

THERMO FISHER SCIENTIFIC INC.

Form S-3ASR

February 28, 2019

As filed with the Securities and Exchange Commission on February 28, 2019

Registration No. 333-

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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

THERMO FISHER SCIENTIFIC INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of

THERMO FISHER SCIENTIFIC
(FINANCE I) B.V.

(Exact name of registrant as specified in its charter)

The Netherlands
(State or other jurisdiction of

incorporation or organization)

incorporation or organization)

**04-2209186
(I.R.S. Employer**

**98-1315372
(I.R.S. Employer**

Identification Number)

Identification Number)

**168 Third Avenue
Waltham, Massachusetts 02451

(781) 622-1000**

**Takkebijsters 1
4817BL Breda
The Netherlands

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168 Third Avenue

Waltham, Massachusetts 02451

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New York, NY 10007

(212) 230-8800

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

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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, 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.D. 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.D. 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 a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company and emerging growth company in Rule 12b-2 of the Exchange Act:

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, 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.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered(1)	Amount to be Registered(1)	Proposed		Amount of Registration Fee(1)
		Maximum Offering Price Per Unit(1)	Maximum Aggregate Offering Price(1)	
Thermo Fisher Scientific Inc. Debt Securities Common Stock, par value \$1.00 per share				

Preferred Stock, par value \$100 per
share
Depository Shares(2)
Purchase Contracts
Purchase Units
Warrants
Guarantees(3)
Thermo Fisher Scientific (Finance I)
B.V.
Debt Securities

- (1) An indeterminate amount of the securities of each identified class is being registered as may from time to time be offered hereunder at indeterminate prices, along with an indeterminate number of securities that may be issued upon exercise, settlement, exchange or conversion of securities offered or sold hereunder or that are represented by depository shares. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the Securities Act), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or pursuant to anti-dilution provisions of any of the securities. Separate consideration may or may not be received for securities that are issuable upon conversion, exercise or exchange of other securities. In accordance with Rules 456(b) and 457(r) under the Securities Act, the registrants are deferring payment of all registration fees and will pay the registration fees subsequently in advance or on a pay-as-you-go basis. Securities registered hereunder may be sold either separately or as units comprised of more than one type of security registered hereunder.
- (2) Each depository share will be issued under a deposit agreement, will represent an interest in a fractional share or multiple shares of preferred stock and will be evidenced by a depository receipt.
- (3) Thermo Fisher Scientific Inc. will fully and unconditionally guarantee any series of debt securities issued by Thermo Fisher Scientific (Finance I) B.V. Pursuant to Rule 457(n) under the Securities Act, no separate registration fee will be paid in respect of such guarantees.

PROSPECTUS

Thermo Fisher Scientific Inc.

Debt Securities

Common Stock

Preferred Stock

Depository Shares

Purchase Contracts

Purchase Units

Warrants

Guarantees

Thermo Fisher Scientific (Finance I) B.V.

Debt Securities

(fully and unconditionally guaranteed by Thermo Fisher Scientific Inc.)

The Issuers may issue securities from time to time in one or more offerings. 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 securities in supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any applicable prospectus supplement before you invest.

The Issuers may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement.

The common stock of Thermo Fisher Scientific Inc. trades on The New York Stock Exchange under the symbol TMO .

Investing in these securities involves certain risks. See Risk Factors included in or incorporated by reference in any accompanying prospectus supplement and elsewhere in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these

securities.

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

The date of this prospectus is February 28, 2019.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the SEC, utilizing a shelf registration process. Under this shelf registration process, Thermo Fisher or Thermo Fisher International may from time to time sell any combination of the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities the Issuers may offer. Each time Thermo Fisher or Thermo Fisher International sells securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and the accompanying prospectus supplement together with the additional information described under the heading **Where You Can Find More Information** on page 1 of this prospectus.

You should rely only on the information contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and the accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to **we**, **our** and **us** refer, collectively, to Thermo Fisher Scientific Inc., a Delaware corporation, and its consolidated subsidiaries. The term **Thermo Fisher** refers to Thermo Fisher Scientific Inc. a Delaware corporation, the term **Thermo Fisher International** refers to Thermo Fisher Scientific (Finance I) B.V., a private limited liability company incorporated under Dutch law and the term **Issuers** refers to Thermo Fisher and Thermo Fisher International, collectively.

Pursuant to Rule 3-10(b) (*Rule 3-10(b)*) of Regulation S-X, this prospectus does not contain separate financial statements for Thermo Fisher International since Thermo Fisher International is an indirect 100%-owned subsidiary of Thermo Fisher, and Thermo Fisher files consolidated financial information under the Securities Exchange Act of 1934, as amended (the *Exchange Act*). Thermo Fisher International is a finance subsidiary of Thermo Fisher under Rule 3-10(b) with no independent function other than financing activities. Thermo Fisher will provide a full and unconditional guarantee of Thermo Fisher International's obligations under its debt securities, and no other subsidiary of Thermo Fisher will guarantee these obligations.

WHERE YOU CAN FIND MORE INFORMATION

Thermo Fisher files annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Copies of certain information filed by us with the SEC are also available on our website at www.thermofisher.com. Our website is not a part of this prospectus.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information in and exhibits to the registration statement for further information on us and the securities the Issuers are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these

filings. You should review the complete document to evaluate these statements.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information 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 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 (File No.001-08002) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on February 27, 2019;

the portions of our definitive proxy statement on Schedule 14A filed with the SEC on April 10, 2018 that are incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017;

Current Report on Form 8-K filed on February 28, 2019; and

the description of our common stock contained in our Amendment No. 3 to Registration Statement on Form 8-A filed on September 9, 1999, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Thermo Fisher Scientific Inc.

168 Third Avenue

Waltham, Massachusetts 02451

Attn: Investor Relations

Telephone: (781) 622-1111

FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange Act. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words believes, anticipates, plans, expects, seeks, estimates, and similar expressions are intended to identify forward-looking statements. While we may elect to update

forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change, and investors should not rely on those forward-looking statements as representing our views as of any date subsequent to the date of this prospectus or the date of information incorporated by reference herein.

A number of important factors could cause our results to differ materially from those indicated by such forward-looking statements, including those detailed in the section of any prospectus supplement or document incorporated by reference in this prospectus entitled Risk Factors.

THERMO FISHER

Thermo Fisher is the world leader in serving science. Our mission is to enable our customers to make the world healthier, cleaner and safer. We help our customers accelerate life sciences research, solve complex analytical challenges, improve patient diagnostics, deliver medicines to market and increase laboratory productivity.

Thermo Fisher had approximately 70,000 employees and served more than 400,000 customers within pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies, as well as environmental, industrial quality and process control settings, as of December 31, 2018.

We serve our customers through our premier brands, Thermo Scientific, Applied Biosystems, Invitrogen, Fisher Scientific and Unity Lab Services:

The Thermo Scientific brand offers customers in research, diagnostics, industrial, and applied markets a complete range of high-end analytical instruments as well as laboratory equipment, software, services, consumables and reagents. Our portfolio of products includes innovative technologies for mass spectrometry, chromatography, elemental analysis, electron microscopy, molecular spectroscopy, sample preparation, informatics, chemical research and analysis, cell culture, bioprocess production, cellular, protein and molecular biology research, allergy testing, drugs-of-abuse testing, therapeutic drug monitoring testing, microbiology, anatomical pathology, as well as environmental monitoring and process control.

The Applied Biosystems brand offers customers in research, clinical and applied markets integrated instrument systems, reagents, and software for genetic analysis. Our portfolio includes innovative technologies for genetic sequencing and real-time, digital and end point polymerase chain reaction (PCR), that are used to determine meaningful genetic information in applications such as cancer diagnostics, human identification testing, and animal health, as well as inherited and infectious disease.

The Invitrogen brand offers life science customers a broad range of consumables and instruments that accelerate research and ensure consistency of results. Our portfolio of products includes innovative solutions for cellular analysis and biology, flow cytometry, cell culture, protein expression, synthetic biology, molecular biology and protein biology.

Fisher Scientific is our channels brand, offering customers a complete portfolio of laboratory equipment and consumables, chemicals, supplies and services used in scientific research, healthcare, safety, and education markets. These products are offered through an extensive network of direct sales professionals, segment-relevant printed collateral and digital content, a state-of-the-art website and supply-chain management services. We also offer a range of biopharma services for clinical trials management and biospecimen storage.

Unity Lab Services is our instrument and equipment services brand, offering a complete portfolio of services from enterprise level engagements to individual instruments and laboratory equipment, regardless of the original manufacturer. Through our network of world-class service and support personnel, we provide services that are designed to help our customers improve productivity, reduce costs, and drive decisions with better data.

