
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**AMENDMENT NO. 1
TO
FORM F-3**

**REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

4D pharma plc

(Exact name of registrant as specified in its charter)

England and Wales
(State or other jurisdiction of
incorporation or organization)

Not applicable
(I.R.S. Employer
Identification Number)

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(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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From time to time after the effective date of this registration statement.
(Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: ☐

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

The information contained in this prospectus is not complete and may be changed. No securities may be sold pursuant to this prospectus until the registration statement filed with the Securities and Exchange Commission with respect to such securities has been declared effective. This prospectus is not an offer to sell these securities and no offers to buy these securities are being solicited in any jurisdiction where their offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MARCH 28, 2022

PROSPECTUS



\$150,000,000
Ordinary Shares
American Depositary Shares representing Ordinary Shares
Debt Securities
Preference Shares
Warrants
Rights
Units

This prospectus will allow us to issue, from time to time in one or more offerings at prices and on terms to be determined at or prior to the time of the offering, up to \$150,000,000 in aggregate offering prices of any combination of the securities described in this prospectus, either individually or in units.

This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these offerings in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus will also describe the specific manner in which these securities will be offered and may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference into this prospectus or any prospectus supplement, before investing in any of the securities being offered.

This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.

Our securities may be sold directly by us to you, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section titled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. If any underwriters or agents are involved in the sale of our securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable fees, discounts or commissions and options to purchase additional shares will also be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

Our ordinary shares are currently traded on AIM, a market operated by the London Stock Exchange, under the symbol "DDDD." Our American Depositary Shares, or ADSs, each representing eight ordinary shares of 4D pharma plc, are listed on the Nasdaq Global Market, or Nasdaq, under the symbol "LBPS." The ADSs began trading on Nasdaq on March 22, 2021. The closing price of our ordinary shares on AIM on March 24, 2022 was £0.50 per ordinary share, which is equivalent to a price of \$0.66 per ordinary share based on the noon buying rate of the Federal Reserve Bank of New York on March 18, 2022. The closing price of our ADSs on Nasdaq on March 23, 2022 was \$6.00 per ADS.

We are a "foreign private issuer," and an "emerging growth company" each as defined under the federal securities laws, and, as such, we will be subject to reduced public company reporting requirements. See the section entitled "Prospectus Summary—Implications of Being an Emerging Growth Company and a Foreign Private Issuer" for additional information.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Investing in our ordinary shares or our ADSs representing our ordinary shares involves a high degree of risk. Before buying any ordinary shares or ADSs you should carefully read the discussion of material risks of investing in such securities in "Risk Factors" beginning on page 4 of this prospectus and included in any applicable prospectus supplement and in the documents incorporated by reference in this prospectus and in any applicable prospectus supplement. We may also include specific risk factors in supplements to this prospectus under the caption "Risk Factors."

The date of this prospectus is _____, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form F-3 that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may offer and sell, from time to time in one or more offerings, ordinary shares, including ADSs representing our ordinary shares, debt securities, preference shares, warrants and/or rights, either individually or in units, in one or more offerings, with a total aggregate offering price of up to \$150,000,000. This prospectus provides you with a general description of the securities we may offer.

Each time we offer securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to read carefully this prospectus, any applicable prospectus supplement and any related free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the heading “Incorporation By Reference,” before investing in any of the securities being offered.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Neither we, nor any agent, underwriter or dealer has authorized any person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus prepared by or on behalf of us or to which we have referred you. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered, or securities are sold, on a later date.

This prospectus and the information incorporated herein by reference contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find Additional Information.”

For investors outside the United States: We have not taken any action to permit the possession or distribution of this prospectus in any jurisdiction other than the United States where action for that purpose is required. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to the ADSs and securities to which this prospectus relates and the distribution of this prospectus outside the United States.

We are a public limited company incorporated under the laws of England and Wales and a majority of our outstanding securities are owned by non-U.S. residents. Under the rules of the U.S. Securities and Exchange Commission, or the SEC, we are currently eligible for treatment as a “foreign private issuer.” As a foreign private issuer, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as domestic registrants whose securities are registered under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”).

Unless the context indicates otherwise, references in this prospectus to the “**Company**,” “**4D Pharma**,” the “**Group**,” “**we**,” “**us**,” “**our**” and similar terms refer to 4D pharma plc and its consolidated subsidiaries.

TRADEMARKS, TRADE NAMES AND SERVICE MARKS

We own or have rights to trademarks, trade names and service marks that they use in connection with the operation of our business. In addition, our names, logos and website names and addresses are its trademarks or service marks. Other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, in some cases, the trademarks, trade names and service marks referred to in this prospectus are listed without the applicable ®, ™ and SM symbols, but they will assert, to the fullest extent under applicable law, their rights to these trademarks, trade names and service marks.

INDUSTRY AND MARKET DATA

The industry and market data relating to our business included in this prospectus on our internal estimates and research, as well as publications, research, surveys and studies conducted by independent third parties not affiliated to us. We include data obtained from Globaldata Service (found at <https://www.globaldata.com/>).

Industry publications, studies and surveys generally state that they were prepared based on sources believed to be reliable, although there is no guarantee of accuracy. While we believe that each of these studies and publications is reliable, we have not independently verified the market and industry data provided by third-party sources. In addition, while we believe our internal research is reliable, such research has not been verified by any independent source. We believe that all market data in this prospectus is reliable, accurate and complete. We note that assumptions underlying industry and market data are subject to risks and uncertainties, including those discussed under “Special Note Regarding Forward-Looking Statements” and “Risk Factors” of this prospectus.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Financial Statements

We prepare our audited consolidated financial statements in accordance with the generally accepted accounting principles in the United States (“GAAP”). Our financial information is presented in U.S. dollars.

Currencies and Exchange Rates

References in this prospectus to “USD,” “U.S. dollars,” “dollars,” “\$” or “cents” are to the currency of the United States and references to “GBP,” “pounds sterling,” “pounds,” “£,” “pence” or “p” are to the currency of the United Kingdom. There are 100 pence to each pound.

In this prospectus, unless otherwise stated, pounds sterling have been translated into U.S. dollars at the noon buying rate in New York City for cable transfers in pounds sterling as certified for custom purposes by the Federal Reserve Bank of New York, on the date indicated. On March 18, 2022, the noon buying rate in New York City for cable transfers in pounds sterling as certified for customs purposes by the Federal Reserve Bank of New York was \$1.3169 per £1.00. These translations should not be construed as a representation that the U.S. dollar amounts actually represent, or could be converted into, pounds sterling at the rates indicated.

Rounding

We have made rounding adjustments to reach some of the figures included in this prospectus. As a result, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that precede them.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “**Securities Act**”) and Section 21E of the Exchange Act. These forward-looking statements are management’s beliefs and assumptions. In addition, other written or oral statements that constitute forward-looking statements are based on current expectations, estimates and projections about the industry and markets in which we operate and statements may be made by or on our behalf. Words such as “should,” “could,” “may,” “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “estimate,” variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. There are a number of important factors that could cause our actual results to differ materially from those indicated by such forward-looking statements.

Forward-looking statements are based on the current beliefs and assumptions of our management and on information currently available to our management. While our management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments will be as anticipated. Such statements are subject to risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to, those identified under the section “Risk Factors” in this prospectus. These risks and uncertainties include factors relating to:

- the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics and operating as an early clinical stage company;
- our ability to develop, initiate or complete preclinical studies and clinical trials for, obtain approvals for and commercialize any of our therapeutic candidates;
- the timing, progress and results of preclinical studies and clinical trials for MRx0518, MRx-4DP0004, MRx0029, MRx0005, Blautix, Thetanix or any other of our therapeutic candidates, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work and the period during which the results of the trials will become available;
- changes in our plans to develop and commercialize our therapeutic candidates;
- the potential for clinical trials of MRx0518, MRx-4DP0004, MRx0029, MRx0005, Blautix, Thetanix or any other of our therapeutic candidates to differ from preclinical, preliminary or expected results;
- our ability to enroll patients and volunteers in clinical trials, timely and successfully completion of those trials and receipt of necessary regulatory approvals;
- our ability to continue to manufacture sufficient quantity of our therapeutic candidates and to scale manufacturing to clinical-scale and small-to-mid-scale commercial supply;

- negative impacts arising from pandemics, such as COVID-19, on our operations, including the impact on clinical trials;
- the risk of the occurrence of any event, change or other circumstance that could give rise to the termination of the strategic collaboration agreement with the University of Texas MD Anderson Cancer Center or the research collaboration and option to license agreement with Merck Sharp & Dohme Corp.;
- our ability to obtain funding for our operations, including funding necessary to complete the clinical trials of any of our therapeutic candidates, and the terms on which we are able to raise additional capital;
- the risk of the occurrence of any event, change or other circumstance that could give rise to the triggering the security agreement with Oxford Finance Luxembourg S.À R.L., which is secured by our assets;
- regulatory developments in the United Kingdom, the United States and other countries;
- our reliance on third parties, including contract research organizations;
- our ability to claim UK Research and Development tax credits;
- our estimates regarding future expenses, revenues and needs for additional financing and the accuracy thereof, including the risk that values on financial instruments, such as warrants and share options, create unforeseen fluctuations in profits and tax liability;
- our ability to obtain and maintain intellectual property protection for our therapeutic candidates;
- the future composition of our management team and directors and those of our subsidiaries;
- competition in the industry in which we operate;
- matters relating to Brexit; and
- other risk factors discussed under “Risk Factors.”

The foregoing list is not intended to be exhaustive, and there may be other key risks that are not listed above that are not presently known to us or that we currently deem immaterial. Should one or more of these or other risks or uncertainties materialize, or should any of the underlying assumptions prove incorrect, actual results may vary in material respects from those expressed or implied by the forward-looking statements made by us contained in this prospectus and the documents incorporated by reference herein. As a result of the foregoing, readers should not place undue reliance on the forward-looking statements contained in this prospectus and the documents incorporated by reference herein. The forward-looking statements contained in this prospectus, and the documents incorporated by reference herein, are expressly qualified in their entirety by the foregoing cautionary statements.

Forward looking statements speak only as of the date on which they are made, and we undertake no obligation to update any forward-looking statements or other information contained in this report, whether as a result of new information, future events or otherwise. You are advised, however, to consult any additional disclosures we make in our reports on Form 6-K filed with the SEC. Please also see the cautionary discussion of risks and uncertainties referred to in the “Risk Factors” section contained in this prospectus, the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus.

PROSPECTUS SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere, or incorporated by reference, in this prospectus. It does not contain all of the information that may be important to you and your investment decision. Before investing in our securities, you should carefully read this entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the matters set forth under the section of this prospectus captioned "Risk Factors" and under similar headings in the applicable prospectus supplement and any related free writing prospectus and in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements and related notes, and the exhibits to the registration statement of which this prospectus is a part.

Company Overview

4D Pharma was established with the mission of leveraging the deep and varied interactions between the human body and the gut microbiome, the trillions of bacteria that colonize the human gastrointestinal tract, to develop an entirely novel class of drug: Live Biotherapeutics. We are focused on understanding how individual strains of bacteria function and how their interactions with the human host can be exploited to treat particular diseases, from cancer, respiratory, central nervous system, immunological and gastrointestinal diseases and disorders.

To further advance our product pipeline, we have developed MicroRx, our proprietary discovery platform. MicroRx interrogates our proprietary library of bacterial isolates for therapeutic functionality and comprehensively characterizes the bacterial isolates using a range of complementary tools and technologies. By developing a thorough understanding of the functionality and mechanism of action of our therapeutic candidates, we can develop LBP that target disease pathology rationally and effectively and expand our robust sector-leading patent portfolio with additional patents relating to LBP functionality.

To this end, our key clinical focus areas include immuno-oncology, IBS and respiratory disease, with preclinical candidates targeting CNS and autoimmune conditions. We have completed three clinical trials and currently have five clinical programs. One of our key focus areas is immuno-oncology, and with our lead immuno-oncology therapeutic candidate, MRx0518, we delivered what we believe to be the first positive proof-of-concept data with a LBP in the treatment of cancer. MRx0518 is being evaluated in three ongoing clinical trials, including a Phase I/II clinical trial in solid tumors in combination with Keytruda (supplied under a free of charge supply agreement) in patients with advanced or metastatic NSCLC, RCC and UC who are refractory to prior anti-PD-1/ PD-L1 therapy. Additionally, new cohorts of 10 patients with new tumor types are being enrolled in the study, including patients with TNBC, HNSCC and MSI-H high tumors. We successfully completed Part A of this Phase I/II clinical trial and Part B of the clinical trial is currently enrolling up to an additional 30 patients per tumor type and will assess clinical benefit in addition to safety. We also completed recruitment for Part A of an ongoing Phase I trial of MRx0518 as a monotherapy in patients undergoing surgical resection of solid tumors, which is being conducted at Imperial College London. We are currently redesigning Part B of this Phase I clinical trial after initial data from Part A expressed showed encouraging early biomarker readouts. Our third clinical trial of MRx0518 is a Phase I clinical trial of MRx0518 in patients with potentially resectable pancreatic cancer in combination with hypofractionated radiotherapy, which is part of our strategic collaboration with the University of Texas MD Anderson Cancer Center. We anticipate that in the second quarter of 2022, the first patient will be enrolled as part of a Phase I/II clinical trial to investigate Bavencio (to be supplied under a free of charge supply agreement) in combination with MRx0518 in a first-line maintenance setting for patients with locally advanced or metastatic urothelial carcinoma that has not progressed on first-line platinum-containing chemotherapy.

We are engaged in business development activities with the goal of expanding the development of MRx0518 into new settings and are actively exploring additional collaboration opportunities.

A second-generation oncology candidate, MRx1299, is in preclinical development and its ability to enhance the anti-tumor activity of cytotoxic T lymphocytes (CTL) and CAR-T therapies in animal models of cancer, resulting in better tumor clearance, was reported in July 2021.

In our gastro-intestinal disease portfolio, we currently have two LBP candidates that have completed early clinical evaluation, Blautix and Thetanix. Blautix is being developed as the first therapeutic to treat patients with IBS, regardless of clinical subtype. The Phase II clinical trial results for Blautix provide a foundation for the continued development of Blautix as the first therapeutic with the potential to treat both major subtypes of IBS, and this data will advance regulatory engagement around the design of a potential Phase III pivotal program. Thetanix is a single strain human gut commensal bacteria that has an anti-inflammatory mechanism and is currently under investigation for the treatment of IBD. Thetanix has an Orphan Drug Designation for pediatric Crohn's disease from the FDA. We have successfully completed a Phase Ib clinical trial of Thetanix in pediatric Crohn's disease patients, and we are exploring strategic options for Thetanix, including parallel development in pediatric and adult populations in both Crohn's disease and ulcerative colitis, as well as potential partners.

We are also developing therapeutic candidates for our respiratory disease portfolio. MicroRx enabled the discovery of MRx-4DP0004, an immunomodulatory single strain LBP candidate that demonstrated marked effects in preclinical trials of respiratory inflammation, particularly in the lungs. We have successfully completed Part A of a Phase I/II clinical trial of MRx-4DP0004 in partly controlled asthma, with enrollment for 90 patients in Part B to commence shortly. To our knowledge, this is the world's first clinical trial of an LBP in the indication.

We continue to utilize the MicroRx platform to discover promising new LBP candidates for major diseases with significant unmet need. As part of our CNS portfolio, we have identified novel LBP candidates that act upon multiple aspects of the pathology of neurodegenerative diseases in preclinical models, including gut-barrier function, neuroinflammation and protection of neurons critical to healthy CNS function. Accordingly, we are currently planning a first-in-human clinical study for our lead CNS therapeutic candidates, MRx0005 and MRx0029, in Parkinson's disease patients. In February 2022, the U.S. Food and Drug Administration cleared investigational new drug ("IND") applications for MRx0005 and MRx0029 for the treatment of Parkinson's disease. As part of our commitment to CNS research and drug development, in December 2020, we became an industry partner of the Parkinson's Progression Markers Initiative, a longitudinal study sponsored by The Michael J. Fox Foundation for Parkinson's Research to better understand Parkinson's disease and accelerate the development of new treatments.

In addition to our internal development programs, we are seeking to realize the value and potential of the MicroRx platform through collaborations in new areas. In 2019, we entered into a research collaboration and option to license agreement with MSD to discover and develop LBPs for vaccines. This collaboration pairs our proprietary MicroRx platform with MSD's expertise in the development and commercialization of novel vaccines, to discover and develop LBPs as vaccines in up to three undisclosed indications. See "Business—Collaborations—Research Collaboration and Option to License Agreement with Merck."

In 2020, the global COVID-19 pandemic hit the United Kingdom, United States and other regions worldwide, affecting almost all aspects of the economy including the pharmaceutical industry in which we operate. In response we have been proactive, putting the safety of staff and patients first. We have made good use of technology to minimize disruption to our operations while protecting our staff. However, as has been seen across the biopharma industry, there have been unavoidable impacts on certain activities, resulting in some potential delays to expected clinical readouts. We continue to monitor the situation closely and will provide updates as and when the expected resolution of the situation becomes clearer.

Corporate Information

4D pharma plc was incorporated in England and Wales on January 10, 2014. Our principal executive offices are located at 5th Floor, 9 Bond Court, Leeds, LS1 2JZ, United Kingdom, and our telephone number is +44 (0) 113 895 0130.

Our website address is www.4dpharmapl.com. The information on, or that can be accessed through, our website is not part of this prospectus, and you should not consider information contained on our website in deciding whether to purchase shares of our Ordinary Shares.

Implications of Being an Emerging Growth Company and a Foreign Private Issuer

Emerging Growth Company

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (the "**JOBS Act**"). We will remain an emerging growth company until the earliest to occur of: the last day of the fiscal year in which we have more than \$1.07 billion in annual revenues; the date we qualify as a "large accelerated filer," with at least \$700 million of equity securities held by non-affiliates; the issuance, in any three-year period, by us of more than \$1.0 billion in non-convertible debt securities; and the last day of the fiscal year ending after the fifth anniversary of our first sale of common equity securities pursuant to a U.S. registration

As an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other publicly traded entities that are not emerging growth companies. These exemptions include: (i) the option to present only two years of audited financial statements and related discussion in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus; (ii) not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002; (iii) not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board, or PCAOB, regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis); (iv) not being required to submit certain executive compensation matters to shareholder advisory votes, such as "say-on-pay," "say-on-frequency," and "say-on-golden parachutes"; and (v) not being required to disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer's compensation to median employee compensation.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of these accounting standards until they would otherwise apply to private companies.

We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with certain other public companies difficult or impossible because of the potential differences in accounting standards used.

Foreign Private Issuer

We report under the Exchange Act as a non-U.S. company with foreign private issuer status. Even after we no longer qualify as an emerging growth company, as long as we qualify as a foreign private issuer under the Exchange Act, we will be exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including: (i) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act; (ii) 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; and (iii) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specific information, and current reports on Form 8-K upon the occurrence of specified significant events.

Foreign private issuers are also exempt from certain more stringent executive compensation disclosure rules. Thus, even if we no longer qualify as an emerging growth company, but remain a foreign private issuer, we will continue to be exempt from the more stringent compensation and other disclosures required of companies that are neither an emerging growth company nor a foreign private issuer.

RISK FACTORS

Investing in our securities involves significant risks. Before making an investment decision, you should carefully consider the risks described under “Risk Factors” in the applicable prospectus supplement and any related free writing prospectus and under Item 3. Key Information—D. Risk Factors” in our annual report on Form 20-F for the fiscal year ended December 31, 2020, filed with the SEC on April 2, 2021, as amended by our annual report on Form 20-F/A for the fiscal year ended December 31, 2020, filed with the SEC on April 30, 2021, as so amended, the “Annual Report,” or any updates in our Reports on Form 6-K, as updated by our subsequent filings, which are incorporated by reference into this prospectus, in light of your particular investment objectives and financial circumstances. The risks so described are not the only risks facing us. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition and results of operations could be materially adversely affected by any of these risks. Each of the risk factors could adversely affect our business, results of operations, financial condition and cash flows, as well as adversely affect the value of an investment in our securities, the trading price of our securities could decline due to any of these risks and the occurrence of any of these risks might cause you to lose all or part of your investment. The discussion of risks includes or refers to forward-looking statements; you should read the explanation of the qualifications and limitations on such forward-looking statements discussed elsewhere in this prospectus.

OFFER STATISTICS AND EXPECTED TIMETABLE

We may offer ordinary shares, ADSs representing our ordinary shares, debt securities, preference shares, warrants and/or rights, either individually or in units, in one or more offerings, with a total aggregate offering price of up to \$150,000,000. The actual price per share of the securities that we will offer pursuant hereto will depend on a number of factors that may be relevant as of the time of offer. See “Plan of Distribution.”

REASONS FOR THE OFFER AND USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement or in any free writing prospectus that we may authorized to be provided to you in connection with a specific offering, we intend to use any net proceeds from the sale of securities under this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, commercial expenditures, milestone payments under in-license agreements, and possible acquisitions or in-license of additional compounds, product candidates or technology. Accordingly, we will have significant discretion in the use of any net proceeds. Additional information on the use of net proceeds we receive from the sale of securities covered by this prospectus may be set forth in the prospectus supplement relating to the specific offering.

THE OFFER AND LISTING

Our ordinary shares are currently traded on AIM, a market operated by the London Stock Exchange, under the symbol “DDDD.” Our American Depositary Shares, or ADSs, each representing eight ordinary shares of 4D pharma plc, are listed on the Nasdaq Global Market, or Nasdaq, under the symbol “LBPS.” The ADSs began trading on Nasdaq on March 22, 2021.

DESCRIPTION OF SHARE CAPITAL AND ARTICLES OF ASSOCIATION

Set forth below is a summary of certain information concerning our share capital, as well as a description of certain provisions of our articles of association and relevant provisions of the United Kingdom Companies Act 2006 (as amended from time to time and including any statutory modification or re-enactment thereof, the “U.K. Companies Act”). The summary includes certain references to, and descriptions of, material provisions of our articles of association and English law. The summary below contains only material information concerning our share capital and corporate status and does not purport to be complete. For further information, please refer to the full version of our articles of association, which are incorporated by reference into the registration statement of which this prospectus forms a part. We encourage holders to read the articles and the applicable provisions of English law for additional information. Further, please note that if you are a holder of ordinary shares represented by American Depositary Shares, or ADSs, then you are not treated as one of our shareholders and do not have any shareholder rights.

General

We were incorporated as a private limited company with the legal name 4D Pharma plc under the laws of England and Wales on January 10, 2014 with the company number 08840579. Our principal executive offices are located at 5th Floor, 9 Bond Court, Leeds, LS1 2JZ, United Kingdom. The principal legislation under which we operate and our ordinary shares are issued is the U.K. Companies Act. Our ordinary shares have been listed on are listed on the AIM since February 2014 under the symbol “DDDD,” our ADSs have been listed on the Nasdaq Global Market in the United States since March 2021 under the symbol “LBPS” and the Assumed Warrants have been listed on the Nasdaq Global Market in the United States since March 2021 under the symbol “LBPSW.”

Share Capital

As of December 31, 2021, we are authorized to issue up to 308,236,884 ordinary shares, comprising of:

- (i) 180,300,967 outstanding shares. The nominal value of our ordinary shares, including ordinary shares in the form of ADSs, is £0.0025 per ordinary share. Each issued ordinary share is fully paid.
- (ii) 71,380,232 shares authorized for issue without pre-emption rights authorized at the general meeting of our shareholders on May 24, 2021;
- (iii) 21,892,448 shares issuable pursuant to the outstanding warrants issued in March 2020;
- (iv) 15,063,000 shares issuable pursuant to the outstanding public warrants we assumed in connection with our merger with Longevity Acquisition Corporation (the “LOAC Merger”);
- (v) 7,530,000 shares issuable pursuant to warrants issued to backstop investors in connection with the LOAC Merger;
- (vi) 2,892,096 shares issuable pursuant to the representative units we assumed in connection with the LOAC Merger;
- (vii) 1,205,040 shares issuable pursuant private warrants we assumed in connection with the LOAC Merger;
- (viii) 212,568 shares issuable pursuant to warrants issued to Oxford Finance Luxembourg S.À R.L.;
- (ix) 7,520,152 options issuable under the 2021 Long Term Incentive Plan scheme (the “2021 LTIP”); and
- (x) 240,381 options issuable under the 2015 Long Term Incentive Plan scheme (the “2015 LTIP”).

Share capital history

On April 15, 2021, Chief Executive Officer, Duncan Peyton and our Chief Scientific Officer, Alexander Stevenson subscribed for 1,317,680 ordinary shares at a share price of £1.10 (or \$1.52) per share.

On March 22, 2021, we assumed warrants to purchase up to a total 16,268,040 ordinary shares at an exercise price of \$1.53 per ordinary share (the “Assumed Warrants”). We also assumed an option to purchase up to a total of 240,000 units at an exercise price of \$11.50 per unit, each unit consisting of 8.28465 ordinary shares and a warrant to purchase up to 3.76575 ordinary shares at an exercise price of \$1.53 per ordinary share. We also committed to issue warrants to acquire up to 7,530,000 ordinary shares at an exercise price of £0.0025 per ordinary share.

On March 17, 2021 and March 22, 2021, certain accredited investors and Merck Sharp & Dohme Corp. subscribed for 16,367,332 ordinary shares at a price of £1.10 (or \$1.52) per ordinary share.

In July 2020, we raised £7.7 million (\$9.7 million) (£7.1 million (\$9.0 million) net of transaction costs) through the issuance of 21,898,400 ordinary shares at a share price of 35 pence (\$0.44) per share.

In February 2020, we raised £22 million (\$28.6 million) (£20.9 million (\$27.2 million) net of transaction costs) through the issuance of 44 million ordinary shares at a share price of 50 pence (\$0.65) per share. A warrant was also issued on the basis of one share for every two ordinary shares issued and has an exercise price of 100 pence (\$1.30) per share and is exercisable for five years from the date of issuance.

We have also exercised our right to cause MSD to purchase \$5 million of new ordinary shares at the same price as other investors in the February 2020 fundraising pursuant to the terms of a subscription agreement.

Options

As of February 28, 2022, there were share options to purchase 15,611,848 ordinary shares of £0.0025 each outstanding. Options granted have an exercise price based on market value at the time of issue of between £0.305 and £0.536 and are pursuant to our 2021 LTIP.

As of December 31, 2021, there were share options to purchase 240,381 ordinary shares of £0.0025 each outstanding, exercisable at par value. The exercise of share options granted is pursuant to our 2015 LTIP.

As of December 31, 2021, a total of 175,521 shares had been issued from exercise of warrants and employee share options.

General Description of our Ordinary Shares

The ordinary shares underlying our ADSs comprise a single class of ordinary shares with a nominal value of £0.0025 each.

The following information is a summary of our ordinary shares:

- Our ordinary shares carry the right to receive dividends and distributions paid by us, if any.
- The holders of our ordinary shares have the right to receive notice of, and to attend and vote at, all our general meetings.
- Subject to the U.K. Companies Act, any equity securities issued by us for cash must first be offered to our shareholders in proportion to their existing holdings of our ordinary shares.
- The U.K. Companies Act allow for the disapplication of pre-emption rights, which may be waived by a special resolution of not less than three-fourths of our shareholders, either generally or specifically, for a maximum period not exceeding five years.
- Our ordinary shares are not redeemable; however, we may purchase or contract to purchase any of our ordinary shares on or off-market, subject to the U.K. Companies Act and our articles of association. We may only purchase our ordinary shares out of distributable reserves or the proceeds of a new issue of shares made for the purpose of funding the repurchase.

If we are wound up (whether the liquidation is voluntary, under supervision of the Court or by the Court), the liquidator is under a duty to collect in and realize our assets and to distribute them to our creditors and, if there is a surplus, to our shareholders according to their entitlements. This applies whether the assets consist of property of one kind or of different kinds.

Share rights

Subject to the U.K. Companies Act, the articles and to any rights for the time being attached to any existing share, ordinary shares may be issued with such rights or restrictions as we may from time to time by ordinary resolution determine, or, if we have not so determined, as our board of directors may determine.

Subject to the U.K. Companies Act, any share may be issued which is to be redeemed or is to be liable to be redeemed at the option of 4D Pharma or the holder, on such terms, conditions and in such manner as our board of directors may determine.

Voting rights

Subject to any rights or restrictions attached to any shares from time to time, the 4D Pharma shareholders, their duly appointed proxies shall have voting rights as provided in the U.K. Companies Act, except that on a vote on a resolution on a show of hands at a meeting, a proxy has one vote for and one vote against the resolution if the proxy has been duly appointed by more than one member entitled to vote on the resolution and either:

- the proxy has been instructed by one or more of those members to vote in one way and has been instructed by one or more other of those members to vote in the other way; or
- the proxy has been instructed by one or more of those members to vote in one way and is given discretion as to how to vote by one or more other of those members and wishes to use that discretion to vote in the other way.

At any general meeting a resolution put to the vote of the meeting shall be decided on a show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. Subject to the provisions of the Companies Act, a poll may be demanded by:

- the chairman of the meeting;
- not less than five members present in person having the right to vote on the resolution;
- a member or members present in person representing in aggregate not less than one tenth of the total voting rights of all the members having the right to vote at the meeting; or
- a member or members present in person holding shares in the Company conferring a right to vote at the meeting, being shares on which an aggregate sum has been paid up equal to not less than one tenth of the total sum paid up on all the shares conferring that right.

Restrictions on Voting

No shareholder shall, unless the directors otherwise determine, be entitled to vote, either in person or by proxy, at any general meeting or at any separate class meeting in respect of any share held by such shareholder unless all calls or other sums payable by such shareholder in respect of that share have been paid.

Our board of directors may from time to time make calls upon the shareholders in respect of any money unpaid on their shares and each shareholder shall (subject to us serving on such shareholder at least 14 days' notice specifying the time or times and place of payment) pay at the time or times so specified the amount called on such holder's shares.

Variation of Rights

The rights attached to any class of shares may be varied or abrogated, in accordance with the provisions of the U.K. Companies Act and with either the written consent of the holders of not less than three-fourths in nominal value of the issued shares of that class (calculated excluding any shares held as treasury shares), or with the sanction of a special resolution (being a 75% majority of 4D Pharma shareholders, present at a general meeting in person or by proxy) passed at a separate meeting of the holders of those shares. At every such separate general meeting (except an adjourned meeting) the quorum must be two or more persons holding or representing by proxy not less than one-third in nominal value of the issued shares of the class (calculated excluding any shares held as treasury shares).

