MTU Aero Engines AG
(Munich, Federal Republic of Germany)

EUR 500,000,000 3.000% fixed rate notes due 2025

ISIN XS2197673747, Common Code 219767374, WKN A289QB

Issue Price: 99.430%

MTU Aero Engines AG, Munich, the Federal Republic of Germany, (the "Issuer" or the "Company") will issue on 1 July 2020 (the "Issue Date") EUR 500,000,000 3.000% fixed rate notes in bearer form due 1 July 2025 (the "Notes") in the denomination of EUR 1,000 each at an issue price of 99.430% (the "Issue Price").

The Notes will be governed by the laws of the Federal Republic of Germany ("Germany"). The Notes will be redeemed at par on 1 July 2025. Under certain circumstances described in §5 of the terms and conditions of the Notes (the "Terms and Conditions"), the Notes may be subject to early redemption. The Notes will bear interest from and including the Issue Date to, but excluding 1 July 2025 at a rate of 3.000 per cent. per annum, payable annually in arrear on 1 July of each year (each such date, an "Interest Payment Date"), commencing on 1 July 2021.

This prospectus (the "Prospectus") constitutes a prospectus within the meaning of Article 6 of Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 (as amended, the "Prospectus Regulation"). This Prospectus will be published in electronic form together with any supplement thereto and all documents incorporated by reference on the website of the Luxembourg Stock Exchange (www.bourse.lu) and on the website of the Issuer (www.mtu.de).

This Prospectus has been approved by the Commission de Surveillance du Secteur Financier of the Grand Duchy of Luxembourg (the "CSSF") as competent authority under the Prospectus Regulation. The CSSF only approves this Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Such approval should not be considered as an endorsement of the Issuer that is the subject of this Prospectus nor of the quality of the securities that are the subject of this Prospectus. Investors should make their own assessment as to the suitability of investing in such Notes. The Issuer has requested the CSSF to provide the competent authorities in Germany, Austria and The Netherlands and may request CSSF to provide competent authorities in additional host Member States within the European Economic Area, with a certificate of approval attesting that this Prospectus has been drawn up in accordance with the Prospectus Regulation. By approving a prospectus, the CSSF shall give no undertaking as to the economic and financial soundness of the operation or the quality or solvency of each issuer pursuant to Article 6(4) of the Luxembourg act relating to prospectuses for securities dated 16 July 2019 (Loi du 16 juillet 2019 relative aux prospectus pour valeurs mobilières).

Application has been made to the Luxembourg Stock Exchange for the Notes to be listed on the Official List of the Luxembourg Stock Exchange and to be admitted to trading on the Luxembourg Stock Exchange's regulated market "Bourse de Luxembourg", appearing on the list of regulated markets issued by the European Commission. The Luxembourg Stock Exchange's regulated market is a regulated market for the purposes of Directive 2014/65/EU (as amended, "MiFID II").

Prospective purchasers of the Notes should ensure that they understand the nature of the Notes and the extent of their exposure to risks and that they consider the suitability of the Notes as an investment in light of their own circumstances and financial condition. Investing in the Notes involves certain risks. Please review the section entitled "Risk Factors" beginning on page 21 of this Prospectus.

The Notes have not been, and will not be, registered under the United States Securities Act of 1933, as amended (the "Securities Act"). The Notes may not be offered or sold within the United States of America (the "United States" or "U.S.") or to, for the account or benefit of, U.S. persons.

Joint Lead Managers

COMMERZBANK Deutsche Bank HSBC
RESPONSIBILITY STATEMENT

MTU Aero Engines AG (the "Issuer" or the "Company" and, together with its consolidated subsidiaries, "MTU" or the "MTU Group") with its registered office in Munich, Federal Republic of Germany, accepts responsibility for the information contained in this Prospectus and hereby declares that, to the best of its knowledge, the information contained in this Prospectus is in accordance with the facts and does not omit anything likely to affect its import.

NOTICE TO INVESTORS

The Issuer further confirms that (i) this Prospectus contains all information with respect to the Issuer, the MTU Group and the Notes which is material in the context of the issue and offering of the Notes, including all information which, according to the particular nature of the Issuer, the MTU Group and the Notes is necessary to enable investors and their investment advisers to make an informed assessment of the assets and liabilities, financial position, profits and losses, and prospects of the Issuer, the MTU Group and of the rights attached to the Notes; (ii) the information contained in this Prospectus relating to the Issuer, the MTU Group and the Notes is accurate and complete in all material respects and not misleading; (iii) that any opinions and intentions expressed herein are honestly held and based on reasonable assumptions; (iv) there are no other facts in relation to the Issuer, MTU Group or the Notes the omission of which would, in the context of the issue and offering of the Notes, make this Prospectus as a whole or any of such information or the expression of any such opinions or intentions misleading; and (v) reasonable enquiries have been made by the Issuer to ascertain all such facts for the purposes aforesaid.

This Prospectus should be read and construed with any supplement thereto and with any documents incorporated by reference. Each investor contemplating purchasing any Notes should make its own independent investigation of the financial condition and affairs, and its own appraisal of the creditworthiness, of the Issuer and should make their own assessment as to the suitability of investing in the Notes.

This Prospectus will be valid until 25 June 2021 and may be used in this period for admission to trading of the Notes on a regulated market and for the offering of the Notes during the Offer Period (please refer to section "Offer, Sale and Subscription of the Notes"). In case of a significant new factor, material mistake or material inaccuracy relating to the information included in this Prospectus which may affect the assessment of the Notes and which arises or is noted between the time when this Prospectus is approved and the time when trading of the Notes begins on the regulated market of the Luxembourg Stock Exchange, the Issuer will prepare and publish a supplement to the Prospectus without undue delay in accordance with Article 23 of the Prospectus Regulation. The obligation of the Issuer to supplement this Prospectus will cease to apply at the latest upon expiry of the validity of this Prospectus.

No person has been authorized by the Issuer to give any information or to make any representation not contained in or not consistent with this Prospectus or any other document entered into in relation to the Notes or any information supplied by the Issuer or such other information as is in the public domain and, if given or made, such information or representation should not be relied upon as having been authorized by the Issuer or any of Commerzbank Aktiengesellschaft, Deutsche Bank Aktiengesellschaft and HSBC Bank plc (together, the "Joint Lead Managers" and each a "Joint Lead Manager").

No representation or warranty is made or implied by the Joint Lead Managers or any of their respective affiliates, and neither the Joint Lead Managers nor any of their respective affiliates make any representation or warranty or accept any responsibility, as to the accuracy or completeness of the information contained in this Prospectus.
This Prospectus reflects the status as of its date. Neither the delivery of this Prospectus nor the offering, sale or delivery of any Note shall, in any circumstances, create any implication that the information contained in this Prospectus is true subsequent to the date upon which this Prospectus has been published or most recently supplemented or that there has been no adverse change in the financial position of the Issuer since the date hereof or, as the case may be, the date upon which this Prospectus has been most recently supplemented or the balance sheet date of the most recent consolidated financial statements which are deemed to be incorporated into this Prospectus by reference is correct at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

This document may only be communicated or caused to be communicated in circumstances in which section 21(1) of the Financial Services and Markets Act 2000 ("FSMA") does not apply.

The Notes have not been and will not be registered under the United States Securities Act of 1933, as amended (the "Securities Act"), and will include Notes in bearer form that are subject to U.S. tax law requirements. Subject to certain exceptions, Notes may not be offered, sold or delivered within the United States or to U.S. persons, see "Offer, Sale and Subscription of the Notes — Selling Restrictions". The distribution of this Prospectus as well as the offering, sale, and delivery of the Notes in certain jurisdictions may be restricted by law.

Persons into whose possession this Prospectus comes are required by the Issuer and the Joint Lead Managers to inform themselves about and to observe any such restrictions. For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of this Prospectus and other offering material relating to the Notes, see "Offer, Sale and Subscription of the Notes — Selling Restrictions".

This Prospectus may not be used for the purpose of an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it is unlawful to make such an offer or solicitation.

This Prospectus should not be considered as a recommendation by the Issuer or any Joint Lead Managers that any recipient of this Prospectus should subscribe for or purchase Notes. Each recipient of this Prospectus shall be taken to have made its own investigation and appraisal of the condition (financial or otherwise) of the Issuer.

This Prospectus contains assessments of market data and information derived therefrom which could not be obtained from any independent sources. Such information is based on the Issuer's own internal assessments and may therefore deviate from the assessments of competitors of the Issuer or future statistics by independent sources. As regards to the market position of the Issuer, the Issuer's own estimations are mainly based on company data which either is derived from information by competitors or from data provided by independent research companies.

In this Prospectus, all references to €, EUR or euro are to the currency introduced at the start of the third stage of the European economic and monetary union, and defined in Article 2 of Council Regulation (EC) No 974/98 of May 3, 1998, on the introduction of the euro, as amended. U.S. dollars or $ refer to the lawful currency of the United States.

The information on any website included in the Prospectus, except for the website www.bourse.lu in the context of the documents incorporated by reference, do not form part of the Prospectus and has not been scrutinised or approved by the CSSF.