We continuously increase our depth of capabilities in technologies, software and services, and leverage our extensive global channels to address our customers' emerging needs. For example, in October 2018, we acquired, within the Life Sciences Solutions segment, Becton Dickinson and Company's Advanced Bioprocessing business, expanding our bioproduction offerings. Our goal is to make our customers more productive in an increasingly competitive business environment, and to allow them to solve their challenges, from complex research to improved patient care, environmental and process monitoring, and consumer safety.

Thermo Fisher is a Delaware corporation and was incorporated in 1956. We completed our initial public offering in 1967 and our common stock was listed on the New York Stock Exchange in 1980. Thermo Fisher's principal executive offices are located at 168 Third Avenue, Waltham, Massachusetts 02451, and its telephone number is (781) 622-1000.

THERMO FISHER INTERNATIONAL

Thermo Fisher International, a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*), was incorporated in 2016 under the laws of The Netherlands, with its corporate seat in Breda, The Netherlands, and its registered office is located at Takkebijsters 1, 4817BL Breda, The Netherlands. Thermo Fisher International is an indirect 100%-owned finance subsidiary of Thermo Fisher and conducts no independent operations other than its financing activities. Thermo Fisher International's telephone number is +31-76-579-5555.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include the acquisition of companies or businesses, repayment and refinancing of debt, working capital and capital expenditures or the repurchase of our outstanding equity securities. We may temporarily invest the net proceeds in short-term, liquid investments until they are used for their stated purpose.

DESCRIPTION OF THERMO FISHER DEBT SECURITIES

Thermo Fisher may offer debt securities, which may be senior or subordinated. In this Description of Thermo Fisher Debt Securities, we refer to the senior debt securities and the subordinated debt securities that Thermo Fisher issues collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered. References to Thermo Fisher and the Issuer in this Description of Thermo Fisher Debt Securities mean Thermo Fisher Scientific Inc. excluding, unless the context otherwise requires or as otherwise expressly stated, its subsidiaries.

Thermo Fisher may issue senior debt securities from time to time, in one or more series under a senior indenture, dated November 20, 2009, between it and The Bank of New York Mellon Trust Company, N.A., which we refer to as the senior trustee. Thermo Fisher may issue subordinated debt securities from time to time, in one or more series under a subordinated indenture to be entered into between Thermo Fisher and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The senior indenture and the form of the subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

The indentures do not limit the amount of debt securities that Thermo Fisher may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by the Issuer and may be payable in any currency or currency unit designated by it or in amounts determined by reference to an index.

General

The senior debt securities will constitute the Issuer's unsecured and unsubordinated general obligations and will rank *pari passu* with its other unsecured and unsubordinated obligations. The subordinated debt securities will constitute the Issuer's unsecured and subordinated general obligations and will be junior in right of payment to its senior indebtedness (including senior debt securities), as described under the heading Certain Terms of the Subordinated Debt Securities Subordination.

The debt securities will be the Issuer's unsecured obligations. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and/or free writing prospectus will include any additional or different terms of the debt securities being offered, including the following terms:

the title of the debt securities;

whether the debt securities will be senior or subordinated debt securities, and, with respect to debt securities issued under the subordinated indenture, the terms on which they are subordinated;

any limit upon the aggregate principal amount of the debt securities;

the rate or rates (which may be fixed or variable) at which the debt securities will bear interest, or the manner of calculating such rate or rates, if applicable;

the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates and the related record dates;

any trustees, authenticating agents or paying agents, if different from those set forth in this prospectus;

the right, if any, to extend the interest payment periods or defer the payment of interest and the duration of that extension or deferral;

the period or periods within which, the price or prices at which and the terms and conditions upon which debt securities may be redeemed, in whole or in part, at the Issuer's option;

the manner of paying principal and interest and the place or places where principal and interest will be payable;

provisions for a sinking fund or other analogous fund;

the form of the debt securities;

if other than denominations of \$1,000 or any integral multiple thereof, the denominations in which the debt securities will be issuable;

the currency or currencies in which payment of the principal of, premium, if any, and interest on, the debt securities will be payable;

if the principal amount payable at the stated maturity of the debt securities will not be determinable as of any one or more dates prior to such stated maturity, the amount which will be deemed to be such principal amount as of any such date for any purpose;

the terms of any repurchase or remarketing rights;

whether the debt securities will be issued in global form, the terms upon which the debt securities will be exchanged for definitive form, the depositary for the debt securities and the form of legend;

any conversion or exchange features of the debt securities;

if other than the principal amount thereof, the portion of the principal amount of the debt securities which shall be payable upon declaration of acceleration of the maturity thereof;

any restrictive covenants or events of default in addition to or in lieu of those set forth in this prospectus;

any provisions granting special rights to holders when a specified event occurs;

if the amount of principal or any premium or interest on the debt securities may be determined with reference to an index or pursuant to a formula, the manner in which such amounts will be determined;

any special tax implications of the debt securities;

whether and upon what terms the debt securities may be defeased if different from the provisions set forth in this prospectus;

with regard to the debt securities that do not bear interest, the dates for certain required reports to the applicable trustee; and

any all additional, eliminated or changed terms that will apply to the debt securities.

The Issuer may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series

and having the same terms as such series (or the same terms other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

You may present debt securities for exchange and you may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. The Issuer will provide you those services without charge, although you may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indentures.

Debt securities will bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (called original issue discount securities) may be sold at a discount below their stated principal amount. U.S. federal income tax considerations applicable to any such discounted debt securities or to certain debt securities issued at par which are treated as having been issued at a discount for U.S. federal income tax purposes will be described in the applicable prospectus supplement.

The Issuer may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked and certain related tax considerations will be set forth in the applicable prospectus supplement.

Certain Terms of the Senior Debt Securities

Certain Covenants

Limitations on Liens. The Issuer will not, and will not permit any of its subsidiaries to, create, incur, assume or otherwise cause to become effective any Lien (other than permitted Liens) on any Principal Property or upon shares of stock of any Principal Subsidiary (whether such Principal Property or shares are now existing or owned or hereafter created or acquired), to secure any indebtedness of the Issuer, any of its subsidiaries or any indebtedness of any other Person, unless the Issuer or such subsidiary also secures all payments due under the senior debt securities and all senior debt securities of any series having the benefit of this covenant (together with, if the Issuer shall so determine, any other indebtedness of the Issuer or any subsidiary of the Issuer then existing or thereafter created ranking equally with the senior debt securities), on an equal and ratable basis with such other indebtedness so secured (or, in the case of indebtedness subordinated to the senior debt securities, prior or senior thereto, with the same relative priority as the senior debt securities issued pursuant to the senior indenture will have with respect to such subordinated indebtedness) for so long as such other indebtedness shall be so secured. The senior indenture contains the following exceptions to the foregoing prohibition:

- (a) Liens existing on the date when the Issuer first issues the senior debt securities pursuant to the senior indenture;
- (b) Liens on property owned or leased by a Person existing at the time such Person is merged with or into or consolidated with the Issuer or any subsidiary of the Issuer or the Issuer or one or more of its subsidiaries acquires directly or indirectly all or substantially all of the stock or assets of such Person; provided that such Liens were in existence prior to the contemplation of such merger, consolidation or acquisition and do not extend to any assets other than those of the Person merged into, consolidated with or acquired by the Issuer or such subsidiary;

(c) Liens on property existing at the time of acquisition thereof by the Issuer or any subsidiary of the Issuer, provided that such Liens were in existence prior to the contemplation of such acquisition and do not extend to any property other than the property so acquired by the Issuer or such subsidiary;

(d) Liens to secure indebtedness incurred prior to, at the time of or within 18 months after the later of the acquisition of any property and the completion of the construction, alteration, repair or improvement of any property, as the case may be, for the purpose of financing all or a part of the purchase price thereof or cost of the construction, alteration, repair or improvement thereof and Liens to the extent they secure indebtedness in excess of such purchase price or cost and for the payment of which recourse may be had only against such property;

(e) Liens in favor of the United States or any state, territory or possession thereof (or the District of Columbia), or any department, agency, instrumentality or political subdivision of the United States or any state, territory or possession thereof (or the District of Columbia), to secure partial, progress, advance or other payments pursuant to any contract or statute or to secure any indebtedness incurred for the purpose of financing all or any part of the purchase price or the cost of constructing or improving the property subject to such Liens;

(f) any Lien securing indebtedness of a subsidiary owing to the Issuer or to one or more of its subsidiaries;