The rights conferred upon the holders of any shares are not, unless otherwise expressly provided in the rights attaching to those shares, deemed to be varied by the creation or issue of further shares ranking equally with them.

Share transfers

The ordinary shares are in registered form. Any ordinary shares may be held in uncertificated form.

A member may transfer certificated shares to another person by a written instrument of transfer in any usual form (or any other form approved by our board of directors) executed by or on behalf of the member and, in the case of a share which is not fully paid, by or on behalf of that person. Our board of directors may refuse to register the transfer of a certificated share which is in respect of a partly paid share provided that any refusal does not prevent open and proper dealings of any class of shares which are admitted to trading on AIM. Our board of directors may also refuse to register the transfer of a certificated share unless the transfer is in respect of only one class of share, is duly stamped (or certified as not chargeable to stamp duty) and is deposited to our registered office or any place that our board of directors may determine and is accompanied by the relevant share certificate or such other evidence our board of directors may reasonably require.

The transferor of an ordinary share is deemed to remain the holder until the transferee's name is entered in the share register.

Subject to the provisions of our articles of association, title to uncertificated shares may be transferred in accordance with the Uncertificated Securities Regulations 2001. Our board of directors is required to register a transfer of any uncertificated share in accordance with those regulations. Our board of directors may refuse to register any such transfer which is in favor of more than four persons jointly or in any other circumstance permitted by those regulations. Provisions of the articles of association do not apply to any uncertificated shares to the extent that such provisions are inconsistent with the holding of shares in uncertificated form or with the transfer of shares by means of a relevant system.

Our board of directors can decline to register any transfer of any share which is not a fully paid share or any transfer of any share on which we have a lien.

Dividends

Subject to it having sufficient distributable reserves, we may by ordinary resolution (being a resolution passed by a 50% majority of our shareholders in person or by proxy) from time to time declare dividends not exceeding the amount recommended by our board of directors. Our board of directors may pay interim dividends, and also any fixed rate dividend, whenever our financial position, in the opinion of our board of directors, justifies its payment.

All dividends on shares are to be paid according to the amounts paid up on their nominal value, or otherwise in accordance with the terms concerning entitlement to dividends on which shares were issued.

All unclaimed dividends may be made use of by our board of directors for our benefit until claimed. Any dividend unclaimed for a period of 12 years from the date when it was declared or became due for payment shall revert to 4D Pharma.

Our board of directors can be claimed by way of scrip dividend instead of cash in respect of any dividend.

Shareholder meetings

Our board of directors is required to convene annual general meetings in accordance with the U.K. Companies Act. The U.K. Companies Act provides that a general meeting (other than an adjourned meeting) must be called by notice of at least 21 days in the case of an annual general meeting (unless shareholders approve a notice period of 14 days by special resolution (being a resolution passed by a 75% majority of 4D Pharma shareholders present at a general meeting in person or by proxy) and at least 14 days in any other case). Our board of directors may convene a general meeting which is not an annual general meeting whenever it thinks fit.

We are required to give notice of a general meeting to each member (other than a person who, under our articles of association or pursuant to any restrictions imposed on any shares, is not entitled to receive such a notice or to whom we, in accordance with applicable law, have not sent and are not required to send our latest annual report and accounts), to our directors and to our auditors. For these purposes "members" are the persons registered in our register of members as being holders of shares at any particular time on any particular record date fixed by our board of directors that (in accordance with the Uncertificated Securities Regulations 2001) is not more than 21 days before the sending out of the notice convening the meeting. The notice of a general meeting may specify a time by which a person must be entered on our register of members in order to have the right to attend or vote at the meeting.

A member who is entitled to attend and vote at a general meeting is entitled to appoint another person, or two or more persons in respect of different shares held by him, as his proxy to exercise all or any of his rights to attend and to speak and to vote at the meeting.

Every member who is present at a general meeting (whether physical or electronic) in person or by proxy is entitled to one vote on a resolution put to the meeting on a show of hands and to one vote for every share of which he is the holder on a resolution put to the meeting on a poll.

Alteration of share capital

We may alter its share capital in any way permitted by the U.K. Companies Act and applicable law and confer any preference or other advantage on one or more of the shares resulting from any division or sub-division of its share capital. We may, by special resolution (being a resolution passed by a 75% majority of 4D Pharma shareholders present at a general meeting in person or by proxy), reduce its share capital, share premium account, capital redemption reserve or any other undistributable reserves.

Change of Control

There is no specific provision in the articles of association that would have the effect of delaying, deferring or preventing a change of control.

Distributions on Winding Up

On a winding up, the liquidator may, with the sanction of a special resolution of shareholders and any other sanctions required by law, divide amongst the shareholders (excluding the company itself to the extent it is a shareholder by virtue only of its holding of shares as treasury shares) in specie or in kind the whole or any part of our assets (whether they shall consist of property of the same kind or not) and may set such values and may determine how such division shall be carried out as between the shareholders or different classes of shareholder. The liquidator may, with the sanction of a special resolution of the shareholders and any other sanctions required by law, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the shareholders as the liquidator shall think fit, but no shareholder shall be compelled to accept any shares or other assets upon which there is any liability.

CREST

To be traded on AIM, securities must be able to be transferred and settled through the CREST system. CREST is a computerized paperless share transfer and settlement system which allows securities to be transferred by electronic means, without the need for a written instrument of transfer. The articles of association are consistent with CREST membership and, amongst other things, allow for the holding, evidencing and transferring of shares through CREST in uncertificated form.

Directors

Number of Directors

Unless and until otherwise determined by an ordinary resolution of shareholders, we may not have less than two directors and no more than ten directors on our board of directors.

Appointment of Directors

Subject to the provisions of the articles of association we may, by ordinary resolution of the shareholders, elect any person who is willing to act to be a director, either to fill a casual vacancy or as an addition to the existing board. No person that is not a director retiring from the existing board is eligible for appointment as a director unless recommended by the board of directors, or unless not less than seven and not more than 42 days before the date appointed for the meeting a notice is given to the company by a member expressing an intention to propose such person for appointment as a director, and such notice has also been signed by that person expressing a willingness to be elected.

Without prejudice to the power to appoint any person to be a director by shareholder resolution, the board has power to appoint any person to be a director, either to fill a casual vacancy or as an addition to the existing board but so that the total number of directors does not exceed any maximum number fixed by or in accordance with the Articles.

Any director appointed by the board will hold office only until the following annual general meeting. Such a director is eligible for re-appointment at that meeting.

Rotation of Directors

At every annual general meeting, there shall retire from office at least one third of the directors. A retiring director shall be eligible for re-appointment. A director retiring at a meeting shall, if he or she is not re-appointed at such meeting, retain office until the meeting appoints someone in his or her place, or if it does not do so, until the conclusion of such meeting.

Directors' Interests

The directors may authorize, to the fullest extent permitted by law, any matter proposed to them which would otherwise result in a director infringing his or her duty to avoid a situation in which he or she has, or can have, a direct or indirect interest that conflicts, or possibly may conflict, with our interests. A director shall not, save as otherwise agreed by him or her, be accountable to us for any benefit which he or she derives from any matter authorized by the directors and any contract, transaction or arrangement relating thereto shall not be liable to be avoided on the grounds of any such benefit.

Subject to the requirements under sections 175, 177 and 182 of the Companies Act, a director who is any way, whether directly or indirectly, interested in a proposed or existing transaction or arrangement with us shall declare the nature of his interest at a meeting of the directors.

A director shall not vote in respect of any contract, arrangement or transaction whatsoever in which he or she has an interest which is to his or her knowledge a material interest otherwise than by virtue of interests in shares or debentures or other securities of or otherwise in or through our company. A director shall not be counted in the quorum at a meeting in relation to any resolution on which he or she is debarred from voting.

A director shall be entitled to vote (and be counted in the quorum) in respect of any resolution concerning any of the following matters:

- the giving of any guarantee, security or indemnity in respect of (i) money lent or obligations incurred by him or any other person at the request of, or for the benefit of, the Company or any of its subsidiary undertakings, or (ii) a debt or obligation of the of the Company or any of its subsidiary undertakings for which he himself has assumed responsibility under a guarantee or indemnity or by the giving of security;
- any contract concerning the subscription of or purchase of shares, debentures or other securities of the Company by him under an offer to members;
- any contract concerning any issue or offer of shares or debentures or other securities of or by the Company or any of its subsidiary undertakings for subscription or purchase, in respect of which he is or may be entitled to participate in his capacity as a holder of any such securities or as an underwriter or sub-underwriter;
- any contract concerning another company in which he is interested, directly or indirectly, and whether as an officer or member or otherwise, provided that he does not hold an interest representing one per cent or more of any class of the equity share capital of such company (or of any third company through which his interest is derived and calculated exclusive of any shares of that class in that company held as treasury shares) or of the voting rights available to members of the relevant company (any such interest being deemed for the purposes of this article to be a material interest in all circumstances);
- any contract for the benefit of employees of the Company or of any of its subsidiary undertakings which does not accord to him any privilege or benefit not generally accorded to the employees to whom the contract or arrangement relates;
- any contract concerning the purchase or maintenance of insurance either for or for the benefit of any director or for persons who include directors; and
- any proposal for the Company (i) to provide him with an indemnity permitted by the Statutes, (ii) to provide him with funds in circumstances permitted by the Statutes to meet his defense expenditure in respect of any civil or criminal proceedings or regulatory investigation or other regulatory action or in connection with any application for any category of relief permitted by the Statutes, or (iii) to do anything to enable him to avoid incurring any such expenditure.

If a question arises at a meeting of the board or of a committee of the board as to the right of a director to vote or be counted in the quorum, and such question is not resolved by his or her voluntarily agreeing to abstain from voting or not to be counted in the quorum, the question shall be determined by the chairman and his or her ruling in relation to any director other than himself or herself shall be final and conclusive except in a case where the nature or extent of the interest of the director concerned has not been fairly disclosed.

Directors' Fees and Remuneration

Each of the directors shall be paid a fee in such sums as may from time to time be determined by the directors provided that the aggregate of all such fees so paid to a director shall not exceed £0.6 million per annum, or such higher amount as may from time to time be determined by ordinary resolution of shareholders.

Each director may be paid all proper and reasonable expenses incurred in attending and returning from meetings of the directors or committees of the directors or general meetings of the company or separate meetings of the holders of any class of shares or debentures of the company or otherwise in connection with the business of our Company.

Any director who is appointed to any executive office or who serves on any committee or who devotes special attention to the business of our company, or who otherwise performs services which in the opinion of the 4D Pharma Board are outside the scope of the ordinary duties of a director, may be paid such extra remuneration by way of salary, percentage of profits or otherwise as the 4D Pharma Board may determine.

Borrowing Powers

Our board of directors may exercise all the powers to borrow money and to mortgage or charge all or any part of our undertaking, property, assets (present or future) and uncalled capital and to issue debentures, debenture stock and other securities, whether outright or as collateral security for any debt, liability or obligation of us or of any third party, subject to and in accordance with the U.K. Companies Act.

Our board of directors must restrict our borrowings and exercise all voting and other rights or powers of control exercisable by us in relation to its subsidiaries so as to secure that the aggregate principal amount of all borrowings by the Group outstanding at any time shall not, without the previous sanction of an ordinary resolution of the shareholders, exceed a sum equal to three times the aggregate of:

- the amount paid up or credited as paid up on our issued share capital and on any share capital that has been unconditionally allotted but not issued; and
- the amounts standing to the credit of our reserves (including any share premium account, capital redemption reserve and revaluation reserve) after adding any credit balance or deducting any debit balance on the profit and loss account;

all as shown in the latest audited consolidated balance sheet of the Group, subject to certain adjustments.

Indemnity

Every one of our directors or other officers shall be indemnified out of our funds against all costs, charges, expenses, losses and liabilities sustained or incurred by him or her for negligence, default, breach of duty or breach of trust or otherwise in relation to our affairs or the affairs of an associated company, or in connection with our activities, or the activities of an associated company.

Other English Law Considerations

Notification of Voting Rights

A shareholder in a public company incorporated in the United Kingdom whose shares are admitted to trading on AIM is required pursuant to Rule 5 of the Disclosure Guidance and Transparency Rules of the U.K. Financial Conduct Authority to notify us of the percentage of his, her or its voting rights if the percentage of voting rights which he, she or it holds as a shareholder or through his, her or its direct or indirect holding of financial instruments (or a combination of such holdings) reaches, exceeds or falls below 3%, 4%, 5%, and each 1% threshold thereafter up to 100% as a result of an acquisition or disposal of shares or financial instruments.

Mandatory Purchases and Acquisitions

Pursuant to Sections 979 to 991 of the U.K. Companies Act, where a takeover offer has been made for us and the offeror has acquired or unconditionally contracted to acquire not less than 90% in value of the shares to which the offer relates and not less than 90% of the voting rights carried by those shares, the offeror may give notice to the holder of any shares to which the offer relates which the offeror has not acquired or unconditionally contracted to acquire that he, she or it wishes to acquire, and is entitled to so acquire, those shares on the same terms as the general offer. The offeror would do so by sending a notice to the outstanding minority shareholders telling them that it will compulsorily acquire their shares.

Such notice must be sent within three months of the last day on which the offer can be accepted in the prescribed manner. The squeeze-out of the minority shareholders can be completed at the end of six weeks from the date the notice has been given, subject to the minority shareholders failing to successfully lodge an application to the court to prevent such squeeze-out any time prior to the end of those six weeks following which the offeror can execute a transfer of the outstanding shares in its favor and pay the consideration to us, which would hold the consideration on trust for the outstanding minority shareholders. The consideration offered to the outstanding minority shareholders whose shares are compulsorily acquired under the U.K. Companies Act must, in general, be the same as the consideration that was available under the takeover offer.

Sell Out

The U.K. Companies Act also gives our minority shareholders a right to be bought out in certain circumstances by an offeror who has made a takeover offer for all of our shares. The holder of shares to which the offer relates, and who has not otherwise accepted the offer, may require the offeror to acquire his, her or its shares if, prior to the expiry of the acceptance period for such offer, (i) the offeror has acquired or unconditionally agreed to acquire not less than 90% in value of the voting shares, and (ii) not less than 90% of the voting rights carried by those shares. The offeror may impose a time limit on the rights of minority shareholders to be bought out that is not less than three months after the end of the acceptance period. If a shareholder exercises his, her or its rights to be bought out, the offeror is required to acquire those shares on the terms of this offer or on such other terms as may be agreed.

Disclosure of Interest in Shares

Pursuant to Part 22 of the U.K. Companies Act, we are empowered by notice in writing to any person whom we know or have reasonable cause to believe to be interested in our shares, or at any time during the three years immediately preceding the date on which the notice is issued has been so interested, within a reasonable time to disclose to us particulars of that person's interest and (so far as is within such person's knowledge) particulars of any other interest that subsists or subsisted in those shares.

Under the articles of association, if a person defaults in supplying us with the required particulars in relation to the shares in question, or default shares, within the prescribed period of 14 days from the date of the service of notice, the directors may by notice direct that:

- in respect of the default shares, the relevant shareholder shall not be entitled to vote (either in person or by proxy) at any general meeting or to exercise any other right conferred by a shareholding in relation to general meetings; and
- where the default shares represent at least 0.25% of their class, (i) any dividend or other money payable in respect of the default shares shall be retained by us without liability to pay interest and/or (ii) no transfers by the relevant shareholder of any default shares may be registered (unless the shareholder is not in default and the shareholder provides a certificate, in a form satisfactory to the directors, to the effect that after due and careful enquiry the shareholder is satisfied that none of the shares to be transferred are default shares).

Purchase of Own Shares

Under the laws of England and Wales, a limited company may only purchase its own shares out of the distributable profits of the company or the proceeds of a fresh issue of shares made for the purpose of financing the purchase, provided that they are not restricted from doing so by their articles of association.

A limited company may not purchase its own shares if, as a result of the purchase, there would no longer be any issued shares of the company other than redeemable shares or shares held as treasury shares. Shares must be fully paid in order to be repurchased.

Subject to the above, we may purchase our own shares in the manner prescribed below. We may make an "on-market" purchase of our own fully paid shares pursuant to an ordinary resolution of shareholders. The resolution authorizing an on-market purchase must:

- specify the maximum number of shares authorized to be acquired;
- determine the maximum and minimum prices that may be paid for the shares; and
- specify a date, not being later than five years after the passing of the resolution, on which the authority to purchase is to expire.

We may purchase our own fully paid shares in an "off-market" purchase otherwise than on a recognized investment exchange pursuant to a purchase contract authorized by resolution of shareholders before the purchase takes place. Any authority will not be effective if any shareholder from whom we propose to purchase shares votes on the resolution and the resolution would not have been passed if he, she or it had not done so. The resolution authorizing the purchase must specify a date, not being later than five years after the passing of the resolution, on which the authority to purchase is to expire.

For these purposes, on-market purchases can only be made on AIM. Any purchase of our ADSs through Nasdaq would be an off-market purchase.

Distributions and Dividends

Under the U.K. Companies Act, before a company can lawfully make a distribution or dividend, it must ensure that it has sufficient distributable reserves (on a non-consolidated basis). The basic rule is that a company's profits available for the purpose of making a distribution are its accumulated, realized profits, so far as not previously utilized by distribution or capitalization, less its accumulated, realized losses, so far as not previously written off in a reduction or reorganization of capital duly made. The requirement to have sufficient distributable reserves before a distribution or dividend can be paid applies to us and to each of our subsidiaries that has been incorporated under the laws of England and Wales.

It is not sufficient that we, as a public company, have made a distributable profit for the purpose of making a distribution. An additional capital maintenance requirement is imposed on us to ensure that the net worth of the company is at least equal to the amount of its capital. A public company can only make a distribution:

- if, at the time that the distribution is made, the amount of its net assets (that is, the total excess of assets over liabilities) is not less than the total of its called up share capital and undistributable reserves; and
- if, and to the extent that, the distribution itself, at the time that it is made, does not reduce the amount of the net assets to less than that total.

City Code on Takeovers and Mergers

As a public company incorporated in England and Wales with our registered office in England and Wales which has shares admitted to AIM, we are subject to the U.K. Takeover Code, which is issued and administered by the U.K. Panel on Takeovers and Mergers, or the Takeover Panel. The U.K. Takeover Code provides a framework within which takeovers of companies subject to it are conducted. In particular, the U.K. Takeover Code contains certain rules in respect of mandatory offers. Under Rule 9 of the U.K. Takeover Code, if a person:

- acquires an interest in our shares which, when taken together with shares in which he or she or persons acting in concert with him or her are interested, carries 30% or more of the voting rights of our shares; or
- who, together with persons acting in concert with him or her, is interested in shares that in the aggregate carry not less than 30% and not more than 50% of the voting rights of our shares, and such persons, or any person acting in concert with him or her, acquires additional interests in shares that increase the percentage of shares carrying voting rights in which that person is interested, the acquirer and depending on the circumstances, its concert parties, would be required (except with the consent of the Takeover Panel) to make a cash offer for our outstanding shares at a price not less than the highest price paid for any interests in the shares by the acquirer or its concert parties during the previous twelve months.

Corporate Governance Code

The AIM Rules for Companies published by the London Stock Exchange require us to include on our website details of a recognized corporate governance code that our board of directors has decided to apply, how we comply with that code and, where we depart from our chosen corporate governance code, an explanation of the reasons for doing so.

Since 2015, our board of directors has sought to apply The QCA Corporate Governance Code (2018 edition). Our board of directors views this as an appropriate corporate governance framework for our company and consideration has been given to each of the ten principles set out in the code.

Differences in Corporate Law

The applicable provisions of the Companies Act 2006 differ from laws applicable to U.S. corporations and their shareholders. Set forth below is a summary of certain differences between the provisions of the Companies Act 2006 applicable to us and the Delaware General Corporation Law relating to shareholders' rights and protections. This summary is not intended to be a complete discussion of the respective rights and it is qualified in its entirety by reference to Delaware law and English law.

England and Wales

Delaware

Number of Directors	Under the Companies Act, a public limited company must have at least two directors and the number of directors may be fixed by or in the manner provided in a company's articles of association.	Under Delaware law, a corporation must have at least one director and the number of directors shall be fixed by or in the manner provided in the bylaws.
Removal of Directors	Under the Companies Act, shareholders may remove a director without cause by an ordinary resolution (which is passed by a simple majority of those voting in person or by proxy at a general meeting) irrespective of any provisions of any service contract the director has with the company, provided 28 clear days' notice of the resolution has been given to the company and its shareholders. On receipt of notice of an intended resolution to remove a director, the company must forthwith send a copy of the notice to the director concerned. Certain other procedural requirements under the Companies Act must also be followed, such as allowing the director to make representations against his or her removal either at the meeting or in writing.	Under Delaware law, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except (i) unless the certificate of incorporation provides otherwise, in the case of a corporation whose board of directors is classified, stockholders may effect such removal only for cause, or (ii) in the case of a corporation having cumulative voting, if less than the entire board of directors is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire board of directors, or, if there are classes of directors, at an election of the class of directors of which he is a part.
Vacancies on the Board of Directors	Under English law, the procedure by which directors, other than a company's initial directors, are appointed is generally set out in a company's articles of association, provided that where two or more persons are appointed as directors of a public limited company by resolution of the shareholders, resolutions appointing each director must be voted on individually.	Under Delaware law, vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) or by a sole remaining director unless (i) otherwise provided in the certificate of incorporation or bylaws of the corporation or (ii) the certificate of incorporation directs that a particular class of stock is to elect such director, in which case a majority of the other directors elected by such class, or a sole remaining director elected by such class, will fill such vacancy.
Annual General Meeting	Under the Companies Act, a public limited company must hold an annual general meeting in each six-month period following the company's annual accounting reference date.	Under Delaware law, the annual meeting of stockholders shall be held at such place, on such date and at such time as may be designated from time to time by the board of directors or as provided in the certificate of incorporation or by the bylaws.
General Meeting	Under the Companies Act, a general meeting of the shareholders of a public limited company may be called by the directors. Shareholders holding at least 5% of the paid-up capital of the company carrying voting rights at general meetings (excluding any paid up capital held as treasury shares) can require the directors to call a general meeting and, if the directors fail to do so within a certain period, may themselves convene a general meeting.	Under Delaware law, special meetings of the stockholders may be called by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or by the bylaws.
Notice of General Meetings	Subject to a company's articles of association providing for a longer period, under the Companies Act, (i) at least 21 days' notice must be given for an annual general meeting and any resolutions to be proposed at the meeting and (ii) at least 14 days' notice is required for any other general meeting of a public limited company. In addition, certain matters, such as the removal of directors or auditors, require special notice, which is 28 days' notice. The shareholders of a company may in all cases consent to a shorter notice period, the proportion of shareholders' consent required being 100% of those entitled to attend and vote in the case of an annual general meeting and, in the case of any other general meeting, a majority in number of the members having a right to attend and vote at the meeting, being a majority who together hold not less than 95% in nominal value of the shares giving a right to attend and vote at the meeting.	Under Delaware law, unless otherwise provided in the certificate of incorporation or bylaws, written notice of any meeting of the stockholders must be given to each stockholder entitled to vote at the meeting not less than ten nor more than 60 days before the date of the meeting and shall specify the place, date, hour and purpose or purposes of the meeting.

Proxy	Under the Companies Act, at any meeting of shareholders, a shareholder may designate another person to attend, speak and vote at the meeting on their behalf by proxy.	Under Delaware law, at any meeting of stockholders, a stockholder may designate another person to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A director of a Delaware corporation may not issue a proxy representing the director's voting rights as a director.
Preemptive Rights	Under the Companies Act, "equity securities," being (i) shares in the company other than shares that, with respect to dividends and capital, carry a right to participate only up to a specified amount in a distribution, referred to as "ordinary shares," or (ii) rights to subscribe for, or to convert securities into, ordinary shares, proposed to be allotted for cash must be offered first to the existing holders of equity shares in the company in proportion to the respective nominal value of their holdings of ordinary shares, unless an exception applies or a special resolution to the contrary has been passed by shareholders in a general meeting or the articles of association provide otherwise in each case in accordance with the provisions of the Companies Act.	Under Delaware law, shareholders have no preemptive rights to subscribe to additional issues of stock or to any security convertible into such stock unless, and except to the extent that, such rights are expressly provided for in the certificate of incorporation.
Authority to Allot	Under the Companies Act, the directors of a company must not allot shares or grant rights to subscribe for or convert any security into shares unless an exception applies or an ordinary resolution to the contrary has been passed by shareholders in a general meeting or the articles of association provide otherwise, in each case in accordance with the provisions of the Companies Act.	Under Delaware law, if the corporation's charter or certificate of incorporation so provides, the board of directors has the power to authorize the issuance of stock. The board may authorize capital stock to be issued for consideration consisting of cash, any tangible or intangible property or any benefit to the corporation or any combination thereof. It may determine the amount of such consideration by approving a formula. In the absence of actual fraud in the transaction, the judgment of the directors as to the value of such consideration is conclusive.

Liability of Directors and Officers

Under the Companies Act, any provision, whether contained in a company's articles of association or any contract or otherwise, that purports to exempt a director of a company, to any extent, from any liability that would otherwise attach to him in connection with any negligence, default, breach of duty or breach of trust in relation to the company, is void. Any provision by which a company directly or indirectly provides an indemnity, to any extent, for a director of the company or of an associated company against any liability attaching to him in connection with any negligence, default, breach of duty or breach of trust in relation to the company of which he is a director is also void except as permitted by the Companies Act, which provides exceptions for the company to (i) purchase and maintain insurance against such liability; (ii) provide a "qualifying third party indemnity," or an indemnity against liability incurred by the director to a person other than the company or an associated company or criminal proceedings in which he is convicted; and (iii) provide a "qualifying pension scheme indemnity," or an indemnity against liability incurred in connection with the company's activities as trustee of an occupational pension plan.

Under Delaware law, a corporation's certificate of incorporation may include a provision eliminating or limiting the personal liability of a director to the corporation and its stockholders for damages arising from a breach of fiduciary duty as a director.

However, no provision can limit the liability of a director for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- intentional or negligent payment of unlawful dividends or stock purchases or redemptions; or
- any transaction from which the director derives an improper personal benefit.

Voting Rights

Under English law, unless a poll is demanded by the shareholders of a company or is required by the chairman of the meeting or the company's articles of association, shareholders shall vote on all resolutions on a show of hands. Under the Companies Act, a poll may be demanded by (i) not fewer than five shareholders having the right to vote on the resolution; (ii) any shareholder(s) representing not less than 10% of the total voting rights of all the shareholders having the right to vote on the resolution (excluding any voting rights attaching to treasury shares); or (iii) any shareholder(s) holding shares in the company conferring a right to vote on the resolution (excluding any voting rights attaching to treasury shares) being shares on which an aggregate sum has been paid up equal to not less than 10% of the total sum paid up on all the shares conferring that right. A company's articles of association may provide more extensive rights for shareholders to call a poll.

Delaware law provides that, unless otherwise provided in the certificate of incorporation, each stockholder is entitled to one vote for each share of capital stock held by such stockholder.

Under English law, an ordinary resolution is passed on a show of hands if it is approved by a simple majority (more than 50%) of the votes cast by shareholders present (in person or by proxy) and entitled to vote. If a poll is demanded, an ordinary resolution is passed if it is approved by holders representing a simple majority of the total voting rights of shareholders present, in person or by proxy, who, being entitled to vote, vote on the resolution. Special resolutions require the affirmative vote of not less than 75% of the votes cast by shareholders present, in person or by proxy, at the meeting.

**Shareholder Vote on
Certain
Transactions**

The Companies Act provides for schemes of arrangement, which are arrangements or compromises between a company and any class of shareholders or creditors and used in certain types of reconstructions, amalgamations, capital reorganizations or takeovers. These arrangements require:

- the approval at a shareholders' or creditors' meeting convened by order of the court, of a majority in number of shareholders or creditors representing 75% in value of the capital held by, or debt owed to, the class of shareholders or creditors, respectively, present and voting, either in person or by proxy; and
- the approval of the court.

**Standard of
Conduct for
Directors**

Under English law, a director owes various statutory and fiduciary duties to the company, including:

- to act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole;
- to avoid a situation in which he has, or can have, a direct or indirect interest that conflicts, or possibly conflicts, with the interests of the company;
- to act in accordance with the company's constitution and only exercise his powers for the purposes for which they are conferred;
- to exercise independent judgment;
- to exercise reasonable care, skill and diligence;
- not to accept benefits from a third party conferred by reason of his being a director or doing, or not doing, anything as a director; and
- to declare any interest that he has, whether directly or indirectly, in a proposed or existing transaction or arrangement with the company.

Generally, under Delaware law, unless the certificate of incorporation provides for the vote of a larger portion of the stock, completion of a merger, consolidation, sale, lease or exchange of all or substantially all of a corporation's assets or dissolution requires:

- the approval of the board of directors; and
- the approval by the vote of the holders of a majority of the outstanding stock or, if the certificate of incorporation provides for more or less than one vote per share, a majority of the votes of the outstanding stock of the corporation entitled to vote on the matter.

Delaware law does not contain specific provisions setting forth the standard of conduct of a director. The scope of the fiduciary duties of directors is generally determined by the courts of the State of Delaware. In general, directors have a duty to act without self-interest, on a well-informed basis and in a manner they reasonably believe to be in the best interest of the stockholders.

Directors of a Delaware corporation owe fiduciary duties of care and loyalty to the corporation and to its shareholders. The duty of care generally requires that a director acts 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 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. In general, but subject to certain exceptions, 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. Delaware courts have also imposed a heightened standard of conduct upon directors of a Delaware corporation who take any action designed to defeat a threatened change in control of the corporation.

In addition, under Delaware law, when the board of directors of a Delaware corporation approves the sale or break-up of a corporation, the board of directors may, in certain circumstances, have a duty to obtain the highest value reasonably available to the shareholders.