The language of this Prospectus is English. Any part of this Prospectus in the German language constitutes a translation except for the Terms and Conditions where the English part constitutes a translation. The German text of the Terms and Conditions is controlling and binding.
MIFID II PRODUCT GOVERNANCE / ELIGIBLE COUNTERPARTIES, PROFESSIONAL INVESTORS AND RETAIL INVESTORS TARGET MARKET

Solely for the purposes of the product approval process conducted by each Joint Lead Manager who is a manufacturer for the purposes of EU Delegated Directive 2017/593, the target market assessment in respect of the Notes has led to the conclusion that, as of the date of this Prospectus: (i) the target market for the Notes is eligible counterparties, professional clients and retail clients, each as defined in MiFID II, and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate and (iii) the following channels for distribution of the Notes to retail clients are appropriate: investment advice, portfolio management, non-advised sales and pure execution services, subject to the distributor's suitability and appropriateness obligations under MiFID II, as applicable.

Any person subsequently offering, selling or recommending the Notes (a "Distributor") should take into consideration the manufacturers' target market assessment; however, a Distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

STABILIZATION

IN CONNECTION WITH THE ISSUE OF THE NOTES, DEUTSCHE BANK AKTIENGESELLSCHAFT (OR PERSONS ACTING ON ITS BEHALF) MAY OVER-ALLOT NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, STABILIZATION MAY NOT NECESSARILY OCCUR. ANY STABILIZATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE NOTES IS MADE AND, IF BEGUN, MAY CEASE AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES. ANY STABILIZATION ACTION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE RELEVANT STABILIZATION MANAGER(S) (OR PERSON(S) ACTING ON BEHALF OF ANY STABILIZATION MANAGER(S)) IN ACCORDANCE WITH ALL APPLICABLE LAWS, DIRECTIVES, REGULATIONS AND RULES OF ANY RELEVANT JURISDICTION.

ALTERNATIVE PERFORMANCE MEASURES

Certain terms used in this Prospectus and financial measures presented in the documents incorporated by reference are not recognized financial measures under International Financial Reporting Standards ("IFRS") ("Alternative Performance Measures") and may therefore not be considered as an alternative to the financial measures defined in the accounting standards in accordance with generally accepted accounting principles. The Issuer has provided these Alternative Performance Measures because it believes they provide investors with additional information to assess the economic situation of the Issuer's business activities. The definition of the Alternative Performance Measures may vary from the definition of identically named alternative performance measures used by other companies. The Alternative Performance Measures used by the Issuer should not be considered as an alternative to measures derived in accordance with IFRS as measures of operating performance. These Alternative Performance Measures have limitations as analytical tools and should not be considered in isolation or as substitutes for analysis of results as reported under IFRS.

FORWARD-LOOKING STATEMENTS

This Prospectus contains certain forward-looking statements. A forward-looking statement is a statement that does not relate to historical facts and events. They are based on analyses or forecasts of fu-
future results and estimates of amounts not yet determinable or foreseeable. These forward-looking statements are identified by the use of terms and phrases such as "anticipate", "believe", "could", "estimate", "expect", "intend", "may", "plan", "predict", "project", "will" and similar terms and phrases, including references and assumptions. This applies, in particular, to statements in this Prospectus containing information on future earning capacity, plans and expectations regarding MTU Group's business and management, its growth and profitability, and general economic and regulatory conditions and other factors that affect it.

Forward-looking statements in this Prospectus are based on current estimates and assumptions that the Issuer makes to the best of its present knowledge. These forward-looking statements are subject to risks, uncertainties and other factors which could cause actual results, including MTU Group's financial condition and results of operations, to differ materially from and be worse than results that have expressly or implicitly been assumed or described in these forward-looking statements. MTU Group's business is also subject to a number of risks and uncertainties that could cause a forward-looking statement, estimate or prediction in this Prospectus to become inaccurate. Accordingly, investors are strongly advised to read the following sections of this Prospectus "Risk Factors" and "Information about the Issuer and MTU Group" of this Prospectus. These sections include more detailed descriptions of factors that might have an impact on MTU Group's business and the markets in which it operates.

In light of these risks, uncertainties and assumptions, future events described in this Prospectus may not occur. In addition, the Issuer does not assume any obligation to update such forward-looking statements and to adapt them to future events or developments.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>7</td>
</tr>
<tr>
<td>GERMAN TRANSLATION OF THE SUMMARY (ZUSAMMENFASSUNG)</td>
<td>14</td>
</tr>
<tr>
<td>RISK FACTORS</td>
<td>21</td>
</tr>
<tr>
<td>INFORMATION ABOUT THE ISSUER AND MTU GROUP</td>
<td>41</td>
</tr>
<tr>
<td>TERMS AND CONDITIONS OF THE NOTES</td>
<td>65</td>
</tr>
<tr>
<td>TAXATION WARNING</td>
<td>93</td>
</tr>
<tr>
<td>OFFER, SALE AND SUBSCRIPTION OF THE NOTES</td>
<td>94</td>
</tr>
<tr>
<td>GENERAL INFORMATION</td>
<td>98</td>
</tr>
<tr>
<td>INCORPORATION BY REFERENCE</td>
<td>100</td>
</tr>
<tr>
<td>GLOSSARY</td>
<td>102</td>
</tr>
<tr>
<td>NAMES AND ADDRESSES</td>
<td>104</td>
</tr>
</tbody>
</table>
### A. INTRODUCTION AND WARNINGS

**Name and international securities identifier number (ISIN) of the securities**

EUR 500,000,000 3.000% fixed rate notes in bearer form due 1 July 2025 with a denomination of EUR 1,000, ISIN Code: XS2197673747 (the "Notes")

**Identity and contact details of the issuer, including its legal entity identifier (LEI)**

MTU Aero Engines AG (the "Issuer" or the "Company" and, together with its consolidated subsidiaries, "MTU" or the "MTU Group"), has its registered office in Munich, Germany. Its business address is Dachauer Straße 665, 80995 Munich, Germany (telephone: +49 89 1489-0). Its Legal Entity Identifier (LEI) is 529900807L67Y81RD65.

**Identity and contact details of the offerors, including their legal entity identifier (LEI)**

The Notes will be publicly offered by Commerzbank Aktiengesellschaft, Deutsche Bank Aktiengesellschaft and HSBC Bank plc (together, the "Joint Lead Managers" and each a "Joint Lead Manager").

Commerzbank Aktiengesellschaft is a stock corporation (Aktiengesellschaft) incorporated and operating under German law. Its Legal Entity Identifier (LEI) is 851WYGNLUQLFZBSYGB56. Commerzbank Aktiengesellschaft is a multinational universal bank. Commerzbank Aktiengesellschaft can be contacted at its business address: Kaiserstraße 16 (Kaiserplatz), 60311 Frankfurt am Main, Federal Republic of Germany.

Deutsche Bank Aktiengesellschaft is a stock corporation (Aktiengesellschaft) incorporated and operating under German law. Its Legal Entity Identifier (LEI) is 7LTWFZYICNSX8D621K86. Deutsche Bank Aktiengesellschaft is a multinational investment bank and financial services company. Deutsche Bank Aktiengesellschaft can be contacted at its business address: Mainzer Landstrasse 11-17, 60329 Frankfurt am Main, Federal Republic of Germany.

HSBC Bank plc is a public limited company incorporated and operating under the laws of the United Kingdom. Its Legal Entity Identifier (LEI) is MP6I5ZYZBEU3UXPYFY54. HSBC Bank plc is part of a multinational investment banking and financial services group. HSBC Bank plc can be contacted at its business address: 8 Canada Square, London, E14 5HQ, United Kingdom.

**Identity and contact details of the competent authority approving the Prospectus**

The Luxembourg Commission de Surveillance du Secteur Financier (the "CSSF"), 283 route d'Arlon, L-1150 the Grand Duchy of Luxembourg (telephone +352 26 25 1-1; website: https://www.cssf.lu), has approved this Prospectus as competent authority under Regulation (EU) 2017/1129.

**Date of approval of the Prospectus**

25 June 2020

**Warning**

This summary has been prepared in accordance with Article 7 of Regulation (EU) 2017/1129 and should be read as an introduction to this Prospectus. Any decision to invest in the Notes of the Issuer should be based on a consideration of this Prospectus. Investors in the Notes of the Issuer could lose all or part of their invested capital. Where a claim relating to the information contained in this Prospectus is brought before a court, the plaintiff investor might, under national law, have to bear the costs of translating this Prospectus before the legal proceedings are initiated. Civil liability attaches only to those persons who have tabled this summary, including any translation thereof, but only where this summary is misleading, inaccurate or inconsistent, when read together with this Prospectus, or where it does not provide, when read together with this Prospectus, key information in order to aid investors when considering whether to invest in the Notes.

### B. KEY INFORMATION ON THE ISSUER

**B.1 Who is the issuer of the securities?**

**B.1.1 Domicile, legal form, LEI, law under which it operates and country of incorporation**

MTU Aero Engines AG is incorporated under German law as a stock corporation (Aktiengesellschaft) and domiciled in Munich, Germany and operates under German law. The Legal Entity Identifier (LEI) of MTU Aero Engines AG is 529900807L67Y81RD65.
MTU Group develops and manufactures aircraft engine modules and components, and is a provider of maintenance, repair and overhaul services for jet engines.

MTU Aero Engines AG is the parent company of MTU Group. MTU Aero Engines AG is the main legal entity for MTU Group's activities in the OEM business which develops and manufactures new commercial and military aircraft engine modules and components and is a provider of maintenance, repair and overhaul services for military flight engines. Moreover, it carries out certain management services for the MTU Group.

Based on the notification received until 18 June 2020, the following notifiers directly or indirectly hold, in aggregate, the following voting rights of more than 5% in the Issuer.