(g) Liens incurred or assumed in connection with the issuance of revenue bonds the interest on which is exempt from federal taxation pursuant to Section 103 of the Internal Revenue Code;

(h) Liens created, incurred or assumed in connection with an industrial revenue bond, pollution control bond or similar financing between the Issuer or any subsidiary of the Issuer and any federal, state or municipal government or other government body or quasi-governmental agency;

(i) any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Lien referred to in clauses (a) through (h) above, inclusive, so long as (1) the principal amount of the indebtedness secured thereby does not exceed the principal amount of indebtedness so secured at the time of the extension, renewal or replacement (except that, where an additional principal amount of indebtedness is incurred to provide funds for the completion of a specific project, the additional principal amount, and any related financing costs, may be secured by the Lien as well) and (2) the Lien is limited to the same property subject to the Lien so extended, renewed or replaced (and improvements on the property); and

(j) any Lien on a Principal Property or the shares of stock of a Principal Subsidiary that would not otherwise be permitted by clauses (a) through (i) above, inclusive, securing indebtedness which, together with:

the aggregate outstanding principal amount of all other indebtedness of the Issuer and its subsidiaries secured by Liens on a Principal Property or the shares of stock of a Principal Subsidiary that is permitted solely pursuant to this clause (j), and

the aggregate Value of existing Sale and Leaseback Transactions that are permitted solely pursuant to clause (c) of Limitation on Sale and Leaseback Transactions and are still in existence, does not exceed 10% of Consolidated Net Assets.

In order to constitute a Principal Property under the senior indenture, a property must have a book value in excess of 3% of the most recently calculated Consolidated Net Assets. Based on Consolidated Net Assets as of December 31, 2018, a property would only constitute a Principal Property if it had a book value in excess of approximately \$1.1 billion. As of the date of this prospectus, neither the Issuer nor any of its subsidiaries owns any Principal Property

as defined. See Definition of Certain Terms.

Limitation on Sale and Leaseback Transactions. The Issuer will not, and will not permit any of its subsidiaries to, enter into any Sale and Leaseback Transaction with respect to any Principal Property unless:

(a) the Issuer or such subsidiary could incur indebtedness, in a principal amount at least equal to the Value of such Sale and Leaseback Transaction, secured by a Lien on the Principal Property to be leased (without equally

and ratably securing debt securities of any series having the benefit of this covenant) pursuant to clauses (a) through (i) under *Limitations on Liens* above;

(b) the Issuer applies, during the six months following the effective date of the Sale and Leaseback Transaction, an amount equal to the Value of the Sale and Leaseback Transaction to either (or a combination of) the voluntary retirement of Funded Debt or to the acquisition of property; or

(c) the aggregate Value of such Sale and Leaseback Transaction plus the Value of all other Sale and Leaseback Transactions of Principal Properties entered into after the date of the issuance of the senior debt securities permitted solely by this clause (c) and still in existence, plus the aggregate amount of all indebtedness secured by Liens permitted solely by clause (j) of *Limitations on Liens* does not exceed 10% of Consolidated Net Assets.

Certain Other Covenants. The senior indenture contains certain other covenants regarding, among other matters, corporate existence and reports to holders of senior debt securities. Unless indicated otherwise in a prospectus supplement, the senior debt securities will not contain any additional financial or restrictive covenants, including covenants relating to total indebtedness, interest coverage, stock repurchases, recapitalizations, dividends and distributions to shareholders or current ratios. The provisions of the senior indenture do not afford holders of senior debt securities issued thereunder protection in the event of a sudden or significant decline in the Issuer's credit quality or in the event of a takeover, recapitalization or highly leveraged or similar transaction involving the Issuer or any of its affiliates that may adversely affect such holders.

Consolidation, Merger and Sale of Assets. Unless indicated otherwise in a prospectus supplement, the Issuer will not consolidate with, merge with or into, or sell, convey, transfer, lease or otherwise dispose of all or substantially all of its and its subsidiaries property and assets taken as a whole (in one transaction or a series of related transactions) to any Person, or permit any Person to merge with or into the Issuer, unless:

the Issuer shall be the continuing Person, or the Person (if other than the Issuer) formed by such consolidation or into which the Issuer is merged or that acquired or leased such property and assets (the *Surviving Person*), shall be a Person organized and validly existing under the laws of the United States of America or any jurisdiction thereof, or, subject to certain conditions (including an obligation to pay additional amounts in respect of withholding taxes), a jurisdiction outside the United States, and shall expressly assume, by a supplemental indenture, executed and delivered to the senior trustee, all of the Issuer's obligations under the senior indenture and the senior debt securities;

immediately after giving effect to such transaction, no default or event of default (each as defined in the senior indenture) shall have occurred and be continuing; and

the Issuer delivers to the senior trustee an officer's certificate and opinion of counsel, in each case stating that such consolidation, merger or transfer and such supplemental indenture complies with this provision and that all conditions precedent provided for herein relating to such transaction have been complied with.

The Surviving Person will succeed to, and be substituted for, the Issuer under the senior indenture and the senior debt securities and, except in the case of a lease, the Issuer shall be released of all obligations under the senior indenture and the senior debt securities.

No Protection in the Event of a Change of Control. Unless the Issuer indicates otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions

that may afford holders of the senior debt securities protection in the event the Issuer has a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control).

Definition of Certain Terms. The following are the meanings of terms that are important in understanding the covenants described above.

Capital Lease Obligation means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease that would at that time be required to be capitalized on a balance sheet in accordance with U.S. GAAP as in effect on the date of the senior indenture.

Consolidated Net Assets means the consolidated total assets of the Issuer and its subsidiaries as reflected in its most recent balance sheet prepared in accordance with U.S. GAAP as in effect at the time of such determination, less (a) all current liabilities (excluding any notes and loans payable, current maturities of long-term debt, the current portion of deferred revenue and obligations under capital leases) and (b) acquisition-related intangible assets in accordance with U.S. GAAP in effect at the time of such determination. Consolidated Net Assets includes goodwill of the Issuer and its subsidiaries.

Funded Debt means, as of any date of determination, the Issuer's indebtedness or the indebtedness of a subsidiary maturing by its terms more than one year after its creation and indebtedness classified as long-term debt under U.S. GAAP as in effect on the date of the senior indenture, and in each case ranking at least *pari passu* with the senior debt securities.

indebtedness means, with respect to any specified Person, any indebtedness of such Person, whether or not contingent:

- 1) in respect of borrowed money;
- 2) evidenced by bonds, notes, debentures or similar instruments or letters of credit (or reimbursement agreements in respect thereof); and
- 3) in respect of Capital Lease Obligations.

In addition, the term *indebtedness* includes (x) all indebtedness (as defined above) of others secured by a Lien on any asset of the specified Person (whether or not such indebtedness is assumed by the specified Person), *provided* that the amount of such indebtedness will be the lesser of (A) the fair market value of such asset at such date of determination and (B) the amount of such indebtedness, and (y) to the extent not otherwise included, the guarantee by the specified Person of any indebtedness (as defined above) of any other Person.

Lien means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected under applicable law, including any conditional sale or other title retention agreement.

Original Issue Discount Security means any debt security which provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of maturity thereof pursuant to the senior indenture.

Person means any individual, corporation, partnership, limited liability company, joint venture, joint-stock company, association, trust, unincorporated organization or government or any agency or political subdivision of a government or governmental agency.

Principal Property means any single parcel of real property or any permanent improvement thereon (i) owned by the Issuer or any of its subsidiaries located in the United States, including the Issuer's principal corporate office, any manufacturing facility or plant or any portion thereof and (ii) having a book value, as of the date of determination, in excess of 3% of the most recently calculated Consolidated Net Assets. Principal Property does not include any property that the Issuer's board of directors has determined not to be of material importance to the business conducted by the Issuer and its subsidiaries, taken as a whole. As of the date of this prospectus, none of the Issuer's current properties or those of its subsidiaries constitutes a Principal Property.

Principal Subsidiary means any direct or indirect subsidiary of the Issuer that owns a Principal Property.

Sale and Leaseback Transaction means any arrangement with any Person providing for the leasing by the Issuer or any subsidiary of any Principal Property which has been or is to be sold or transferred by the Issuer or such subsidiary to such Person, excluding (1) temporary leases for a term, including renewals at the option of the lessee, of not more than three years, (2) leases between the Issuer and a subsidiary or between subsidiaries of the Issuer, (3) leases of a Principal Property executed by the time of, or within 12 months after the latest of, the acquisition, the completion of construction or improvement, or the commencement of commercial operation of the property, and (4) arrangements pursuant to any provision of law with an effect similar to the former Section 168(f)(8) of the Internal Revenue Code of 1954, as amended.