**Shareholder
Litigation**

Under English law, generally, the company, rather than its shareholders, is the proper claimant in an action in respect of a wrong done to the company or where there is an irregularity in the company's internal management. Notwithstanding this general position, the Companies Act provides that (i) a court may allow a shareholder to bring a derivative claim (that is, an action in respect of and on behalf of the company) in respect of a cause of action arising from a director's negligence, default, breach of duty or breach of trust and (ii) a shareholder may bring a claim for a court order where the company's affairs have been or are being conducted in a manner that is unfairly prejudicial to some or all of its shareholders.

Under Delaware law, a stockholder may initiate a derivative action to enforce a right of a corporation if the corporation fails to enforce the right itself. The complaint must:

- state that the plaintiff was a stockholder at the time of the transaction of which the plaintiff complains or that the plaintiff's shares thereafter devolved on the plaintiff by operation of law; and
- allege with particularity the efforts made by the plaintiff to obtain the action the plaintiff desires from the directors and the reasons for the plaintiff's failure to obtain the action; or
- state the reasons for not making the effort.

Additionally, the plaintiff must remain a stockholder through the duration of the derivative suit. The action will not be dismissed or compromised without the approval of the Delaware Court of Chancery.

Transfer Agent and Registrar of Shares

Our share register is maintained by Link Group, with Continental acting as the Transfer Agent. The share register reflects only record owners of our ordinary shares. Holders of our ADSs are not treated as our shareholders and their names will therefore not be entered in our share register. The depositary, the custodian or their nominees are the holders of the ordinary shares underlying our ADSs. Pursuant to the terms of the deposit agreement, holders of our ADSs have a right to receive the ordinary shares underlying their ADSs. For discussion on our ADSs and ADS holder rights, see "Description of American Depositary Shares" in this prospectus.

Listing

Our ADSs are listed on the Nasdaq Global Market under the trading symbol "LBPS."

DESCRIPTION OF OUR AMERICAN DEPOSITARY SHARES

American Depositary Receipts

We have appointed JPMorgan Chase Bank, N.A. (“**JPMorgan**”), as depositary. The depositary’s office is located at 383 Madison Avenue, Floor 11, New York, NY 10179. A copy of the form of the deposit agreement is on file with the SEC under cover of a registration statement on Form F-6. A copy of the deposit agreement is available from the SEC’s website (www.sec.gov). Please refer to registration number 333-253268 when retrieving such copy.

Each ADS represents an ownership interest in eight ordinary shares deposited with the custodian, as agent of the depositary, under the deposit agreement among ourselves, the depositary, and all ADR holders, and all beneficial owners of an interest in the ADSs evidenced by ADRs from time to time. Each ADS represents any securities, cash or other property deposited with the depositary but which they have not distributed directly to the holders. Unless certificated ADRs are specifically requested by the holder all ADSs are issued on the books of our depositary in book-entry form and periodic statements will be mailed to the holder which reflect the holder’s ownership interest in such ADSs. In our description, references to American depositary receipts or ADRs shall include the statements holders will receive which reflect their ownership of ADSs.

The holders may hold ADSs either directly or indirectly through their broker or other financial institution. If a holder holds ADSs directly, by having an ADS registered in their name on the books of the depositary, they are an ADR holder. This description assumes they are an ADR holder and hold their ADSs directly. If holders have a beneficial ownership interest in ADSs but hold the ADSs through their broker or financial institution nominee, they are a beneficial owner of ADSs and must rely on the procedures of such broker or financial institution to assert the rights of an ADR holder described in this section. Holders should consult with their broker or financial institution to find out what those procedures are. If a holder is a beneficial owner, they will only be able to exercise any right or receive any benefit under the deposit agreement solely through the ADR holder which holds the ADR(s) evidencing the ADSs owned by the holder, and the arrangements between the holder and such ADR holder may affect their ability to exercise any rights they may have. For all purposes under the deposit agreement, an ADR holder is deemed to have all requisite authority to act on behalf of any and all beneficial owners of the ADSs evidenced by the ADR(s) registered in such ADR holder’s name. The depositary’s only notification obligations under the deposit agreement shall be to the ADR holders, and notice to an ADR holder shall be deemed, for all purposes of the deposit agreement, to constitute notice to any and all beneficial owners of the ADSs evidenced by such ADR holder’s ADRs.

ADR holders or beneficial owners will not be treated as shareholders of ours and they will not have any shareholder rights. English law governs shareholder rights. Because the depositary or its nominee will be the shareholder of record for the shares represented by all outstanding ADSs, shareholder rights rest with such record holder. Holders’ rights are those of an ADR holder or of a beneficial owner. Such rights derive from the terms of the deposit agreement to be entered into among the depositary and all registered holders and beneficial owners from time to time of ADSs issued under the deposit agreement and, in the case of a beneficial owner, from the arrangements between the beneficial owner and the holder of the corresponding ADRs. Obligations of 4D Pharma, the depositary and its agents are also set out in the deposit agreement. Because the depositary or its nominee will actually be the registered owner of the shares, holders must rely on it to exercise the rights of a shareholder on their behalf. The deposit agreement, the ADRs and the ADSs are governed by New York law. Under the deposit agreement, an ADR holder or a beneficial owner of ADSs agrees that any legal suit, action or proceeding brought by holders against or involving us or the depositary, arising out of or based upon the deposit agreement, the ADSs, the ADRs or the transactions contemplated thereby, may only be instituted in a federal court in New York, New York, or, except for claims arising under the Securities Act of 1933 or Securities Exchange Act of 1934, any state court in New York, New York, and holders irrevocably waive any objection which they may have to the laying of venue of any such proceeding and irrevocably submit to the exclusive jurisdiction of such courts in any such suit, action or proceeding, provided, however, pursuant to applicable law and the Company’s Articles of Association, any claim brought by holders arising under the Securities Act of 1933 may be instituted only in any federal court in the United States, and any claim brought by holders or on behalf of the Company with regard to the internal affairs of the Company, including the ability to bring such a claim, shall be governed by and construed in accordance with the laws of England and Wales, and may only be instituted against the Company, its directors, officers or employees as provided in the Company’s Articles of Association in the courts of England and Wales.

The following is a summary of what we believe to be the material terms of the deposit agreement. Notwithstanding this, because it is a summary, it may not contain all the information that holders may otherwise deem important. For more complete information, holders should read the entire deposit agreement and the form of ADR which contains the terms of their ADSs. Holders can read a copy of the deposit agreement which is filed as an exhibit to, or incorporated by reference in, the most recent Form F-6 registration statement (or amendment thereto) filed with the SEC. Holders may also obtain a copy of the form of deposit agreement at the SEC’s Public Reference Room which is located at 100 F Street, NE, Washington, DC 20549. Holders may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-732-0330. Holders may also find the registration statement and the attached deposit agreement on the SEC’s website at <http://www.sec.gov>.

Share Dividends and Other Distributions

How will Holders receive dividends and other distributions on the shares underlying my ADSs?

We may make various types of distributions with respect to our securities. The depositary has agreed that, to the extent practicable, it will pay to holders the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, after converting any cash received into U.S. dollars (if it determines such conversion may be made on a reasonable basis) and, in all cases, making any necessary deductions provided for in the deposit agreement. The depositary may utilize a division, branch or affiliate of JPMorgan to direct, manage and/or execute any public and/or private sale of securities under the deposit agreement. Such division, branch and/or affiliate may charge the depositary a fee in connection with such sales, which fee is considered an expense of the depositary. Holders will receive these distributions in proportion to the number of underlying securities that their ADSs represent.

Except as stated below, the depositary will deliver such distributions to ADR holders in proportion to their interests in the following manner:

- *Cash.* The depositary will distribute any U.S. dollars available to it resulting from a cash dividend or other cash distribution or the net proceeds of sales of any other distribution or portion thereof (to the extent applicable), on an averaged or other practicable basis, subject to (i) appropriate adjustments for taxes withheld, (ii) such distribution being impermissible or impracticable with respect to certain ADR holders, and (iii) deduction of the depositary's and/or its agents' expenses in (1) converting any foreign currency to U.S. dollars to the extent that it determines that such conversion may be made on a reasonable basis, (2) transferring foreign currency or U.S. dollars to the United States by such means as the depositary may determine to the extent that it determines that such transfer may be made on a reasonable basis, (3) obtaining any approval or license of any governmental authority required for such conversion or transfer, which is obtainable at a reasonable cost and within a reasonable time and (4) making any sale by public or private means in any commercially reasonable manner. *If exchange rates fluctuate during a time when the depositary cannot convert a foreign currency, holders may lose some or all of the value of the distribution.*
- *Shares.* In the case of a distribution in shares, the depositary will issue additional ADRs to evidence the number of ADSs representing such shares. Only whole ADSs will be issued. Any shares which would result in fractional ADSs will be sold and the net proceeds will be distributed in the same manner as cash to the ADR holders entitled thereto.
- *Rights to receive additional shares.* In the case of a distribution of rights to subscribe for additional shares or other rights, if we timely provide evidence satisfactory to the depositary that it may lawfully distribute such rights, the depositary will distribute warrants or other instruments in the discretion of the depositary representing such rights. However, if we do not timely furnish such evidence, the depositary may: (i) sell such rights if practicable and distribute the net proceeds in the same manner as cash to the ADR holders entitled thereto; or (ii) if it is not practicable to sell such rights by reason of the non-transferability of the rights, limited markets therefor, their short duration or otherwise, do nothing and allow such rights to lapse, in which case ADR holders will receive nothing and the rights may lapse. We have no obligation to file a registration statement under the Securities Act in order to make any rights available to ADR holders.
- *Other Distributions.* In the case of a distribution of securities or property other than those described above, the depositary may either (i) distribute such securities or property in any manner it deems equitable and practicable or (ii) to the extent the depositary deems distribution of such securities or property not to be equitable and practicable, sell such securities or property and distribute any net proceeds in the same way it distributes cash.
- *Elective Distributions.* In the case of a dividend payable at the election of our shareholders in cash or in additional shares, we will notify the depositary at least 30 days prior to the proposed distribution stating whether or not we wish such elective distribution to be made available to ADR holders. The depositary shall make such elective distribution available to ADR holders only if (i) we shall have timely requested that the elective distribution is available to ADR holders, (ii) the depositary shall have determined that such distribution is reasonably practicable and (iii) the depositary shall have received satisfactory documentation within the terms of the deposit agreement including any legal opinions of counsel that the depositary in its reasonable discretion may request. If the above conditions are not satisfied, the depositary shall, to the extent permitted by law, distribute to the ADR holders, on the basis of the same determination as is made in the local market in respect of the shares for which no election is made, either (x) cash or (y) additional ADSs representing such additional shares. If the above conditions are satisfied, the depositary shall establish procedures to enable ADR holders to elect the receipt of the proposed dividend in cash or in additional ADSs. There can be no assurance that ADR holders or beneficial owners of ADSs generally, or any ADR holder or beneficial owner of ADSs in particular, will be given the opportunity to receive elective distributions on the same terms and conditions as the holders of shares.

If the depositary determines in its discretion that any distribution described above is not practicable with respect to any specific ADR holder, the depositary may (after consultation with the Company, if practicable, in the case where the depositary believes such distribution is not practicable with respect to all ADR holders) choose any method of distribution that it deems practicable for such ADR holder, including the distribution of foreign currency, securities or property, or it may retain such items, without paying interest on or investing them, on behalf of the ADR holder as deposited securities, in which case the ADSs will also represent the retained items.

Any U.S. dollars will be distributed by checks drawn on a bank in the United States for whole dollars and cents. Fractional cents will be withheld without liability and dealt with by the depositary in accordance with its then current practices.

The depositary is not responsible if it fails to determine that any distribution or action is lawful or reasonably practicable.

There can be no assurance that the depositary will be able to convert any currency at a specified exchange rate or sell any property, rights, shares or other securities at a specified price, nor that any of such transactions can be completed within a specified time period. All purchases and sales of securities will be handled by the depositary in accordance with its then current policies, which are currently set forth on <https://www.adr.com/disclosure/disclosures>, the location and contents of which the depositary shall be solely responsible for.

Deposit, Withdrawal and Cancellation

How does the depositary issue ADSs?

The depositary will issue ADSs if holders or a holder's broker deposit shares or evidence of rights to receive shares with the custodian and pay the fees and expenses owing to the depositary in connection with such issuance.

Shares deposited in the future with the custodian must be accompanied by certain delivery documentation and shall, at the time of such deposit, be registered in the name of JPMorgan, as depositary for the benefit of ADR holders or in such other name as the depositary shall direct.

The custodian will hold all deposited shares for the account and to the order of the depositary, in each case for the benefit of ADR holders, to the extent not prohibited by law. ADR holders and beneficial owners thus have no direct ownership interest in the shares and only have such rights as are contained in the deposit agreement. The custodian will also hold any additional securities, property and cash received on or in substitution for the deposited shares. The deposited shares and any such additional items are referred to as "deposited securities".

Deposited securities are not intended to, and shall not, constitute proprietary assets of the depositary, the custodian or their nominees. Beneficial ownership in deposited securities is intended to be and shall at all times during the term of the deposit agreement continue to be, vested in the beneficial owners of the ADSs representing such deposited securities. Notwithstanding anything else contained herein, in the deposit agreement, in the form of ADR and/or in any outstanding ADSs, the depositary, the custodian and their respective nominees are intended to be and shall at all times during the term of the deposit agreement be, the record holder(s) only of the deposited securities represented by the ADSs for the benefit of the ADR holders. The depositary, on its own behalf and on behalf of the custodian and their respective nominees, disclaims any beneficial ownership interest in the deposited securities held on behalf of the ADR holders.

Upon each deposit of shares, receipt of related delivery documentation and compliance with the other provisions of the deposit agreement, including the payment of the fees and charges of the depositary and any taxes or other fees or charges owing, the depositary will issue an ADR or ADRs in the name or upon the order of the person entitled thereto evidencing the number of ADSs to which such person is entitled. All of the ADSs issued will, unless specifically requested to the contrary, be part of the depositary's direct registration system, and an ADR holder will receive periodic statements from the depositary which will show the number of ADSs registered in such ADR holder's name. An ADR holder can request that the ADSs not be held through the depositary's direct registration system and that a certificated ADR be issued.

How do ADR holders cancel an ADS and obtain deposited securities?

When holders turn in their ADR certificate at the depositary's office, or when they provide proper instructions and documentation in the case of direct registration ADSs, the depositary will, upon payment of certain applicable fees, charges and taxes, deliver the underlying shares to holders or upon their written order. Delivery of deposited securities in certificated form will be made at the custodian's office. At the holder's risk, expense and request, the depositary may deliver deposited securities at such other place as holders may request.

The depositary may only restrict the withdrawal of deposited securities in connection with:

- temporary delays caused by closing our transfer books or those of the depositary or the deposit of shares in connection with voting at a shareholders' meeting, or the payment of dividends;
- the payment of fees, taxes and similar charges; or
- compliance with any U.S. or foreign laws or governmental regulations relating to the ADRs or to the withdrawal of deposited securities.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Record Dates

The depositary may, after consultation with us if practicable, fix record dates (which, to the extent applicable, shall be as near as practicable to any corresponding record dates set by us) for the determination of the ADR holders who will be entitled (or obligated, as the case may be):

- to receive any distribution on or in respect of deposited securities,
- to give instructions for the exercise of voting rights at a meeting of holders of shares,
- to pay any fees, charges or expenses assessed by, or owing to the depositary, or
- to receive any notice or to act or be obligated in respect of other matters,
- all subject to the provisions of the deposit agreement.

Voting Rights

How do holders vote?

If a holder is an ADR holder and the depositary asks the holder to provide it with voting instructions, the holder may instruct the depositary how to exercise the voting rights for the shares which underlie their ADSs. As soon as practicable after receiving notice from us of any meeting at which the holders of shares are entitled to vote, or of our solicitation of consents or proxies from holders of shares, the depositary shall fix the ADS record date in accordance with the provisions of the deposit agreement, provided that if the depositary receives a written request from us in a timely manner and at least 30 days prior to the date of such vote or meeting, the depositary shall, at our expense, distribute to the ADR holders a notice stating (i) final information particular to such vote and meeting and any solicitation materials, (ii) that each ADR holder on the record date set by the depositary will, subject to any applicable provisions of the laws of England and Wales, be entitled to instruct the depositary to exercise the voting rights, if any, pertaining to the shares underlying such ADR holder's ADSs and (iii) the manner in which such instructions may be given, including instructions to give a discretionary proxy to a person designated by us. Each ADR holder is solely responsible for the forwarding of such notices to the beneficial owners of ADSs registered in such ADR holder's name. Following actual receipt by the ADR department responsible for proxies and voting of ADR holders' instructions (including, without limitation, instructions of any entity or entities acting on behalf of the nominee for DTC), the depositary shall, in the manner and on or before the time established by the depositary for such purpose, endeavor to vote or cause to be voted the shares represented by the ADSs evidenced by such ADR holders' ADRs in accordance with such instructions insofar as practicable and permitted under the provisions of or governing our shares.

ADR holders and beneficial owners of ADSs are strongly encouraged to forward their voting instructions to the depositary as soon as possible. For instructions to be valid, the ADR department of the depositary that is responsible for proxies and voting must receive them in the manner and on or before the time specified, notwithstanding that such instructions may have been physically received by the depositary prior to such time. The depositary will not itself exercise any voting discretion. Notwithstanding anything contained in the deposit agreement or any ADR, the depositary may, to the extent not prohibited by any law, rule or regulation, or by the rules and/or requirements of the stock exchange or market on which the ADSs are listed or traded, in lieu of distribution of the materials provided to the depositary in connection with any meeting of, or solicitation of consents or proxies from, holders of deposited securities, distribute to the ADR holders a notice that provides such ADR holders with, or otherwise publicizes to such ADR holders, instructions on how to retrieve such materials or receive such materials upon request (*i.e.*, by reference to a website containing the materials for retrieval or a contact for requesting copies of the materials).

There is no guarantee that ADR holders and beneficial owners of ADSs generally, or any ADR holder or beneficial owner of ADSs in particular, will receive voting materials in time to instruct the depositary to vote and it is possible that holders, or persons who hold their ADSs through brokers, dealers or other third parties, will not have the opportunity to exercise a right to vote.

Reports and Other Communications

Will ADR holders be able to view our reports?

The depositary will make available for inspection by ADR holders at the offices of the depositary and the custodian the deposit agreement, the provisions of or governing deposited securities, and any written communications from us which are both received by the custodian or its nominee as a holder of deposited securities and made generally available to the holders of deposited securities.

Additionally, if we make any written communications generally available to holders of our shares, and we furnish copies thereof (or English translations or summaries) to the depositary, it will distribute the same to ADR holders.

Fees and Expenses

What fees and expenses will holders be responsible for paying?

The depositary may charge each person to whom ADSs are issued, including, without limitation, issuances against deposits of shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by us or issuances pursuant to a merger, exchange of securities or any other transaction or event affecting the ADSs or deposited securities, and each person surrendering ADSs for withdrawal of deposited securities or whose ADSs are cancelled or reduced for any other reason, \$5.00 for each 100 ADSs (or any portion thereof) issued, delivered, reduced, cancelled or surrendered, or upon which a share distribution or elective distribution is made or offered, as the case may be. The depositary may sell (by public or private sale) sufficient securities and property received in respect of a share distribution, rights and/or other distribution prior to such deposit to pay such charge.

The following additional charges shall also be incurred by the ADR holders and beneficial owners of ADSs, by any party depositing or withdrawing shares or by any party surrendering ADSs and/or to whom ADSs are issued (including, without limitation, issuance pursuant to a stock dividend or stock split declared by us or an exchange of stock regarding the ADSs or the deposited securities or a distribution of ADSs), whichever is applicable:

- a fee of U.S. \$1.50 per ADR or ADRs for transfers of certificated or direct registration ADRs;
- a fee of up to U.S. \$0.05 per ADS held upon which any cash distribution made pursuant to the deposit agreement or in the case of an elective cash/stock dividend, upon which a cash distribution or an issuance of additional ADSs is made as a result of such elective dividend;
- an aggregate fee of up to U.S. \$0.05 per ADS per calendar year (or portion thereof) for services performed by the depositary in administering the ADRs (which fee may be charged on a periodic basis during each calendar year and shall be assessed against ADR holders as of the record date or record dates set by the depositary during each calendar year and shall be payable in the manner described in the next succeeding provision);
- a fee for the reimbursement of such fees, charges and expenses as are incurred by the depositary and/or any of its agents (including, without limitation, the custodian and expenses incurred on behalf of ADR holders in connection with compliance with foreign exchange control regulations or any law, rule or regulation relating to foreign investment) in connection with the servicing of the shares or other deposited securities, the sale of securities (including, without limitation, deposited securities), the delivery of deposited securities or otherwise in connection with the depositary's or its custodian's compliance with applicable law, rule or regulation (which fees and charges shall be assessed on a proportionate basis against ADR holders as of the record date or dates set by the depositary and shall be payable at the sole discretion of the depositary by billing such ADR holders or by deducting such charge from one or more cash dividends or other cash distributions);
- a fee for the distribution of securities (or the sale of securities in connection with a distribution), such fee being in an amount equal to the \$0.05 per ADS issuance fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities (treating all such securities as if they were shares) but which securities or the net cash proceeds from the sale thereof are instead distributed by the depositary to those ADR holders entitled thereto;
- stock transfer or other taxes and other governmental charges;
- SWIFT, cable, telex and facsimile transmission and delivery charges incurred at holders' request in connection with the deposit or delivery of shares, ADRs or deposited securities;
- transfer or registration fees for the registration of transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited securities; and
- fees of any division, branch or affiliate of the depositary utilized by the depositary to direct, manage and/or execute any public and/or private sale of securities under the deposit agreement.

To facilitate the administration of various depositary receipt transactions, including disbursement of dividends or other cash distributions and other corporate actions, the depositary may engage the foreign exchange desk within JPMorgan Chase Bank, N.A. (the “**Bank**”) and/or its affiliates in order to enter into spot foreign exchange transactions to convert foreign currency into U.S. dollars (“**FX Transactions**”). For certain currencies, FX Transactions are entered into with the Bank or an affiliate, as the case may be, acting in a principal capacity. For other currencies, FX Transactions are routed directly to and managed by an unaffiliated local custodian (or other third-party local liquidity provider), and neither the Bank nor any of its affiliates is a party to such FX Transactions.

The foreign exchange rate applied to an FX Transaction will be either (i) a published benchmark rate, or (ii) a rate determined by a third-party local liquidity provider, in each case plus or minus a spread, as applicable. The depositary will disclose which foreign exchange rate and spread, if any, apply to such currency on the “Disclosure” page (or Successor page) of www.adr.com (as updated by the depositary from time to time, “**ADR.com**”). Such applicable foreign exchange rate and spread may (and neither the depositary, the Bank nor any of their affiliates is under any obligation to ensure that such rate does not) differ from rates and spreads at which comparable transactions are entered into with other customers or the range of foreign exchange rates and spreads at which the Bank or any of its affiliates enters into foreign exchange transactions in the relevant currency pair on the date of the FX Transaction. Additionally, the timing of execution of an FX Transaction varies according to local market dynamics, which may include regulatory requirements, market hours and liquidity in the foreign exchange market or other factors. Furthermore, the Bank and its affiliates may manage the associated risks of their position in the market in a manner they deem appropriate without regard to the impact of such activities on us, the depositary, ADR holders or beneficial owners of ADSs. The spread applied does not reflect any gains or losses that may be earned or incurred by the Bank and its affiliates as a result of risk management or other hedging related activity. Notwithstanding the foregoing, to the extent we provide U.S. dollars to the depositary, neither the Bank nor any of its affiliates will execute an FX Transaction as set forth herein. In such case, the depositary will distribute the U.S. dollars received from us.

Further details relating to the applicable foreign exchange rate, the applicable spread and the execution of FX Transactions will be provided by the depositary on ADR.com. We and by holding an ADS or an interest therein, ADR holders and beneficial owners of ADSs will each be acknowledging and agreeing that the terms applicable to FX Transactions disclosed from time to time on ADR.com will apply to any FX Transaction executed pursuant to the deposit agreement.

We will pay all other charges and expenses of the depositary and any agent of the depositary (except the custodian) pursuant to agreements from time to time between us and the depositary.

The fees and charges holders may be required to pay may vary over time and may be changed by us and by the depositary. ADR holders will receive prior notice of the increase in any such fees and charges. The right of the depositary to charge and receive payment of fees, charges and expenses as provided above shall survive the termination of the deposit agreement.

The depositary may make available to us a set amount or a portion of the depositary fees charged in respect of the ADR program or otherwise upon such terms and conditions as we and the depositary may agree from time to time. The depositary collects its fees for issuance and cancellation of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions, or by directly billing investors, or by charging the book-entry system accounts of participants acting for them. The depositary will generally set off the amounts owing from distributions made to ADR holders. If, however, no distribution exists and payment owing is not timely received by the depositary, the depositary may refuse to provide any further services to ADR holders that have not paid those fees and expenses owing until such fees and expenses have been paid. At the discretion of the depositary, all fees and charges owing under the deposit agreement are due in advance and/or when declared owing by the depositary.

Payment of Taxes

ADR holders or beneficial owners must pay any tax or other governmental charge payable by the custodian or the depositary on any ADS or ADR, deposited security or distribution. If any taxes or other governmental charges (including any penalties and/or interest) shall become payable by or on behalf of the custodian or the depositary with respect to any ADR, any deposited securities represented by the ADSs evidenced thereby or any distribution thereon, such tax or other governmental charge shall be paid by the applicable ADR holder to the depositary and by holding or owning, or having held or owned, an ADR or any ADSs evidenced thereby, the ADR holder and all beneficial owners of such ADSs, and all prior registered holders of such ADRs and prior beneficial owners of such ADSs, jointly and severally, agree to indemnify, defend and save harmless each of the depositary and its agents in respect of such tax or governmental charge. Each ADR holder and beneficial owner of ADSs, and each prior ADR holder and beneficial owner of ADSs, by holding or having held an ADR or an interest in ADSs, acknowledges and agrees that the depositary shall have the right to seek payment of any taxes or governmental charges owing with respect to the relevant ADRs from any one or more such current or prior ADR holder or beneficial owner of ADSs, as determined by the depositary in its sole discretion, without any obligation to seek payment of amounts owing from any other current or prior ADR holder or beneficial owner of ADSs. If an ADR holder owes any tax or other governmental charge, the depositary may (i) deduct the amount thereof from any cash distributions, or (ii) sell deposited securities (by public or private sale) and deduct the amount owing from the net proceeds of such sale. In either case the ADR holder remains liable for any shortfall. If any tax or governmental charge is unpaid, the depositary may also refuse to effect any registration, registration of transfer, split-up or combination of deposited securities or withdrawal of deposited securities until such payment is made. If any tax or governmental charge is required to be withheld on any cash distribution, the depositary may deduct the amount required to be withheld from any cash distribution or, in the case of a non-cash distribution, sell the distributed property or securities (by public or private sale) in such amounts and in such manner as the depositary deems necessary and practicable to pay such taxes and distribute any remaining net proceeds or the balance of any such property after deduction of such taxes to the ADR holders entitled thereto.

ADR holders or beneficial owners will be agreeing to indemnify us, the depositary, its custodian and any of our or their respective officers, directors, employees, agents and affiliates against, and hold each of them harmless from, any claims by any governmental authority with respect to taxes, additions to tax, penalties or interest arising out of any refund of taxes, reduced rate of withholding at source or other tax benefit obtained.

Reclassifications, Recapitalizations and Mergers

If we take certain actions that affect the deposited securities, including (i) any change in par value, split-up, consolidation, cancellation or other reclassification of deposited securities or (ii) any distributions of shares or other property not made to ADR holders or (iii) any recapitalization, reorganization, merger, consolidation, liquidation, receivership, bankruptcy or sale of all or substantially all of our assets, then the depositary may choose to, and shall if reasonably requested by us:

- amend the form of ADR;
- distribute additional or amended ADRs;
- distribute cash, securities or other property it has received in connection with such actions;
- sell any securities or property received and distribute the proceeds as cash; or
- none of the above.

If the depositary does not choose any of the above options, any of the cash, securities or other property it receives will constitute part of the deposited securities and each ADS will then represent a proportionate interest in such property.

Amendment and Termination

How may the deposit agreement be amended?

We may agree with the depositary to amend the deposit agreement and the ADSs without holders' consent for any reason. ADR holders must be given at least 30 days' notice of any amendment that imposes or increases any fees or charges on a per ADS basis (other than stock transfer or other taxes and other governmental charges, transfer or registration fees, SWIFT, cable, telex or facsimile transmission costs, delivery costs or other such expenses), or otherwise prejudices any substantial existing right of ADR holders or beneficial owners of ADSs. Such notice need not describe in detail the specific amendments effectuated thereby, but must identify to ADR holders and beneficial owners a means to access the text of such amendment. If an ADR holder continues to hold an ADR or ADRs after being so notified, such ADR holder and the beneficial owner of the corresponding ADSs are deemed to agree to such amendment and to be bound by the deposit agreement as so amended. No amendment, however, will impair holders' right to surrender their ADSs and receive the underlying securities, except in order to comply with mandatory provisions of applicable law.

Any amendments or supplements which (i) are reasonably necessary (as agreed by us and the depositary) in order for (A) the ADSs to be registered on Form F-6 under the Securities Act of 1933 or (B) the ADSs or shares to be traded solely in electronic book-entry form and (ii) do not in either such case impose or increase any fees or charges to be borne by ADR holders, shall be deemed not to prejudice any substantial rights of ADR holders or beneficial owners of ADSs. Notwithstanding the foregoing, if any governmental body or regulatory body should adopt new laws, rules or regulations which would require amendment or supplement of the deposit agreement or the form of ADR to ensure compliance therewith, we and the depositary may amend or supplement the deposit agreement and the form of ADR (and all outstanding ADRs) at any time in accordance with such changed laws, rules or regulations, which amendment or supplement to the deposit agreement in such circumstances may become effective before a notice of such amendment or supplement is given to ADR holders or within any other period of time as required for compliance.

Notice of any amendment to the deposit agreement or form of ADRs shall not need to describe in detail the specific amendments effectuated thereby, and failure to describe the specific amendments in any such notice shall not render such notice invalid, provided, however, that, in each such case, the notice given to the ADR holders identifies a means for ADR holders and beneficial owners to retrieve or receive the text of such amendment (*i.e.*, upon retrieval from the SEC's, the depositary's or our website or upon request from the depositary).