<table>
<thead>
<tr>
<th>Name</th>
<th>Total voting rights proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allianz Global Investors GmbH</td>
<td>5.09%</td>
</tr>
<tr>
<td>BlackRock, Inc.</td>
<td>7.64%</td>
</tr>
<tr>
<td>The Capital Group Companies, Inc.</td>
<td>14.62%*</td>
</tr>
</tbody>
</table>

* Including voting rights attributed to The Capital Group Companies, Inc and held by EuroPacific Growth Fund as notified to the Issuer.

The executive board of the Issuer currently comprises four members. These are: Reiner Winkler, Peter Kamersitsch, Michael Schreyögg and Lars Wagner.

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Arnulfstraße 59, 80636 Munich, Germany.

The following table sets out selected financial information relating to MTU. The financial information has been extracted or derived from MTU's audited consolidated financial statements prepared in accordance with IFRS, as adopted by the European Union, and the additional requirements of German commercial law pursuant to Section 315e (1) of the German Commercial Code (Handelsgesetzbuch) as of and for the fiscal year ended 31 December 2019 and as of and for the fiscal year ended 31 December 2018 as well as from MTU's unaudited quarterly statement as of and for the three-month period ended 31 March 2020, unless otherwise stated. All amounts are rounded to millions of euros (€ million). Due to rounding, it is possible that item values may not add up exactly to the stated total. IFRS 16, Leases, was adopted for the first time by MTU on and has been applied since 1 January 2019 in its audited consolidated financial statements as of and for the fiscal year ended 31 December 2019 using the modified retrospective approach, under which the figures from the periods prior to 1 January 2019 are shown unadjusted. As a result, some of the following figures as of and for the fiscal year ended 31 December 2019 are not comparable with the prior-year period. Where financial information in the following tables is labelled "audited", this means that it has been taken from the audited MTU's consolidated financial statements mentioned above. The label "unaudited" is used in the following tables to indicate financial information that has not been taken from the audited MTU's consolidated financial statements mentioned above but has been taken or derived from MTU's unaudited quarterly statement mentioned above or MTU's accounting records or has been calculated on the basis of financial information from the above-mentioned sources. MTU's unaudited quarterly statement as of and for the three-month period ended 31 March 2020 has neither been reviewed nor does it constitute an interim financial report as defined in International Accounting Standard (IAS) No. 34.

<table>
<thead>
<tr>
<th>(in EUR million)</th>
<th>As of 31 December 2019</th>
<th>As of 31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Balance Sheet Data</td>
<td>(audited, unless stated otherwise)</td>
<td>(unaudited)</td>
</tr>
<tr>
<td>Total assets</td>
<td>7,765</td>
<td>6,851</td>
</tr>
<tr>
<td>Total non-current assets</td>
<td>4,155</td>
<td>3,716</td>
</tr>
<tr>
<td>Total current assets</td>
<td>3,610</td>
<td>3,135</td>
</tr>
<tr>
<td>Total equity</td>
<td>2,421</td>
<td>2,144</td>
</tr>
<tr>
<td>Total non-current liabilities</td>
<td>2,130</td>
<td>1,902</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>3,214</td>
<td>2,804</td>
</tr>
</tbody>
</table>
Net financial debt (unaudited).......................... 961

Year ended 31 December Revenue......................................................... 4,628
Consolidated Income Statement Data (in EUR million) Year ended 31 December
Earnings before interest, taxes, depreciation and amortization (EBITDA) (unaudited).................. 965
Adjusted earnings before interest and taxes (adjusted EBIT).................................................. 757
Earnings before interest and taxes (EBIT).......................................................... 706
Adjusted net income (unaudited)........................................................................ 538
Net income........................................................................................................... 488

Consolidated Cash Flow Statement Data
Cash flow from operating activities.................................................. 832
Cash flow from investing activities........................................ -472
Free cash flow (unaudited)......................................................................... 358
Cash flow from financing activities.................................................. -324

(1) This figure is not taken from MTU's audited consolidated financial statements as of and for the fiscal year ended 31 December 2019 and as of and for the fiscal year ended 31 December 2018 or MTU's unaudited quarterly statement as of and for the three-month period ended 31 March 2020 but derived from MTU's accounting records.

(2) The Company defines net financial debt as the difference between gross financial debt and financial assets (as set out below). The Company reports its net financial debt as it believes this measure serves as an indicator of the MTU Group's financial situation. Net financial debt is not a performance indicator recognized under IFRS. The net financial debt reported by the Company is not necessarily comparable to the performance measures published by other companies as net financial debt or the like. The following table provides a reconciliation of gross financial debt and financial assets to net financial debt:

<table>
<thead>
<tr>
<th>(in EUR million)</th>
<th>As of 31 December</th>
<th>As of 31 March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(audited, unless stated otherwise)</td>
<td>(unaudited)</td>
</tr>
<tr>
<td>bonds and notes</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>convertible bonds</td>
<td>562</td>
<td>483</td>
</tr>
<tr>
<td>financial liabilities to banks</td>
<td>40</td>
<td>54</td>
</tr>
<tr>
<td>loans from third parties</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td>lease liabilities / finance lease liabilities</td>
<td>147</td>
<td>10</td>
</tr>
<tr>
<td>financial liabilities arising from acquisition of stakes in programs</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td><strong>Gross financial debt</strong></td>
<td><strong>1,150</strong></td>
<td><strong>1,032</strong></td>
</tr>
<tr>
<td>less:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cash and cash equivalents</td>
<td>140</td>
<td>99</td>
</tr>
<tr>
<td>loans to third parties</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>loans to related companies</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td><strong>Financial assets (unaudited)</strong></td>
<td><strong>189</strong></td>
<td><strong>178</strong></td>
</tr>
<tr>
<td><strong>Net financial debt (unaudited)</strong></td>
<td><strong>961</strong></td>
<td><strong>854</strong></td>
</tr>
</tbody>
</table>

(3) The Company uses the adjusted net income and adjusted earnings before interest and taxes (adjusted EBIT) to eliminate special items from the key earnings figures of the MTU Group and its business segments. The Company reports its adjusted net income and adjusted EBIT because it considers this to be a useful measure of the success of its management of operating activities. The Company defines earnings before interest, taxes, depreciation and amortization (EBITDA) as net income before financial income/expense, income taxes, amortization/value adjustments/depreciation/impairment losses. The Company defines earnings before interest and taxes (EBIT) as net income before net financial income/expense and income taxes. The Company defines adjusted earnings before interest and taxes (adjusted EBIT) as net income adjusted for the contributions resulting from the “special items from purchase price allocation” and the "special items from the increase in the stake in IAE-V2500" before financial income/expense and income taxes. The Company defines earnings before taxes (EBIT) as net income before income taxes. The Company defines adjusted net income as net income adjusted for the contributions resulting from the “special items from purchase price allocation” and the “special items from the increase in the stake in IAE-V2500”, and adding net interest income/expense and the interest shares in other financial income/expense connected with provisions for pensions and liabilities from pensions and plan assets and subtracting normalized income taxes, which are calculated on the basis of the expected average tax rate for the group (fiscal year 2019 and 2018: 29%) and in consideration that profit/loss contribution of companies accounted for using the equity method does not form part of the tax basis. The
Company discloses its EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income because it considers these to be useful measures of the MTU Group's operating performance. EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income are not performance measures recognized under IFRS. The EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income reported by the Company are not necessarily comparable with the performance measures reported by other companies as EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income or similarly named. The following table provides a reconciliation of adjusted EBIT, EBIT and EBT to net income and adjusted net income:

<table>
<thead>
<tr>
<th>Year ended 31 December</th>
<th>Three months ended 31 March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019 (audited, unless stated otherwise)</td>
</tr>
<tr>
<td>Adjusted EBIT</td>
<td>757</td>
</tr>
<tr>
<td>Adjustments (unaudited)</td>
<td>-51</td>
</tr>
<tr>
<td>thereof &quot;special items from purchase price allocation&quot;</td>
<td>-21</td>
</tr>
<tr>
<td>thereof &quot;special items from the increase in the stake in IAE-V2500&quot;</td>
<td>-30</td>
</tr>
<tr>
<td>Earnings before interest and taxes (EBIT)</td>
<td>706</td>
</tr>
<tr>
<td>Net financial income/expense</td>
<td>-39</td>
</tr>
<tr>
<td>Earnings before taxes (EBIT)</td>
<td>667</td>
</tr>
<tr>
<td>Income taxes</td>
<td>-178</td>
</tr>
<tr>
<td>Net income</td>
<td>488</td>
</tr>
<tr>
<td>Adjustments to net income (unaudited)</td>
<td>49</td>
</tr>
<tr>
<td>thereof &quot;special items from purchase price allocation&quot;</td>
<td>21</td>
</tr>
<tr>
<td>thereof &quot;special items from the increase in the stake in IAE-V2500&quot;</td>
<td>30</td>
</tr>
<tr>
<td>thereof adjustment of net financial income / expense to net interest income / expense (unaudited)</td>
<td>7</td>
</tr>
<tr>
<td>thereof adjustment of income taxes to normalized income taxes (unaudited)</td>
<td>-9</td>
</tr>
<tr>
<td>Adjusted net income (unaudited)</td>
<td>538</td>
</tr>
</tbody>
</table>

(a) Adjustments for the contributions resulting from the "special items from purchase price allocation" and the "special items from the increase in the stake in IAE-V2500". As of 1 January 2004, the Company passed into the ownership of Kohlberg Kravis Roberts & Co. Ltd., following the latter's purchase of 100% of the Company's shares from the then DaimlerChrysler AG. In the context of the acquisition, assets, liabilities and contingent liabilities were identified in accordance with IFRS 3 and measured at fair value. Since then, the identified intangible assets in connection with the purchase price allocation, in particular, have resulted in substantial scheduled amortization. The latter are referred to collectively as "special items from purchase price allocation". The contributions from the "special items from the increase in the stake in IAE-V2500" result from the increase in the stake in the V2500 engine program in 2012, which is capitalized as an acquired program asset and is accounted for as a reduction of revenue over its estimated economic life of 25 years.

