to the fullest extent permitted under applicable law, including without limitation, Section 409A of the U.S. Internal Revenue Code and the regulations and guidance thereunder. If the Committee does not specify a repayment timing in the written notice described above, the applicable person shall be required to repay the Erroneously Awarded Compensation to the Company Group by wire, cash, cashier’s check or other means as agreed by the Committee no later than thirty (30) days after receipt of such notice.

4. No Indemnification

No person shall be indemnified, insured or reimbursed by the Company Group in respect of any loss of compensation by such person in accordance with this Policy, nor shall any person receive any advancement of expenses for disputes related to any loss of compensation by such person in accordance with this Policy, and no person shall be paid or reimbursed by the Company Group for any premiums paid by such person for any third-party insurance policy covering potential recovery obligations under this Policy. For this purpose, "indemnification" includes any modification to current compensation arrangements or other means that would amount to *de facto* indemnification (for example, providing the person a new cash award which would be cancelled to effect the recovery of any Erroneously Awarded Compensation). In no event shall the Company Group be required to award any person an additional payment if any Restatement would result in a higher incentive compensation payment.

5. Miscellaneous

This Policy generally will be administered and interpreted by the Committee, provided that the Board may, from time to time, exercise discretion to administer and interpret this Policy, in which case, all references herein to "Committee" shall be deemed to refer to the Board. Any determination by the Committee with respect to this Policy shall be final, conclusive and binding on all interested parties. Any discretionary determinations of the Committee under this Policy, if any, need not be uniform with respect to all persons, and may be made selectively amongst persons, whether or not such persons are similarly situated.

This Policy is intended to satisfy the requirements of Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, as it may be amended from time to time, and any related rules or regulations promulgated by the SEC or the Nasdaq, including any additional or new requirements that become effective after the Effective Date which upon effectiveness shall be deemed to automatically amend this Policy to the extent necessary to comply with such additional or new requirements.

The provisions in this Policy are intended to be applied to the fullest extent of the law. To the extent that any provision of this Policy is found to be unenforceable or invalid under any applicable law, such provision will be applied to the maximum extent permitted and shall automatically be deemed amended in a manner consistent with its objectives to the extent necessary to conform to applicable law. The invalidity or unenforceability of any provision of this Policy shall not affect the validity or enforceability of any other provision of this Policy. Recovery of Erroneously Awarded Compensation under this Policy is not dependent upon the Company Group satisfying any conditions in this Policy, including any requirements to provide applicable documentation to the Nasdaq.

The rights of the Company Group under this Policy to seek forfeiture or reimbursement are in addition to, and not in lieu of, any rights of recovery, or remedies or rights other than recovery, that may be available to the Company Group pursuant to the terms of any law, government regulation or stock exchange listing requirement or any other policy, code of conduct, employee handbook, employment agreement, equity award agreement, or other plan or agreement of the Company Group.

6. Amendment and Termination

To the extent permitted by, and in a manner consistent with applicable law, including SEC and Nasdaq rules, the Committee may terminate, suspend or amend this Policy at any time in its discretion.

7. Successors

This Policy shall be binding and enforceable against all persons and their respective beneficiaries, heirs, executors, administrators or other legal representatives with respect to any Covered Compensation granted, vested or paid to or administered by such persons or entities.