How may the deposit agreement be terminated?

The depositary may, and shall at our written direction, terminate the deposit agreement and the ADRs by mailing notice of such termination to the ADR holders at least 30 days prior to the date fixed in such notice for such termination; provided, however, if the depositary shall have (i) resigned as depositary under the deposit agreement, notice of such termination by the depositary shall not be provided to ADR holders unless a successor depositary shall not be operating under the deposit agreement within 60 days of the date of such resignation, and (ii) been removed as depositary under the deposit agreement, notice of such termination by the depositary shall not be provided to ADR holders unless a successor depositary shall not be operating under the deposit agreement on the 60th day after our notice of removal was first provided to the depositary. Notwithstanding anything to the contrary herein, the depositary may terminate the deposit agreement without notifying us, but subject to giving 30 days' notice to the ADR holders, under the following circumstances: (i) in the event of our bankruptcy or insolvency, (ii) if we effect (or will effect) a redemption of all or substantially all of the deposited securities, or a cash or share distribution representing a return of all or substantially all of the value of the deposited securities, or (iii) there occurs a merger, consolidation, sale of all or substantially all assets or other transaction as a result of which securities or other property are delivered in exchange for or in lieu of deposited securities. After the date so fixed for termination, the depositary and its agents will perform no further acts under the deposit agreement and the ADRs, except to receive and hold (or sell) distributions on deposited securities and deliver deposited securities being withdrawn. As soon as practicable after the date so fixed for termination, the depositary shall use its reasonable efforts to sell the deposited securities and shall thereafter (as long as it may lawfully do so) hold in an account (which may be a segregated or unsegregated account) the net proceeds of such sales, together with any other cash then held by it under the deposit agreement, without liability for interest, in trust for the pro rata benefit of the ADR holders who have not theretofore surrendered their ADRs. After making such sale, the depositary shall be discharged from all obligations in respect of the deposit agreement and the ADRs, except to account for such net proceeds and other cash. After the date so fixed for termination, we shall be discharged from all obligations under the deposit agreement except for our obligations to the depositary and its agents.

Limitations on Obligations and Liability to ADR holders

Limits on our obligations and the obligations of the depositary; limits on liability to ADR holders and beneficial owners of ADSs

Prior to the issue, registration, registration of transfer, split-up, combination, or cancellation of any ADRs, or the delivery of any distribution in respect thereof, and from time to time in the case of the production of proofs as described below, we or the depositary or its custodian may require:

- payment with respect thereto of (i) any stock transfer or other tax or other governmental charge, (ii) any stock transfer or registration fees in effect for the registration of transfers of shares or other deposited securities upon any applicable register and (iii) any applicable fees and expenses described in the deposit agreement;
- the production of proof satisfactory to it of (i) the identity of any signatory and genuineness of any signature and (ii) such other information, including without limitation, information as to citizenship, residence, exchange control approval, beneficial or other ownership of, or interest in, any securities, compliance with applicable law, regulations, provisions of or governing deposited securities and terms of the deposit agreement and the ADRs, as it may deem necessary or proper; and
- compliance with such regulations as the depositary may establish consistent with the deposit agreement.

The issuance of ADRs, the acceptance of deposits of shares, the registration, registration of transfer, split-up or combination of ADRs or the withdrawal of shares, may be suspended, generally or in particular instances, when the ADR register or any register for deposited securities is closed or when any such action is deemed advisable by the depositary; provided that the ability to withdraw shares may only be limited under the following circumstances: (i) temporary delays caused by closing transfer books of the depositary or our transfer books or the deposit of shares in connection with voting at a shareholders' meeting, or the payment of dividends, (ii) the payment of fees, taxes, and similar charges, and (iii) compliance with any laws or governmental regulations relating to ADRs or to the withdrawal of deposited securities.

The deposit agreement expressly limits the obligations and liability of the depositary, ourselves and each of our and the depositary's respective agents, provided, however, that no provision of the deposit agreement is intended to constitute a waiver or limitation of any rights which ADR holders or beneficial owners of ADSs may have under the Securities Act of 1933 or the Securities Exchange Act of 1934, to the extent applicable. In the deposit agreement it provides that neither we nor the depositary nor any such agent will be liable to ADR holders or beneficial owners of ADSs if:

- any present or future law, rule, regulation, fiat, order or decree of the United States, England, Wales or any other country or jurisdiction, or of any governmental or regulatory authority or securities exchange or market or automated quotation system, the provisions of or governing any deposited securities, any present or future provision of our charter, any act of God, war, terrorism, nationalization, epidemic, pandemic, expropriation, currency restrictions, work stoppage, strike, civil unrest, revolutions, rebellions, explosions, computer failure or circumstance beyond our, the depositary's or our respective agents' direct and immediate control shall prevent or delay, or shall cause any of them to be subject to any civil or criminal penalty in connection with, any act which the deposit agreement or the ADRs provide shall be done or performed by us, the depositary or our respective agents (including, without limitation, voting);
- it exercises or fails to exercise discretion under the deposit agreement or the ADRs including, without limitation, any failure to determine that any distribution or action may be lawful or reasonably practicable;
- it performs its obligations under the deposit agreement and ADRs without gross negligence or willful misconduct;
- it takes any action or refrains from taking any action in reliance upon the advice of or information from legal counsel, accountants, any person presenting shares for deposit, any ADR holder, or any other person believed by it to be competent to give such advice or information, or in the case of the depositary only, our company; or
- it relies upon any written notice, request, direction, instruction or document believed by it to be genuine and to have been signed, presented or given by the proper party or parties.

The depositary shall not be a fiduciary or have any fiduciary duty to ADR holders or beneficial owners of ADSs. Neither the depositary nor its agents have any obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any deposited securities, the ADSs or the ADRs. We and our agents shall only be obligated to appear in, prosecute or defend any action, suit or other proceeding in respect of any deposited securities, the ADSs or the ADRs, which in our opinion may involve us in expense or liability, if indemnity satisfactory to us against all expense (including fees and disbursements of counsel) and liability is furnished as often as may be required. The depositary and its agents may fully respond to any and all demands or requests for information maintained by or on its behalf in connection with the deposit agreement, any ADR holder or holders, any ADRs or otherwise related to the deposit agreement or ADRs to the extent such information is requested or required by or pursuant to any lawful authority, including without limitation laws, rules, regulations, administrative or judicial process, banking, securities or other regulators. The depositary shall not be liable for the acts or omissions made by, or the insolvency of, any securities depository, clearing agency or settlement system. Furthermore, the depositary shall not be responsible for, and shall incur no liability in connection with or arising from, the insolvency of any custodian that is not a branch or affiliate of JPMorgan. Notwithstanding anything to the contrary contained in the deposit agreement or any ADRs, the depositary shall not be responsible for, and shall incur no liability in connection with or arising from, any act or omission to act on the part of the custodian except to the extent that any ADR holder has incurred liability directly as a result of the custodian having (i) committed fraud or willful misconduct in the provision of custodial services to the depositary or (ii) failed to use reasonable care in the provision of custodial services to the depositary as determined in accordance with the standards prevailing in the jurisdiction in which the custodian is located. The depositary and the custodian(s) may use third party delivery services and providers of information regarding matters such as, but not limited to, pricing, proxy voting, corporate actions, class action litigation and other services in connection with the ADRs and the deposit agreement, and use local agents to provide services such as, but not limited to, attendance at any meetings of security holders. Although the depositary and the custodian will use reasonable care (and cause their agents to use reasonable care) in the selection and retention of such third-party providers and local agents, they will not be responsible for any errors or omissions made by them in providing the relevant information or services. The depositary shall not have any liability for the price received in connection with any sale of securities, the timing thereof or any delay in action or omission to act nor shall it be responsible for any error or delay in action, omission to act, default or negligence on the part of the party so retained in connection with any such sale or proposed sale.

The depositary has no obligation to inform ADR holders or beneficial owners of ADSs about the requirements of any laws, rules or regulations or any changes therein or thereto.

Additionally, none of us, the depositary or the custodian shall be liable for the failure by any ADR holder or beneficial owner of ADSs to obtain the benefits of credits or refunds of non-U.S. tax paid against such ADR holder's or beneficial owner's income tax liability. The depositary is under no obligation to provide ADR holders or beneficial owners of ADSs, or any of them, with any information about the tax status of our company. Neither we nor the depositary shall incur any liability for any tax or tax consequences that may be incurred by ADR holders or beneficial owners of ADSs on account of their ownership or disposition of the ADRs or ADSs.

Neither the depositary nor its agents will be responsible for any failure to carry out any instructions to vote any of the deposited securities, for the manner in which any such vote is cast, or for the effect of any such vote. The depositary may rely upon instructions from us or our counsel in respect of any approval or license required for any currency conversion, transfer or distribution. The depositary shall not incur any liability for the content of any information submitted to it by us or on our behalf for distribution to ADR holders or for any inaccuracy of any translation thereof, for any investment risk associated with acquiring an interest in the deposited securities, for the validity or worth of the deposited securities, for the credit-worthiness of any third party, for allowing any rights to lapse upon the terms of the deposit agreement or for the failure or timeliness of any notice from us. The depositary shall not be liable for any acts or omissions made by a successor depositary whether in connection with a previous act or omission of the depositary or in connection with any matter arising wholly after the removal or resignation of the depositary. Neither the depositary, the Company, nor any of their respective agents shall be liable to ADR holders or beneficial owners of ADSs for any indirect, special, punitive or consequential damages (including, without limitation, legal fees and expenses) or lost profits, in each case of any form incurred by any person or entity (including, without limitation, ADR holders and beneficial owners of ADSs), whether or not foreseeable and regardless of the type of action in which such a claim may be brought.

The depositary and its agents may own and deal in any class of securities of our company and our affiliates and in ADSs.

Disclosure of Interest in ADSs

To the extent that the provisions of or governing any deposited securities may require disclosure of or impose limits on beneficial or other ownership of deposited securities, other shares and other securities and may provide for blocking transfer, voting or other rights to enforce such disclosure or limits, ADR holders and beneficial owners of ADSs agree to comply with all such disclosure requirements and ownership limitations and to comply with any reasonable instructions we may provide in respect thereof. We reserve the right to instruct ADR holders (and through any such ADR holder, the beneficial owners of ADSs evidenced by the ADRs registered in such ADR holder's name) to deliver their ADSs for cancellation and withdrawal of the deposited securities so as to permit us to deal directly with the ADR holder and/or beneficial owner of ADSs as a holder of shares and, by holding an ADS or an interest therein, ADR holders and beneficial owners of ADSs will be agreeing to comply with such instructions.

Each ADR holder and beneficial owner agrees to provide such information as the Company may request in a disclosure notice (a “**Disclosure Notice**”) given pursuant to the U.K. Companies Act or the Articles of Association of the Company. Each ADR holder and beneficial owner acknowledges that it understands that failure to comply with a Disclosure Notice may result in the imposition of sanctions against the holder of the underlying Company ordinary shares in respect of which the non-complying person is or was, or appears to be or has been, interested as provided in the U.K. Companies Act and the Articles of Association which currently may include, subject to the granting of an appropriate order by the court, the withdrawal of the voting rights of such ordinary shares and the imposition of restrictions on the rights to receive dividends on and to transfer such ordinary shares. In addition, each ADR holder and beneficial owner agrees to comply with the provisions of the Disclosure Guidance and Transparency Rules published by the United Kingdom Financial Conduct Authority (as amended from time to time, the “**DTRs**”) with regard to the notification to the Company of interests in Company ordinary shares underlying ADSs and certain financial instruments, which currently provide, *inter alia*, that an ADR holder and beneficial owner must notify the Company of the percentage of its voting rights he holds as a shareholder or holds or is deemed to hold through his direct or indirect holding of certain financial instruments (or a combination of such holdings) if the percentage of those voting rights reaches, exceeds or falls below specified thresholds.

Books of Depositary

The depositary or its agent will maintain a register for the registration, registration of transfer, combination and split-up of ADRs, which register shall include the depositary's direct registration system. ADR holders may inspect such records at the depositary's office at all reasonable times, but solely for the purpose of communicating with other ADR holders in the interest of the business of our company or a matter relating to the deposit agreement. Such register (and/or any portion thereof) may be closed at any time or from time to time, when deemed expedient by the depositary. Additionally, at the reasonable request of the Company, the depositary may close the issuance book portion of the ADR register in order to enable the Company to comply with applicable law.

The depositary will maintain facilities for the delivery and receipt of ADRs.

Appointment

In the deposit agreement, each ADR holder and each beneficial owner of ADSs, upon acceptance of any ADSs (or any interest therein) issued in accordance with the terms and conditions of the deposit agreement will be deemed for all purposes to:

- be a party to and bound by the terms of the deposit agreement and the applicable ADR or ADRs, and
- appoint the depositary its attorney-in-fact, with full power to delegate, to act on its behalf and to take any and all actions contemplated in the deposit agreement and the applicable ADR or ADRs, to adopt any and all procedures necessary to comply with applicable laws and to take such action as the depositary in its sole discretion may deem necessary or appropriate to carry out the purposes of the deposit agreement and the applicable ADR and ADRs, the taking of such actions to be the conclusive determinant of the necessity and appropriateness thereof.

Each ADR holder and beneficial owner of ADSs is further deemed to acknowledge and agree that (i) nothing in the deposit agreement or any ADR shall give rise to a partnership or joint venture among the parties thereto nor establish a fiduciary or similar relationship among such parties, (ii) the depositary, its divisions, branches and affiliates, and their respective agents, may from time to time be in the possession of non-public information about our company, the ADR holders, the beneficial owners of ADSs and/or their respective affiliates, (iii) the depositary and its divisions, branches and affiliates may at any time have multiple banking relationships with us, ADR holders, beneficial owners of ADSs and/or the affiliates of any of them, (iv) the depositary and its divisions, branches and affiliates may, from time to time, be engaged in transactions in which parties adverse to us or the ADR holders or beneficial owners of ADSs may have interests, (v) nothing contained in the deposit agreement or any ADR(s) shall (A) preclude the depositary or any of its divisions, branches or affiliates from engaging in such transactions or establishing or maintaining such relationships, or (B) obligate the depositary or any of its divisions, branches or affiliates to disclose such transactions or relationships or to account for any profit made or payment received in such transactions or relationships, and (vi) the depositary shall not be deemed to have knowledge of any information held by any branch, division or affiliate of the depositary.

Governing Law and Consent to Jurisdiction

The deposit agreement and the ADRs are governed by and construed in accordance with the laws of the State of New York. In the deposit agreement, we have submitted to the jurisdiction of the courts of the State of New York and appointed an agent for service of process on our behalf. Without limiting the foregoing, any claim brought by any ADR holder or beneficial owner or on behalf of the Company with regard to the internal affairs of the Company, including the ability to bring such a claim, shall be governed by and construed in accordance with the laws of England and Wales, and any such claims may only be instituted against the Company, its directors, officers or employees as provided in the Company's Articles of Association in the courts of England and Wales.

By holding an ADS or an interest therein, ADR holders and beneficial owners of ADSs each irrevocably agree that any legal suit, action or proceeding brought by any holder or beneficial owner against or involving us or the depositary, arising out of or based upon the deposit agreement, the ADSs or the transactions contemplated thereby, may only be instituted in a federal court in New York, New York, or, except for claims arising under the Securities Act of 1933 or Securities Exchange Act of 1934, any state court in New York, New York, and each irrevocably waives any objection which it may have to the laying of venue of any such proceeding, and irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding, provided, however, pursuant to applicable law and the Company's Articles of Association, any claim brought by holders or beneficial owners arising under the Securities Act of 1933 may be instituted only in any federal court in the United States, and any claim brought by any ADR holder or beneficial owner or on behalf of the Company with regard to the internal affairs of the Company, including the ability to bring such a claim, shall be governed by and construed in accordance with the laws of England and Wales, and any such claims may only be instituted against the Company, its directors, officers or employees as provided in the Company's Articles of Association in the courts of England and Wales.

Jury Trial Waiver

The deposit agreement provides that, to the fullest extent permitted by applicable law, each party thereto (including, for avoidance of doubt, each ADR holder and beneficial owner and/or holder of interests in ADSs) irrevocably waives, to the fullest extent permitted by applicable law, the right to a jury trial in any suit, action or proceeding against us or the depositary directly or indirectly arising out of or relating to our shares or other deposited securities, the ADSs, the ADRs, the deposit agreement, or any transaction contemplated therein, or the breach thereof (whether based on contract, tort, common law or other theory), including any suit, action or proceeding under the U.S. federal securities laws. If we or the depositary were to oppose a jury trial demand based on such waiver, the court would determine whether the waiver was enforceable in the facts and circumstances of that case in accordance with applicable state and federal law, including whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. The waiver to right to a jury trial of the deposit agreement is not intended to be deemed a waiver by any ADR holder or beneficial owner of ADSs of our or the depositary's compliance with the Securities Act of 1933 or the Securities Exchange Act of 1934, to the extent applicable.

DESCRIPTION OF PREFERENCE SHARES

The particular terms of each issue or series of preference shares will be described in the related prospectus supplement. This description will include, where applicable, a description of:

- the title and nominal value of the preference shares;
- the number of preference shares we are offering;
- the liquidation preference per preference share, if any;
- the issue price per preference share (or if applicable, the calculation formula of the issue price per preference share);
- whether preferential subscription rights will be issued to existing shareholders;
- the dividend rate per preference share, dividend period and payment dates and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the relative ranking and preferences of the preference shares as to dividend rights (preferred dividend if any) and rights if we liquidate, dissolve or wind up the Company;
- the procedures for any auction and remarketing, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preference shares on any securities exchange or market;
- whether the preference shares will be convertible into our ordinary shares or preference shares of another category, and, if applicable, conditions of an automatic conversion into ordinary shares, if any, the conversion period, the conversion price, or how such price will be calculated, and under what circumstances it may be adjusted;
- voting rights, if any, of the preference shares;
- preemption rights, if any;
- other restrictions on transfer, sale or assignment, if any;
- whether interests in the preference shares will be represented by American depositary shares;
- a discussion of any material or special U.S. federal and U.K. income tax considerations applicable to the preference shares;
- any limitations on issuances of any class or series of preference shares ranking senior to or on a parity with the series of preference shares being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any rights attached to the preference shares regarding the corporate governance of our company, which may include, for example representation rights to the board of directors; and
- any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preference shares.

DESCRIPTION OF DEBT SECURITIES

This prospectus describes certain general terms and provisions of the debt securities we may issue. The debt securities we may issue will be issued under an indenture between us and a trustee to be specified in an accompanying prospectus supplement (the “**trustee**”) in one or more series established in or pursuant to a board resolution and set forth in an officer’s certificate or a supplemental indenture. When we offer to sell a particular series of debt securities, we will describe the specific terms for the securities in a supplement to this prospectus, including, without limitation, whether the debt securities will be senior or subordinated debt securities. The prospectus supplement will also indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities. We have summarized certain terms and provisions of the indenture below. The summary is not complete. The indenture has been filed as an exhibit to the registration statement of which this prospectus is a part. You should read the indenture and officer’s certificate or supplemental indenture (including the form of debt security) relating to the applicable series of debt securities for the provisions which may be important to you. The indenture is subject to and governed by the U.S. Trust Indenture Act of 1939, as amended (the “**Trust Indenture Act**”). In this description of the debt securities, the words “we,” “us,” or “our” refer only to 4d pharma plc and not to any of our subsidiaries, unless we expressly state or the context otherwise requires.

General

Debt securities may be issued in separate series without limitation as to aggregate principal amount and may be denominated and payable in non-U.S. currencies or units based on or relating to non-U.S. currencies. We may specify a maximum aggregate principal amount for the debt securities of any series.

We are not limited as to the amount of debt securities we may issue under the indenture. Unless otherwise provided in a prospectus supplement, a series of debt securities may be reopened to issue additional debt securities of such series.

The prospectus supplement relating to a particular series of debt securities will set forth:

- whether the debt securities are senior or subordinated and if such debt securities are subordinated, the subordination provisions applicable to such series of debt securities;
- the offering price;
- the title;
- any limit on the aggregate principal amount;
- the person who shall be entitled to receive interest, if other than the record holder on the record date;
- the date or dates the principal will be payable;
- the interest rate or rates, which may be fixable or variable, if any, the date from which interest will accrue, the interest payment dates and the regular record dates, or the method for calculating the dates and rates;
- the place where payments may be made;
- any redemption provisions at our option and any applicable redemption prices associated with these provisions;
- any obligation by us to redeem or repurchase any debt securities pursuant to any sinking fund or similar provision or any redemption or repurchase at the option of the holder and any applicable redemption or repurchase terms and conditions and prices with these provisions;
- if issued other than in denominations of U.S. \$1,000 or any multiple of U.S. \$1,000, the denominations in which the debt securities shall be issuable;
- if applicable, the method for determining how the principal, premium, if any, or interest will be calculated by reference to an index or formula;
- if other than U.S. currency, the currency or currency units in which principal premium, if any, or interest will be payable and whether we or a holder may elect payment to be made in a different currency;

- if the principal, premium or interest on debt securities is payable at our option or the holder thereof in one or more currencies or currency units other than those in which debt securities are payable, the currency or currency units in which the principal, premium or interest on the debt securities as to which such election is made shall be payable and the terms and conditions associated with these provisions;
- the percentage of the principal amount at which the debt securities may be issued, and if other than the entire amount, the portion of the principal amount that will be payable upon acceleration of maturity;
- if the principal amount payable at stated maturity will not be determinable as of any date prior to stated maturity, the amount or method for determining the amount which will be deemed to be the principal amount;
- if applicable, whether the debt securities shall be subject to the defeasance provisions described below under “Satisfaction and Discharge; Defeasance” or such other defeasance provisions specified in the applicable prospectus supplement for the debt securities;
- any conversion or exchange provisions, including the terms and conditions associated with these provisions;
- whether the debt securities will be issuable in the form of a global security, the depositary for any such global security, the form of legends for any global security and the terms for exchanging any such global security into a definitive registered debt security;
- any change in the right of the trustee or the requisite percentage of holders to declare the principal amount due and payable upon an event of default;
- any deletion, addition or change in the events of default or covenants or other provisions applicable to the series of debt securities, or any that are not applicable to the series of debt securities;
- any paying agents, authenticating agents, security registrars or other agents for the debt securities, if other than the trustee;
- any provisions relating to any security provided for the debt securities, including any provisions regarding the circumstances under which collateral may be released or substituted;
- any provisions relating to guaranties for the debt securities and any circumstances under which there may be additional obligors;
- any provisions granting special rights to holders when a specified event occurs;
- any provision with respect to any special interest premium or other premium;
- any special tax provisions that apply to the debt securities;
- with respect to the debt securities that do not bear interest, the dates for any required reports to the applicable trustee;
- any and all additional, eliminated or changed terms that will apply to the debt securities; and
- any other terms of such debt securities.

Unless otherwise specified in the prospectus supplement, the debt securities will be registered debt securities. Debt securities may be sold at a substantial discount below their stated principal amount, bearing no interest or interest at a rate which at time of issuance is below market rates. The U.S. federal income tax considerations applicable to debt securities sold at a discount will be described in the applicable prospectus supplement.

Exchange and Transfer

Debt securities may be transferred or exchanged at the office of the security registrar or at the office of any transfer agent designated by us.

We will not impose a service charge for any transfer or exchange, but we may require holders to pay any tax or other governmental charges associated with any transfer or exchange.

In the event of any partial redemption of debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange, any debt security of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt security of that series selected for redemption, in whole or in part, except the unredeemed portion of the debt security being redeemed in part.

We will appoint the trustee as the initial security registrar. Any transfer agent, in addition to the security registrar initially designated by us, will be named in the prospectus supplement. We may designate additional transfer agents or change transfer agents or change the office of the transfer agent. However, we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

Global Securities

The debt securities of any series may be represented, in whole or in part, by one or more global securities. Each global security will:

- be registered in the name of a depositary, or its nominee, that we will identify in a prospectus supplement;
- be deposited with the depositary or nominee or custodian; and
- bear any required legends.

No global security may be exchanged in whole or in part for debt securities registered in the name of any person other than the depositary or any nominee unless:

- the depositary has notified us that it is unwilling or unable to continue as depositary or has ceased to be qualified to act as depositary;
- an event of default is continuing with respect to the debt securities of the applicable series; or
- any other circumstance described in a prospectus supplement has occurred permitting or requiring the issuance of any such security.

As long as the depositary, or its nominee, is the registered owner of a global security, the depositary or nominee will be considered the sole owner and holder of the debt securities represented by the global security for all purposes under the indenture. Except in the above limited circumstances, owners of beneficial interests in a global security will not be:

- entitled to have the debt securities registered in their names;
- entitled to physical delivery of certificated debt securities; or
- considered to be holders of those debt securities under the indenture.

Payments on a global security will be made to the depositary or its nominee as the holder of the global security. Some jurisdictions have laws that require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to transfer beneficial interests in a global security.

Institutions that have accounts with the depositary or its nominee are referred to as “participants.” Ownership of beneficial interests in a global security will be limited to participants and to persons that may hold beneficial interests through participants. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants.

Ownership of beneficial interests in a global security will be shown on and effected through records maintained by the depositary, with respect to participants’ interests, or any participant, with respect to interests of persons held by participants on their behalf.

Payments, transfers and exchanges relating to beneficial interests in a global security will be subject to policies and procedures of the depositary. The depositary policies and procedures may change from time to time. Neither any trustee nor we will have any responsibility or liability for the depositary’s or any participant’s records with respect to beneficial interests in a global security.

Payment and Paying Agents

Unless otherwise indicated in a prospectus supplement, the provisions described in this paragraph will apply to the debt securities. Payment of interest on a debt security on any interest payment date will be made to the person in whose name the debt security is registered at the close of business on the regular record date. Payment on debt securities of a particular series will be payable at the office of a paying agent or paying agents designated by us. However, at our option, we may pay interest by mailing a check to the record holder. The trustee will initially be designated as our paying agent.

We may also name any other paying agents in a prospectus supplement. We may designate additional paying agents, change paying agents or change the office of any paying agent. However, we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

All moneys paid by us to a paying agent for payment on any debt security that remain unclaimed for a period ending the earlier of:

- 10 business days prior to the date the money would be turned over to the applicable state; or
- at the end of two years after such payment was due,

will be repaid to us thereafter. The holder may look only to us for such payment.

No Protection in the Event of a Change of Control

Unless otherwise indicated in a prospectus supplement with respect to a particular series of debt securities, the debt securities will not contain any provisions that may afford holders of the debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction, whether or not such transaction results in a change in control.

Covenants

Unless otherwise indicated in a prospectus supplement with respect to a particular series of debt securities, the debt securities will not contain any financial or restrictive covenants.

Consolidation, Merger and Sale of Assets

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of debt securities, we may not consolidate with or merge with or into any other person (other than one of our subsidiaries), in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to, any person (other than to one or more of our subsidiaries), unless:

- The successor entity, if any, is a corporation or other business entity organized and validly existing under the laws of the relevant jurisdiction;
- The successor entity assumes our obligations on the debt securities and under the indenture;
- immediately after giving effect to the transaction, no default or event of default, shall have occurred and be continuing; and
- certain other conditions specified in the indenture are met.

Events of Default

Unless we indicate otherwise in a prospectus supplement, the following will be events of default for any series of debt securities under the indenture:

- (1) we fail to pay principal of or any premium or the redemption price on any debt security of that series when due and the time for payment has not been extended or delayed;
- (2) if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;
- (3) we fail to deposit any sinking fund payment when due;
- (4) we fail to perform any covenant in the indenture and such failure continues for 90 days after we are given the notice required in the indenture; and
- (5) certain events involving our bankruptcy, insolvency or reorganization.

Additional or different events of default applicable to a series of debt securities may be described in a prospectus supplement. An event of default of one series of debt securities is not necessarily an event of default for any other series of debt securities.

The trustee may withhold notice to the holders of any default, except defaults in the payment of principal, premium, if any, interest, any sinking fund installment on the debt securities of such series. However, the trustee must consider it to be in the interest of the holders of the debt securities of such series to withhold this notice.

Unless we indicate otherwise in a prospectus supplement, if an event of default, other than an event of default described in clause (5) above, shall occur and be continuing with respect to any series of debt securities, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding securities of that series may declare the principal amount and premium, if any, of the debt securities of that series, or if any debt securities of that series are original issue discount securities, such other amount as may be specified in the applicable prospectus supplement, in each case together with accrued and unpaid interest thereon, if any, to be due and payable immediately.

Unless we indicate otherwise in a prospectus supplement, if an event of default described in clause (5) above shall occur, the principal amount and premium, if any, of all the debt securities of that series, or if any debt securities of that series are original issue discount securities, such other amount as may be specified in the applicable prospectus supplement, in each case together with accrued and unpaid interest thereon, if any, will automatically become immediately due and payable. Notwithstanding the foregoing, each indenture will provide that we may, at our option, elect that the sole remedy for an event of default relating to our failure to comply with our obligations described under the section entitled “Reports” below or our failure to comply with the requirements of Section 314(a)(1) of the Trust Indenture Act will for the first 360 days after the occurrence of such an event of default consist exclusively of the right to receive additional interest on the relevant series of debt securities at an annual rate equal to (1) 0.25% of the principal amount of such series of debt securities for the first 180 days after the occurrence of such event of default and (2) 0.50% of the principal amount of such series of debt securities from the 181st day to, and including, the 360th day after the occurrence of such event of default, which we call “additional interest.” If we so elect, the additional interest will accrue on all outstanding debt securities from and including the date on which such event of default first occurs until such violation is cured or waived and shall be payable on each relevant interest payment date to holders of record on the regular record date immediately preceding the interest payment date. On the 361st day after such event of default (if such violation is not cured or waived prior to such 361st day), the debt securities will be subject to acceleration as provided above. In the event we do not elect to pay additional interest upon any such event of default in accordance with this paragraph, the debt securities will be subject to acceleration as provided above.

In order to elect to pay the additional interest as the sole remedy during the first 360 days after the occurrence of any event of default relating to the failure to comply with the reporting obligations in accordance with the preceding paragraph, we must notify all holders of debt securities and the trustee and paying agent of such election prior to the close of business on the first business day following the date on which such event of default occurs. Upon our failure to timely give such notice or pay the additional interest, the debt securities will be immediately subject to acceleration as provided above.