The following table provides a reconciliation of EBITDA to EBIT:

<table>
<thead>
<tr>
<th>Year ended 31 December</th>
<th>Three months ended 31 March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019 (audited, unless stated otherwise)</td>
</tr>
<tr>
<td>EBITDA (unaudited)</td>
<td>965</td>
</tr>
<tr>
<td>Amortization/value adjustments/depreciation/ impairment losses</td>
<td>-260</td>
</tr>
<tr>
<td>Earnings before interest and taxes (EBIT)</td>
<td>706</td>
</tr>
</tbody>
</table>

(4) The Company defines its free cash flow by combining its cash flow from operating activities with its cash flow from investing activities and eliminating components of cash flow from investing activities (non-recurring cash flows) that lie outside the operational management of the core business (as set out below). The Company reports its free cash flow as it believes this measure serves as an indicator of the MTU Group's liquidity situation. Free cash flow is not a performance indicator recognized under IFRS. The free cash flow reported by the Company is not necessarily comparable to the performance measures published by other companies as free cash flow or the like. The following table provides a reconciliation of free cash flow:

<table>
<thead>
<tr>
<th>Year ended 31 December</th>
<th>Three months ended 31 March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019 (audited, unless stated otherwise)</td>
</tr>
<tr>
<td>Cash flow from operating activities</td>
<td>832</td>
</tr>
<tr>
<td>Cash flow from investing activities</td>
<td>-472</td>
</tr>
<tr>
<td>Non-recurring cash flows (unaudited)</td>
<td>-2</td>
</tr>
<tr>
<td>thereof payments made to acquire stakes in</td>
<td>29</td>
</tr>
</tbody>
</table>
B.3 What are the key risks that are specific to the Issuer?

- MTU operates in the highly competitive industry of aero engine modules and components. MTU faces competition among market participants in each aspect of its business comprising original equipment manufacturing and commercial maintenance, repair and overhaul services.

- The commercial business of MTU is cyclical as it is affected by the general state of the global macroeconomic environment. It also is sensitive to demand for air transportation and the financial condition of the commercial airline industry.

- MTU faces risks associated with the outbreak and spread of the novel coronavirus 2019-nCoV ("COVID-19") and the implications of this global pandemic on the global economy, the air transportation, commercial airline as well as aircraft and flight engine industry.

- MTU is heavily dependent on certain customers as its four largest customers together accounted for the majority of MTU Group's revenue in the fiscal year ended 31 December 2019. Hence, if any of its customers are not able to win (or less successful in winning) aero engine business this would have a direct effect on the revenue of MTU.

- Developments in the commercial MRO market may adversely affect the performance of MTU's commercial MRO Business.

- MTU is exposed to risks associated with procurement and supply, as it purchases parts and components, finished products, specific services and raw materials from external suppliers as well as third-party vendors. Therefore, MTU is highly dependent on the availability of such supplies.

- MTU's research and development efforts may not be successful, as they could fail to meet the needs of customers on a cost-effective or timely basis.

- MTU's risk and revenue sharing partnerships ("RRSP") contracts expose MTU to significant risks, including a lack of control over the activities covered by the RRSP and losses arising from up-front design and development costs, cost overruns, warranties, guarantees and penalties.

- The design and development of aviation products is heavily regulated and the failure to comply with applicable laws could affect MTU's sales or require MTU to incur additional costs to achieve compliance.

- A decline in German or other European defense budgets or changes in funding priorities may adversely affect MTU's sales of engine modules and components in the military business and may reduce revenue of MTU and increase its costs.

- Changes to expectations concerning the growth of air travel and the aircraft industry or a deterioration of the sales number of aircrafts may result in significant impairments or further adjustments in the assumptions and estimates underlying the valuation of assets and liabilities of MTU and the presentation of the financial condition of MTU.

- Because MTU's assets, liabilities, revenue and costs are denominated in multiple currencies, MTU is vulnerable to exchange rate fluctuations.

C. KEY INFORMATION ON THE SECURITIES

C.1 What are the main features of the securities?

C.1.1 Type, class and ISIN

The Notes are unsubordinated and unsecured notes bearing fixed interest and will be uniquely identified by ISIN: XS2197673747, Common Code: 219767374, WKN: A289QB.

C.1.2 Currency, denomination, number of securities issued and term of the securities

The currency of the Notes will be Euro (EUR). The specified denomination per Note is EUR 1,000. The number of Notes is 500,000. The term of the Notes is five years, until 1 July 2025.

C.1.3 Rights attached to the securities

Each holder of the Notes ("Noteholder") has the right vis-à-vis the Issuer to claim payment of interest and
nominal when such payments are due in accordance with the terms and conditions of the Notes (the "Terms and Conditions"). The rate of interest on the Notes is 3.000% per annum. Interest is payable annually in arrear on 1 July of each year. The Note will be redeemed at its principal amount together with accrued interest on 1 July 2025. The yield to maturity of the Notes is 3.125% per annum, calculated on the basis of the issue price.

Negative pledge: The Notes contain a negative pledge provision.

Events of default: The Notes provide for events of default entitling Holders to demand immediate redemption of the Notes at their principal amount (in some cases subject to the quorum requirement that Holders representing at least 10% of the aggregate principal amount of Notes then outstanding will have declared their Notes due).

Early redemption: The Notes provide for an early redemption at the option of the Issuer for reasons of taxation and for reason of minimal outstanding principal amount. The Issuer may further call the Notes for early redemption with effect as of each business day during the period from and including 1 April 2025 to but excluding 1 July 2025. In case of an early redemption, the Issuer will redeem the Notes at the principal amount, plus accrued and unpaid interest.

Change of control: Upon the occurrence of specific change of control events, the Noteholders will have the right to require the redemption of their Notes at the principal amount, plus accrued and unpaid interest.

Resolution of holders: The Notes provide the option to amend the Terms and Conditions and to appoint a holder's representative (a "Noteholders' Representative") pursuant to the terms of the German Act on Issues of Debt Securities of 2009 (Schuldverschreibungsgesetz – "SchVG").

Governing law: The Notes are governed by German law.

C.1.4 Ranking of the securities in the Issuer's capital structure upon insolvency

The obligations under the Notes constitute unsecured and unsubordinated obligations of the Issuer ranking pari passu among themselves and pari passu with all other present and future unsecured and unsubordinated obligations of the Issuer, unless such obligations are accorded priority under mandatory provisions of statutory law.

C.1.5 Restrictions on free transferability of the securities

Not applicable. The Notes are freely transferable.

C.2 Where will the securities be traded?

The Issuer has applied for admission of the Issuer's Notes to trading on the Regulated Market of the Luxembourg Stock Exchange "Bourse de Luxembourg" and to be listed on the Official List of the Luxembourg Stock Exchange.

C.3 What are the key risks that are specific to the Securities?

- The market value of the Notes could decrease if the creditworthiness of the Issuer worsens or is perceived to worsen.
- The Notes represent a new issue of securities for which there is currently no established trading market. There can be no assurance that a market for the Notes will develop or, if it does develop, continue, or that it will be liquid, thereby enabling investors to sell their Notes when desired, or at all, or at prices they find acceptable.
- The Notes bear specific risks typical for fixed rate notes. Therefore, each Noteholder is exposed to the risk that the price of the Notes may fall as a result of changes in market interest rates.

D. KEY INFORMATION ON THE OFFER OF SECURITIES TO THE PUBLIC AND THE ADMISSION TO TRADING ON A REGULATED MARKET

D.1 Under which conditions and timetable can I invest in this security?

Terms and conditions of the Offer and plan for distribution: The Notes will be offered to institutional investors and retail investors with applicable public offer restrictions by the Joint Lead Managers during an offer period which will commence on 26 June 2020 and will be open until and including 1 July 2020, subject to a shortening or extension of the offer period (due to changing market conditions).

During the offer period, the Joint Lead Managers will offer the Notes upon request through banking institutions in Luxembourg, Germany, Austria and The Netherlands. These institutions will supply investors with the relevant information on such offers. Delivery and payment of the Notes will be made on the issue date.
Any investor who has submitted an order in relation to the Notes and whose order is accepted by the Joint Lead Managers will receive a confirmation by electronic mail, fax or through commonly used information systems setting out its respective allotment of Notes. Before an investor receives a confirmation from the Joint Lead Managers that its offer to purchase Notes has been accepted, the investor may reduce or withdraw its purchase order.

There are no conditions to which the offer is subject.

**Admission to trading:** Application has been made to the Luxembourg Stock Exchange for Notes to be listed on the Official List of the Luxembourg Stock Exchange and admitted to trading on the regulated market of the Luxembourg Stock Exchange.

**Estimated total expenses of the issue and/or the offer (including expenses charged to the investor by the issuer or the offerors):** EUR 2,850,000. The investors will not directly be charged any costs, expenses or taxes. Investors must, however, inform themselves about any costs, expenses or taxes in connection with the Notes which are generally applicable in their respective country of residence, including any charges their own depository banks charge them for purchasing or holding securities.

D.2 | **Who is the offeror?**
---|---
The Notes will be publicly offered by the Joint Lead Managers. For details on the Joint Lead Managers, please see section A of this summary.