U.S. GAAP means generally accepted accounting principles set forth in the FASB Accounting Standards Codification or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, which are in effect from time to time.

Value means, with respect to a Sale and Leaseback Transaction, an amount equal to the net present value of the lease payments (other than amounts required to be paid on account of property taxes, maintenance, repairs, insurance, water rates and other items that do not constitute payments for property rights) with respect to the term of the lease remaining on the date as of which the amount is being determined, without regard to any renewal or extension options contained in the lease, discounted at the weighted average interest rate on the debt securities of all series (including the yield to maturity on any Original Issue Discount Securities) which are outstanding on the effective date of such Sale and Leaseback Transaction.

Events of Default

The senior indenture defines an Event of Default with respect to any series of senior debt securities issued pursuant to the senior indenture. Events of Default on the senior debt securities are any of the following:

Default in the payment of the principal or any premium on senior debt securities when due (whether at maturity, upon acceleration, redemption or otherwise);

Default for 30 days in the payment of interest on senior debt securities when due;

Failure by the Issuer to observe or perform any other term of the senior indenture for a period of 90 days after it receives a notice of default stating that it is in breach. The notice must be sent by either the senior trustee or holders of 25% of the principal amount of the senior debt securities of the affected series;

(1) Failure by the Issuer to pay indebtedness for money it borrowed or guaranteed the payment of in an aggregate principal amount of at least \$100 million at the later of final maturity and the expiration of any related applicable grace period and such defaulted payment shall not have been made, waived or extended within 30 days or (2) acceleration of the maturity of any indebtedness for money that the Issuer borrowed or guaranteed the payment of in an aggregate principal amount of at least \$100 million, if such indebtedness has not been discharged in full or such acceleration has not been rescinded or annulled within 30 days; *provided, however*, that, if the default under the instrument is cured by the Issuer, or waived by the holders of the indebtedness, in each case as permitted by the governing instrument, then the Event of Default under the senior indenture governing the senior debt securities caused by such default will be deemed likewise to be cured or waived;

Certain events in bankruptcy, insolvency or reorganization with respect to the Issuer; and

Any other Event of Default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

An Event of Default under one series of senior debt securities issued pursuant to the senior indenture does not necessarily constitute an Event of Default under any other series of senior debt securities. The senior indenture provides that the senior trustee may withhold notice to the holders of any series of senior debt securities issued

thereunder of any default if the trustee's board of directors, executive committee, or a trust committee of directors or trustees and/or certain officers of the trustee in good faith determine it in the interest of such holders to do so.

Remedies If an Event of Default Occurs. The senior indenture provides that if an Event of Default has occurred with respect to a series of senior debt securities and has not been cured, the senior trustee or the holders of not less than 25% in principal amount of the senior debt securities of that series may declare the entire principal amount of all the senior debt securities of that series to be due and immediately payable. This is called a declaration of acceleration of maturity. If an Event of Default occurs because of certain events in bankruptcy, insolvency or reorganization with respect to the Issuer, the principal amount of all the senior debt securities will be automatically accelerated, without any action by the senior trustee or any holder. The holders of a majority in aggregate principal amount of the senior debt securities of the affected series may by written notice to the Issuer and the senior trustee may, on behalf of the holders of the senior debt securities of the affected series, rescind an acceleration or waive any existing Default or Event of Default and its consequences under the senior indenture, if the rescission would not conflict with any judgment or decree, except a continuing Default or Event of Default in the payment of principal of, premium on, if any, or interest, if any, on, such senior debt securities.

Except as may otherwise be provided in the senior indenture in cases of default, where the senior trustee has some special duties, the senior trustee is not required to take any action under the senior indenture at the request of any holders unless the holders offer the senior trustee protection from expenses and liability (called an *indemnity*). If indemnity satisfactory to the senior trustee is provided, the holders of a majority in principal amount of the outstanding senior debt securities of the affected series may direct the time, method and place of conducting any lawsuit or other formal legal action seeking any remedy available to the senior trustee. Subject to certain exceptions contained in the senior indenture, these majority holders may also direct the senior trustee in performing any other action under the senior indenture.

Before you bypass the senior trustee and bring your own lawsuit or other formal legal action or take other steps to enforce your rights or protect your interests relating to the senior debt securities, the following must occur:

You must give the senior trustee written notice that an Event of Default has occurred and remains uncured.

The holders of 25% in principal amount of all outstanding senior debt securities of the affected series must make a written request that the senior trustee take action because of the Event of Default and must offer reasonable indemnity to the senior trustee against the cost and other liabilities of taking that action.

The senior trustee must have failed to take action for 60 days after receipt of the above notice and offer of indemnity and during such 60-day period, the senior trustee has not received a contrary instruction from holders of a majority in principal amount of all outstanding senior debt securities.

However, you are entitled at any time to bring a lawsuit for the payment of money due on your senior debt securities on or after the due date of that payment.

The Issuer will furnish to the senior trustee every year a written statement of two of its officers certifying that to their knowledge the Issuer is in compliance with the senior indenture and the senior debt securities, or else specifying any default.

Satisfaction and Discharge

The senior indenture will cease to be of further effect and the senior trustee, upon the Issuer's demand and at its expense, will execute appropriate instruments acknowledging the satisfaction and discharge of the senior indenture upon compliance with certain conditions, including:

the Issuer having paid all sums payable by it under the senior indenture, as and when the same shall be due and payable;

the Issuer having delivered to the senior trustee for cancellation all senior debt securities theretofore authenticated under the senior indenture;

all senior debt securities of any series outstanding under the senior indenture not theretofore delivered to the senior trustee for cancellation shall have become due and payable or are by their terms to become due and payable within one year and the Issuer shall have deposited with the senior trustee sufficient cash or U.S. government or U.S. government agency notes or bonds that will generate enough cash to pay, at maturity or upon redemption, all such senior debt securities of any series outstanding under the senior indenture; or

the Issuer having delivered to the senior trustee an officer's certificate and an opinion of counsel, each stating that these conditions have been satisfied.

Under current U.S. federal tax law, the deposit and the Issuer's legal release from the senior debt securities would be treated as though it took back your senior debt securities and gave you your share of the cash and senior debt securities or bonds deposited in trust. In that event, you could recognize gain or loss on the senior debt securities you give back to the Issuer. Purchasers of the senior debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. income tax law.

Defeasance

Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and discharge and covenant defeasance will apply to any series of debt securities issued under the indentures.

Full Defeasance. The Issuer can legally release itself from any payment or other obligations on the debt securities of any series (called *full defeasance*) if the following conditions are met:

The Issuer deposits in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal, any premium and any other payments on the debt securities of that series on their various due dates.

There is a change in current U.S. federal tax law or an IRS ruling that lets the Issuer make the above deposit without causing you to be taxed on the debt securities any differently than if the Issuer did not make the deposit and instead repaid the debt securities itself when due. Under current U.S. federal tax law, the deposit and the Issuer's legal release from the debt securities would be treated as though the Issuer took back your debt securities and gave you your share of the cash and debt securities or bonds deposited in trust. In that event, you could recognize gain or loss on the debt securities you give back to the Issuer.

The Issuer delivers to the trustee a legal opinion of its counsel confirming the tax law change or ruling described above.

If the Issuer ever did accomplish full defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to the Issuer for repayment in the event of any shortfall.

However, even if the Issuer makes the deposit in trust and opinion delivery arrangements discussed above, a number of its obligations relating to the debt securities will remain. These include the Issuer's obligations:

to register the transfer and exchange of debt securities;

to replace mutilated, destroyed, lost or stolen debt securities;

to maintain paying agencies; and

to hold money for payment in trust.

Covenant Defeasance. Without any change of current U.S. federal tax law, the Issuer can make the same type of deposit described above and be released from some of the covenants on the debt securities of any series. This is called *covenant defeasance*. In that event, you would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the debt securities. In order to achieve covenant defeasance, the Issuer must do the following:

The Issuer must deposit in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal, any premium and any other payments on the debt securities of that series on their various due dates.

The Issuer must deliver to the trustee a legal opinion of its counsel confirming that under current U.S. federal income tax law the Issuer may make the above deposit without causing you to be taxed on the debt securities any differently than if it did not make the deposit and instead repaid the debt securities itself when due.

If the Issuer accomplishes covenant defeasance, you can still look to it for repayment of the debt securities if there were a shortfall in the trust deposit. In fact, if one of the Events of Default occurred (such as the Issuer's bankruptcy) and the debt securities become immediately due and payable, there may be such a shortfall. Depending on the event causing the default, you may not be able to obtain payment of the shortfall.