After acceleration, the holders of a majority in aggregate principal amount of the outstanding securities of that series may, under certain circumstances, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, or other specified amounts or interest, have been cured or waived.

Other than the duty to act with the required care during an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request of the holders unless the holders shall have offered to the trustee reasonable indemnity. Generally, the holders of a majority in aggregate principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee.

A holder of debt securities of any series will not have any right to institute any proceeding under the indenture, or for the appointment of a receiver or a trustee, or for any other remedy under the indenture, unless:

- (1) the holder has previously given to the trustee written notice of a continuing event of default with respect to the debt securities of that series;
- (2) the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made a written request and have offered reasonable indemnity to the trustee to institute the proceeding; and
- (3) the trustee has failed to institute the proceeding and has not received direction inconsistent with the original request from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series within 60 days after the original request.

Holders may, however, sue to enforce the payment of principal, premium or interest on any debt security on or after the due date without following the procedures listed in (1) through (3) above.

We will furnish the trustee an annual statement from our officers as to whether or not we are in default in the performance of the conditions and covenants under the indenture and, if so, specifying all known defaults.

Modification and Waiver

Unless we indicate otherwise in a prospectus supplement, the trustee and we may make modifications and amendments to the indenture with the consent of the holders of a majority in aggregate principal amount of the outstanding securities of each series affected by the modification or amendment.

We may also make modifications and amendments to the indenture for the benefit of holders without their consent, for certain purposes including, but not limited to:

- to evidence the succession of another person to our company, or successive successions, and the assumption by any such successor of our covenants in the indenture in compliance with the indenture;
- adding covenants for the benefit of holders of the debt securities of a series or surrendering any right or power conferred upon us;
- adding events of default for the benefit of holders of all or any series of debt securities;
- making certain changes to facilitate the issuance of the debt securities in registrable or not registrable as to principal, and with or without interest coupons, or to permit or facilitate the issuance of securities in uncertificated form;
- to add to, change or eliminate any of the provisions of the indenture in respect of one or more series of debt securities, provided that any such addition, change or elimination (1) shall neither (a) apply to any security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (b) modify the rights of the holder of any such security with respect to such provision or (2) shall become effective only when there is no such debt security outstanding;
- securing the debt securities of a series, including provisions regarding the circumstances under which collateral may be released and substituted;
- providing for guaranties of, or adding additional obligors on, the debt securities of a series;
- to establish the form or term of debt securities as permitted by the indenture;
- providing for a successor trustee or additional trustees;
- conforming the indenture to the description of the debt securities set forth in this prospectus or the accompanying prospectus supplement;
- curing any ambiguity, defect or inconsistency (or to make any other provisions with respect to matters or questions arising under the indenture);
- supplementing any of the provisions of the indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of the debt securities of a series, provided that such action shall not adversely affect the interest of the holders of such series of debt securities in any material respect;

- make such other provisions in regard to matters or questions arising under the indenture or under any supplemental indentures as our board of directors may deem necessary or desirable, and which does not in each case adversely affect the interests of the holders of the debt securities of a series; and
- comply with requirements of the SEC in order to effect or maintain the qualifications of the indenture under the U.S. Trust Indenture Act of 1939, as amended (the “**Trust Indenture Act**”).

However, neither the trustee nor we may make any modification or amendment without the consent of the holder of each outstanding security of that series affected by the modification or amendment if such modification or amendment would:

- change the stated maturity of the principal of, or any installment of principal or interest on, any debt security;
- reduce the principal, premium, if any, or interest on any debt security or any premium payable upon redemption or repurchase, whether at our option or the option of any holder, or reduce the amount of any sinking fund payments;
- reduce the principal of an original issue discount debt security or any other debt security payable on acceleration of maturity;
- change the place of payment or the currency in which any debt security or any premium or interest is payable;
- impair the right to enforce any payment after the stated maturity (or in the case of redemption, on or after the redemption date);
- modify any of the provisions relating to the percentage in principal amount outstanding of debt securities of a series which must consent to an amendment, supplement or waiver or consent to take any action, except to increase any such percentage or to provide that certain other provisions of the indenture cannot be modified or waived without the consent of the holder of each outstanding debt security of such series affected thereby; provided, however, that this clause shall not be deemed to require the consent of any holder of the debt securities of a series with respect to changes in the references to “the Trustee” and concomitant changes relating to such percentage in principal amount outstanding of debt securities of a series which must consent to any such amendment, supplement or waiver or consent to take action, or the deletion of this proviso, in accordance with the requirements of providing for a successor trustee or additional trustees; or
- if subordinated debt securities, modify the subordination provisions in a materially adverse manner to the holders.

Satisfaction and Discharge; Defeasance

We may be discharged from our obligations on the debt securities, subject to limited exceptions, of any series that have matured or will mature or be redeemed within one year if we deposit enough money with the trustee to pay all the principal, interest and any premium due to the stated maturity date or redemption date of the debt securities.

The indenture contains a provision that permits us to elect either or both of the following:

- we may elect to be discharged from all of our obligations, subject to limited exceptions, with respect to any series of debt securities then outstanding. If we make this election, the holders of the debt securities of the series will not be entitled to the benefits of the indenture, except for the rights of holders to receive payments on debt securities or the registration of transfer and exchange of debt securities and replacement of lost, stolen or mutilated debt securities.
- impair we may elect to be released from our obligations under some or all of any financial or restrictive covenants applicable to the series of debt securities to which the election relates and from the consequences of an event of default resulting from a breach of those covenants.

To make either of the above elections, we must irrevocably deposit in trust with the trustee enough money to pay in full the principal, interest and premium on the debt securities. This amount may be made in cash and/or U.S. government obligations or, in the case of debt securities denominated in a currency other than U.S. dollars, cash in the currency in which such series of securities is denominated and/or foreign government obligations. As a condition to either of the above elections, for debt securities denominated in U.S. dollars we must deliver to the trustee an opinion of counsel that the holders of the debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the action.

With respect to debt securities of any series that are denominated in a currency other than United States dollars, “foreign government obligations” means:

- direct obligations of the government that issued or caused to be issued the currency in which such securities are denominated and for the payment of which obligations its full faith and credit is pledged, or, with respect to debt securities of any series which are denominated in Euros, direct obligations of certain members of the European Union for the payment of which obligations the full faith and credit of such members is pledged, which in each case are not callable or redeemable at the option of the issuer thereof; or
- obligations of a person controlled or supervised by or acting as an agency or instrumentality of a government described in the bullet above the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by such government, which are not callable or redeemable at the option of the issuer thereof.

Notices

Notices to holders will be given by mail to the addresses of the holders in the security register.

Governing Law

The indenture and the debt securities of each series will be governed by, and construed under, the laws of the State of New York.

No Personal Liability of Directors, Officers, Employees and Stockholders

No incorporator, stockholder, employee, agent, officer, director or subsidiary of ours will have any liability for any obligations of ours, or because of the creation of any indebtedness under the debt securities, the indenture or any supplemental indentures. The indenture provides that all such liability is expressly waived and released as a condition of, and as a consideration for, the execution of such indenture and the issuance of the debt securities of such series.

Regarding the Trustee

The indenture limits the right of the trustee, should it become our creditor, to obtain payment of claims or secure its claims.

The trustee will be permitted to engage in certain other transactions with us. However, if the trustee acquires any conflicting interest, and there is a default under the debt securities of any series for which it is trustee, the trustee must eliminate the conflict or resign.

DESCRIPTION OF WARRANTS

General

We may issue warrants to purchase our ordinary shares represented by ADSs and/or debt securities in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement relating to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for our ordinary shares or ADSs and the number of ordinary shares or ADSs to be received upon exercise;
- if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms;
- any applicable material U.S. federal income tax consequences and any applicable material U.K. tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the ordinary shares, ADSs and/or debt securities will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF RIGHTS

General

We may issue rights to our shareholders to purchase our ordinary shares represented by ADSs or the other securities described in this prospectus. We may offer rights separately or together with one or more additional rights, debt securities, ordinary shares represented by ADSs, or warrants, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. Each series of rights will be issued under a separate rights agreement to be entered into between us and a bank or trust company, as rights agent. The rights agent will act solely as our agent in connection with the certificates relating to the rights of the series of certificates and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights. The following description sets forth certain general terms and provisions of the rights to which any prospectus supplement may relate. The particular terms of the rights to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the rights so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the rights, rights agreement or rights certificates described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable rights agreement and rights certificate for additional information before you decide whether to purchase any of our rights. We will provide in a prospectus supplement the following terms of the rights being issued:

- the date of determining the shareholders entitled to the rights distribution;
- the aggregate number of ordinary shares represented by ADSs or other securities purchasable upon exercise of the rights;
- the exercise price;
- the aggregate number of rights issued;
- whether the rights are transferrable and the date, if any, on and after which the rights may be separately transferred;
- the date on which the right to exercise the rights will commence, and the date on which the right to exercise the rights will expire;
- the method by which holders of rights will be entitled to exercise;
- the conditions to the completion of the offering, if any;
- the withdrawal, termination and cancellation rights, if any;
- whether there are any backstop or standby purchaser or purchasers and the terms of their commitment, if any;
- whether shareholders are entitled to oversubscription rights, if any;
- any applicable material U.S. federal income tax considerations and any applicable material U.K. tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights, as applicable.

Each right will entitle the holder of rights to purchase for cash the principal amount of ordinary shares represented by ADSs or other securities at the exercise price provided in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the ordinary shares represented by ADS or other securities, as applicable, purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than shareholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements, as described in the applicable prospectus supplement.

Rights Agent

The rights agent for any rights we offer will be set forth in the applicable prospectus supplement.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus or any prospectus supplement in any combination. Each unit will be issued so that the holder of the unit is also the holder, with the rights and obligations of a holder, of each security included in the unit. The units may be issued under unit agreements to be entered into between us and a unit agent, which may provide that the securities included in the unit may not be held or transferred separately, at any time or any times before a specified date or upon the occurrence of a specified event or occurrence.

The applicable prospectus supplement may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units;
- the terms of the unit agreement governing the units;
- United States federal income tax and material U.K. tax considerations relevant to the units; and
- whether the units will be issued in fully registered global form.

This summary of certain general terms of units and any summary description of units in the applicable prospectus supplement do not purport to be complete and are qualified in their entirety by reference to all provisions of the applicable unit agreement and, if applicable, collateral arrangements and depositary arrangements relating to such units. The forms of the unit agreements and other documents relating to a particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you.

PLAN OF DISTRIBUTION

We may offer and sell securities in this prospectus in any of the ways described below or in any combination:

- through one or more underwriters;
- through dealers, who may act as agents or principal (including a block trade in which a broker or dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction);
- through one or more agents;
- through registered direct offerings;
- as part of a collaboration with a third party;
- as part of an acquisition or merger with a third party;
- through at-the-market issuances;
- in privately negotiated transactions; or
- directly to purchasers or to a single purchaser.

The distribution of the securities by us may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement will describe the terms of the offering of the securities, including the following, as applicable:

- the terms of the securities being offered, including the public offering price of the securities and the proceeds to us;
- the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them;
- any underwriting discounts and commissions or agency fees and other items constituting underwriters' or agents' compensation;
- any options under which underwriters may purchase additional securities from us;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which the securities may be listed. Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

Any ordinary shares will be admitted to trading on AIM and any ADSs will be listed on the Nasdaq Global Market. Underwriters may offer and sell the securities at a fixed price or prices, which may be changed, or from time to time at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. We may, from time to time, authorize agents acting on a best or reasonable efforts basis as our agents to solicit or receive offers to purchase the securities upon the terms and conditions as are set forth in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and may be deemed to have received compensation from us in the form of underwriting discounts or commissions and may also receive commissions from purchasers of securities for whom they may act as agent. Underwriters may sell securities to or through dealers, and dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agent.

Each series of debt securities, warrants, preference shares, rights or units offered will be a new issue of securities and will have no established trading market. The debt securities offered may or may not be listed on a national securities exchange. We cannot be sure as to the liquidity of or the existence of trading markets for any debt securities, warrants, preference shares, rights, or units offered.

Underwriters, dealers and agents who participate in the distribution of securities and their controlling persons may be entitled, under agreements that may be entered into with us to indemnification by us against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments that the underwriters, dealers or agents and their controlling persons may be required to make in respect of those liabilities.

Certain persons participating in an offering may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with applicable laws and regulations, including Regulation M under the Exchange Act, that stabilize, maintain or otherwise affect the price of the offered securities at a level above that which might otherwise prevail in the open market and affect compliance with the EU Market Abuse Regulation (Commission Regulation (EU) no. 596/2014) as it forms part of the UK domestic law by virtue of the European (Withdrawal) Act 2018. including delegated acts]. Over-allotments or short sales of the securities involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. If any such activities will occur, they will be described in the applicable prospectus supplement. These transactions may be discontinued at any time.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

TAXATION

Taxation in the United Kingdom

A general summary of certain U.K. tax considerations relating to the purchase, ownership and disposition of any of the securities offered by this prospectus will be set forth or incorporated by reference in a prospectus supplement relating to the offering of those securities.

Taxation in the United States

A general summary of the material U.S. federal income tax consequences relating to the purchase, ownership and disposition of any of the securities offered by this prospectus will be set forth or incorporated by reference in a prospectus supplement relating to the offering of those securities.

EXPENSES OF THIS OFFERING

The following table sets forth the expenses, other than any underwriting discounts and commissions or agency fees and other items constituting underwriters' or agents' compensation, expected to be incurred by us in connection with a possible offering of securities registered under the registration statement of which this prospectus is a part. All amounts are estimated other than the SEC registration fee.

Expense	Amount
SEC registration fee	\$ 13,905
FINRA filing fees	*
Legal fees and expenses	*
Printing expenses	*
Accounting fees and expenses	*
Miscellaneous expenses	*
Total	\$ 13,905

* To be provided in a prospectus supplement or in a report on Form 6-K subsequently incorporated by reference into this prospectus.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the ordinary shares represented by the ADSs, the preference shares, the warrants, the rights and the units and certain legal matters relating to U.K. law will be passed upon by Pinsent Masons LLP, and the validity of the warrants, the debt securities, the rights and the units and certain legal matters relating to U.S. federal and New York law will be passed upon by Wilson Sonsini Goodrich & Rosati, P.C., Palo Alto, California. Additional legal matters may be passed upon for any underwriters, dealers or agents by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of 4D pharma plc as of December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020 incorporated in this prospectus by reference from the 4D pharma plc Annual Report on Form 20-F/A for the year ended December 31, 2020 have been audited by RSM US LLP, an independent registered public accounting firm, as stated in their report thereon incorporated herein by reference, and have been incorporated in this prospectus and registration statement in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

ENFORCEABILITY OF CIVIL LIABILITIES

We are a corporation organized under the laws of England and Wales. A substantial portion of our assets and most of our directors and executive officers are located and reside, respectively, outside the United States. Because of the location of our assets and board members, it may not be possible for investors to serve process within the United States upon us or such persons with respect to matters arising under the United States federal securities laws or to enforce against us or persons located outside the United States judgments of United States courts asserted under the civil liability provisions of the United States federal securities laws.

We understand that there is doubt as to the enforceability in the United Kingdom, in original actions or in actions for enforcement of judgments of United States courts, of civil liabilities predicated solely upon the federal securities laws of the United States insofar as they are fines or penalties. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in the United Kingdom by reason of being a penalty.

We have appointed Cogency Global Inc. as its agent to receive service of process in any action against it in any state or federal court in the State of New York.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of the registration statement on Form F-3 we filed with the SEC under the Securities Act. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. We have also filed a registration statement on a Form F-6 to register the ADSs representing our ordinary shares. The rules and regulations of the SEC allow us to omit from this prospectus certain information included in the registration statement.

For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement, which may be obtained from the SEC or us, as provided below. Statements in this prospectus or any prospectus supplement are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters.

You should rely only on the information contained in this prospectus or incorporated by reference. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered by this prospectus.

We are subject to the periodic reporting and other informational requirements of the Exchange Act. We file reports and other information with the SEC under the Exchange Act. As a foreign private issuer, we are exempt from, among other things, the rules under the Exchange Act prescribing the furnishing and content of proxy statements and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including us. The address of the SEC website is www.sec.gov. We also maintain a website at www.4dpharma.com through which you can access our SEC filings. The information contained on, or accessible through, our website is not incorporated by reference into this prospectus, and you should not consider any information contained in, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase ordinary shares, including ordinary shares in the form of ADSs. We have included our website address as an inactive textual reference only.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information that we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded.

This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed:

- our Annual Report on Form 20-F for the fiscal year ended December 31, 2020, filed with the SEC on April 2, 2021;
- our Annual Report on Form 20-F/A for the fiscal year ended December 31, 2020, filed with the SEC on April 30, 2021;
- our Reports on Form 6-K submitted May 25, 2020, May 25, 2021, June 4, 2021, July 7, 2021, July 27, 2021, August 2, 2021, September 23, 2021, September 30, 2021, December 14, 2021, January 1, 2022, February 2, 2022, February 18, 2022, February 18, 2022 and March 23, 2022; and
- the description of our ordinary shares and American Depositary Shares contained in our registration statement on Form 8-A (File No. 001-40106), filed with the SEC on February 23, 2021, including any amendments or reports filed for the purpose of updating such description

We are also incorporating by reference all subsequent annual reports on Form 20-F that we file with the SEC and certain reports on Form 6-K that we furnish to the SEC after the date of this prospectus (if such reports on Form 6-K expressly state that they are incorporated in whole or in part by reference into the registration statement of which this prospectus forms a part) prior to the termination of this offering. In all cases, you should rely on the later information over different information included in this prospectus or any accompanying prospectus supplement.

Unless expressly incorporated by reference, nothing in this prospectus shall be deemed to incorporate by reference information furnished to, but not filed with, the SEC. Copies of all documents incorporated by reference in this prospectus, other than exhibits to those documents unless such exhibits are specifically incorporated by reference in this prospectus, will be provided at no cost to each person, including any beneficial owner, who receives a copy of this prospectus on the written or oral request of that person made to:

4D pharma plc
5th Floor, 9 Bond Court
Leeds, LS1 2JZ United Kingdom
Attn: Investor Relations
+44 (0) 113 895 0130



\$150,000,000

Ordinary Shares
American Depositary Shares representing Ordinary Shares
Debt Securities
Preference Shares
Warrants
Rights
Units

PROSPECTUS

, 2022

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 8. Indemnification of Directors and Officers

4D Pharma's articles of association provide that, to the extent permitted by the U.K. Companies Act, the 4D Pharma may indemnify its directors against and every other officer of the company against all costs, charges, losses, expenses and liabilities incurred by such director or officer for any negligence, default, breach of duty or breach of trust or otherwise in relation to the business and affairs of 4D Pharma or any associated company. In addition, 4D Pharma maintains directors' and officers' insurance to insure such persons against certain liabilities.

Insofar as indemnification of liabilities arising under the Securities Act may be permitted to our board, executive officers or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 9. Exhibits

Exhibit Number	Exhibit Description	Incorporation by Reference			Filed Herewith
		Form	Filing Date	Exhibit Number	
1.1*	Form of Underwriting Agreement				
4.1	Articles of Association of 4D pharma plc, as currently in effect	F-4/A	01/27/21	3.1	
4.2	Form of share certificate of 4D pharma plc ordinary share	F-4/A	01/27/21	4.1	
4.3	Form of Deposit Agreement among 4D pharma plc., JPMorgan Chase Bank, N.A., as depositary thereunder, and all Holders and Beneficial Owners from time to time of American Depositary Receipts issued thereunder evidencing American Depositary Shares representing deposited Shares	F-4/A	01/27/21	4.2	
4.4	Form of Indenture				X
4.5*	Form of Debt Security Agreement				
4.6*	Form of Warrant Agreement and Warrant Certificate				
4.7*	Form of Rights Agreement and Rights Certificate				
4.8*	Form of Unit Agreement and Unit				
5.1	Opinion of Pinsent Masons, U.K. counsel to the Registrant				X
5.2	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation, U.S. counsel to the Registrant				X
21.1	List of Subsidiaries	F-4/A	01/27/21	21.1	
23.1	Consent of RSM US LLP, Independent Registered Public Accounting Firm				X
23.2	Consent of Pinsent Masons (included in Exhibit 5.1 and incorporated herein by reference)				X
23.3	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.2 and incorporated herein by reference)				X
24.1	Power of Attorney (included on the signature page to this Registration Statement)				X
25.1**	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939, as amended, of the Trustee under the Senior Indenture will be incorporated herein by reference from a subsequent filing in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939.				
25.2**	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939, as amended, of the Trustee under the Subordinated Indenture will be incorporated herein by reference from a subsequent filing in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939.				
107	Calculation of Registration Fee Table	F-3	3/08/22	107	

* To be filed, if necessary, either by amendment to this registration statement or as an exhibit to a document to be incorporated by reference in this registration statement.

** To be filed pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939.

Item 10. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission, or the Commission, pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) to file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A of Form 20-F at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Securities Act of 1933 need not be furnished, provided, that the registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph (a)(4) and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements. Notwithstanding the foregoing, with respect to registration statements on Form F-3, a post-effective amendment need not be filed to include financial statements and information required by Section 10(a)(3) of the Securities Act of 1933, or Item 8.A of Form 20-F if such financial statements and information are contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Form F-3.

(5) that, for the purpose of determining liability under the Securities Act to any purchaser:

(i) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(6) that, for the purpose of determining liability of a registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of such undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(7) that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-3 and has duly caused this Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, on March 28, 2022.

4D Pharma plc

By: /s/ Duncan Peyton

Name: Duncan Peyton

Title: Chief Executive Officer

By: /s/ John Doyle

Name: John Doyle

Title: Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Amendment No. 1 to the Registration Statement has been signed by the following persons on March 28, 2022 in the capacities indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Duncan Peyton</u> Duncan Peyton	Chief Executive Officer and Director	March 28, 2022
<u>*</u> Alexander Stevenson	Director and Chief Scientific Officer	March 28, 2022
<u>/s/ John Doyle</u> John Doyle	Chief Financial Officer	March 28, 2022
<u>*</u> Axel Glasmacher	Chairman (non-executive) of the Board of Directors	March 28, 2022
<u>*</u> Alexander (Sandy) Macrae	Director	March 28, 2022
<u>*</u> Edgardo (Ed) Baracchini	Director	March 28, 2022
<u>*</u> Katrin Rupalla	Director	March 28, 2022
<u>*</u> Paul Maier	Director	March 28, 2022

By: /s/ Duncan Peyton

Name: Duncan Peyton

Title: Attorney-in-Fact

Pursuant to powers of attorney previously filed

SIGNATURE OF AUTHORIZED U.S. REPRESENTATIVE OF THE REGISTRANT

Pursuant to the Securities Act of 1933, the undersigned, the duly authorized representative in the United States of the registrant has signed this Amendment No. 1 to the Registration Statement or amendment thereto on March 28, 2022.

4D Pharma Delaware Inc.

By: /s/ Glenn Dourado

Name: Glenn Dourado

Title: President

Authorized Representative in the United States

4D pharma plc

[],

AS TRUSTEE TO

INDENTURE

DATED AS OF [●]

DEBT SECURITIES

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Certain Sections of this Indenture relating to Sections 310 through 318, inclusive, of the Trust Indenture Act of 1939:

Section 310(a)(1)	6.9
(a)(2)	6.9
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(b)	6.8, 6.10
Section 311(a)	6.13
(b)	6.13
Section 312(a)	7.1, 7.2
(b)	7.2
(c)	7.2
Section 313(a)	7.3
(b)	7.3
(c)	7.3
(d)	7.3
Section 314(a)	7.4
(a)(4)	10.1, 10.4
(b)	Not Applicable
(c)(1)	1.2
(c)(2)	1.2
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	1.2
Section 315(a)	6.1
(b)	6.2
(c)	6.1
(d)	6.1
(e)	5.14
Section 316(a)	1.1
(a)(1)(A)	5.2, 5.12
(a)(1)(B)	5.13
(a)(2)	Not Applicable
(b)	5.8
(c)	1.4
Section 317(a)(1)	5.3
(a)(2)	5.4
(b)	10.3
Section 318(a)	1.7

NOTE: This reconciliation and tie shall not, for any purpose, be deemed to be a part of the Indenture.

INDENTURE, dated as of [●], between 4D pharma plc, a public limited company incorporated under the laws of England and Wales (herein called the “Company”), having its principal executive office at 5th Floor, 9 Bond Court, Leeds LS1 2JZ United Kingdom, and [], as Trustee (herein called the “Trustee”).

RECITALS OF THE COMPANY

The Company has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of its unsecured debentures, notes or other evidences of indebtedness (herein called the “Securities”), to be issued in one or more series as provided in this Indenture.

All things necessary to make this Indenture a valid agreement of the Company, in accordance with its terms, have been done.

The Indenture is subject to, and will be governed by, the provisions of the Trust Indenture Act that are required to be a part of and govern indentures qualified under the Trust Indenture Act.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of series thereof appertaining, as follows:

ARTICLE 1

DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

Section 1.1 Definitions.

For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (1) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;
 - (2) all other terms used herein which are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein;
 - (3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted accounting principles in the United States of America, and, except as otherwise herein expressly provided, the term “generally accepted accounting principles” with respect to any computation required or permitted hereunder shall mean such accounting principles in the United States of America as are generally accepted at the date of such computation;
 - (4) all references to “\$” refer to the lawful currency of the United States of America;
 - (5) unless the context otherwise requires, any reference to an “Article” or a “Section” refers to an Article or a Section, as the case may be, of this Indenture; and
 - (6) the words “herein,” “hereof” and “hereunder” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.
- “Act,” when used with respect to any Holder, has the meaning specified in Section 1.4.
- “Additional Interest” has the meaning specified in Section 5.2(b).
- “Affiliate” of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person.
- “Authenticating Agent” means any Person authorized by the Trustee pursuant to Section 6.14 to act on behalf of the Trustee to authenticate Securities of one or more series.
- “Board of Directors” means either the board of directors of the Company or any duly authorized committee of that board empowered to act for it with respect to this Indenture.
- “Board Resolution” means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification, and delivered to the Trustee.

“Business Day,” when used with respect to any Place of Payment, means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in that Place of Payment are authorized or obligated by law or executive order to close.

“Commission” means the Securities and Exchange Commission, from time to time constituted, created under the Exchange Act, or, if at any time after the execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties at such time.

“Company” means the corporation named as the “Company” in the first paragraph of this instrument until a successor Person shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Company” shall mean such successor Person.

“Company Request” or “Company Order” means a written request or order signed by any two of the following in the name of the Company: the Chairman of the Board, the Vice Chairman of the Board, the Chief Executive Officer, the President or any executive officer, the principal financial officer, the principal accounting officer, the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary of the Company, and delivered to the Trustee.

“control” when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“Corporate Trust Office” means the corporate trust office of the Trustee at [], or such other office, designated by the Trustee by written notice to the Company, at which at any particular time its corporate trust business shall be administered.

“corporation” means a public limited company, corporation, association, company, joint-stock company or business trust.

“Covenant Defeasance” has the meaning specified in Section 13.3.

“Defaulted Interest” has the meaning specified in Section 3.7.

“Defeasance” has the meaning specified in Section 13.2.

“Depository” means, with respect to Securities of any series issuable in whole or in part in the form of one or more Global Securities, a clearing agency registered under the Exchange Act that is designated to act as Depository for such Securities as contemplated by Section 3.1.

“euro” or “euros” means the currency adopted by those nations participating in the third stage of the economic and monetary union provisions of the Treaty on European Union, signed at Maastricht on February 7, 1992.

“European Economic Area” means the member nations of the European Economic Area pursuant to the Oporto Agreement on the European Economic Area dated May 2, 1992, as amended.

“European Union” means the member nations of the European Union established by the Treaty of European Union, signed at Maastricht on February 7, 1992, which amended the Treaty of Rome establishing the European Community.

“Event of Default” has the meaning specified in Section 5.1.

“Exchange Act” means the Securities Exchange Act of 1934 and any statute successor thereto, in each case as amended from time to time.

“Expiration Date” has the meaning specified in Section 1.4.

“Non-U.S. Government Obligation” means with respect to Securities of any series which are not denominated in the currency of the United States of America (x) any security which is (i) a direct obligation of the government which issued or caused to be issued the currency in which such security is denominated and for the payment of which obligations its full faith and credit is pledged or, with respect to Securities of any series which are denominated in euros, a direct obligation of any member nation of the European Union for the payment of which obligation the full faith and credit of the respective nation is pledged so long as such nation has a credit rating at least equal to that of the highest rated member nation of the European Economic Area, or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of a government specified in clause (i) above the payment of which is unconditionally guaranteed as a full faith and credit obligation by the such government, which, in either case (i) or (ii), is not callable or redeemable at the option of the issuer thereof, and (y) any depositary receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act) as custodian with respect to any Non-U.S. Government Obligation which is specified in clause (x) above and held by such bank for the account of the holder of such depositary receipt, or with respect to any specific payment of principal of or interest on any Non-U.S. Government Obligation which is so specified and held, provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the Non-U.S. Government Obligation or the specific payment of principal or interest evidenced by such depositary receipt.

“Global Security” means, with respect to any series of Securities, a Security executed by the Company and delivered by the Trustee to the Depositary or held by the Trustee as custodian for the Depositary pursuant to a safekeeping agreement with the Depositary, all in accordance with the Indenture, which shall be registered in global form without interest coupons in the name of the Depositary or its nominee.

“Holder” means a Person in whose name a Security is registered in the Security Register.

“Indenture” means this instrument as originally executed and as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, including, for all purposes of this instrument and any such supplemental indenture, the provisions of the Trust Indenture Act that are deemed to be a part of and govern this instrument and any such supplemental indenture, respectively. The term “Indenture” shall also include the terms of particular series of Securities established as contemplated by Section 3.1; provided, however, that if at any time more than one Person is acting as Trustee under this Indenture due to the appointment of one or more separate Trustees for any one or more separate series of Securities, “Indenture” shall mean, with respect to such series of Securities for which any such Person is Trustee, this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of particular series of Securities for which such Person is Trustee established as contemplated by Section 3.1, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is not Trustee, regardless of when such terms or provisions were adopted, and exclusive of any provisions or terms adopted by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee, but to which such person, as such Trustee, was not a party; provided, further that in the event that this Indenture is supplemented or amended by one or more indentures supplemental hereto which are only applicable to certain series of Securities, the term “Indenture” for a particular series of Securities shall only include the supplemental indentures applicable thereto.