D.3 | **Why is this prospectus being produced?**
---|---
**Reasons for the offer or for the admission to trading:** The net proceeds from the issue are intended to be used for general corporate purposes, including refinancing of existing financial liabilities of the MTU Group.

**Estimated net proceeds:** EUR 495,150,000

**Conflicts of interest:** The Joint Lead Managers or their respective affiliates have provided from time to time, and expect to provide in the future, investment services to the Issuer and its affiliates, for which the Joint Lead Managers or their respective affiliates have received or will receive customary fees and commissions. There are no interests of natural and legal persons other than the Issuer and the Joint Lead Managers involved in the issue, including conflicting ones that are material to the Issuer.
A. EINLEITUNG UND WARNHINWEISE

Bezeichnung und internationale Wertpapier-Identifikationsnummer (ISIN) der Wertpapiere

EUR 500.000.000 3,00 % festverzinsliche, auf den Inhaber lautende Schuldverschreibungen mit Fälligkeit am 1. Juli 2025 und einer Stückelung von EUR 1.000, ISIN Code: XS2197673747 (die "Schuldverschreibungen").

Identität und Kontaktdaten der Emittentin, einschließlich der Rechtsträgerkennung (LEI)

Die MTU Aero Engines AG (die "Emittentin" oder die "Gesellschaft" und gemeinsam mit ihren konsolidierten Tochtergesellschaften "MTU" oder der "MTU-Konzern") mit Sitz in München, Deutschland. Ihre Geschäftsanschrift lautet Dachauer Straße 665, 80995 München, Deutschland (Telefon: +49 89 1489-0). Ihre Rechtsträgerkennung (LEI) lautet 529900807L67JY81RD65.

Identität und Kontaktdaten der Anbieter, einschließlich der Rechtsträgerkennung (LEI)

Die Schuldverschreibungen werden von der Commerzbank Aktiengesellschaft, der Deutsche Bank Aktiengesellschaft und der HSBC Bank plc (zusammen die "Joint Lead Manager" und jeweils ein "Joint Lead Manager") öffentlich angeboten.

Die Commerzbank Aktiengesellschaft ist eine nach deutschem Recht gegründete und tätige Aktiengesellschaft. Ihre Rechtsträgerkennung (LEI) lautet 851WYGNLUQLFZBSYGB56. Die Commerzbank Aktiengesellschaft ist eine multinationale Universalbank. Die Commerzbank Aktiengesellschaft kann unter ihrer Geschäftsadresse kontaktiert werden: Kaiserstraße 16 (Kaiserplatz), 60311 Frankfurt am Main, Bundesrepublik Deutschland.

Die Deutsche Bank Aktiengesellschaft ist eine nach deutschem Recht gegründete und tätige Aktiengesellschaft. Ihre Rechtsträgerkennung (LEI) lautet 7LTWFZYICNSX8D621K86. Die Deutsche Bank Aktiengesellschaft ist eine multinationale Investmentbank und Finanzdienstleistungsgesellschaft. Die Deutsche Bank Aktiengesellschaft kann unter ihrer Geschäftsadresse kontaktiert werden: Mainzer Landstraße 11-17, 60329 Frankfurt am Main, Bundesrepublik Deutschland.


Identität und Kontaktdaten der zuständigen Behörde, die den Prospekt billigt


Datum der Billigung des Prospekts


Warnhinweise

B. BASISINFORMATIONEN ÜBER DIE EMITTENTIN

B.1 Wer ist die Emittentin der Wertpapiere?

B.1.1 Sitz, Rechtsform, LEI, für sie geltendes Recht und Land der Eintragung

Die MTU Aero Engines AG ist eine nach deutschem Recht gegründete Aktiengesellschaft mit Sitz in München, Deutschland, für die das deutsche Recht gilt. Die Rechtsträgerkennung (LEI) der MTU Aero Engines AG lautet 529900807L67JY81RD65.

B.1.2 Haupttätigkeiten


B.1.3 Hauptanteilseigner

Gemäß den bis zum 18. Juni 2020 eingegangenen Mitteilungen halten die folgenden meldenden Personen mittelbar oder unmittelbar insgesamt die folgenden Stimmrechtsanteile von mehr als 5 % an der Emittentin.

<table>
<thead>
<tr>
<th>Name</th>
<th>Stimmrechtsanteil insgesamt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allianz Global Investors GmbH</td>
<td>5,09 %</td>
</tr>
<tr>
<td>BlackRock, Inc.</td>
<td>7,64 %</td>
</tr>
<tr>
<td>The Capital Group Companies, Inc.</td>
<td>14,62 %*</td>
</tr>
</tbody>
</table>

* Einschließlich Stimmrechten, die The Capital Group Companies, Inc. zugerechnet und von EuroPacific Growth Fund gehalten werden, wie dies der Emittenten mitgeteilt wurde.

B.1.4 Hauptgeschäftsführer

Der Vorstand der Emittentin umfasst derzeit vier Mitglieder. Dabei handelt es sich um Reiner Winkler, Peter Kameritsch, Michael Schreyögg und Lars Wagner.

B.1.5 Abschlussprüfer

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Arnulfstraße 59, 80636 München, Deutschland.

B.2 Welches sind die wesentlichen Finanzinformationen über die Emittentin?


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Daten aus der Konzernbilanz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summe Aktiva</td>
<td>7.765</td>
<td>6.851</td>
<td>8.024</td>
</tr>
</tbody>
</table>

Summe langfristige Vermögenswerte .................  4.155  3.716  4.183\(^{(1)}\)
Summe kurzfristige Vermögenswerte .................  3.610  3.135  3.841\(^{(1)}\)
Summe Eigenkapital .............................................  2.421  2.144  2.438
Summe langfristige Schulden .........................  2.130  1.902  2.197\(^{(1)}\)
Summe kurzfristige Schulden .........................  3.214  2.804  3.389\(^{(1)}\)
Netto-Finanzverschuldung (ungeprüft)\(^{(2)}\) .............  961  854  943

<table>
<thead>
<tr>
<th>Daten aus der Konzern-Gewinn- und Verlustrechnung</th>
</tr>
</thead>
<tbody>
<tr>
<td>Umsatzerlöse .................................................</td>
</tr>
<tr>
<td>Ergebnis vor Finanzergebnis, Steuern, Abschreibungen und Amortisationen (EBITDA) (ungeprüft)(^{(1x3)})</td>
</tr>
<tr>
<td>Bereinigtes Ergebnis vor Finanzergebnis und Steuern (EBIT bereinigt)(^{(3)})</td>
</tr>
<tr>
<td>Ergebnis vor Finanzergebnis und Steuern (EBIT)(^{(3)})</td>
</tr>
<tr>
<td>Ergebnis vor Steuern (EBT)(^{(3)})</td>
</tr>
<tr>
<td>Bereinigtes Ergebnis nach Ertragsteuern (ungeprüft)(^{(3)})</td>
</tr>
<tr>
<td>Ergebnis nach Ertragsteuern ...................................</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daten aus der Konzern-Kapitalflussrechnung</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cashflow aus betrieblicher Tätigkeit ...........</td>
</tr>
<tr>
<td>Cashflow aus Investitionstätigkeit ..........</td>
</tr>
<tr>
<td>Free Cashflow (ungeprüft)(^{(4)}) ...............</td>
</tr>
<tr>
<td>Cashflow aus Finanzierungstätigkeit ..........</td>
</tr>
</tbody>
</table>


\(^{(2)}\) Die Gesellschaft definiert die Netto-Finanzverschuldung als den Saldo aus den Brutto-Finanzschulden und dem Finanzvermögen (wie unten angegeben). Die Gesellschaft weist ihre Netto-Finanzverschuldung und bereinigte Ergebnisse und Ergebnisse nach ab, die Kennzahl ihrer Ansicht nach eine hilfreiche Kennzahl ist, um den Erfolg der Steuerung der operativen Geschäftstätigkeit zu messen. Die Gesellschaft definiert das Ergebnis vor Zinsen, Steuern, Abschreibungen und Amortisationen (EBITDA) als Ergebnis nach Er-

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>EBIT bereinigt</td>
<td>(geprüft, soweit nicht anders angegeben)</td>
<td>(ungeprüft)</td>
</tr>
<tr>
<td>Bereinigungen (ungeprüft)(a)</td>
<td>-51</td>
<td>-51</td>
</tr>
<tr>
<td>Davon &quot;Sondereinfluss aus der Kaufpreisallokation&quot;</td>
<td>-21</td>
<td>-21</td>
</tr>
<tr>
<td>Davon &quot;Sondereinfluss aus der IAE-V2500-Anteilserhöhung&quot;</td>
<td>-30</td>
<td>-30</td>
</tr>
<tr>
<td>Ergebnis vor Finanzergebnis und Steuern (EBIT)</td>
<td>706</td>
<td>620</td>
</tr>
<tr>
<td>Finanzergebnis</td>
<td>-39</td>
<td>-13</td>
</tr>
<tr>
<td>Ergebnis vor Steuern (EBT)</td>
<td>667</td>
<td>607</td>
</tr>
<tr>
<td>Ertragsteuern</td>
<td>-178</td>
<td>-154</td>
</tr>
<tr>
<td>Ergebnis nach Ertragsteuern</td>
<td>488</td>
<td>453</td>
</tr>
<tr>
<td>Bereinigungen am Ergebnis nach Ertragsteuern (ungeprüft)</td>
<td>-49</td>
<td>26</td>
</tr>
<tr>
<td>Davon &quot;Sondereinfluss aus der Kaufpreisallokation&quot;</td>
<td>-21</td>
<td>21</td>
</tr>
<tr>
<td>Davon &quot;Sondereinfluss aus der IAE-V2500-Anteilserhöhung&quot;</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Davon Bereinigung zur Anpassung des Finanzergebnisses auf das Zinsergebnis (ungeprüft)</td>
<td>7</td>
<td>-2</td>
</tr>
<tr>
<td>Davon Bereinigung zur Anpassung der Ertragsteuern auf normalisierte Ertragsteuern (ungeprüft)</td>
<td>-9</td>
<td>-24</td>
</tr>
<tr>
<td>Bereinigtes Ergebnis nach Ertragsteuern (ungeprüft)</td>
<td>538</td>
<td>-479</td>
</tr>
</tbody>
</table>