Modification and Waiver

There are three types of changes the Issuer can make to the senior indenture and the senior debt securities.

Changes Requiring Approval of the Holder. First, there are changes that cannot be made to the senior debt securities without specific approval of the holder. The following is a list of those types of changes:

change the stated maturity of the principal or interest on any senior debt securities of such series;

reduce any amounts due on any senior debt securities of such series;

reduce the amount of principal payable upon acceleration of the maturity of the senior debt securities following an Event of Default;

change the place or currency of payment for the senior debt securities;

impair the holder's right to sue for the enforcement of any payment on or with respect to the senior debt securities;

reduce the percentage in principal amount of the senior debt securities, the approval of whose holders is needed to modify or amend the senior indenture or the senior debt securities;

reduce the percentage in principal amount of the senior debt securities, the approval of whose holders is needed to waive compliance with certain provisions of the senior indenture or to waive certain defaults; and

modify any other aspect of the provisions dealing with modification and waiver of the senior indenture, except to increase the percentage required for any modification or to provide that other provisions of the senior indenture may not be modified or waived without consent of the holder of each security of such series affected by the modification.

Changes Not Requiring Approval. The second type of change does not require any vote by holders of the senior debt securities. The following is a list of those types of changes:

cure any ambiguity, defect or inconsistency;

evidence the succession of another entity to the Issuer's obligations under the senior indenture;

provide for uncertificated debt securities in addition to or in place of certificated debt securities;

add to the covenants for the benefit of holders of outstanding debt securities or to surrender any right or power the Issuer has under the senior indenture;

add additional events of default;

secure senior debt securities of any series;

make any change that does not adversely affect the rights of any holder of senior debt securities in any material respect;

issue additional debt securities of any series;

evidence and provide for a successor senior trustee and add to or change the provisions of the senior indenture to provide for or facilitate the administration of the trusts under the senior indenture; or

comply with requirements of the SEC in order to effect or maintain the qualification of the senior indenture under the Trust Indenture Act of 1939, as amended (the *Trust Indenture Act*).

Nor does the Issuer need any approval to make changes that affect only senior debt securities to be issued under the senior indenture after the changes take effect. The Issuer may also make changes or obtain waivers that do not adversely affect the senior debt securities, even if they affect other senior debt securities issued under the senior indenture. In those cases, the Issuer needs only obtain any required approvals from the holders of the affected senior debt securities.

Changes Requiring a Majority Vote. Any other change to the senior indenture and the senior debt securities would require the following approval:

If the change affects only senior debt securities of one series, it must be approved by the holders of a majority in principal amount of the senior debt securities of that series.

If the change affects the senior debt securities as well as the senior debt securities of one or more other series issued under the senior indenture, it must be approved by the holders of a majority in principal amount of the senior debt securities and each other series of senior debt securities affected by the change.

In each case, the required approval must be given by written consent.

The same vote would be required for the Issuer to obtain a waiver of a past default. However, the Issuer cannot obtain a waiver of a payment default or a waiver with respect to any other aspect of the senior indenture and the senior debt securities listed in the first category described previously under *Changes Requiring Approval of the Holder* unless the

Issuer obtains your individual consent to the waiver.

Further Details Concerning Voting

The senior debt securities will not be considered outstanding, and therefore not eligible to vote, if the Issuer has deposited or set aside in trust for you money for their payment or redemption. The senior debt securities will also not be eligible to vote if they have been fully defeased as described above under Full Defeasance.

The Issuer will generally be entitled to set any day as a record date for the purpose of determining the holders of outstanding senior debt securities that are entitled to vote or take other action under the senior indenture. In certain limited circumstances, the senior trustee will be entitled to set a record date for action by holders. If the Issuer or the senior trustee sets a record date for a vote or other action to be taken by holders of senior debt securities, that vote or action may be taken only by persons who are holders of outstanding senior debt securities on the record date and must be taken within 180 days following the record date or another period that the Issuer may specify (or as the senior trustee may specify, if it set the record date). The Issuer may shorten or lengthen (but not beyond 180 days) this period from time to time.

No Personal Liability of Incorporators, Stockholders, Officers, Directors

The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of the Issuer in the senior indenture or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of its incorporators, stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

Concerning the Senior Trustee

The Bank of New York Mellon Trust Company, N.A., as senior trustee under the senior indenture, has been appointed by the Issuer as paying agent, registrar and custodian with regard to the senior debt securities. The senior trustee or its affiliates may from time to time in the future provide banking and other services to the Issuer in the ordinary course of their business.

The senior indenture provides that, prior to the occurrence of an Event of Default with respect to the senior debt securities of a series and after the curing or waiving of all such Events of Default with respect to that series, the senior trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and has not been cured or waived, the senior trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The senior indenture and the provisions of the Trust Indenture Act incorporated by reference therein contain limitations on the rights of the senior trustee thereunder, should it become a creditor of the Issuer or any of its subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by the senior trustee in respect of any such claims, as security or otherwise. The senior trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

Unclaimed Funds

All funds deposited with the senior trustee or any paying agent for the payment of principal, interest, premium or additional amounts in respect of the senior debt securities that remain unclaimed for one year after the date upon which the principal of, premium, if any, or interest on such debt securities shall have become due and payable will be repaid to the Issuer. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against the Issuer, and the senior trustee and paying agents will have no liability therefor.

Governing Law

The senior indenture and the senior debt securities will be governed by, and construed in accordance with, the laws of the State of New York.

Certain Terms of the Subordinated Debt Securities

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities, except the subordinated indenture and subordinated debt securities will not include a limitation on liens or a limitation on sale and leaseback transactions.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination. The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of the Issuer's senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of the Issuer's senior indebtedness, it may not make any payment of principal of, or premium, if any, or interest on the subordinated debt securities, except under limited circumstances set forth in the subordinated indenture. In addition, upon any payment or distribution of the Issuer's assets upon any dissolution, winding up, liquidation or reorganization, the payment of the principal of, or premium, if any, and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all its senior indebtedness. Because of this subordination, if the Issuer dissolves or otherwise liquidates, holders of its subordinated debt securities may receive less, ratably, than holders of its senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term "senior indebtedness" of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

all of the indebtedness of that person for money borrowed;

all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money;

all of the lease obligations which are capitalized on the books of that person in accordance with generally accepted accounting principles;

all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise; and

all renewals, extensions or refundings of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above;

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. The Issuer's senior debt securities constitute senior indebtedness for purposes of the subordinated indenture.

DESCRIPTION OF THERMO FISHER INTERNATIONAL DEBT SECURITIES

Thermo Fisher International may offer senior debt securities that are fully and unconditionally guaranteed by Thermo Fisher. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered. References to Thermo Fisher International and Issuer in this Description of Thermo Fisher International Debt Securities mean Thermo Fisher Scientific (Finance I) B.V., excluding, unless the context otherwise requires or as otherwise expressly stated, its subsidiaries and affiliates and references to Thermo Fisher or the Guarantor mean Thermo Fisher Scientific Inc., excluding, unless the context otherwise requires or as otherwise expressly stated, its subsidiaries.

Thermo Fisher International may issue senior debt securities from time to time, in one or more series under an indenture, dated August 9, 2016, among it as issuer, Thermo Fisher as guarantor, and The Bank of New York Mellon Trust Company, N.A., which we refer to as the trustee. The indenture is filed as an exhibit to the registration statement of which this prospectus forms a part. This prospectus briefly outlines some of the provisions of the indenture. The following summary of the material provisions of the indenture is qualified in its entirety by the provisions of the indenture, including definitions of certain terms used in the indenture. Wherever we refer to particular sections or defined terms of the indenture, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indenture that is filed as an exhibit to the registration statement of which this prospectus forms a part for additional information.

The indenture will not limit the amount of debt securities that Thermo Fisher International may issue. The indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by the Issuer and may be payable in any currency or currency unit designated by the Issuer or in amounts determined by reference to an index.

General

The debt securities will constitute the Issuer's unsecured and unsubordinated general obligations, will be fully and unconditionally guaranteed by Thermo Fisher and will rank *pari passu* with the Issuer's other unsecured and unsubordinated obligations. The debt securities will be the Issuer's unsecured obligations. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations. Thermo Fisher International is a finance subsidiary of Thermo Fisher and conducts no independent operations of its own other than financing activities. Thermo Fisher is a holding company that conducts substantially all of its operations through its subsidiaries, and, as a result, the guarantee of debt securities will be effectively subordinated to the creditors of Thermo Fisher's other subsidiaries. This means that all claims of creditors (including trade creditors) of Thermo Fisher's other subsidiaries will have priority with respect to the assets of such subsidiaries over Thermo Fisher's claims (and therefore the claims of its creditors, including holders of debt securities guaranteed by Thermo Fisher).