“interest,” when used with respect to an Original Issue Discount Security, which by its terms bears interest only at Maturity, means interest payable at Maturity.

“Interest Payment Date,” when used with respect to any Security, means the Stated Maturity of an installment of interest on such Security.

“Investment Company Act” means the Investment Company Act of 1940 and any statute successor thereto, in each case as amended from time to time.

“Maturity,” when used with respect to any Security, means the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, repurchase at the option of the Holder, upon redemption or otherwise.

“Notice of Default” means a written notice of the kind specified in Section 5.1(4).

“Officers’ Certificate” means a certificate signed by any two of the following in the name of the Company: the Chairman of the Board, a Vice Chairman of the Board, the Chief Executive Officer, the President, any executive officer, the principal financial officer, the Chief Financial Officer, the principal accounting officer, the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee. One of the officers signing an Officers’ Certificate given pursuant to Section 10.4 shall be the principal executive or principal financial officer of the Company.

“Opinion of Counsel” means a written opinion of counsel, who may be counsel for, or an employee of, the Company, and who shall be reasonably acceptable to the Trustee.

“Original Issue Discount Security” means any Security that provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.2.

“Outstanding,” when used with respect to Securities, means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, except:

(1) Securities theretofore canceled by the Trustee or delivered to the Trustee for cancellation;

(2) Securities for whose payment or redemption money in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent (other than the Company) in trust or set aside and segregated in trust by the Company (if the Company shall act as its own Paying Agent) for the Holders of such Securities; provided that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;

(3) Securities as to which Defeasance has been effected pursuant to Section 13.2; and

(4) Securities which have been paid pursuant to Section 3.6 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company;

provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given, made or taken any request, demand, authorization, direction, notice, consent, waiver or other action hereunder as of any date, (A) the principal amount of an Original Issue Discount Security which shall be deemed to be Outstanding shall be the amount of the principal thereof which would be due and payable as of such date upon acceleration of the Maturity thereof to such date pursuant to Section 5.2, (B) if, as of such date, the principal amount payable at the Stated Maturity of a Security is not determinable, the principal amount of such Security which shall be deemed to be Outstanding shall be the amount as specified or determined as contemplated by Section 3.1, (C) the principal amount of a Security denominated in one or more non-U.S. dollar currencies or currency units which shall be deemed to be Outstanding shall be the U.S. dollar equivalent, determined as of such date in the manner provided as contemplated by Section 3.1, of the principal amount of such Security (or, in the case of a Security described in clause (A) or (B) above, of the amount determined as provided in such clause), and (D) Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent, waiver or other action, only Securities which the Trustee knows to be so owned shall be so disregarded. Securities so owned which have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee’s right so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor.

“Paying Agent” means any Person authorized by the Company to pay the principal of or any premium or interest on any Securities on behalf of the Company.

“Person” means any individual, corporation, limited liability company, partnership, joint venture, trust, unincorporated organization or government or any agency or political subdivision thereof.

“Place of Payment,” when used with respect to the Securities of any series, means the place or places where the principal of and any premium and interest on the Securities of that series are payable as specified as contemplated by Section 3.1.

“Predecessor Security” of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 3.6 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security.

“Prospectus” means the prospectus (including any prospectus supplement) used with respect to the offer and sale of the Securities of any series.

“Record Date” means any Regular Record Date or Special Record Date.

“Redemption Date,” when used with respect to any Security to be redeemed, means the date fixed for such redemption by or pursuant to this Indenture.

“Redemption Price,” when used with respect to any Security to be redeemed, means the price at which it is to be redeemed pursuant to this Indenture.

“Regular Record Date” for the interest payable on any Interest Payment Date on the Securities of any series means the date specified for that purpose as contemplated by Section 3.1.

“Reporting Default” has the meaning specified in Section 5.2(b).

“Responsible Officer” means, when used with respect to the Trustee, an officer of the Trustee in the Corporate Trust Office assigned and duly authorized by the Trustee to administer its corporate trust matters.

“Securities” has the meaning stated in the first recital of this Indenture and more particularly means any Securities authenticated and delivered under this Indenture.

“Securities Act” means the Securities Act of 1933 and any statute successor thereto, in each case as amended from time to time.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 3.5.

“Special Record Date” for the payment of any Defaulted Interest means a date fixed by the Trustee pursuant to Section 3.7.

“Stated Maturity,” when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“Subsidiary” means a Person of which at least a majority of the outstanding voting stock having the power to elect a majority of the board of directors of such Person (in the case of a corporation) is, or of which at least a majority of the equity interests (in the case of a Person which is not a corporation) are, at the time owned, directly or indirectly, by the Company or by one or more other Subsidiaries, or by the Company and one or more other Subsidiaries. For the purposes of this definition, “voting stock” means stock or similar interests to the Company which ordinarily has or have voting power for the election of directors, or persons performing similar functions, whether at all times or only so long as no senior class of stock or other interests has or have such voting power by reason of any contingency.

“Trust Indenture Act” means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed; provided, however, that in the event the Trust Indenture Act of 1939 is amended after such date, “Trust Indenture Act” means, to the extent required by any such amendment, the Trust Indenture Act of 1939 as so amended.

“Trustee” means the Person named as the “Trustee” in the first paragraph of this instrument until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, “Trustee” as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

“U.S. Government Obligation” means (x) any security which is (i) a direct obligation of the United States of America for the payment of which the full faith and credit of the United States of America is pledged or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America, which, in either case (i) or (ii), is not callable or redeemable at the option of the issuer thereof, and (y) any depositary receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act) as custodian with respect to any U.S. Government Obligation which is specified in clause (x) above and held by such bank for the account of the holder of such depositary receipt, or with respect to any specific payment of principal of or interest on any U.S. Government Obligation which is so specified and held, provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of principal or interest evidenced by such depositary receipt.

Section 1.2 Compliance Certificates and Opinions.

Upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee such certificates and opinions as may be required under the Trust Indenture Act. Each such certificate or opinion shall be given in the form of an Officers’ Certificate, if to be given by an officer of the Company, or an Opinion of Counsel, if to be given by counsel, and shall comply with the requirements of the Trust Indenture Act and any other requirements set forth in this Indenture.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture shall include,

- (1) a statement that each individual signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;
- (3) a statement that, in the opinion of each such individual, he or she has made such examination or investigation as is necessary to enable him or her to express an informed opinion as to whether or not such covenant or condition has been complied with; and
- (4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

Section 1.3 Form of Documents Delivered to Trustee.

In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

Any certificate or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon a certificate or opinion of, or representations by, counsel, unless such officer knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which his or her certificate or opinion is based are erroneous. Any such certificate or opinion of counsel may be based, insofar as it relates to factual matters, upon a certificate or opinion of, or representations by, an officer or officers of the Company stating that the information with respect to such factual matters is in the possession of the Company, unless such counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous.

Any such certificate or opinion of an officer of the Company or of counsel may be based, insofar as it relates to accounting matters, upon a certificate or opinion of, or representations by, an accountant or firm of accountants in the employ of the Company, unless such officer or counsel, as the case may be, knows, that the certificate or opinion or representations with respect to the accounting matters upon which his or her certificate or opinion are based are erroneous.

Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

Section 1.4 Acts of Holders; Record Dates.

Any request, demand, authorization, direction, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made or taken by Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by an agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company. The Trustee shall promptly deliver to the Company copies of any such instrument or instruments delivered to the Trustee. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the “Act” of the Holders signing such instrument or instruments. Proof of execution of any such instrument or of a writing appointing any such agent shall be sufficient for any purpose of this Indenture and (subject to Section 6.1) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section.

The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him or her the execution thereof. Where such execution is by a signer acting in a capacity other than his or her individual capacity, such certificate or affidavit shall also constitute sufficient proof of his or her authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other manner that the Trustee deems sufficient.

The ownership of Securities shall be proved by the Security Register.

Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

The Company may set any day as a record date for the purpose of determining the Holders of Outstanding Securities of any series entitled to give, make or take any request, demand, authorization, direction, vote, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made or taken by Holders of Securities of such series. If any record date is set pursuant to this paragraph, the Holders of Outstanding Securities of the relevant series on such record date, and no other Holders, shall be entitled to take the relevant action, whether or not such Holders remain Holders after such record date; provided that no such action shall be effective hereunder unless taken on or prior to the applicable Expiration Date by Holders of the requisite principal amount of Outstanding Securities of such series on such record date. Nothing in this paragraph shall be construed to prevent the Company from setting a new record date for any action for which a record date has previously been set pursuant to this paragraph (whereupon the record date previously set shall automatically and with no action by any Person be canceled and of no effect), and nothing in this paragraph shall be construed to render ineffective any action taken by Holders of the requisite principal amount of Outstanding Securities of the relevant series on the date such action is taken. Promptly after any record date is set pursuant to this paragraph, the Company, at its own expense, shall cause notice of such record date, the proposed action by Holders and the applicable Expiration Date to be given to the Trustee in writing and to each Holder of Securities of the relevant series in the manner set forth in Section 1.6.

With respect to any record date set pursuant to this Section, the Company may designate any day as the “Expiration Date” and from time to time may change the Expiration Date to any earlier or later day; provided that no such change shall be effective unless notice of the proposed new Expiration Date is given to the Trustee in writing, and to each Holder of Securities of the relevant series in the manner set forth in Section 1.6, on or prior to the existing Expiration Date. If an Expiration Date is not designated with respect to any record date set pursuant to this Section, the Company shall be deemed to have initially designated the 180th day after such record date as the Expiration Date with respect thereto, subject to its right to change the Expiration Date as provided in this paragraph. Notwithstanding the foregoing, no Expiration Date shall be later than the 180th day after the applicable record date.

Without limiting the foregoing, a Holder entitled hereunder to take any action hereunder with regard to any particular Security may do so with regard to all or any part of the principal amount of such Security or by one or more duly appointed agents each of which may do so pursuant to such appointment with regard to all or any part of such principal amount.

Section 1.5 Notices, etc., to Trustee and Company.

Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing (or by facsimile transmissions, provided that oral confirmation of receipt shall have been received) to or with the Trustee at its Corporate Trust Office, Attention: Corporate Trust Department, or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed by first-class postage prepaid, personally delivered or sent via overnight courier to the Company addressed to it at the address of its principal office specified in the first paragraph of this instrument or at any other address previously furnished in writing to the Trustee by the Company, Attention: Chief Financial Officer.

Section 1.6 Notice to Holders; Waiver.

Where this Indenture provides for notice to Holders of any event, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed by first-class postage prepaid, or delivered by hand or overnight courier to each Holder affected by such event, at its address as it appears in the Security Register, not later than the latest date (if any), and not earlier than the earliest date (if any), prescribed for the giving of such notice. Neither the failure to mail or deliver by hand or overnight courier any notice, nor any defect in any notice so mailed or delivered by hand or overnight courier, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders. Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

In case by reason of the suspension of regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification as shall be made with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder.

Section 1.7 Conflict with Trust Indenture Act.

If any provision hereof limits, qualifies or conflicts with a provision of the Trust Indenture Act that is required under the Trust Indenture Act to be a part of and govern this Indenture, the latter provision shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act, that may be so modified or excluded, the latter provision shall be deemed to apply to this Indenture as so modified or to be excluded, as the case may be.

Section 1.8 Effect of Headings and Table of Contents.

The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

Section 1.9 Successors and Assigns.

All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

Section 1.10 Separability Clause.

In case any provision in this Indenture or in the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 1.11 Benefits of Indenture.

Nothing in this Indenture or in the Securities, express or implied, shall give to any Person, other than the parties hereto and their successors hereunder and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 1.12 Governing Law.

THIS INDENTURE AND THE SECURITIES SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

Section 1.13 Legal Holidays.

In any case where any Interest Payment Date, Redemption Date or Stated Maturity of any Security or the last date on which a Holder has the right to convert a Security at a particular conversion price or conversion rate, as the case may be, shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or of the Securities (other than a provision of any Security which specifically states that such provision shall apply in lieu of this Section)) payment of interest or principal (and premium, if any) or, if applicable to a particular series of Securities, conversion need not be made at such Place of Payment on such date, but may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date or Redemption Date, at the Stated Maturity or on such last day for conversion, as the case may be.

Section 1.14 Indenture and Securities Solely Corporate Obligations.

No recourse for the payment of the principal of or premium, if any, or interest on any Security, or for any claim based thereon or otherwise in respect thereof, and no recourse under or upon any obligation, covenant or agreement of the Company in this Indenture or in any supplemental indenture or in any Security, or because of the creation of any indebtedness represented thereby, shall be had against any incorporator, stockholder, employee, agent, officer, or director or subsidiary, as such, past, present or future, of the Company or of any successor corporation, either directly or through the Company or any successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that all such liability is hereby expressly waived and released as a condition of, and as a consideration for, the execution of this Indenture and the issue of the Securities.

Section 1.15 Indenture May be Executed in Counterparts.

This instrument may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument.

ARTICLE 2

SECURITY FORMS

Section 2.1 Forms Generally

The Securities of each series shall be in substantially such form as shall be established by or pursuant to a Board Resolution and as set forth in such Board Resolution (including such terms as set forth in any form of Securities for each series approved by such Board Resolution) or, to the extent established pursuant to rather than set forth in a Board Resolution, in an Officers' Certificate detailing such establishment (including any exhibit attached thereto), or in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture, and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be required to comply with the rules of any securities exchange or Depositary therefor or as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution thereof. If the form of Securities of any series is established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Company Order contemplated by Section 3.3 for the authentication and delivery of such Securities. Any such Board Resolution or record of such action shall have attached thereto a true and correct copy of the form of Security referred to therein approved by or pursuant to such Board Resolution.

The definitive Securities shall be printed, lithographed or engraved on steel engraved borders or may be produced in any other manner, all as determined by the officers executing such Securities, as evidenced by their execution of such Securities.

Section 2.2 Form of Legend for Global Securities.

Unless otherwise specified as contemplated by Section 3.1 for the Securities evidenced thereby, every Global Security authenticated and delivered hereunder shall bear a legend in substantially the following form:

THIS SECURITY IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF A DEPOSITARY OR A NOMINEE THEREOF. THIS SECURITY MAY NOT BE EXCHANGED IN WHOLE OR IN PART FOR A SECURITY REGISTERED, AND NO TRANSFER OF THIS SECURITY IN WHOLE OR IN PART MAY BE REGISTERED, IN THE NAME OF ANY PERSON OTHER THAN SUCH DEPOSITARY OR A NOMINEE THEREOF, EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE.

Section 2.3 Form of Trustee’s Certificate of Authentication.

The Trustee’s certificates of authentication shall be in substantially the following form:

This is one of the Securities of the series designated herein referred to in the within-mentioned Indenture.

as Trustee

By: _____
Authorized Officer

ARTICLE 3

THE SECURITIES

Section 3.1 Amount Unlimited; Issuable in Series.

The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series up to the aggregate principal amount of Securities of that series from time to time authorized by or pursuant to a Board Resolution of the Company, pursuant to one or more indentures supplemental hereto or pursuant to an Officers' Certificate pursuant to authority granted under a Board Resolution. Prior to the initial issuance of Securities of any series, there shall be established in or pursuant to a Board Resolution of the Company and set forth in an Officers' Certificate of the Company, established in one or more indentures supplemental hereto, or established in an Officers' Certificate pursuant to authority granted under a Board Resolution with respect to the Securities of the series:

- (1) whether the Securities of the series are senior or subordinated and if such Securities are subordinated, the subordination provisions applicable to such series of Securities;
- (2) the offering price of the Securities of the series;
- (3) the title of the Securities of the series (which shall distinguish the Securities of the series from Securities of any other series);
- (4) any limit upon the aggregate principal amount of the Securities of the series which may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 3.4, 3.5, 3.6, 9.6 or 11.7 and except for any Securities which, pursuant to Section 3.3, are deemed never to have been authenticated and delivered hereunder);
- (5) the Person to whom any interest on a Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest;
- (6) the date or dates on which the principal of any Securities of the series is payable;
- (7) the rate or rates (which may be fixed or variable) at which any Securities of the series shall bear interest, if any, the date or dates from which any such interest shall accrue, the Interest Payment Dates on which any such interest shall be payable and the Regular Record Date for any such interest payable on any Interest Payment Date (or the method for determining the dates and rates);
- (8) the place or places where the principal of and any premium and interest on any Securities of the series shall be payable;
- (9) the period or periods within which, the price or prices at which and the terms and conditions upon which any Securities of the series may be redeemed, in whole or in part, at the option of the Company and, if other than by a Board Resolution, the manner in which any election by the Company to redeem the Securities shall be evidenced;
- (10) the obligation, if any, of the Company to redeem or purchase any Securities of the series pursuant to any sinking fund or similar provisions or any redemption or purchase at the option of the Holder thereof and the period or periods within which, the price or prices at which and the terms and conditions upon which any Securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;
- (11) if issued other than in denominations of \$1,000 and any integral multiple thereof, the denominations in which any Securities of the series shall be issuable;
- (12) if the amount of principal of or any premium or interest on any Securities of the series may be determined with reference to an index or pursuant to a formula, the manner in which such amounts shall be determined;
- (13) if other than the currency of the United States of America, the currency, currencies or currency units in which the principal of or any premium or interest on any Securities of the series shall be payable and the manner of determining the equivalent thereof in the currency of the United States of America for any purpose, including for purposes of the definition of "Outstanding" in Section 1.1;

(14) if the principal of or any premium or interest on any Securities of the series is to be payable, at the election of the Company or the Holder thereof, in one or more currencies or currency units other than that or those in which such Securities are stated to be payable, the currency, currencies or currency units in which the principal of or any premium or interest on such Securities as to which such election is made shall be payable, the periods within which and the terms and conditions upon which such election is to be made and the amount so payable (or the manner in which such amount shall be determined);

(15) the percentage of the principal amount at which the Securities will be issued, and, if other than the entire principal amount thereof, the portion of the principal amount of any Securities of the series which shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 5.2;

(16) if the principal amount payable at the Stated Maturity of any Securities of the series will not be determinable as of any one or more dates prior to the Stated Maturity, the amount which shall be deemed to be the principal amount of such Securities as of any such date for any purpose thereunder or hereunder, including the principal amount thereof which shall be due and payable upon any Maturity other than the Stated Maturity or which shall be deemed to be Outstanding as of any date prior to the Stated Maturity (or, in any such case, the manner in which such amount deemed to be the principal amount shall be determined);

(17) if applicable, that the Securities of the series, in whole or any specified part, shall be defeasible pursuant to Section 13.2 or Section 13.3 or both such Sections, or any other defeasance provisions applicable to any Securities of the series, and, if other than by a Board Resolution, the manner in which any election by the Company to defease such Securities shall be evidenced;

(18) if applicable, the terms of any right to convert Securities of the series, including, without limitation, the conversion price, the conversion period, provisions as to whether conversion will be mandatory, at the option of the Holders thereof or at the option of the Company, the events requiring an adjustment of the conversion price and provisions affecting conversion if such series of Securities are redeemed, if applicable;

(19) if applicable, that any Securities of the series shall be issuable in whole or in part in the form of one or more Global Securities and, in such case, the respective Depositaries for such Global Securities, the form of any legend or legends which shall be borne by any such Global Security in addition to or in lieu of that set forth in Section 2.2 and any circumstances in addition to or in lieu of those set forth in clause (2) of the last paragraph of Section 3.5 in which any such Global Security may be exchanged in whole or in part for Securities registered, and any transfer of such Global Security in whole or in part may be registered, in the name or names of Persons other than the Depositary for such Global Security or a nominee thereof;

(20) any change in the right of the Trustee or the requisite Holders of such Securities to declare the principal amount thereof due and payable pursuant to Section 5.2 upon an Event of Default;

(21) any addition to or deletion of or change in the Events of Default or covenants or other provisions which apply to Securities of the series or do not apply to the Securities of the series;

(22) any Authenticating Agents, Paying Agents, Security Registrars or such other agents necessary in connection with the issuance of the Securities of such series, including, without limitation, exchange rate agents and calculation agents;

(23) if applicable, the terms of any security that will be provided for a series of Securities, including any provisions regarding the circumstances under which collateral may be released or substituted;

(24) if applicable, the terms of any guaranties for the Securities and any circumstances under which there may be additional obligors on the Securities;

(25) any provisions granting special rights to Holders when a specified event occurs;

(26) any provisions with respect to any special interest premium or other premium;

(27) any special tax provisions that apply to any series of Securities;

(28) with respect to any series of Securities that do not bear interest, the date for any required reports to the Trustee;

(29) any and all additional, eliminated or changed terms that will apply to such series of Securities; and

(30) any other terms of the series of Securities (which terms shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 9.1(5)).

All Securities of any one series shall be substantially identical except as to denomination and except as may otherwise be provided in or pursuant to the Board Resolution referred to above and (subject to Section 3.3) set forth, or determined in the manner provided, in the Officers' Certificate (including any exhibit attached thereto) referred to above or in any such indenture supplemental hereto.

If any of the terms of the series are established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officers' Certificate (including any exhibit attached thereto) setting forth the terms of the series.

Section 3.2 Denominations.

The Securities of each series shall be issuable only in registered form without coupons and only in such denominations as shall be specified as contemplated by Section 3.1. In the absence of any such specified denomination with respect to the Securities of any series, the Securities of such series shall be issuable in denominations of \$1,000 and any integral multiple thereof.

Section 3.3 Execution, Authentication, Delivery and Dating.

The Securities shall be executed on behalf of the Company by its Chairman of the Board, its Vice Chairman of the Board, its Chief Executive Officer, its principal financial officer, its Chief Financial Officer, its principal accounting officer, its President or one of its executive officers, and attested by its Treasurer, its Secretary or one of its Assistant Treasurers or Assistant Secretaries. The signature of any of these officers on the Securities may be manual or facsimile.

Securities bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities, and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities. If the form or terms of the Securities of the series have been established by or pursuant to one or more Board Resolutions as permitted by Sections 2.1 and 3.1, in authenticating such Securities, and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall be entitled to receive, and (subject to Section 6.1) shall be fully protected in relying upon, a certified copy of such Board Resolution, an Officers' Certificate or supplemental indenture hereto setting forth the terms of the series and an Opinion of Counsel (which opinion of Counsel may contain customary qualifications and exceptions), with such Opinion of Counsel stating,

(1) if the form of such Securities has been established by or pursuant to Board Resolution as permitted by Section 2.1, that such form has been established in conformity with the provisions of this Indenture;

(2) if the terms of such Securities have been established by or pursuant to Board Resolution as permitted by Section 3.1, that such terms have been established in conformity with the provisions of this Indenture; and

(3) that such Securities, when authenticated and delivered by the Trustee and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute a valid and binding agreement of the Company, enforceable in accordance with their terms, subject to customary bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights and to general equity principles and qualifications.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner that is not reasonably acceptable to the Trustee.

Notwithstanding the provisions of Section 3.1 and of this Section 3.3, if all Securities of a series are not to be originally issued at one time, it shall not be necessary to deliver an Officers' Certificate or supplemental indenture hereto otherwise required pursuant to Section 3.1 or the Company Order and Opinion of Counsel otherwise required pursuant to this Section 3.3 at or prior to the authentication of each Security of such series if such documents are delivered at or prior to the authentication upon original issuance of the first Security of such series to be issued.

Each Security shall be dated the date of its authentication.

No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein executed by the Trustee by manual signature, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder. Notwithstanding the foregoing, if any Security shall have been authenticated and delivered hereunder but never issued and sold by the Company, and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 3.9, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

Neither the Company nor the Trustee shall have any responsibility for any defect in the CUSIP number that appears on any Security, check, advice of payment, redemption notice or any other notice, and any such document may contain a statement to the effect that CUSIP numbers have been assigned by an independent service for convenience of reference and that neither the Company nor the Trustee shall be liable for any inaccuracy in such numbers.

Section 3.4 Temporary Securities.

Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as evidenced by their execution of such Securities.

If temporary Securities of any series are issued, the Company will cause definitive Securities of that series to be prepared without unreasonable delay. After the preparation of definitive Securities of such series, the temporary Securities of such series shall be exchangeable for definitive Securities of such series upon surrender of the temporary Securities of such series at the office or agency of the Company in a Place of Payment for that series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor one or more definitive Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount. Until so exchanged, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series and tenor.

Section 3.5 Registration; Registration of Transfer and Exchange.

The Company shall cause to be kept at the Corporate Trust Office a register (the register maintained in such office and in any other office or agency of the Company in a Place of Payment being herein sometimes collectively referred to as the "Security Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Securities and of transfers of Securities. The Trustee is hereby appointed "Security Registrar" for the purpose of registering Securities and transfers of Securities as herein provided.

Upon surrender for registration of transfer of any Security of a series at the office or agency of the Company in a Place of Payment for that series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount.

At the option of the Holder, Securities of any series may be exchanged for other Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount, upon surrender of the Securities to be exchanged at such office or agency. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

All Securities issued upon any registration of transfer or exchange of Securities shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such registration of transfer or exchange.

Every Security presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed, by the Holder thereof or its attorney duly authorized in writing.

No service charge shall be made for any registration of transfer or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or exchange of Securities, other than exchanges pursuant to Section 3.4, 9.6 or 11.7 not involving any transfer.

If the Securities of any series (or of any series and specified tenor) are to be redeemed in part, the Company shall not be required (A) to issue, register the transfer of or exchange any Securities of that series (or of that series and specified tenor, as the case may be) during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of any such Securities selected for redemption under Section 11.3 and ending at the close of business on the day of such mailing, or (B) to register the transfer of or exchange any Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.

The provisions of clauses (1), (2), (3) and (4) below shall apply only to Global Securities:

(1) Each Global Security authenticated under this Indenture shall be registered in the name of the Depositary designated for such Global Security or a nominee thereof and delivered to such Depositary or a nominee thereof or custodian therefor, and each such Global Security shall constitute a single Security for all purposes of this Indenture.

(2) Notwithstanding any other provision in this Indenture, no Global Security may be exchanged in whole or in part for Securities registered, and no transfer of a Global Security in whole or in part may be registered, in the name of any Person other than the Depositary for such Global Security or a nominee thereof unless (A) such Depositary (i) has notified the Company that it is unwilling or unable to continue as Depositary for such Global Security or (ii) has ceased to be a clearing agency registered under the Exchange Act, (B) there shall have occurred and be continuing an Event of Default with respect to such Global Security or (C) there shall exist such circumstances, if any, in addition to or in lieu of the foregoing as have been specified for this purpose as contemplated by Section 3.1.

(3) Subject to clause (2) above, any exchange of a Global Security for other Securities may be made in whole or in part, and all Securities issued in exchange for a Global Security or any portion thereof shall be registered in such names as the Depositary for such Global Security shall direct.

(4) Every Security authenticated and delivered upon registration of transfer of, or in exchange for or in lieu of, a Global Security or any portion thereof, whether pursuant to this Section, Section 3.4, 3.6, 9.6 or 11.7 or otherwise, shall be authenticated and delivered in the form of, and shall be, a Global Security, unless such Security is registered in the name of a Person other than the Depositary for such Global Security or a nominee thereof.

Section 3.6 Mutilated, Destroyed, Lost and Stolen Securities.

If any mutilated Security is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

If there shall be delivered to the Company and the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security and (ii) such security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of notice to the Company or the Trustee that such Security has been acquired by a bona fide purchaser, the Company shall execute and the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security, a new Security of the same series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, pay such Security.

Upon the issuance of any new Security under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

Every new Security of any series issued pursuant to this Section in lieu of any destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of that series duly issued hereunder.

The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities.

Section 3.7 Payment of Interest; Interest Rights Preserved.

Except as otherwise provided as contemplated by Section 3.1 with respect to any series of Securities, interest on any Security which is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest.

Any interest on any Security of any series which is payable, but is not punctually paid or duly provided for, on any Interest Payment Date (herein called "Defaulted Interest") shall forthwith cease to be payable to the Holder on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Security of such series and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be given to each Holder of Securities of such series in the manner set forth in Section 1.6, not less than 10 days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so given, such Defaulted Interest shall be paid to the Persons in whose names the Securities of such series (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (2).

(2) The Company may make payment of any Defaulted Interest on the Securities of any series in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section, each Security delivered under this Indenture upon registration of transfer of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

Section 3.8 Persons Deemed Owners.

Prior to due presentment of a Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name such Security is registered as the owner of such Security for the purpose of receiving payment of principal of and any premium and (subject to Section 3.7) any interest on such Security and for all other purposes whatsoever, whether or not such Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

Section 3.9 Cancellation.

All Securities surrendered for payment, redemption, registration of transfer or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee and shall be promptly canceled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly canceled by the Trustee. No Securities shall be authenticated in lieu of or in exchange for any Securities canceled as provided in this Section, except as expressly permitted by this Indenture. All canceled Securities held by the Trustee shall be disposed of in accordance with its customary procedures.

Section 3.10 Computation of Interest.

Except as otherwise specified as contemplated by Section 3.1 for Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year of twelve 30-day months.

ARTICLE 4

SATISFACTION AND DISCHARGE

Section 4.1 Satisfaction and Discharge of Indenture.

This Indenture shall upon Company Request cease to be of further effect (except as to any surviving rights of registration of transfer or exchange of Securities herein expressly provided for), and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when

(1) either

(A) all Securities theretofore authenticated and delivered (other than (i) Securities which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 3.6 and (ii) Securities for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Trustee or the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 10.3) have been delivered to the Trustee for cancellation; or

(B) all such Securities not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

(ii) will become due and payable at their Stated Maturity within one year, or

(iii) are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company,

and the Company, in the case of (i), (ii) or (iii) above, has deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose money in an amount sufficient to pay and discharge the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal and any premium and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

(2) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(3) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 6.7, the obligations of the Trustee to any Authenticating Agent under Section 6.14 and, if money shall have been deposited with the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 4.2 and the last paragraph of Section 10.3 shall survive.

Section 4.2 Application of Trust Money.

Subject to the provisions of the last paragraph of Section 10.3, all money deposited with the Trustee pursuant to Section 4.1 shall be held in trust and applied by it, in accordance with the provisions of the Securities and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the principal and any premium and interest for whose payment such money has been deposited with the Trustee.