Die folgende Tabelle enthält eine Überleitung von EBITDA auf EBIT:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>EBITDA (ungeprüft)</td>
<td>965</td>
<td>821</td>
</tr>
<tr>
<td>Amortisationen/Fortschreibungen/Abschreibungen/Wertminderungen</td>
<td>-260</td>
<td>-201</td>
</tr>
<tr>
<td>Ergebnis vor Finanzergebnis und Steuern (EBIT)</td>
<td>706</td>
<td>620</td>
</tr>
</tbody>
</table>

(4) Die Gesellschaft ermittelt den Free Cashflow aus der Kombination der Cashflows aus betrieblicher Tätigkeit und aus Investitionsaktivität, wobei der Cashflows aus Investitionsaktivität auch Komponenten (Zahlungssondereinflüsse) enthält, die nicht dem operativen Kerngeschäft zurechnen sind (wie unten angegeben). Die Gesellschaft weist ihren Free Cashflow aus, weil diese Kennzahl ihrer Ansicht nach die Liquiditätszustände des MTU-Konzerns verdeutlicht. Der Free Cashflow ist kein nach
den IFRS anerkannter Leistungsindikator. Der von der Gesellschaft berichtete Free Cashflow ist nicht unbedingt mit den von anderen Unternehmen als Free Cashflow oder mit einer ähnlichen Bezeichnung berichteten Leistungskennzahlen vergleichbar. Die folgende Tabelle enthält eine Überleitung auf den Free Cashflow:

<table>
<thead>
<tr>
<th>Geschäftsjahr zum 31. Dezember</th>
<th>Quartal zum 31. März</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in Mio. EUR)</td>
<td></td>
</tr>
<tr>
<td>(geprüft, soweit nicht anders angegeben)</td>
<td>(ungeprüft)</td>
</tr>
<tr>
<td>Cashflow aus betrieblicher Tätigkeit</td>
<td>832 595 149 202</td>
</tr>
<tr>
<td>Cashflow aus Investitionstätigkeit</td>
<td>-472 -336 -80 -50</td>
</tr>
<tr>
<td>Zahlungssondereinflüsse (ungeprüft)</td>
<td>-2 -56 0 0</td>
</tr>
<tr>
<td>Davon Akquisitionzahlungen für Programmabteilungen (ungeprüft)</td>
<td>29 23 0 1</td>
</tr>
<tr>
<td>Davon Einzahlungen im Zusammenhang mit einenbringen Flugzeug- und Triebwerksfinanzierungen (ungeprüft)</td>
<td>-31 -79 0 -11</td>
</tr>
<tr>
<td>Free Cashflow (ungeprüft)</td>
<td>358 203 69 141</td>
</tr>
</tbody>
</table>

B.3 Welches sind die zentralen Risiken, die für die Emittentin spezifisch sind?

- MTU ist in der sehr wettbewerbsintensiven Branche der Flugzeugtriebwerksmodule und -komponenten tätig. MTU ist in jedem Aspekt ihrer Geschäftstätigkeit, einschließlich des Original Equipment Manufacturing (OEM) und der zivilen Wartungs-, Reparatur- und Überholungsdienstleistungen (MRO), dem Wettbewerb zwischen Marktteilnehmern ausgesetzt.

- Das zivile Geschäft von MTU unterliegt zyklischen Schwankungen, da es durch die allgemeine Lage des weltweiten gesamtwirtschaftlichen Umfelds beeinflusst wird. Es wird außerdem durch die Nachfrage nach Lufttransport und den finanziellen Verhältnissen der zivilen Luftfahrtbranche beeinflusst.


- Entwicklungen auf dem zivilen MRO-Markt können sich nacheilig auf die Entwicklung des zivilen MRO-Geschäfts von MTU auswirken.


- Die Anstrengungen von MTU im Bereich Forschung und Entwicklung sind möglicherweise nicht erfolgreich, falls sie den Kundenbedürfnissen nicht kosteneffektiv oder zeitnah gerecht werden.

- Die sogenannten „risk and revenue sharing partnerships ("RRSP")-Verträge von MTU setzen MTU erheblichen Risiken aus, einschließlich des Mangels an Kontrolle über die Geschäfte, die Gegenstand der RRSP sind, sowie Verlusten aus Vorlaufkosten für Konstruktion und Entwicklung, Kostensteigerungen, Gewährleistungen, Garantien und Strafen.

- Die Konstruktion und Entwicklung von Luftfahrtprodukten sind sehr stark reguliert; die Nichteinhaltung geltender Rechtsvorschriften könnte den Umsatz von MTU beeinträchtigen oder dazu führen, dass MTU zusätzliche Kosten für die Einhaltung der Rechtsvorschriften entstehen.

- Ein Rückgang bei den Verteidigungsausgaben in Deutschland oder anderen europäischen Ländern oder veränderte Finanzierungsprioritäten können die Verkäufe von Triebwerksmodulen und -bauteilen durch MTU im militärischen Bereich beeinträchtigen und die Umsätze von MTU schmälern und die Kosten steigern.

- Änderungen der Erwartungen hinsichtlich des Wachstums des Luftverkehrs und der Flugzeugindustrie oder eine Verschlechterung der Verkaufszenahlen von Flugzeugen können zu erheblichen Beeinträchtigungen oder weiteren Anpassungen der Annahmen und Schätzungen führen, die der Bewertung der Vermögenswerte und Verbindlichkeiten der MTU und der Darstellung der Finanzlage der MTU zugrunde liegen.

- Weil die Vermögenswerte, Verbindlichkeiten, Umsatzerlöse und Kosten von MTU auf verschiedene Währungen lauten, ist MTU anfällig für Wechselkursschwankungen.
<table>
<thead>
<tr>
<th>C. BASISINFORMATIONEN ÜBER DIE WERTPAPIERE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C.1</td>
<td>Welches sind die wichtigsten Merkmale der Wertpapiere?</td>
</tr>
<tr>
<td>C.1.1</td>
<td>Art, Gattung und ISIN</td>
</tr>
<tr>
<td>Die Schuldverschreibungen sind nicht nachrangige, nicht besicherte, festverzinsliche Schuldverschreibungen und sind eindeutig gekennzeichnet durch ISIN: XS2197673747, Common Code: 219767374, WKN: A289QD.</td>
<td></td>
</tr>
<tr>
<td>C.1.2</td>
<td>Währung, Stückelung, Anzahl der begebenen Wertpapiere und Laufzeit</td>
</tr>
<tr>
<td>C.1.3</td>
<td>Mit den Wertpapieren verbundene Rechte</td>
</tr>
<tr>
<td>Negativverpflichtung:</td>
<td>Die Schuldverschreibungen sehen eine Negativverpflichtung vor.</td>
</tr>
<tr>
<td>Kündigunggründe:</td>
<td>Die Schuldverschreibungen sehen Kündigungsgründe vor, die die Anleihegläubiger berechtigen, die sofortige Rückzahlung der Schuldverschreibungen zu ihrem Nennbetrag zu verlangen (in einigen Fällen vorbehaltlich der Vorgabe, dass Anleihegläubiger, die mindestens 10 % des gesamten Kapitalbetrags der dann ausstehenden Schuldverschreibungen repräsentieren, ihre Schuldverschreibungen fällig gestellt haben).</td>
</tr>
<tr>
<td>Kontrollwechsel:</td>
<td>Bei Eintritt bestimmter Kontrollwechselereignisse sind die Anleihegläubiger berechtigt, die Rückzahlung ihrer Schuldverschreibungen zum Nennbetrag zuzüglich aufgelaufener und noch nicht gezahlter Zinsen zu verlangen.</td>
</tr>
<tr>
<td>Geltendes Recht:</td>
<td>Die Schuldverschreibungen unterliegen deutschem Recht.</td>
</tr>
<tr>
<td>C.1.4</td>
<td>Rang der Wertpapiere in der Kapitalstruktur der Emittentin im Fall einer Insolvenz</td>
</tr>
<tr>
<td>Die im Rahmen der Schuldverschreibungen bestehenden Verpflichtungen begründen nicht nachrangige und nicht besicherte Verbindlichkeiten der Emittentin, die untereinander und mit allen anderen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Emittentin gleichrangig sind, soweit diesen Verbindlichkeiten nicht durch zwingende gesetzliche Bestimmungen ein Vorrang eingeräumt wird.</td>
<td></td>
</tr>
<tr>
<td>C.1.5</td>
<td>Beschränkungen der freien Handelbarkeit der Wertpapiere</td>
</tr>
<tr>
<td>Nicht anwendbar. Die Schuldverschreibungen sind frei übertragbar.</td>
<td></td>
</tr>
<tr>
<td>C.2</td>
<td>Wo werden die Wertpapiere gehandelt?</td>
</tr>
<tr>
<td>Die Emittentin hat die Zulassung der Schuldverschreibungen der Emittentin zum Handel am Regulierten Markt der Luxemburger Börse (&quot;Bourse de Luxembourg&quot;) und zur Notierung in der Official List der Luxemburger Börse beantragt.</td>
<td></td>
</tr>
<tr>
<td>C.3</td>
<td>Welches sind die zentralen Risiken, die für die Wertpapiere spezifisch sind?</td>
</tr>
<tr>
<td>• Der Marktwert der Schuldverschreibungen könnte sich verringern, wenn sich die Bonität des Emittenten verschlechtert oder als verschlechtert empfunden wird.</td>
<td></td>
</tr>
<tr>
<td>• Die Schuldverschreibungen stellen eine Neuemission von Wertpapieren dar, für die es derzeit keinen etablierten Handelssatz gibt. Es kann nicht garantiert werden, dass sich ein Markt für die Schuldverschrei-</td>
<td></td>
</tr>
</tbody>
</table>
Die Schuldverschreibungen sind mit spezifischen Risiken verbunden, die für festverzinsliche Schuldverschreibungen typisch sind. Daher ist jeder Anleihengläubiger dem Risiko ausgesetzt, dass der Kurs der Schuldverschreibungen aufgrund von Änderungen der Marktzinssätze fallen kann.