The applicable prospectus supplement and/or free writing prospectus will include any additional or different terms of the debt securities being offered, including the following terms:

the title of the debt securities;

any limit upon the aggregate principal amount of the debt securities;

the date or dates on which the principal and premium, if any, of the debt securities is payable;

the rate or rates (which may be fixed or variable) at which the debt securities will bear interest, or the manner of calculating such rate or rates, if applicable;

the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates and the related record dates;

any trustees, authenticating agents or paying agents, if different from those set forth in this prospectus;

the right, if any, to extend the interest payment periods or defer the payment of interest and the duration of that extension or deferral;

the period or periods within which, the price or prices at which and the terms and conditions upon which debt securities may be redeemed, in whole or in part, at the Issuer's option;

provisions for a sinking fund or other analogous fund;

the form of the debt securities;

if other than denominations of \$100,000 or any integral multiple of \$1,000 in excess thereof, the denominations in which the debt securities will be issuable;

the currency or currencies in which payment of the principal of, premium, if any, and interest on, the debt securities will be payable;

if the principal amount payable at the stated maturity of the debt securities will not be determinable as of any one or more dates prior to such stated maturity, the amount which will be deemed to be such principal amount as of any such date for any purpose;

the terms of any repurchase or remarketing rights;

whether the debt securities will be issued in global form, the types of global securities to be issued, the terms upon which the debt securities will be exchanged for definitive form, the depository for the debt securities and the form of legend;

any conversion or exchange features of the debt securities;

if other than the principal amount thereof, the portion of the principal amount of the debt securities which shall be payable upon declaration of acceleration of the maturity thereof;

any restrictive covenants or events of default in addition to or in lieu of those set forth in this prospectus;

any provisions granting special rights to holders when a specified event occurs;

if the amount of principal or any premium or interest on the debt securities may be determined with reference to an index or pursuant to a formula, the manner in which such amounts will be determined;

any special tax implications of the debt securities;

whether and upon what terms the debt securities may be defeased if different from the provisions set forth in this prospectus;

with regard to the debt securities that do not bear interest, the dates for certain required reports to the trustee;

the terms of the guarantee, including any corresponding changes to the provisions of the indenture then in effect; and

any all additional, eliminated or changed terms that will apply to the debt securities.

The Issuer may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series and having the same terms as such series (or the same terms other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

You may present debt securities for exchange and you may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. The Issuer will provide you those services without charge, although you may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indenture.

Debt securities will bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (called original issue discount securities) may be sold at a discount below their stated principal amount. U.S. federal income tax considerations applicable to any such discounted debt securities or to certain debt securities issued at par which are treated as having been issued at a discount for U.S. federal income tax purposes will be described in the applicable prospectus supplement.

The Issuer may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked and certain related tax considerations will be set forth in the applicable prospectus supplement.

Guarantee

Thermo Fisher will fully and unconditionally guarantee the full and punctual payment of principal of and premium, if any, and interest on the debt securities on a senior unsecured basis, when and as the same become due and payable, whether on a maturity date, by declaration of acceleration, upon redemption, repurchase or otherwise, and all other obligations of Thermo Fisher International under the indenture.

Under certain circumstances, Thermo Fisher may assume all of the Issuer's obligations under the indenture and the debt securities.

Redemption Upon Changes in Withholding Taxes

Unless otherwise provided in the applicable prospectus supplement, Thermo Fisher International may redeem all, but not less than all, of the debt securities of any series under the following conditions:

if there is an amendment to, or change in, the laws, regulations, rulings or treaties of The Netherlands, the United States or other jurisdiction in which Thermo Fisher International or Thermo Fisher or, in each case, any successor thereof (including a continuing Person formed by a consolidation with Thermo Fisher International or Thermo Fisher, into which Thermo Fisher International or Thermo Fisher is merged, or that acquires or leases all or substantially all of the property and assets of Thermo Fisher International or Thermo Fisher) may be organized, as applicable, or any political subdivision thereof or therein having the power to tax (a *Taxing Jurisdiction*), or any change in the application or official interpretation of such laws, regulations, rulings or treaties, including any action taken by, or a change in published administrative practice of, a taxing authority or a holding by a court of competent jurisdiction, regardless of whether such action, change or holding is with respect to Thermo Fisher International or Thermo Fisher;

as a result of such amendment or change, Thermo Fisher International or Thermo Fisher becomes, or there is a material probability that Thermo Fisher International or Thermo Fisher will become, obligated to pay Additional Amounts as defined below in Payment of Additional Amounts, on the next payment date with respect to the debt securities of such series;

the obligation to pay Additional Amounts cannot be avoided through Thermo Fisher International's or Thermo Fisher's commercially reasonable measures, not including substitution of the obligor of the debt securities;

Thermo Fisher International delivers to the trustee:

a certificate of Thermo Fisher International or Thermo Fisher, as the case may be, stating that the obligation to pay Additional Amounts cannot be avoided by Thermo Fisher International or Thermo Fisher as the case may be, taking commercially reasonable measures available to it; and

a written opinion of independent tax counsel to Thermo Fisher International or Thermo Fisher, as the case may be, of recognized standing to the effect that Thermo Fisher International or Thermo Fisher, as the case may be, has, or there is a material probability that it will become obligated, to pay Additional Amounts as a result of a change, amendment, official interpretation or application described above and that Thermo Fisher International or Thermo Fisher, as the case may be, cannot avoid the payment of such Additional Amounts by taking commercially reasonable measures available to it; and

following the delivery of the certificate and opinion described in the previous bullet point, Thermo Fisher International provides notice of redemption not less than 30 days, but not more than 60 days, prior to the date of redemption. The notice of redemption cannot be given more than 60 days before the earliest date on which Thermo Fisher International or Thermo Fisher would otherwise be, or there is a material probability that it would otherwise be, required to pay Additional Amounts.

Upon the occurrence of each of the bullet points above, Thermo Fisher International may redeem the debt securities of such series at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest, if any, to the redemption date.

Payment of Additional Amounts

Unless otherwise required by law, neither Thermo Fisher International nor Thermo Fisher will deduct or withhold from payments made by Thermo Fisher International or Thermo Fisher under or with respect to the debt securities and the guarantees on account of any present or future taxes, duties, levies, imposts, assessments or governmental charges of whatever nature imposed or levied by or on behalf of any Taxing Jurisdiction (*Taxes*). In the event that Thermo Fisher International or Thermo Fisher is required to withhold or deduct any amount for or on account of any Taxes from any payment made under or with respect to any debt securities or guarantee, as the case may be, Thermo Fisher International or Thermo Fisher, as the case may be, will pay such additional amounts (*Additional Amounts*) so that the net amount received by each holder of debt securities (including Additional Amounts) after such withholding or deduction will equal the amount that such holder would have received if such Taxes had not been required to be withheld or deducted.

Additional Amounts will not be payable with respect to a payment made to a holder of debt securities or a holder of beneficial interests in global securities where such holder is subject to taxation on such payment by a relevant Taxing Jurisdiction for any reason other than such holder's mere ownership of the debt securities or for or on account of:

any Taxes that are imposed or withheld solely because such holder (or the beneficial owner for whose benefit such holder holds such debt securities) or a fiduciary, settlor, beneficiary, member, shareholder or other equity owner of, or possessor of a power over, such holder (or beneficial owner) if such holder (or beneficial owner) is an estate, trust, partnership, limited liability company, corporation or other entity:

is or was present or engaged in, or is or was treated as present or engaged in, a trade or business in the Taxing Jurisdiction or has or had a permanent establishment in the Taxing Jurisdiction (in each case, other than the mere fact of ownership of such securities, without another presence or business in such Taxing Jurisdiction);

has or had any present or former connection (other than the mere fact of ownership of such debt securities) with the Taxing Jurisdiction imposing such Taxes, including being or having been a national citizen or resident thereof, being treated as being or having been a resident thereof or being or having been physically present therein;

with respect to any withholding Taxes imposed by the United States, is or was with respect to the United States a personal holding company, a passive foreign investment company, a controlled foreign corporation, a foreign private foundation or other foreign tax exempt organization or corporation that has accumulated earnings to avoid United States federal income tax;

actually or constructively owns or owned 10% or more of the total combined voting power of all classes of stock of Thermo Fisher International or Thermo Fisher within the meaning of section 871(h)(3) of the U.S. Internal Revenue Code of 1986, as amended (the *Code*); or

is or was a bank receiving payments on an extension of credit made pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of section 881(c)(3) of the Code;