ARTICLE 5

REMEDIES

Section 5.1 Events of Default.

"Event of Default," wherever used herein with respect to Securities of any series, means any one of the following events (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body), unless in the Board Resolution (or an Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing such series, it is provided that such series shall not have the benefit of said Event of Default:

(1) default in the payment of the principal or the Redemption Price of or any premium on any Security of that series at its Maturity; or

(2) default in the payment of any interest upon any Security of that series when it becomes due and payable, and continuance of such default for a period of 90 days and the time for payment has not been extended or deferred; or

(3) default in the deposit of any sinking fund payment, when and as due by the terms of a Security of that series; or

(4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of series of Securities other than that series), and continuance of such default or breach for a period of 90 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities of that series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or

(5) the entry by a court having jurisdiction in the premises of (A) a decree or order for relief in respect of the Company in an involuntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or (B) a decree or order adjudging the Company a bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Company under any applicable Federal or State law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 90 consecutive days; or

(6) the commencement by the Company of a voluntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree or order for relief in respect of the Company in an involuntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable Federal or State law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the admission by it in writing of its inability to pay its debts generally as they become due, or the taking of corporate action by the Company in furtherance of any such action; or

(7) any other Event of Default provided with respect to Securities of that series in the Board Resolution (or in an Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing that series.

Section 5.2 Acceleration of Maturity; Rescission and Annulment.

(a) Unless the Board Resolution (or Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing such series provides otherwise, if an Event of Default (other than an Event of Default specified in Section 5.1(5) or 5.1(6)) with respect to Securities of any series at the time Outstanding occurs and is continuing, then in every such case the Trustee or the Holders of not less than 25% in principal amount of the Outstanding Securities of that series may declare the principal amount of all the Securities of that series (or, if any Securities of that series are Original Issue Discount Securities, such portion of the principal amount of such Securities as may be specified by the terms thereof), and premium, if any, together with accrued and unpaid interest, if any, thereon, to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by the Holders), and upon any such declaration such principal amount (or specified amount), and premium, if any, together with accrued and unpaid interest, if any, thereon, shall become immediately due and payable. If an Event of Default specified in Section 5.1(5) or 5.1(6) with respect to Securities of any series at the time Outstanding occurs, the principal amount of all the Securities of that series (or, if any Securities of that series are Original Issue Discount Securities, such portion of the principal amount of such Securities as may be specified by the terms thereof), and premium, if any, together with accrued and unpaid interest thereon, if any, shall automatically, and without any declaration or other action on the part of the Trustee or any Holder, become immediately due and payable.

(b) Notwithstanding the foregoing, at the election of the Company, the sole remedy with respect to an Event of Default for the failure by the Company to comply with its obligations under Section 314(a)(1) of the Trust Indenture Act relating to the Company's failure to file any documents or reports that the Company is required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act or of its covenants set forth in Section 7.4 (any such Event of Default, a "Reporting Default"), shall for the first 180 calendar days after the occurrence of such Reporting Default consist exclusively of the right to receive additional interest (the "Additional Interest") on the Securities at an annual rate equal to (i) 0.25% of the principal amount of the Securities for the first 180 calendar days after the occurrence of such Reporting Default and (ii) 0.50% of the principal amount of the Securities from the 181st day to, and including, the 360th day after the occurrence of such Reporting Default. If the Company so elects, the Additional Interest shall accrue on all Outstanding Securities from and including the date on which such Reporting Default first occurs until such violation is cured or waived and shall be payable as provided in Section 3.7. On the 361st day after such Reporting Default (if such violation is not cured or waived prior to such 361st calendar day), then the Trustee or the Holders of not less than 25% in principal amount of the Outstanding securities may declare the principal of, and premium, if any, together with accrued and unpaid interest thereon, if any, on all such Securities to be due and payable immediately.

If the Company elects to pay the Additional Interest as the sole remedy for the Reporting Default, the Company shall notify in writing, by a certificate, the Holders, the Paying Agent and the Trustee of such election at any time on or before the close of business on the first Business Day following the date on which such Event of Default first occurs. Unless and until a Responsible Officer of the Trustee receives at the Corporate Trust Office such a certificate, the Trustee may assume without inquiry that Additional Interest is not payable. The Company shall pay the Additional Interest semi-annually in arrears, with the first semi-annual payment due on the first Interest Payment Date following the date of such Reporting Default, in the same manner as described on the face of the Security.

(c) At any time after such a declaration of acceleration with respect to Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article provided, the Holders of a majority in principal amount of the Outstanding Securities of that series, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if

(1) the Company has paid or deposited with the Trustee a sum sufficient to pay

(A) all overdue interest on all Securities of that series,

(B) the principal of (and premium, if any, on) any Securities of that series which have become due otherwise than by such declaration of acceleration and any interest thereon at the rate or rates prescribed therefor in such Securities,

(C) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates prescribed therefor in such Securities, and

(D) all sums paid or advanced by the Trustee hereunder and the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel; and

(2) all Events of Default with respect to Securities of that series, other than the non-payment of the principal of Securities of that series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 5.13.

No such rescission shall affect any subsequent default or impair any right consequent thereon.

Section 5.3 Collection of Indebtedness and Suits for Enforcement by Trustee.

The Company covenants that if

(1) default is made in the payment of the principal or the Redemption Price of (or premium, if any, on) any Security at the Maturity thereof, or

(2) default is made in the payment of any interest on any Security when such interest becomes due and payable and such default continues for a period of 30 days,

the Company will, upon demand of the Trustee, pay to it, for the benefit of the Holders of such Securities, the whole amount then due and payable on such Securities for principal and any premium and interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and premium and on any overdue interest, at the rate or rates prescribed therefor in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

Section 5.4 Trustee May File Proofs of Claim.

In case of any judicial proceeding relative to the Company (or any other obligor upon the Securities), its property or its creditors, the Trustee shall be entitled and empowered, by intervention in such proceeding or otherwise, to take any and all actions authorized under the Trust Indenture Act in order to have claims of the Holders and the Trustee allowed in any such proceeding. In particular, the Trustee shall be authorized to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same; and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 6.7.

No provision of this Indenture shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding; provided, however, that the Trustee may, on behalf of the Holders, vote for the election of a trustee in bankruptcy or similar official and be a member of a creditors' or other similar committee.

Section 5.5 Trustee May Enforce Claims Without Possession of Securities.

All rights of action and claims under this Indenture or the Securities may be prosecuted and enforced by the Trustee without the possession of any of the Securities or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.

Section 5.6 Application of Money Collected.

Any money collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal or any premium or interest, upon presentation of the Securities and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee under Section 6.7;

SECOND: To the payment of the amounts then due and unpaid for principal of and any premium, if any, and interest on the Securities in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the amounts due and payable on such Securities for principal and any premium, if any, and interest, respectively; and

THIRD: The balance, if any, to the Company or any other Person or Persons entitled thereto.

Section 5.7 Limitation on Suits.

No Holder of any Security of any series shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless

(1) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that series;

(2) the Holders of at least 25% in aggregate principal amount of the Outstanding Securities of that series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;

(3) such Holder or Holders have offered to the Trustee reasonable indemnity against the costs, expenses and liabilities to be incurred in compliance with such request;

(4) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and

(5) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the Outstanding Securities of that series;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders, or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all of such Holders.

Section 5.8 Unconditional Right of Holders to Receive Principal, Premium and Interest.

Notwithstanding any other provision in this Indenture, the Holder of any Security shall have the right, which is absolute and unconditional, to receive payment of the principal of and any premium and (subject to Section 3.7) interest on such Security on the respective Stated Maturities expressed in such Security (or, in the case of redemption, on the Redemption Date), and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

Section 5.9 Restoration of Rights and Remedies.

If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Company, the Trustee and the Holders shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

Section 5.10 Rights and Remedies Cumulative.

Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in the last paragraph of Section 3.6, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

Section 5.11 Delay or Omission Not Waiver.

No delay or omission of the Trustee or of any Holder of any Securities to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee (subject to the limitations contained in this Indenture) or by the Holders, as the case may be.

Section 5.12 Control by Holders.

The Holders of a majority in principal amount of the Outstanding Securities of any series shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee, with respect to the Securities of such series, provided that

(1) such direction shall not be in conflict with any rule of law or with this Indenture and the Trustee shall not have determined that the action so directed would be unjustly prejudicial to Holders of Securities of that series, or any other series, not taking part in such direction; and

(2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction or this Indenture.

Section 5.13 Waiver of Past Defaults.

The Holders of not less than a majority in principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series waive any past default hereunder with respect to such series and its consequences, except

(1) a default in the payment of the principal of or any premium or interest on any Security of such series as and when the same shall become due and payable by the terms thereof, otherwise than by acceleration (unless such default has been cured and a sum sufficient to pay all matured installments of interest, principal and premium, if any, has been deposited with the Trustee); or

(2) in respect of a covenant or provision hereof which under Article 9 cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected.

Upon any such waiver, such default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Section 5.14 Undertaking for Costs.

In any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken, suffered or omitted by it as Trustee, a court may require any party litigant in such suit to file an undertaking to pay the costs of such suit, and may assess costs against any such party litigant, in the manner and to the extent provided in the Trust Indenture Act; provided that neither this Section nor the Trust Indenture Act shall be deemed to authorize any court to require such an undertaking or to make such an assessment in any suit instituted by the Company.

This Section does not apply to a suit by a Holder to enforce payment of principal of or interest on any Security on the respective due dates or a suit by Holders of more than 10% in principal amount of the Outstanding Securities.

Section 5.15 Waiver of Usury, Stay or Extension Laws.

The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

ARTICLE 6

THE TRUSTEE

Section 6.1 Certain Duties and Responsibilities.

The duties and responsibilities of the Trustee shall be as provided by the Trust Indenture Act and as set forth herein. Notwithstanding the foregoing, no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it. Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section.

Section 6.2 Notice of Defaults.

If a default occurs hereunder with respect to Securities of any series, the Trustee shall give the Holders of Securities of such series notice of such default as and to the extent provided by the Trust Indenture Act; provided, however, that except in the case of a default in the payment of principal or Redemption Price of (or premium, if any) or interest on any Securities of such series or in the payment of any sinking fund installment or any conversion right applicable to Securities of such series, the Trustee shall be protected in withholding such notice if and so long as a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interests of the holders of Securities of such series; provided, further, however, that in the case of any default of the character specified in Section 5.1(4) with respect to Securities of such series, no such notice to Holders shall be given until at least 60 days after the occurrence thereof. For the purpose of this Section, the term “default” means any event which is, or after notice or lapse of time or both would become, an Event of Default with respect to Securities of such series.

Except with respect to Section 10.1, the Trustee shall have no duty to inquire as to the performance of the Company with respect to the covenants contained in Article 10. In addition, the Trustee shall not be deemed to have knowledge of an Event of Default except (i) any default or Event of Default occurring pursuant to Sections 5.1(1), 5.1(2) and 5.1(3) (defaults in payments on the Securities) or (ii) any default or Event of Default of which the Trustee shall have received written notification or obtained actual knowledge.

Delivery of reports, information and documents to the Trustee under Section 7.4 is for informational purposes only and the Trustee’s receipt of the foregoing shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company’s compliance with any of their covenants hereunder (as to which the Trustee is entitled to rely conclusively on Officers’ Certificates).

Section 6.3 Certain Rights of Trustee.

Subject to the provisions of Section 6.1:

- (1) in the absence of bad faith on the part of the Trustee, the Trustee may rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;
- (2) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order, and any resolution of the Board of Directors shall be sufficiently evidenced by a Board Resolution;
- (3) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) is entitled to and may, in the absence of bad faith on its part, rely upon an Officers’ Certificate;
- (4) the Trustee may consult with counsel and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;
- (5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders pursuant to this Indenture, unless such Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;
- (6) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, personally or by agent or attorney; and
- (7) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder.

Section 6.4 Not Responsible for Recitals or Issuance of Securities.

The recitals contained herein and in the Securities, except the Trustee's certificates of authentication, shall be taken as the statements of the Company, and neither the Trustee nor any Authenticating Agent assumes any responsibility for their correctness. The Trustee makes no representations as to the validity, sufficiency or priority of this Indenture or of the Securities. Neither the Trustee nor any Authenticating Agent shall be accountable for the use or application by the Company of Securities or the proceeds thereof.

Section 6.5 May Hold Securities and Act as Trustee under Other Indentures.

The Trustee, any Authenticating Agent, any Paying Agent, any Security Registrar or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Sections 6.8 and 6.13, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

Subject to the limitations imposed by the Trust Indenture Act, nothing in this Indenture shall prohibit the Trustee from becoming and acting as trustee under other indentures under which other securities, or certificates of interest of participation in other securities, of the Company are outstanding in the same manner as if it were not Trustee hereunder.

Section 6.6 Money Held in Trust.

Money held by the Trustee in trust hereunder need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed with the Company.

Section 6.7 Compensation and Reimbursement.

The Company agrees:

- (1) to pay to the Trustee from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);
- (2) except as otherwise expressly provided herein, to reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the expenses and disbursements of its agents and counsel), except any such expense, disbursement or advance as may be attributable to its negligence or bad faith; and
- (3) to indemnify the Trustee for, and to hold it harmless against, any loss, liability or expense incurred without negligence or bad faith on its part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder, including the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 5.1(5) or Section 5.1(6) hereof occurs, the expenses and the compensation for the services (including the fees and expenses of its agents and counsel) are intended to constitute expenses of administration under any applicable bankruptcy, insolvency, reorganization or similar law.

Section 6.8 Conflicting Interests.

If the Trustee has or shall acquire a conflicting interest within the meaning of the Trust Indenture Act and there is an Event of Default under the Securities of that series, the Trustee shall either eliminate such interest or resign, to the extent and in the manner provided by, and subject to the provisions of, the Trust Indenture Act and this Indenture. To the extent permitted by the Trust Indenture Act, the Trustee shall not be deemed to have a conflicting interest by virtue of being a trustee under this Indenture with respect to Securities of more than one series.

Section 6.9 Corporate Trustee Required; Eligibility.

There shall at all times be one (and only one) Trustee hereunder with respect to the Securities of each series, which may be Trustee hereunder for Securities of one or more other series. Each Trustee shall be a Person that is eligible pursuant to the Trust Indenture Act to act as such and has (or if the Trustee is a member of a bank holding company system, its bank holding company has) a combined capital and surplus of at least \$50,000,000. If any such Person or bank holding company publishes reports of condition at least annually, pursuant to law or to the requirements of its supervising or examining authority, then for the purposes of this Section and to the extent permitted by the Trust Indenture Act, the combined capital and surplus of such Person or bank holding company shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Trustee with respect to the Securities of any series shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article.

Section 6.10 Resignation and Removal; Appointment of Successor.

No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 6.11.

The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If the instrument of acceptance by a successor Trustee required by Section 6.11 shall not have been delivered to the Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series, delivered to the Trustee and to the Company.

If at any time:

- (1) the Trustee shall fail to comply with Section 6.8 after written request therefor by the Company or by any Holder who has been a bona fide Holder of a Security for at least six months, or
- (2) the Trustee shall cease to be eligible under Section 6.9 and shall fail to resign after written request therefor by the Company or by any such Holder, or
- (3) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, (A) the Company by a Board Resolution may remove the Trustee with respect to all Securities, or (B) subject to Section 5.14, any Holder who has been a bona fide Holder of a Security for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause, with respect to the Securities of one or more series, the Company, by a Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series) and shall comply with the applicable requirements of Section 6.11. If, within one year after such resignation, removal or incapability, or the occurrence of such vacancy, a successor Trustee with respect to the Securities of any series shall be appointed by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment in accordance with the applicable requirements of Section 6.11, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders and accepted appointment in the manner required by Section 6.11, the retiring Trustee may petition, or any Holder who has been a bona fide Holder of a Security of such series for at least six months may petition, on behalf of himself and all others similarly situated, any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series to all Holders of Securities of such series in the manner provided in Section 1.6. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

Section 6.11 Acceptance of Appointment by Successor.

In case of the appointment hereunder of a successor Trustee with respect to all Securities, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder.

In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee all such rights, powers and trusts referred to in the first or second preceding paragraph, as the case may be.

No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

Section 6.12 Merger, Conversion, Consolidation or Succession to Business.

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all the corporate trust business of the Trustee (including the administration of the trust created by this Indenture), shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities. In the event that any Securities shall not have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities in either its own name or that of such predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

Section 6.13 Preferential Collection of Claims Against Company.

If and when the Trustee shall be or become a creditor of the Company (or any other obligor upon the Securities), the Trustee shall be subject to the provisions of the Trust Indenture Act regarding the collection of claims against the Company (or any such other obligor).

Section 6.14 Appointment of Authenticating Agent.

The Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon original issue and upon exchange, registration of transfer or partial redemption thereof or pursuant to Section 3.6, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a corporation organized and doing business under the laws of the United States of America, any state thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having (or if the Authenticating Agent is a member of a bank holding company system, its bank holding company has) a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by Federal or State authority. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, provided such corporation shall be otherwise eligible under this Section, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent may resign at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, the Trustee may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment in the manner provided in Section 1.6 to all Holders of Securities of the series with respect to which such Authenticating Agent will serve. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Trustee agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section, and the Trustee shall be entitled to be reimbursed for such payments, subject to the provisions of Section 6.7.

If an appointment with respect to one or more series is made pursuant to this Section 6.14, the Securities of such series may have endorsed thereon, in lieu of the Trustee's certificate of authentication, an alternative certificate of authentication in the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

As Trustee

By: _____

As Authenticating Agent

By: _____

Authorized Officer

ARTICLE 7

HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

Section 7.1 Company to Furnish Trustee Names and Addresses of Holders.

The Company will furnish or cause to be furnished to the Trustee

(1) semi-annually, not later than 15 days after the Regular Record Date for each respective series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Securities of each series as of such Regular Record Date, as the case may be, or if there is no Regular Record Date for such series of Securities, semi-annually, and

(2) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished;

provided that no such list need be furnished by the Company to the Trustee so long as the Trustee is acting as Security Registrar.

Section 7.2 Preservation of Information; Communications to Holders.

The Trustee shall preserve, in as current a form as is reasonably practicable, the names and addresses of Holders contained in the most recent list furnished to the Trustee as provided in Section 7.1 and the names and addresses of Holders received by the Trustee in its capacity as Security Registrar. The Trustee may destroy any list furnished to it as provided in Section 7.1 upon receipt of a new list so furnished.

The rights of Holders to communicate with other Holders with respect to their rights under this Indenture or under the Securities, and the corresponding rights and privileges of the Trustee, shall be as provided by the Trust Indenture Act.

Every Holder of Securities, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any agent of either of them shall be held accountable by reason of any disclosure of information as to names and addresses of Holders made pursuant to the Trust Indenture Act.

Section 7.3 Reports by Trustee.

The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required pursuant to the Trust Indenture Act at the times and in the manner provided pursuant thereto.

Reports so required to be transmitted at stated intervals of not more than 12 months shall be transmitted no later than July 15 in each calendar year, commencing with the first July 15 after the first issuance of Securities pursuant to this Indenture.

A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each stock exchange upon which any Securities are listed, with the Commission and with the Company. The Company will notify the Trustee when any Securities are listed on any stock exchange.

Section 7.4 Reports by Company.

Any information, documents or other reports that the Company shall file with the Commission pursuant to Section 13 or 15(d) of the Exchange Act (excluding any such information, documents or reports, or portions thereof, subject to confidential treatment and any correspondence with the Commission) shall be filed with the Trustee within 15 days after the same is filed with the Commission (giving effect to any grace period provided by Rule 12b-25 under the Exchange Act); provided that any such information, documents or reports filed or furnished with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval (or EDGAR) system shall be deemed to be filed with the Trustee as of the time such information, documents or reports are filed or furnished via EDGAR.

ARTICLE 8

CONSOLIDATION, MERGER, CONVEYANCE, TRANSFER OR LEASE

Section 8.1 Company May Consolidate, etc., Only on Certain Terms.

The Company shall not consolidate with or merge into any other Person (other than to one or more Subsidiaries of the Company) (in a transaction in which the Company is not the surviving corporation) or convey, transfer or lease its properties and assets substantially as an entirety to any Person (other than a Subsidiary of the Company), unless:

(1) in case the Company shall consolidate with or merge into another Person (in a transaction in which the Company is not the surviving corporation) or convey, transfer or lease its properties and assets substantially as an entirety to any Person, the Person formed by such consolidation or into which the Company is merged or the Person which acquires by conveyance or transfer, or which leases, the properties and assets of the Company substantially as an entirety shall be a public limited company, corporation, limited liability company, partnership, trust or other business entity, and (1) shall be organized and validly existing under the laws of the United States of America, any state thereof or the District of Columbia or (2) shall be organized and validly existing under the laws of England and Wales, the Cayman Islands, the Islands of Bermuda, the Netherlands, Belgium, Switzerland, Luxembourg, the republic of Ireland, Canada or the United Kingdom, and shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, the due and punctual payment of the principal of and any premium and interest on all the Securities and the performance or observance of every covenant of this Indenture on the part of the Company to be performed or observed or as otherwise specified pursuant to Section 3.1, by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the Person (if other than the Company) formed by such consolidation or into which the Company shall have been merged or by the Person which shall have acquired the Company's assets;

(2) immediately after giving effect to such transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and

(3) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture comply with this Article and that all conditions precedent herein provided for relating to such transaction have been complied with.

Section 8.2 Successor Substituted.

Upon any consolidation of the Company with, or merger of the Company into, any other Person or any conveyance, transfer or lease of the properties and assets of the Company substantially as an entirety in accordance with Section 8.1, the successor Person formed by such consolidation or into which the Company is merged or to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein, and thereafter, except in the case of a lease, the predecessor Person shall be relieved of all obligations and covenants under this Indenture and the Securities.

ARTICLE 9

SUPPLEMENTAL INDENTURES

Section 9.1 Supplemental Indentures Without Consent of Holders.

Without the consent of any Holders, the Company, when authorized by a Board Resolution, and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any of the following purposes:

- (1) to evidence the succession of another Person to the Company, or successive successions, and the assumption by any such successor of the covenants of the Company herein and in the Securities in compliance with Article 8; or
- (2) to add to the covenants of the Company for the benefit of the Holders of all or any series of Securities (and if such covenants are to be for the benefit of less than all series of Securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any right or power herein conferred upon the Company; or
- (3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such additional Events of Default are to be for the benefit of less than all series of Securities, stating that such additional Events of Default are expressly being included solely for the benefit of such series); or
- (4) to add to or change any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the issuance of Securities in registrable or not registrable as to principal, and with or without interest coupons, or to permit or facilitate the issuance of Securities in uncertificated form; or
- (5) to add to, change or eliminate any of the provisions of this Indenture in respect of one or more series of Securities, provided that any such addition, change or elimination (A) shall neither (i) apply to any Security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (ii) modify the rights of the Holder of any such Security with respect to such provision or (B) shall become effective only when there is no such Security Outstanding; or
- (6) to secure the Securities, including provisions regarding the circumstances under which collateral may be released or substituted; or
- (7) to add or provide for a guaranty of the Securities or additional obligors on the Securities; or
- (8) to establish the form or terms of Securities of any series as permitted by Sections 2.1 and 3.1; or
- (9) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, pursuant to the requirements of Section 6.11; or
- (10) to conform this Indenture to the description of the Securities set forth in the Prospectus for such series of Securities; or
- (11) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture; or
- (12) to supplement any of the provisions of the Indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of Securities pursuant to Articles 4 and 13, provided that any such action shall not adversely affect the interests of the Holders of Securities of such series or any other series of Securities in any material respect; or

(13) make such other provisions in regards to matters or questions arising under the Indenture or any supplemental indenture hereto as the Board of Directors may deem necessary or desirable, and which does not in each case adversely affect the interest of the Holders of Securities or any series; or

(14) comply with requirements of the Commission in order to effect or maintain the qualification of the Indenture under the Trust indenture Act.

Section 9.2 Supplemental Indentures with Consent of Holders.

With the consent of the Holders of a majority in principal amount of the Outstanding Securities of each series affected by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities of such series under this Indenture; provided, however, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby,

(1) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Security, or reduce the principal amount thereof or the rate of interest thereon or any premium payable upon the redemption or repurchase thereof, whether at the option of the Company or at the option of the Holder, or reduce the amount of any sinking fund payments, or reduce the amount of the principal of an Original Issue Discount Security or any other Security which would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.2 of the Indenture, or change the Place of Payment or currency in which, any Security or any premium or interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the Redemption Date), or

(2) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver (of compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture, or

(3) modify any of the provisions of this Section or Section 5.13, except to increase any such percentage or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby; provided, however, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to “the Trustee” and concomitant changes in this Section, or the deletion of this proviso, in accordance with the requirements of Sections 6.11 and 9.1(9), or

(4) in the case of Securities of any series that are subordinated debt securities, modify the subordination provisions in a materially adverse manner.

A supplemental indenture which changes or eliminates any covenant or other provision of this Indenture which has expressly been included solely for the benefit of one or more particular series of Securities, or which modifies the rights of the Holders of Securities of such series with respect to such covenant or other provision, shall be deemed not to affect the rights under this Indenture of the Holders of Securities of any other series.

It shall not be necessary for any Act of Holders under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof.

Section 9.3 Execution of Supplemental Indentures.

In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Sections 6.1 and 6.3) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee’s own rights, duties or immunities under this Indenture or otherwise.

Section 9.4 Effect of Supplemental Indentures.

Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder shall be bound thereby.

Section 9.5 Conformity with Trust Indenture Act.

The Indenture shall incorporate and be governed by the provisions of the Trust Indenture Act that are required to be part of and to govern indentures qualified under the Trust Indenture Act.

Section 9.6 Reference in Securities to Supplemental Indentures.

Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series.

ARTICLE 10

COVENANTS

Section 10.1 Payment of Principal, Premium and Interest.

The Company covenants and agrees for the benefit of each series of Securities that it will duly and punctually pay the principal of and any premium and interest on the Securities of that series in accordance with the terms of the Securities and this Indenture.

Section 10.2 Maintenance of Office or Agency.

The Company will maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment, where Securities of that series may be surrendered for registration of transfer or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations, surrenders, notices and demands. Unless otherwise provided in a supplemental indenture or pursuant to Section 3.1 hereof, the Place of Payment for any series of Securities shall be the Corporate Trust Office of the Trustee.

The Company may also from time to time designate one or more other offices or agencies where the Securities of one or more series may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in each Place of Payment for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

Section 10.3 Money for Securities Payments To Be Held in Trust.

If the Company shall at any time act as its own Paying Agent with respect to any series of Securities, it will, on or before each due date of the principal of or any premium or interest on any of the Securities of that series, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay the principal and any premium and interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities, it will, on or prior to each due date of the principal of or any premium or interest on any Securities of that series, deposit with a Paying Agent a sum sufficient to pay such amount, such sum to be held as provided by the Trust Indenture Act, and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

The Company will cause each Paying Agent for any series of Securities other than the Trustee to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent will (1) comply with the provisions of the Trust Indenture Act applicable to it as a Paying Agent and (2) during the continuance of any default by the Company (or any other obligor upon the Securities of that series) in the making of any payment in respect of the Securities of that series, upon the written request of the Trustee, forthwith pay to the Trustee all sums held in trust by such Paying Agent for payment in respect of the Securities of that series.

The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same trusts as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such money.

Any amounts deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of or any premium or interest on any Security of any series and remaining unclaimed for a period ending on the earlier of the date that is ten Business Days prior to the date such money would escheat to the State or two years after such principal, premium or interest has become due and payable shall be paid to the Company on Company Request, or (if then held by the Company) shall be discharged from such trust; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; provided, however, that the Trustee or such Paying Agent, before being required to make any such repayment, may at the expense of the Company cause to be published once, in a newspaper published in the English language, customarily published on each Business Day and of general circulation in each Place of Payment, notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid to the Company.

Section 10.4 Statement by Officers as to Default.

The Company will deliver to the Trustee, within 120 days after the end of each fiscal year of the Company ending after the date hereof, an Officers' Certificate, stating whether or not to the best knowledge of the signers thereof the Company is in default in the performance and observance of any of the terms, provisions and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and, if the Company shall be in default, specifying all such defaults and the nature and status thereof of which they may have knowledge. The fiscal year of the Company currently ends on December 31; and the Company will give the Trustee prompt written notice of any change of its fiscal year.

Section 10.5 Existence.

Subject to Article 8, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its existence.

Section 10.6 Waiver of Certain Covenants.

Except as otherwise specified as contemplated by Section 3.1 for Securities of such series, the Company may, with respect to the Securities of any series, omit in any particular instance to comply with any term, provision or condition set forth in any covenant provided pursuant to Section 3.1(21) or 9.1(2), for the benefit of the Holders of such series if before the time for such compliance the Holders of at least a majority in principal amount of the Outstanding Securities of such series shall, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition, but no such waiver shall extend to or affect such term, provision or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

ARTICLE 11

REDEMPTION OF SECURITIES

Section 11.1 Applicability of Article.

Securities of any series that are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 3.1 for such Securities) in accordance with this Article.

Section 11.2 Election to Redeem; Notice to Trustee.

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution or pursuant to a supplemental indenture or an Officers' Certificate in the manner specified by Section 3.1 for such Securities. Unless otherwise specified in a supplemental indenture or in an Officers' Certificate in the manner specified by Section 3.1 for such securities, in case of any redemption at the election of the Company of less than all the Securities of any series (including any such redemption affecting only a single Security), the Company shall, at least 60 days prior to the Redemption Date fixed by the Company (unless a shorter notice shall be satisfactory to the Trustee or is specified in the Board Resolution (or in an Officers' Certificate pursuant to such Board Resolution detailing such establishment) or supplemental indenture establishing such series), notify the Trustee of such Redemption Date, of the principal amount of Securities of such series to be redeemed and, if applicable, of the tenor of the Securities to be redeemed.

Section 11.3 Selection by Trustee of Securities to Be Redeemed.