Zulassung zum Handel: Bei der Luxemburger Börse wurde die Notierung der Schuldverschreibungen in der Official List der Luxemburger Börse und die Zulassung zum Handel am Regulierten Markt der Luxemburger Börse beantragt.


Gründe für das Angebot bzw. für die Zulassung zum Handel: Der Netto-Emissionserlös soll für allgemeine Unternehmenszwecke verwendet werden, unter anderem zur Refinanzierung von bestehenden Finanzverbindlichkeiten des MTU-Konzerns.

Geschätzter Nettoerlös: EUR 495.150.000

Interessenkonflikte: Die Joint Lead Manager oder ihre jeweiligen verbundenen Unternehmen haben der Emittentin und deren verbundenen Unternehmen gelegentlich Wertpapierdienstleistungen erbracht und werden dies voraussichtlich auch künftig tun, für die die Joint Lead Manager oder deren jeweilige verbundene Unternehmen marktübliche Gebühren und Provisionen erhalten haben oder erhalten werden.

Mit der Emission sind keine Interessen natürlicher oder juristischer Personen mit Ausnahme der Emittentin und der Joint Lead Manager verbunden, einschließlich kollidierender, für die Emittentin wesentlicher Interessen.
RISK FACTORS

Before deciding to purchase the Notes, investors should carefully review and consider the following risk factors and the other information contained in this Prospectus (including any document incorporated by reference) or any supplement to this Prospectus. The occurrence of one or more of the risks described below alone or in combination with other circumstances may have a material adverse effect on the business, cash flows, results of operations and financial conditions of the Issuer and the MTU Group. Moreover, if any of these risks materialize, the market value of the Notes and the likelihood that the Issuer will be in a position to fulfill its payment obligations under the Notes may decrease, in which case the holders of the Notes (the "Noteholders") could lose all or part of their investment. Additional risks and uncertainties, which are not currently known to the Issuer, or which the Issuer currently believes are immaterial, could likewise impair the business operations of the Issuer or the MTU Group and have a material adverse effect on the business, cash flows, financial condition and results of operations.

The following risk factors are organized in categories depending on their respective nature. The order in which the risks are presented in each category reflects, in the Issuer's current view, the likelihood of their occurrence and the magnitude of their potential impact on the business, cash flows, results of operations and financial condition of the MTU Group.

Words and expressions defined in the section "Terms and Conditions" shall have the same meanings in this section of the Prospectus.

Risks related to the Issuer and the MTU Group

I. Market Risks

MTU operates in a highly competitive industry.

The industry of aero engine modules and components is characterized by intense competition among market participants. MTU faces this competition in each aspect of the business in its two segments Commercial and military engines business ("OEM") and commercial maintenance business ("MRO").

In its OEM segment, MTU participates in aero engine programs offered by its OEM partners to manufacturers of commercial and military aircraft as well as to airlines and governments. Some of those programs face competition from other aero engine programs for installation on the same type of aircraft. Accordingly, success of MTU is partly dependent upon the ability of its OEM partners to win business from manufacturers, airlines and governments for engine programs in which MTU participates. MTU also faces competition for involvement in aero engine programs from other engine module and component manufacturers (some of which are highly specialized and may offer a directly competing technology) as well as from the OEMs themselves which may choose to source components and parts in-house rather than by purchasing them from MTU.

In addition to competition in the aero engine business, MTU faces competition in the aftermarket business of its OEM segment with respect to the sale of engine parts and components. Aftermarket sales are critical to MTU as the success of its participation in engine programs across the entire lifecycle largely relies on them. Among MTU's competitors in this business are suppliers of Part Manufacturer Approval ("PMA") parts, as well as Designated Engineering Representatives ("DER") who conduct repairs. PMA parts are nearly identical in design and functionality to original parts supplied by the respective engine programs MTU participates in and approved for use as modification and replacement articles by the Federal Aviation Authority (the "FAA"). Singular major carriers continue to leverage the use of PMA parts as an OEM alternative. In the past, PMA parts suppliers have been
MTU also faces competition in its MRO segment which comprises activities in the fields of commercial maintenance, repair and overhaul. MTU is an independent provider of MRO services and therefore competes against in-house MRO service providers of airlines which are affiliated with many of its potential customers. MTU's other main competitors are maintenance service units of the OEMs. OEMs have the ability to link their service contracts with airlines to the sale of engines, and hence have a competitive advantage over MTU in this field. The commercial MRO sector has seen a significant increase in the market share enjoyed by OEMs, and OEMs have been particularly successful in negotiating for long-term MRO service agreements (typically for a duration of about ten years) in connection with new engine sales securing customer retention with regard to aftermarket products and services.

The principal competitors of MTU in its commercial business and military business are the major OEMs, GE Aviation, Pratt & Whitney, Rolls-Royce and Safran Aircraft Engines. Other key competitors include IHI Corporation ("IHI"), GE Avio, GKN Aerospace and Industria de Turbo Propulsores, S.A. ("ITP"). Providers of components and parts have traditionally competed on the basis of cost, technology, quality and service. The Company believes that developing and maintaining a competitive advantage will require continued significant investment in product development, technology, engineering, programs, sales and marketing. However, MTU's competitors may have greater resources. The competitors may therefore outcompete MTU due to their ability to adapt more quickly to new or emerging technologies and changes in customer requirements. The competitors of MTU may also be able to devote greater resources to the promotion and sale of their products. Such competition may lead to a situation in which MTU may not have sufficient resources to make the necessary investments to allow itself to compete successfully. In addition to risks associated with the competition of MTU with existing competitors, new competitors could enter the market served by MTU’s commercial business and military business and intensify competition among market participants.

Any of these factors could materially adversely affect MTU’s business, cash flows, results of operations and financial conditions.

The commercial business of MTU is cyclical and sensitive to demand for air transportation and the financial condition of the commercial airline industry.

In its commercial business, MTU competes in the aero engine module and component segment of the aerospace industry. This business is cyclical as it is affected by the general state of the global macroeconomic environment (including currency exchange rates and the commodity price situation). It is also sensitive to demand for air transportation and the financial condition of the commercial airline industry as a whole or of certain market participants in the industry, and other economic factors that affect the demand for air traffic.

Trends in the European and the global economy could adversely affect the aero engine module and component segment of the aerospace industry. The economy could be negatively affected by lower global growth. In the "OECD Economic Outlook" of 10 June 2020, the Organisation for Economic Cooperation and Development (OECD) projected a year-on-year decline in global real GDP by 6% for 2020 due to the economic disruption as a result of the outbreak of the novel coronavirus 2019-nCoV ("COVID-19") based on a scenario which assumes that a further second spread of COVID-19

successfully competing for the spare parts business of MTU's program participation with respect to individual, typically more mature engine programs. MTU continues to face competition from PMA parts suppliers in the future. Besides competition from PMA part suppliers, MTU faces competition also from DER repairs. A DER repair is regarded as an alternative for the aftermarket. It is a process which meets all specifications for development, performance, liability and safety, and is usually developed by independent parts repair specialists and also approved by the FAA.
is avoided. The economy could also be negatively affected by increased protectionist measures in some economies (including measures imposed as a response to COVID-19), and the high level of sovereign debt, as well as the monetary policies pursued by central banks (in particular European and U.S. interest rate policies). Furthermore, political crises in some regions as well as air travel restrictions as a result of terrorist attacks, natural disasters or material health concerns (such as the current global COVID-19 crisis) can further affect the global economy and the economic condition of the commercial airline industry. A stagnating or deteriorating economic performance of the European or global economy is likely to also affect the aerospace industry and its aero engine module and component segment include the business in which MTU operates.

A deterioration of the macroeconomic environment affects passenger airline demand for the production of new aircraft which is a key driver for the business of MTU with respect to new commercial aero engines. Therefore, the demand for commercial aero engine products of MTU is affected by passenger volume growth and, consequently, the forecasted demand for seats, flights and routes within the industry and the ability of airlines to finance the purchase of new aircraft. The market of commercial engines may also be negatively impacted if commercial airlines experience financial difficulties, in particular as a result of competitive pressure in the aviation market.

Demand for new aircraft is also dependent on size and age of the worldwide commercial aircraft fleet as well as the number of parked aircraft. An increasing number of parked aircraft will adversely affect demand for MTU's commercial aero engine products and services.