any estate, inheritance, gift, sales, transfer, excise, personal property or similar Taxes imposed with respect to the debt securities, except as otherwise provided in the indenture;

any Taxes imposed solely as a result of the presentation of such debt securities (where presentation is required) for payment on a date more than 15 days after the date on which such payment became due and payable or the date on which payment thereof is duly provided for, whichever is later, except to the extent that the beneficiary or holder thereof would have been entitled to the payment of Additional Amounts had the debt securities been presented for payment on any date during such 15-day period;

any Taxes imposed or withheld solely as a result of the failure of such holder or any other person to comply with applicable certification, information, documentation or other reporting requirements concerning the nationality, residence, identity or connection with the Taxing Jurisdiction of such holder, if such compliance is required by statute, regulation, ruling or administrative practice of the relevant Taxing Jurisdiction or by any applicable tax treaty to which the relevant Taxing Jurisdiction is a party as a precondition to relief or exemption from such Taxes;

with respect to withholding Taxes imposed by the United States, any such Taxes imposed by reason of the failure of such holder to fulfill the statement requirements of sections 871(h) or 881(c) of the Code;

any Taxes that are payable by any method other than withholding or deduction by Thermo Fisher International or Thermo Fisher or any paying agent from payments in respect of such debt securities;

any Taxes required to be withheld by any paying agent from any payment in respect of any debt securities if such payment can be made without such withholding by at least one other paying agent;

any withholding or deduction for Taxes which would not have been imposed if the relevant debt securities had been presented to another paying agent in a member state of the European Union as of the date of the indenture;

any withholding or deduction required pursuant to sections 1471 through 1474 of the Code, any regulations or agreements thereunder, official interpretations thereof, any intergovernmental agreement, or any law, rule, guidance or administrative practice implementing an intergovernmental agreement entered into in connection with such sections of the Code; or

any combination of the above conditions.

Additional Amounts also will not be payable to any holder of debt securities or the holder of a beneficial interest in a global security that is a fiduciary, partnership, limited liability company or other fiscally transparent entity, or to such holder that is not the sole holder of such security or holder of such beneficial interests in such security, as the case may be. The exception, however, will apply only to the extent that a beneficiary or settlor with respect

to the fiduciary, or a beneficial owner or member of the partnership, limited liability company or other fiscally transparent entity, would not have been entitled to the payment of an Additional Amount had the beneficiary, settlor, beneficial owner or member received directly its beneficial or distributive share of the payment.

Each of Thermo Fisher International and Thermo Fisher, as applicable, also:

will make such withholding or deduction of Taxes;

will remit the full amount of Taxes so deducted or withheld to the relevant Taxing Jurisdiction in accordance with all applicable laws;

will use its commercially reasonable efforts to obtain from each Taxing Jurisdiction imposing such Taxes certified copies of tax receipts evidencing the payment of any Taxes so deducted or withheld; and

upon request, will make available to the holders of the debt securities, within 90 days after the date the payment of any Taxes deducted or withheld is due pursuant to applicable law, certified copies of tax receipts evidencing such payment by Thermo Fisher International or Thermo Fisher or if, notwithstanding Thermo Fisher International's or Thermo Fisher's efforts to obtain such receipts, the same are not obtainable, other evidence of such payments.

At least 30 days prior to each date on which any payment under or with respect to the debt securities of a series or guarantees is due and payable, if Thermo Fisher International or Thermo Fisher will be obligated to pay Additional Amounts with respect to such payment, Thermo Fisher International or Thermo Fisher will deliver to the trustee an officers' certificate stating the fact that such Additional Amounts will be payable, the amounts so payable and such other information as is necessary to enable the trustee to pay such Additional Amounts to holders of such debt securities on the payment date.

In addition, Thermo Fisher International will pay any stamp, issue, registration, documentary or other similar taxes and duties, including interest, penalties and Additional Amounts with respect thereto, payable in The Netherlands or the United States or any political subdivision or taxing authority of or in the foregoing in respect of the creation, issue, offering, enforcement, redemption or retirement of the debt securities.

The foregoing provisions shall survive any termination or the discharge of each indenture and shall apply to any jurisdiction in which Thermo Fisher International or Thermo Fisher or any successor to Thermo Fisher International or Thermo Fisher, as the case may be, is organized or is engaged in business for tax purposes or any political subdivisions or taxing authority or agency thereof or therein.

Whenever in an indenture, any debt securities, any guarantee or in this Description of Thermo Fisher International Debt Securities there is mentioned, in any context, the payment of principal, premium, if any, redemption price, interest or any other amount payable under or with respect to any debt securities, such mention includes the payment of Additional Amounts to the extent payable in the particular context.

Certain Terms of the Debt Securities

Certain Covenants

Limitations on Liens. Thermo Fisher will not, and will not permit any of its subsidiaries to, create, incur, assume or otherwise cause to become effective any Lien (other than permitted Liens) on any Principal Property or upon shares of stock of any Principal Subsidiary (whether such Principal Property or shares are now existing or owned or hereafter created or acquired), to secure any indebtedness of Thermo Fisher, any of its subsidiaries or any indebtedness of any other Person, unless Thermo Fisher or such subsidiary also secures all payments due under the debt securities, the guarantees of the debt securities and guarantees of all debt securities of any series having the benefit of this covenant (together with, if Thermo Fisher shall so determine, any other indebtedness of

Thermo Fisher or any subsidiary of Thermo Fisher then existing or thereafter created ranking equally with the debt securities, the guarantees of the debt securities or such subsidiary indebtedness), on an equal and ratable basis with such other indebtedness so secured (or, in the case of indebtedness subordinated to the debt securities, the guarantees of the debt securities or such subsidiary indebtedness, prior or senior thereto, with the same relative priority as the debt securities, the guarantees of the debt securities or such subsidiary indebtedness will have with respect to such subordinated indebtedness) for so long as such other indebtedness shall be so secured. The indenture contains the following exceptions to the foregoing prohibition:

- (a) Liens existing on the date when the Issuer first issues the debt securities pursuant to the indenture;
- (b) Liens on property owned or leased by a Person existing at the time such Person is merged with or into or consolidated with Thermo Fisher or any of its subsidiaries or Thermo Fisher or one or more of its subsidiaries acquires directly or indirectly all or substantially all of the stock or assets of such Person; provided that such Liens were in existence prior to the contemplation of such merger, consolidation or acquisition and do not extend to any assets other than those of the Person merged into, consolidated with or acquired by Thermo Fisher or such subsidiary;
- (c) Liens on property existing at the time of acquisition thereof by Thermo Fisher or any of its subsidiaries, provided that such Liens were in existence prior to the contemplation of such acquisition and do not extend to any property other than the property so acquired by Thermo Fisher or such subsidiary;
- (d) Liens to secure indebtedness incurred prior to, at the time of or within 18 months after the later of the acquisition of any property and the completion of the construction, alteration, repair or improvement of any property, as the case may be, for the purpose of financing all or a part of the purchase price thereof or cost of the construction, alteration, repair or improvement thereof and Liens to the extent they secure indebtedness in excess of such purchase price or cost and for the payment of which recourse may be had only against such property;
- (e) Liens in favor of the United States or any state, territory or possession thereof (or the District of Columbia), or any department, agency, instrumentality or political subdivision of the United States or any state, territory or possession thereof (or the District of Columbia), to secure partial, progress, advance or other payments pursuant to any contract or statute or to secure any indebtedness incurred for the purpose of financing all or any part of the purchase price or the cost of constructing or improving the property subject to such Liens;
- (f) any Lien securing indebtedness of a subsidiary of Thermo Fisher owing to Thermo Fisher or to one or more of Thermo Fisher's subsidiaries;
- (g) Liens incurred or assumed in connection with the issuance of revenue bonds the interest on which is exempt from federal taxation pursuant to Section 103 of the Code;
- (h) Liens created, incurred or assumed in connection with an industrial revenue bond, pollution control bond or similar financing between Thermo Fisher or any subsidiary of Thermo Fisher and any federal, state or municipal government or other government body or quasi-governmental agency;
- (i) any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any Lien referred to in clauses (a) through (h) above, inclusive, so long as (1) the principal amount of the indebtedness secured thereby does not exceed the principal amount of indebtedness so secured at the time of the extension, renewal or replacement (except that, where an additional principal amount of indebtedness is incurred to provide funds for the completion of a specific project, the additional principal amount, and any related financing costs, may be secured by the Lien as well) and (2) the Lien is limited to the same property subject to the Lien so extended, renewed or replaced (and improvements on the property); and

(j) any Lien on a Principal Property or the shares of stock of a Principal Subsidiary that would not otherwise be permitted by clauses (a) through (i) above, inclusive, securing indebtedness which, together with:

the aggregate outstanding principal amount of all other indebtedness of Thermo Fisher and its subsidiaries secured by Liens on a Principal Property or the shares of stock of a Principal Subsidiary that is permitted solely pursuant to this clause (j), and

the aggregate Value of existing Sale and Leaseback Transactions that are permitted solely pursuant to clause (c) of Limitation on Sale and Leaseback Transactions and are still in existence, does not exceed 10% of Thermo Fisher's Consolidated Net Assets.