Unless otherwise specified in a supplemental indenture or in an Officers' Certificate in the manner specified by Section 3.1 for such securities, if less than all the Securities of any series are to be redeemed (unless all the Securities of such series and of a specified tenor are to be redeemed or unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series not previously called for redemption, by lot, or in the Trustee's discretion, on a pro-rata basis, provided that the unredeemed portion of the principal amount of any Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security. Unless otherwise specified in a supplemental indenture or in an Officers' Certificate in the manner specified by Section 3.1 for such securities, if less than all the Securities of such series and of a specified tenor are to be redeemed (unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series and specified tenor not previously called for redemption in accordance with the preceding sentence.

The Trustee shall promptly notify the Company in writing of the Securities selected for redemption as aforesaid and, in case of any Securities selected for partial redemption as aforesaid, the principal amount thereof to be redeemed.

The provisions of the three preceding paragraphs shall not apply with respect to any redemption affecting only a single Security, whether such Security is to be redeemed in whole or in part. In the case of any such redemption in part, the unredeemed portion of the principal amount of the Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Securities redeemed or to be redeemed only in part, to the portion of the principal amount of such Securities which has been or is to be redeemed.

Section 11.4 Notice of Redemption.

Unless otherwise specified in a supplemental indenture or in an Officers' Certificate in the manner specified by Section 3.1 for such securities, notice of redemption shall be given in the manner provided in Section 1.6 not fewer than 30 nor more than 60 days prior to the Redemption Date, unless a shorter period is specified in the Securities to be redeemed, to each Holder of Securities to be redeemed, at its address appearing in the Security Register or, if the Securities are held in book-entry form, sent by electronic transmission.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price (including accrued interest, if any),
- (3) if less than all the Outstanding Securities of any series consisting of more than a single Security are to be redeemed, the identification (and, in the case of partial redemption of any such Securities, the principal amounts) of the particular Securities to be redeemed and, if less than all the Outstanding Securities of any series consisting of a single Security are to be redeemed, the principal amount of the particular Security to be redeemed,
- (4) in case any Security is to be redeemed in part only, that on and after the Redemption Date, upon surrender of the Security, the Holder of such Security will receive, without charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed,
- (5) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed and, if applicable, that interest thereon will cease to accrue on and after said date,
- (6) the place or places where each such Security is to be surrendered for payment of the Redemption Price,
- (7) that the redemption is for a sinking fund, if such is the case, and
- (8) the CUSIP number or numbers and/or common code(s) of the Security being redeemed.

Notice of redemption of Securities to be redeemed at the election of the Company shall be given by the Company or, at the Company's request, by the Trustee in the name and at the expense of the Company and shall be irrevocable.

Section 11.5 Deposit of Redemption Price.

On or prior to any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 10.3) an amount of money sufficient to pay the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date) accrued interest, if any, on, all the Securities which are to be redeemed on that date.

Section 11.6 Securities Payable on Redemption Date.

Notice of redemption having been given as aforesaid, the Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified, and from and after such date (unless the Company shall default in the payment of the Redemption Price and accrued interest, if any) such Securities shall cease to bear interest. Upon surrender of any such Security for redemption in accordance with said notice, such Security shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date; provided, however, that, unless otherwise specified as contemplated by Section 3.1, installments of interest whose Stated Maturity is on or prior to the Redemption Date will be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 3.7.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal and any premium shall, until paid, bear interest from the Redemption Date at the rate prescribed therefor in the Security.

Section 11.7 Securities Redeemed in Part.

Any Security which is to be redeemed only in part shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or its attorney duly authorized in writing), and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Security or Securities of the same series and of like tenor, of any authorized denomination as requested by such Holder, in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered.

ARTICLE 12

SINKING FUNDS

Section 12.1 Applicability of Article.

The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of any series except as otherwise specified as contemplated by Section 3.1 for such Securities.

The minimum amount of any sinking fund payment provided for by the terms of any Securities is herein referred to as a “mandatory sinking fund payment,” and any payment in excess of such minimum amount provided for by the terms of such Securities is herein referred to as an “optional sinking fund payment.” If provided for by the terms of any Securities, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 12.2. Each sinking fund payment shall be applied to the redemption of Securities as provided for by the terms of such Securities.

Section 12.2 Satisfaction of Sinking Fund Payments with Securities.

The Company (1) may deliver Outstanding Securities of a series (other than any previously called for redemption) and (2) may apply as a credit Securities of a series which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, in each case in satisfaction of all or any part of any sinking fund payment with respect to any Securities of such series required to be made pursuant to the terms of such Securities as and to the extent provided for by the terms of such Securities; provided that the Securities to be so credited have not been previously so credited. The Securities to be so credited shall be received and credited for such purpose by the Trustee at the Redemption Price, as specified in the Securities so to be redeemed, for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly.

Section 12.3 Redemption of Securities for Sinking Fund.

Not fewer than 60 days prior to each sinking fund payment date for any Securities, the Company will deliver to the Trustee an Officers' Certificate specifying the amount of the next ensuing sinking fund payment for such Securities pursuant to the terms of such Securities, the portion thereof, if any, which is to be satisfied by payment of cash and the portion thereof, if any, which is to be satisfied by delivering and crediting Securities pursuant to Section 12.2 and will also deliver to the Trustee any Securities to be so delivered. Not fewer than 30 days prior to each such sinking fund payment date, the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 11.3 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 11.4. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 11.6 and 11.7.

ARTICLE 13

DEFEASANCE AND COVENANT DEFEASANCE

Section 13.1 Company's Option to Effect Defeasance or Covenant Defeasance.

The Company may elect, at its option at any time, to have Section 13.2 or Section 13.3 applied to any Securities or any series of Securities, as the case may be, designated pursuant to Section 3.1 as being defeasible pursuant to such Section 13.2 or 13.3, in accordance with any applicable requirements provided pursuant to Section 3.1 and upon compliance with the conditions set forth below in this Article. Any such election shall be evidenced by a Board Resolution or in another manner specified as contemplated by Section 3.1 for such Securities.

Section 13.2 Defeasance and Discharge.

Upon the Company's exercise of its option (if any) to have this Section applied to any Securities or any series of Securities, as the case may be, the Company shall be deemed to have been discharged from its obligations with respect to such Securities as provided in this Section on and after the date the conditions set forth in Section 13.4 are satisfied (hereinafter called "Defeasance"). For this purpose, such Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by such Securities and to have satisfied all its other obligations under such Securities and this Indenture insofar as such Securities are concerned (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), subject to the following which shall survive until otherwise terminated or discharged hereunder:

- (1) the rights of Holders of such Securities to receive, solely from the trust fund described in Section 13.4 and as more fully set forth in such Section, payments in respect of the principal of and any premium and interest on such Securities when payments are due,
- (2) the Company's obligations with respect to such Securities under Sections 3.4, 3.5, 3.6, 10.2 and 10.3,
- (3) the rights, powers, trusts, duties and immunities of the Trustee hereunder, and
- (4) this Article.

Subject to compliance with this Article, the Company may exercise its option (if any) to have this Section applied to any Securities notwithstanding the prior exercise of its option (if any) to have Section 13.3 applied to such Securities.

Section 13.3 Covenant Defeasance.

Upon the Company's exercise of its option (if any) to have this Section applied to any Securities or any series of Securities, as the case may be,

- (1) the Company shall be released from any covenants provided pursuant to Sections 3.1(21) or 9.1(2) for the benefit of the Holders of such Securities and
- (2) the occurrence of any event specified in Section 5.1(4) (with respect to any such covenants provided pursuant to Section 3.1(21) or 9.1(2)) and the occurrence of any other Event of Default specified pursuant to Section 3.1 shall be deemed not to be or result in an Event of Default,

in each case with respect to such Securities or any series of Securities as provided in this Section on and after the date the conditions set forth in Section 13.4 are satisfied (hereinafter called "Covenant Defeasance"). For this purpose, such Covenant Defeasance means that, with respect to such Securities, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such specified Section (to the extent so specified in the case of Section 5.1(4) and the occurrence of any other Event of Default specified pursuant to Section 3.1), whether directly or indirectly by reason of any reference elsewhere herein to any such Section or by reason of any reference in any such Section to any other provision herein or in any other document, but the remainder of this Indenture and such Securities shall be unaffected thereby.

Section 13.4 Conditions to Defeasance or Covenant Defeasance.

The following shall be the conditions to the application of Section 13.2 or Section 13.3 to any Securities or any series of Securities, as the case may be:

(1) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee which satisfies the requirements contemplated by Section 6.9 and agrees to comply with the provisions of this Article applicable to it) as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefits of the Holders of such Securities,

(A) in the case of Securities of a series denominated in currency of the United States of America,

(i) cash in currency of the United States of America in an amount, or

(ii) U.S. Government Obligations which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than one day before the due date of any payment, an amount in cash, or

(iii) a combination thereof, or

(B) in the case of Securities of a series denominated in currency other than that of the United States of America,

(i) cash in the currency in which such series of Securities is denominated in an amount, or

(ii) Non-U.S. Government Obligations which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than one day before the due date of any payment, an amount in cash, or

(iii) a combination thereof,

in each case sufficient, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay and discharge, and which shall be applied by the Trustee (or any such other qualifying trustee) to pay and discharge, the principal of and any premium and interest on such Securities on the respective Stated Maturities, in accordance with the terms of this Indenture and such Securities.

(2) In the event of an election to have Section 13.2 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel stating that (A) the Company has received from, or there has been published by, the U.S. Internal Revenue Service a ruling or (B) since the date of this instrument, there has been a change in the applicable U.S. Federal income tax law, in either case (A) or (B) to the effect that, and based thereon such opinion shall confirm that, the Holders of such Securities will not recognize gain or loss for U.S. Federal income tax purposes as a result of the deposit, Defeasance and discharge to be effected with respect to such Securities and will be subject to U.S. Federal income tax on the same amount, in the same manner and at the same times as would be the case if such deposit, Defeasance and discharge were not to occur.

(3) In the event of an election to have Section 13.3 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such Securities will not recognize gain or loss for U.S. Federal income tax purposes as a result of the deposit and Covenant Defeasance to be effected with respect to such Securities and will be subject to U.S. Federal income tax on the same amount, in the same manner and at the same times as would be the case if such deposit and Covenant Defeasance were not to occur.

(4) The Company shall have delivered to the Trustee an Officers' Certificate to the effect that neither such Securities nor any other Securities of the same series, if then listed on any securities exchange, will be delisted as a result of such deposit.

(5) No event which is, or after notice or lapse of time or both would become, an Event of Default with respect to such Securities or any other Securities shall have occurred and be continuing at the time of such deposit or, with regard to any such event specified in Sections 5.1(5) and (6), at any time on or prior to the 90th day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until after such 90th day).

(6) Such Defeasance or Covenant Defeasance shall not cause the Trustee to have a conflicting interest within the meaning of the Trust Indenture Act (assuming all Securities are in default within the meaning of such Act).

(7) Such Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound.

(8) Such Defeasance or Covenant Defeasance shall not result in the trust arising from such deposit constituting an investment company within the meaning of the Investment Company Act unless such trust shall be registered under such Act or exempt from registration thereunder.

(9) The Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent with respect to such Defeasance or Covenant Defeasance have been complied with.

Section 13.5 Deposited Money, U.S. Government Obligations and Non-U.S. Government Obligations to be Held in Trust; Miscellaneous Provisions.

Subject to the provisions of the last paragraph of Section 10.3, all money, U.S. Government Obligations and Non-U.S. Government Obligations (including the proceeds thereof) deposited with the Trustee or other qualifying trustee (solely for purposes of this Section and Section 13.6, the Trustee and any such other trustee are referred to collectively as the "Trustee") pursuant to Section 13.4 in respect of any Securities shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities and this Indenture, to the payment, either directly or through any such Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Holders of such Securities, of all sums due and to become due thereon in respect of principal and any premium and interest, but money so held in trust need not be segregated from other funds except to the extent required by law. The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the U.S. Government Obligations or Non-U.S. Government Obligations deposited pursuant to Section 13.4 or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of Outstanding Securities. Anything in this Article to the contrary notwithstanding, the Trustee shall deliver or pay to the Company from time to time upon Company Request any money, U.S. Government Obligations or Non-U.S. Government Obligations held by it as provided in Section 13.4 with respect to any Securities which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, are in excess of the amount thereof which would then be required to be deposited to effect the Defeasance or Covenant Defeasance, as the case may be, with respect to such Securities.

Section 13.6 Reinstatement.

If the Trustee or the Paying Agent is unable to apply any money in accordance with this Article with respect to any Securities by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the obligations under this Indenture and such Securities from which the Company has been discharged or released pursuant to Section 13.2 or 13.3 shall be revived and reinstated as though no deposit had occurred pursuant to this Article with respect to such Securities, until such time as the Trustee or Paying Agent is permitted to apply all money held in trust pursuant to Section 13.5 with respect to such Securities in accordance with this Article; provided, however, that if the Company makes any payment of principal of or any premium or interest on any such Security following such reinstatement of its obligations, the Company shall be subrogated to the rights (if any) of the Holders of such Securities to receive such payment from the money so held in trust.

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IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed as of the day and year first above written.

4D pharma plc.

By: _____
Name:
Title:

[_],
as Trustee

By: _____
Name:
Title:



PRIVATE AND CONFIDENTIAL

The Directors
4D pharma plc
5th Floor, 9 Bond Court
Leeds
LS1 2JZ

Our Ref 130641165\cw29\655335.07038

DDI +44 (0)207 418 8271

E charles.waddell@pinsentmasons.com

28 March 2022

Dear Sirs

REGISTRATION STATEMENT ON FORM F-3 OF 4D PHARMA PLC

1. INTRODUCTION

We have acted for 4D pharma plc, a public limited company incorporated under the laws of England and Wales (the “**Company**”), as its legal advisers as to English law in connection with preparation and filing of the Company’s registration statement on Form F-3 (the “**Registration Statement**”), the initial draft of which was filed on 8 March 2022 by the Company with the US Securities and Exchange Commission (“**SEC**”) under the United States Securities Act of 1933 (as amended) (the “**Securities Act**”), and the rules and regulations promulgated thereunder (the “**Rules**”), and which will be amended on the date hereof.

The Registration Statement relates to the issuance and sale by the Company from time to time, in one or more offerings, of (i) ordinary shares of 0.25 pence each in the capital of the Company (“**Ordinary Shares**”), (ii) American Depositary Shares representing Ordinary Shares (“**ADSs**”), (iii) debt securities in one or more series, as either senior or subordinated debt (“**Debt Securities**”), (iv) warrants for the purchase of Ordinary Shares represented by ADSs and/or Debt Securities in one or more series (“**Warrants**”) (the Ordinary Shares, ADSs, Debt Securities and Warrants together the “**Securities**”), (v) preference shares, (vi) rights and (vii) units, in each case to the public in a registered offering or offerings, with an aggregate offering price of up to \$150,000,000.

The existing issued Ordinary Shares of the Company are admitted to trading on the AIM market operated by London Stock Exchange plc (“**AIM**”).

In connection with the filing of the Registration Statement, we have been asked to provide an opinion on certain matters, as set out below.

2. DOCUMENTS EXAMINED

2.1 For the purposes of giving this opinion, we have examined copies of the following documents:

- (a) a certificate of the company secretary of the Company dated 28 March 2022 (the “**Certificate**”) relating to certain factual matters and having annexed thereto copies (certified by the company secretary as being true, accurate, complete and up-to-date in each case) of the following documents:
 - (i) the Company’s certificate of incorporation;

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- (ii) the Company's articles of association;
- (iii) written resolutions of the board of directors of the Company passed on 9 March 2022 which resolved, inter alia, to approve the filing with the SEC of the Registration Statement (the "**Board Resolutions**");
- (iv) minutes of the annual general meeting of the Company held on 24 May 2021 (the "**AGM**") at which certain shareholder resolutions (the "**Shareholder Resolutions**") (the Board Resolutions and the Shareholder Resolutions together the "**Corporate Approvals**") were passed, including the resolutions (i) to authorise the board of directors to allot equity securities (as defined in section 560 of the Companies Act 2006) in the Company and to grant rights to subscribe for or to convert any security into shares in the Company up to an aggregate nominal amount of £223,727, and (ii) to dis-apply pre-emption rights in respect of the allotment or sale of equity securities (as defined in section 560 of the Companies Act 2006) up to a maximum nominal value of £178,982 (shares in respect of which the pre-emption rights have been dis-applied being the "**Authorised Shares**"); and

- (b) a copy of the Registration Statement filed with the SEC on 8 March 2022.

2.2 For the purposes of giving this opinion, we have made the following enquiries:

- (a) on 28 March 2022 at 10.15 a.m. we carried out an online search of the register maintained by the Registrar of Companies in England and Wales in respect of the Company (the "**Company Search**"); and
- (b) on 28 March 2022 at 10.26 a.m. we carried out a search in respect of the Company of the Central Registry of Winding-Up Petitions (the "**Central Registry Enquiry**") and, together with the Company Search, the "**Searches**"),

and reviewed the information we received from our agents from the Searches (the "**Search Results**").

For the purposes of giving this opinion, we have only examined and relied on those documents referred to in paragraphs 2.1(a) – (b) (inclusive), carried out the Searches on the dates and at the times specified, and reviewed the Search Results. We have made no other enquiries concerning the Company or any other matter in connection with the giving of this opinion.

3. ASSUMPTIONS

3.1 For the purposes of giving this opinion we have assumed (without carrying out any independent investigation or verification in respect of such assumptions) that:

- (a) all signatures, seals and stamps on all documents (including copy documents) examined by us are genuine, complete and accurate;
- (b) in respect of all documents submitted to us electronically through an email signature platform (such as Adobe Sign or DocuSign):
 - (i) such documents have been signed electronically and are not "advanced electronic signatures" or "qualified electronic signatures" (each as defined in Regulation (EU) No 910/2014 (the "**eIDAS Regulation**"));



- (ii) where applicable, the documents have been duly witnessed by witnesses who were physically present when such documents were signed electronically, and each such witness duly observed the act of signing and was aware at that time that he/she was witnessing that signatory's signature;
- (c) each individual who signs as, or otherwise claims to be, an officer of the Company is the individual he claims to be and holds the office he claims to hold;
- (d) all documents submitted to us as original are authentic and complete and all documents submitted to us in electronic form or as certified photocopies or facsimile transmitted copies or other copies of original documents conform to the originals and that the originals from which such copies were taken were authentic and complete;
- (e) all documents, including the constitutional documents, which we have reviewed are in force and remain accurate, up-to-date and have not been amended, terminated or rescinded, or any provisions thereof varied or waived;
- (f) all documents set out in paragraph 2.1 as having been reviewed by us have been or will be duly executed and, where applicable, delivered on behalf of the parties thereto;
- (g) the Certificate and all documents annexed thereto, as listed in paragraph 2.1(a)(i) – (iv) (inclusive), are all the relevant minutes and resolutions of the directors and shareholders of the Company relating to the approval and filing of the Registration Statement with the SEC and give the directors of the Company the authority to allot the Authorised Shares;
- (h) the information disclosed by the Searches is complete, accurate and up-to-date and included all information which should properly have been disclosed by those Searches; and no step will be taken to wind-up, strike off or dissolve the Company or to place the Company into administration and no receiver will be appointed over or in respect of the assets of the Company, nor will any analogous procedure or step be taken in any jurisdiction which (in either case) has or have not been revealed by the Searches;
- (i) in relation to the Board Resolutions and the Shareholder Resolutions, none of those resolutions has been or will be revoked or withdrawn prior to the allotment of the Authorised Shares;
- (j) the AGM at which the Shareholder Resolutions were passed was duly convened, constituted and held in accordance with all applicable laws and regulations and all constitutional and other applicable formalities were duly observed, and in particular, but without limitation, a duly qualified number or quorum of shareholders was present throughout the AGM and voted in favour of the Shareholder Resolutions;
- (k) the Board Resolutions were duly passed in accordance with all applicable laws and regulations and all constitutional and other applicable formalities were duly observed and, in particular, but without limitation, a duly qualified number or quorum of directors voted in favour of the Board Resolutions and that each provision contained in the Companies Act 2006 and / or the then applicable articles of association of the Company relating to (i) the declaration of directors' interests or the power of interested directors to vote, (ii) the number of directors required to sign in writing, or confirm electronically, their agreement with such written resolutions, and (iii) any delegation of authority to a committee, was duly observed;



- (l) the directors of the Company have acted in good faith and have complied with their duties under the Companies Act and all applicable laws in approving the matters set out in the Board Resolutions and all transactions contemplated thereunder;
- (m) no party was, by reasons of the transactions contemplated by the Corporate Approvals, in breach of any of their respective obligations under any other agreement, licence, authorisation, consent or similar document or injunction or other court order against or affecting the Company;
- (n) the Registration Statement, as finally amended, has become effective under the Securities Act and such effectiveness shall not be terminated or rescinded;
- (o) the issue or sale of the Authorised Shares does not violate the then operative articles of association of the Company;
- (p) the Company is and will at all relevant times remain in compliance with all applicable anti-corruption, anti-money laundering, anti-terrorism, sanctions, exchange controls and human rights laws and regulations;
- (q) no agreement, document or obligation to or by which the Company (or its assets) is a party or bound and no injunction or other court order against or affecting the Company (or its assets) would be breached or infringed by the matters contemplated by the performance of the actions to be carried out pursuant to, or any other aspect of, the Corporate Approvals;
- (r) all consents, licences, approvals, authorisations, notices, filings and registrations that are necessary under any applicable laws or regulations in order to permit the performance of the actions to be carried out pursuant to the Corporate Approvals have been or will be duly made or obtained and are, or will be, in full force and effect;
- (s) the aggregate nominal value of the Authorised Shares to be allotted and issued in connection with the offering pursuant to the Registration Statement will not exceed £178,982 (less any equity securities already allotted pursuant to the authority taken at the AGM), and all Authorised Shares will be allotted and issued pursuant to the authority and power granted to the directors of the Company pursuant to the Shareholder Resolutions and that the such authorities have not been and will not be used other than for the allotment of Authorised Shares in connection with the Registration Statement;
- (t) the allotment and issue of the Authorised Shares or ADSs does not involve the making of an offer of transferable securities to the public in the United Kingdom (other than an offer falling within section 86 of the Financial Services and Markets Act 2000); and
- (u) the Company is not, nor will be, engaging in criminal, misleading or deceptive conduct, or seeking to conduct any relevant transaction or any associated activity in a manner or for a purpose which might render any transaction contemplated by the Corporate Approvals or any associated activity illegal, void, voidable or unenforceable.

4. OPINION

4.1 Based on the documents referred to in paragraph 2, and subject to the assumptions contained in paragraph 3 and to the qualifications contained in paragraph 5, and to any matters not disclosed to us, it is our opinion that:

- (a) the Company has been duly incorporated and is existing as a public company with limited liability under English law; and



- (b) the Authorised Shares will, when the names of the holders of such Authorised Shares are entered into the register of members of the Company, and subject to receipt by the Company of the aggregate issue price in respect of all of the Authorised Shares subscribed for, be validly allotted, issued and fully paid.

This opinion is strictly limited to the matters expressly stated in this paragraph 4 and is not to be construed as extending by implication to any other matter.

5. QUALIFICATIONS

5.1 The opinion set out in paragraph 4 is subject to the following qualifications:

- a. the records of the Registrar of Companies and the Central Registry of Winding-Up Petitions may not be complete or up-to-date. In particular, the Central Registry of Winding-Up Petitions may not contain details of administration applications filed, or appointments recorded in or orders made by, district registries and county courts outside London. Searches at Companies House and the Central Registry of Winding-Up Petitions are not capable of revealing whether or not a winding-up petition or a petition for the making of an administration order has been presented and, further, notice of a winding-up order or resolution, notice of an administration order and notice of the appointment of a receiver may not be filed at Companies House immediately and there may be a delay in the relevant notice appearing on the file of the company concerned;
- b. our opinion relates only to the Ordinary Shares that may be allotted and issued pursuant to the Shareholder Resolutions. We express no opinion in respect of the ADSs or in respect of any of the other Securities of the Company; and
- c. we express no opinion as to matters of United Kingdom taxation or any liability to tax which may arise or be incurred as a result of or in connection with the transactions contemplated by the Registration Statement, or as to tax matters generally.

6. LAW

This opinion is confined to matters of English law as applied by the English courts as at the date of this opinion.

This opinion and any non-contractual obligations connected with it are given on the basis that they will be governed by and construed in accordance with English law and the English courts shall have exclusive jurisdiction in respect of any disputes or other matters that arise out of or in connection with them.

We express no opinion on, and have taken no account of, the laws or regulations of any jurisdiction other than England and Wales. We express no opinion on the effect of documents governed by laws other than English law.

7. CONSENT

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving this consent, we do not admit that we are included in the category of persons whose consent is required under section 7 of the Securities Act or the Rules.

Yours faithfully

Pinsent Masons LLP



Wilson Sonsini Goodrich & Rosati
Professional Corporation

650 Page Mill Road
Palo Alto, California 94304-1050

O: 650.493.9300
F: 650.493.6811

March 28, 2022

4D pharma plc
5th Floor, 9 Bond Court
Leeds
LS1 2JZ
United Kingdom

Re: 4D Pharma plc – Registration Statement on Form F-3

Ladies and Gentlemen:

4D pharma plc, a public limited company incorporated under the laws of England and Wales (the “**Company**”), is filing with the United States Securities and Exchange Commission a Registration Statement on Form F-3 (the “**Registration Statement**”) for the purpose of registering under the Securities Act of 1933, as amended (the “**Securities Act**”), (i) ordinary shares, nominal value £0.0025 per share (the “**Ordinary Shares**”), of the Company; (ii) preference shares of the Company (the “**Preferred Shares**”); (iii) warrants of the Company (the “**Warrants**”), which may be issued pursuant to a warrant agreement (the “**Warrant Agreement**”) between the Company and the warrant agent to be named therein; (v) the Company’s debt securities (the “**Debt Securities**”), which may be issued pursuant to an indenture, between the Company and a trustee to be named therein (the “**Trustee**”) (the “**Indenture**”); (vi) rights to purchase Ordinary Shares, Preferred Shares or Debt Securities (the “**Subscription Rights**”); and (vii) units (the “**Units**”) to be issued under one or more unit agreements to be entered into among the Company, a bank or trust company, as unit agent (the “**Unit Agent**”), and the holders from time to time of the Units (each such unit agreement, a “**Unit Agreement**”).

We, as your United States counsel, have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials and other instruments as we have deemed necessary or advisable for the purpose of rendering this opinion.

Based upon the foregoing, we advise you that, in our opinion:

1. When the Warrant Agreement to be entered into in connection with the issuance of any Warrants has been duly authorized, executed and delivered by the Warrant Agent and the Company, the specific terms of the Warrants have been duly authorized and established in accordance with the Warrant Agreement and such Warrants have been duly authorized, executed, issued and delivered in accordance with the Warrant Agreement and the applicable underwriting or other agreement against payment therefor, such Warrants will constitute valid and binding obligations of the Company, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors’ rights generally, concepts of reasonableness and equitable principles of general applicability.
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2. When the specific terms of a particular series of Debt Securities have been duly authorized and established in accordance with the Indenture and such Debt Securities have been duly authorized, executed, authenticated, issued and delivered in accordance with the Indenture and the applicable underwriting or other agreement against payment therefor, such Debt Securities will constitute valid and binding obligations of the Company, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability.
3. When the Board of Directors of the Company (the "**Board**") has taken all necessary corporate action to authorize the issuance and terms of the Subscription Rights, the terms of the offering thereof, and related matters and the agreements relating to the Subscription Rights have been duly authorized and validly executed and delivered by the Company, then the Subscription Rights will be valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
4. When the Unit Agreement to be entered into in connection with the issuance of any Units has been duly authorized, executed and delivered by the Unit Agent and the Company, the specific terms of the Units have been duly authorized and established in accordance with the Unit Agreement and such Units have been duly authorized, executed, issued and delivered in accordance with the Unit Agreement and the applicable underwriting or other agreement against payment therefor, such Units will constitute valid and binding obligations of the Company, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability.

In connection with the opinions expressed above, we have assumed that, (i) at or prior to the time of the delivery of any such security, the Board shall have duly established the terms of such security and duly authorized the issuance and sale of such security and such authorization shall not have been modified or rescinded; (ii) the Company is and shall remain validly existing as a public limited company incorporated under the laws of England and Wales; (iii) at or prior to the time of the delivery of any such security, the Registration Statement shall have become effective and such effectiveness shall not have been terminated or rescinded; (iv) at and prior to the time of the delivery of any such security, the Indenture, the Debt Securities, the Warrant Agreement and the Unit Agreement are each valid, binding and enforceable agreements of each party thereto (other than as expressly covered above in respect of the Company); (v) at or prior to the time of the delivery of any such security, there shall not have occurred any change in law affecting the validity or enforceability of such security, and (vi) any Ordinary Shares, Preferred Shares or other securities issuable upon conversion, exchange, redemption, or exercise of any security offered under the Registration Statement will be duly authorized and validly issued. We have also assumed that none of the terms of any security to be established subsequent to the date hereof, the issuance and delivery of such security or the compliance by the Company with the terms of such security will violate any applicable law or public policy or will result in a violation of any provision of any instrument or agreement then binding upon the Company, or any restriction imposed by any court or governmental body having jurisdiction over the Company

We are members of the Bar of the State of New York and the foregoing opinion is limited to the laws of the State of New York (including the statutory provisions and reported judicial decisions interpreting the foregoing). Without limiting the foregoing, we have made no inquiry into, and we express no opinion as to, the statutes, regulations, treaties, common laws or other laws of any other nation, state or jurisdiction, including in particular the laws of England and Wales.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement referred to above and further consent to the reference to our name under the caption “Legal Matters” in the prospectus, which is a part of the Registration Statement. In giving this consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

This opinion is rendered solely to you in connection with the above matter. This opinion may not be relied upon by you for any other purpose or relied upon by or furnished to any other person without our prior written consent.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Wilson Sonsini Goodrich & Rosati

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Amendment No.1 to the Registration Statement on Form F-3 and related Prospectus of 4D pharma plc of our report dated April 1, 2021, relating to the consolidated financial statements of 4D pharma plc, appearing the Annual Report on Form 20-F/A of 4D pharma plc for the year ended December 31,2020.

We also consent to the reference to our firm under the heading “Experts” in such Prospectus

/s/ RSM US LLP

Boston, MA

March 28, 2022