In order to constitute a Principal Property under the indenture, a property must have a book value in excess of 3% of Thermo Fisher's most recently calculated Consolidated Net Assets. Based on Consolidated Net Assets as of December 31, 2018, a property would only constitute a Principal Property if it had a book value in excess of approximately \$1.1 billion. As of the date of this prospectus, neither Thermo Fisher nor any of its subsidiaries owns any Principal Property as defined. See Definition of Certain Terms.

Limitation on Sale and Leaseback Transactions. Thermo Fisher will not, and will not permit any of its subsidiaries to, enter into any Sale and Leaseback Transaction with respect to any Principal Property unless:

(a) Thermo Fisher or such subsidiary could incur indebtedness, in a principal amount at least equal to the Value of such Sale and Leaseback Transaction, secured by a Lien on the Principal Property to be leased (without equally and ratably securing debt securities of any series having the benefit of this covenant) pursuant to clauses (a) through (i) under Limitations on Liens above;

(b) Thermo Fisher or any subsidiary of Thermo Fisher applies, during the six months following the effective date of the Sale and Leaseback Transaction, an amount equal to the Value of the Sale and Leaseback Transaction to either (or a combination of) the voluntary retirement of Funded Debt or to the acquisition of property; or

(c) the aggregate Value of such Sale and Leaseback Transaction plus the Value of all other Sale and Leaseback Transactions of Principal Properties, entered into after the date of the first issuance of the debt securities under the indenture, permitted solely by this clause (c) and still in existence, plus the aggregate amount of all indebtedness secured by Liens permitted solely by clause (j) of Limitations on Liens does not exceed 10% of Consolidated Net Assets.

Business Activities. Thermo Fisher International will not engage in any activities or take any action that would be inconsistent with the definition of finance subsidiary within the meaning of Rule 3-10 of Regulation S-X under the Securities Act.

Certain Other Covenants. The indenture contains certain other covenants regarding, among other matters, corporate existence and reports to holders of debt securities. Unless indicated otherwise in a prospectus supplement, the debt securities will not contain any additional financial or restrictive covenants, including covenants relating to total indebtedness, interest coverage, stock repurchases, recapitalizations, dividends and distributions to shareholders or current ratios. The provisions of the indenture do not afford holders of debt securities issued thereunder protection in the event of a sudden or significant decline in the Issuer's credit quality or the credit quality of Thermo Fisher or in the event of a takeover, recapitalization or highly leveraged or similar transaction involving the Issuer, Thermo Fisher or any of its affiliates that may adversely affect such holders.

Consolidation, Merger and Sale of Assets. Unless indicated otherwise in a prospectus supplement, the Issuer will not consolidate with, merge with or into, or sell, convey, transfer, lease or otherwise dispose of all or substantially all of its or its subsidiaries' property and assets taken as a whole (in one transaction or a series of related transactions) to any Person, or permit any Person to merge with or into it, unless:

(1) the continuing Person is Thermo Fisher International or Thermo Fisher or (2) the continuing Person formed by such consolidation or into which the Issuer is merged or that acquired or leased such

property and assets (the *Surviving Person*), shall be a Person organized and validly existing under the laws of the United States of America or any jurisdiction thereof, or a Person validly existing under the laws of Switzerland, the United Kingdom, The Netherlands or any other member state of the European Union as of the date of the indenture, and shall expressly assume, by a supplemental indenture, executed and delivered to the trustee, all of the Issuer's obligations under the indenture and the debt securities;

immediately after giving effect to such transaction, no default or event of default (each as defined in the indenture) shall have occurred and be continuing; and

the Issuer delivers to the trustee an officer's certificate and opinion of counsel, in each case stating that such consolidation, merger or transfer and such supplemental indenture complies with this provision and that all conditions precedent provided for herein relating to such transaction have been complied with.

The Surviving Person will succeed to, and be substituted for, the Issuer under the indenture and the debt securities and, except in the case of a lease, the Issuer shall be released of all obligations under the indenture and the debt securities.

In addition, unless indicated otherwise in a prospectus supplement, Thermo Fisher will not consolidate with, merge with or into, or sell, convey, transfer, lease or otherwise dispose of all or substantially all of its or its subsidiaries property and assets taken as a whole (in one transaction or a series of related transactions) to any Person, or permit any Person to merge with or into it, unless:

(1) the continuing Person is Thermo Fisher or (2) the continuing Person formed by such consolidation or into which Thermo Fisher is merged or that acquired or leased such property and assets, shall be a Person validly existing under the laws of the United States of America or any jurisdiction thereof, or a jurisdiction outside of the United States, and shall expressly assume, by a supplemental indenture, executed and delivered to the trustee, all of Thermo Fisher's obligations under the indenture and the debt securities;

immediately after giving effect to such transaction, no default or event of default (each as defined in the indenture) shall have occurred and be continuing; and

Thermo Fisher delivers to the trustee an officer's certificate and opinion of counsel, in each case stating that such consolidation, merger or transfer and such supplemental indenture complies with this provision and that all conditions precedent provided for herein relating to such transaction have been complied with.

No Protection in the Event of a Change of Control. Unless indicated otherwise 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 the Issuer has or Thermo Fisher has a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control).

Definition of Certain Terms. The following are the meanings of certain terms that are important in understanding the covenants described above.

Capital Lease Obligation means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease that would at that time be required to be capitalized on a balance sheet in accordance with U.S. GAAP as in effect on the date of the indenture.

Consolidated Net Assets means the consolidated total assets of Thermo Fisher and its subsidiaries as reflected in the most recent balance sheet of Thermo Fisher prepared in accordance with U.S. GAAP as in effect at the time of such determination, less (a) all current liabilities (excluding any notes and loans payable, current

maturities of long-term debt, the current portion of deferred revenue and obligations under capital leases) and (b) acquisition-related intangible assets in accordance with U.S. GAAP as in effect at the time of such determination. Consolidated Net Assets includes the goodwill of Thermo Fisher and its subsidiaries.

Funded Debt means, as of any date of determination, Thermo Fisher's indebtedness or the indebtedness of a subsidiary of Thermo Fisher maturing by its terms more than one year after its creation and indebtedness classified as long-term debt under U.S. GAAP as in effect on the date of the indenture, and in each case ranking at least *pari passu* with the debt securities, the Thermo Fisher guarantee of the debt securities or the other senior indebtedness of such subsidiary of Thermo Fisher.

indebtedness means, with respect to any specified Person, any indebtedness of such Person, whether or not contingent:

- 1) in respect of borrowed money;
- 2) evidenced by bonds, notes, debentures or similar instruments or letters of credit (or reimbursement agreements in respect thereof); and
- 3) in respect of Capital Lease Obligations.

In addition, the term *indebtedness* includes (x) all indebtedness (as defined above) of others secured by a Lien on any asset of the specified Person (whether or not such indebtedness is assumed by the specified Person), *provided* that the amount of such indebtedness will be the lesser of (A) the fair market value of such asset at such date of determination and (B) the amount of such indebtedness, and (y) to the extent not otherwise included, the guarantee by the specified Person of any indebtedness (as defined above) of any other Person.

Lien means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected under applicable law, including any conditional sale or other title retention agreement.

Original Issue Discount Security means any debt security which provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of maturity thereof pursuant to the indenture.

Person means any individual, corporation, limited liability company, partnership, joint venture, joint-stock company, association, trust, unincorporated organization or government or any agency or political subdivision of a government or governmental agency.

Principal Property means any single parcel of real property or any permanent improvement thereon (i) owned by Thermo Fisher or any of its subsidiaries located in the United States, including Thermo Fisher's principal corporate office, any manufacturing facility or plant or any portion thereof and (ii) having a book value, as of the date of determination, in excess of 3% of Thermo Fisher's most recently calculated Consolidated Net Assets. Principal Property does not include any property that Thermo Fisher's board of directors has determined not to be of material importance to the business conducted by Thermo Fisher and its subsidiaries, taken as a whole. As of the date of this prospectus, none of Thermo Fisher's current properties or those of its subsidiaries con