Such factors, in conjunction with evolving economic conditions, cause the market in which MTU operates to be cyclical to varying degrees, thereby affecting MTU’s business, cash flows, results of operations and financial conditions.

MTU faces risks associated with the outbreak and spread of COVID-19 and the implications of this global pandemic on the global economy, the air transportation, commercial airline as well as aircraft and flight engine industry.

The global economy can also be materially adversely affected as a result of a pandemic, such as the current global outbreak of COVID-19. Due to the unprecedented situation related to the COVID-19 pandemic and the uncertainty regarding the further duration and magnitude of the pandemic, the Company’s ability to adequately predict and plan its business, in particular in the short and mid-term is severely limited. Even though it consults with governmental authorities on a national and international level, the Company could fail to adequately predict the impact of the COVID-19 pandemic on its business and any such failure could materially adversely affect MTU’s business, cash flows, results of operations and financial conditions.

Specific risks associated with a global spread of COVID-19 include, for example, further or extended travel restrictions not only affect the volume of passenger and freight air traffic, but also have a negative impact on demand for aircraft spare parts and maintenance services. Significantly reduced demand for passenger and freight air transport will also result in a more cautious approach of customers of MTU as regards new product and service orders, which could lead to significant deferrals or order cancellations.

COVID-19 implications could materially adversely affect MTU’s commercial flight engine program participations, implying adverse affects on recoverability of MTU’s corresponding asset-positions (i.e. impairment losses) or increase corresponding (contingent) liabilities resulting from MTU’s stakes and obligations as associate of risk and revenue partnerships ("RRSP").

The COVID-19 pandemic may also lead to further operational challenges within the MTU Group due to MTU’s need to protect the health and safety of its employees, the shutdown of sites in production
and research and development ("R&D") and disruptions in its workplaces. MTU's operations could also continue to be negatively affected by governmental restrictions on movement of people, raw materials and goods to, from and at the facilities of MTU and its suppliers or customers.

MTU may also be indirectly affected by the impact the COVID-19 pandemic has on its suppliers. Some of MTU's suppliers may continue to suspend their operations as a result of governmental restrictions, and hence face additional disruptions and challenges to their businesses in the short- to mid-term. Therefore, MTU could face risks related to costs required to meet the contractual commitments it has itself, as well as risks related to its product delivery schedules.

As a long-term implication of the COVID-19 pandemic, MTU could be confronted with more rapid changes in usage patterns of or regulations for air traffic which could adversely affect its business model. A public discussion regarding the social and economic impact of aircraft usage for passenger and freight traffic has already emerged as a result of the ongoing global climate debate. This has led to an increased level of awareness of individuals and corporations as regards travel and consumption behavior. The implementation of potential changes in usage patterns and applicable regulations may be accelerated and intensified as a result of the experiences made during the COVID-19 pandemic, for example, replacement of business travel by online video conferencing. Should reduced travel activity and an adjusted consumption behavior be regarded as socially more desirable by the public, the business model of MTU could also be materially adversely affect.

All of these risks could materially adversely affect MTU's business, cash flows, results of operations and financial conditions. **MTU is heavily dependent on certain customers.**

In the fiscal year ended 31 December 2019 two of MTU Group's major customers each accounted for more than 10% of the MTU Group's revenue. MTU's four largest customers in the fiscal year ended 31 December 2019 were the (i) IAE LLC consortium ("IAE LLC") and (ii) the IAE AG consortium ("IAE AG") (both IAE LLC and IAE AG are joint ventures of Pratt & Whitney (a division of Raytheon Technologies), the Company and Japanese Aero Engines Corp.), (iii) GE Aviation and (iv) Pratt & Whitney. These four customers together accounted for the majority of MTU Group's revenue in the fiscal year ended 31 December 2019. If any of these and other OEM customers and alliances in which MTU participates were unable to win or less successful in winning aero engine business this would have a direct effect on MTU's revenue.

MTU has also entered into long-term collaboration and cooperation agreements with various OEMs and other market participants. These agreements are terminable at any time or at short notice in certain circumstances, such as changes to the Company's shareholder structure, all of which are beyond the control of the Company. The loss of any of MTU's major customers could materially adversely affect MTU's business, financial condition or results of operations.

Even though the Company believes that defense budgets are more likely to increase in the future, MTU's military business is substantially dependent on the German, other European and U.S. governments' continuing commitment to their military procurement programs.

**Developments in the commercial MRO market may adversely affect the performance of MTU's commercial MRO Business.**

Some sectors of the commercial MRO market in which MTU operates experience difficult conditions. Market conditions may remain difficult in future due to factors that are beyond the control of the Company. The following factors may adversely affect the success of the commercial MRO Business of MTU:
• Due to a prevailing overcapacity of providers of MRO services MTU may not be able to compete effectively in this market. This could negatively affect the profit margins achieved in this business unit;

• Demand for MRO services is linked to aircraft utilization and may be significantly reduced during downturns in passenger travel and freight air traffic;

• The client base in the MRO segment is characterized by only a limited number of large individual customers, and a loss of any of those customers could negatively affect the revenue generated by this business;

• Some of the engine programs in the MRO business have reached an advanced stage of their lifecycle which could lead to MRO's product portfolio becoming over-focused on aging products and technologies;

• OEMs endeavor, and may continue to endeavor, to secure agreements pursuant to which a greater portion of maintenance is performed at their in-house units, in particular because some of these units are affiliated with their potential customers. A significant shift towards in-house units would reduce the opportunities for third-party service providers like MTU to compete for this business;

• MTU is party to so-called "Fly by the Hour" and "Power by the Hour" agreements under which MTU agrees to perform maintenance services on engines at prices based on utilization rates. Furthermore, under these agreements MTU effectively assumes the risk of increased maintenance and overhaul costs. MTU may face losses in connection with these agreements as its underlying pricing models require complex analysis of performance conditions when bidding for long-term agreements (including assumptions on future engine usage and shop visit rates). In case assumptions made by MTU prove to be inaccurate the margins of MTU may be negatively affected; and

• Even though in its MRO business the account managers monitor and manage credit risks, MTU has experienced, and may continue to experience, delays in the collection of, or losses with respect to, receivables from certain of its MRO customers.

The foregoing factors, many of which are beyond the control of the Company, may have a material adverse effect on MTU's business, cash flows, results of operations and financial conditions.

Technological changes to aircraft propulsion systems, including a trend towards electric propulsion systems, could adversely affect the attractiveness of MTU’s product portfolio to its customers.

MTU’s product portfolio is largely geared towards conventional engine technologies and hence faces substitution risks associated with the introduction of electric propulsion systems for aircrafts. These systems include propulsion powered by or in connection with electric motors, batteries and in particular fuel cells. Electric propulsion systems for aircraft are currently not capable to power large passenger or freight aircraft, but may become so in the future.

In case of increased regulatory intervention or customer driven demand for electric or other alternative propulsion systems, the current product portfolio of MTU may no longer be as attractive to its customers. This may result in lower sales of products from MTU's current portfolio and may not be compensated by an alternative offering of MTU, if MTU fails to adapt to such new technologies. As a
consequence, MTU’s business, cash flows, results of operations and financial conditions could be materially adversely affected.

**MTU faces risks with respect to potential future M&A activity and establishment of new sites.**

The Company may pursue M&A activities in the future that it believes will present opportunities to realize synergies or cost savings and increase its market position. Any M&A activity could result in the incurrence of additional debt and an increase in interest expense for MTU. Pursuing M&A activities, as any form of MTU’s corporate strategy, may lead to the materialization of strategy risks such as management misjudgment in connection with those projects. M&A risks are numerous and include difficulties in the integration of operations, technologies, services and products of the acquired companies. Pursuing M&A activities may also lead to distraction of management attention among MTU’s management from other business priorities. MTU may also decide to establish new sites or expand sites it currently operates. The establishment of new sites is based on management's assumptions and forecasts, and takes into account the prevailing conditions at the respective time. Due to its nature these decisions may be associated with management misjudgment. Furthermore, in case of a change in the relevant environment, such as the economic, regulatory or political factors, the establishment of new sites may no longer be desirable and decisions may have to be adjusted. For all these reasons, if any such possible M&A activity is pursued or new sites are established or expanded, MTU’s business, cash flows, results of operations and financial conditions could be materially adversely affected.

**II. Operational Risks**

**MTU is exposed to procurement and supply risks.**

MTU purchases individual parts and components, finished products, specific services and some raw materials from suppliers and third-party vendors. MTU is highly dependent on the availability of such supplies, some of which may be available only from limited sources or a single source.

Also, many of the suppliers of MTU have limited production capacity and require long lead times for the production of goods (particularly for items such as highly complex forgings and castings). This, in turn, requires MTU to accurately project its future demand for these items. Should MTU’s requirements exceed the quantities available from its current suppliers, MTU may be unable to obtain alternative supplies at reasonable prices or at all as the current suppliers of MTU are the only practicable source for the relevant products.

Besides the dependency on quantitative abilities of its suppliers, MTU is also dependent upon the ability of its suppliers to meet specifications, quality standards and delivery schedules for the components, finished products, services and raw materials they provide. Even though MTU typically deploys employees on site with some of its suppliers, delays at MTU’s suppliers may nonetheless arise, in particular when production for new, high-volume programs is ramped up, or in the context of new production processes or introduction of new workflow systems. Each of those delays may negatively affect agreed delivery schedules and deadlines.

The supplier base of MTU for purposes of commercial and military aero engine manufacturing is widely spread. The top five suppliers by direct purchasing volumes are PCC-Minerva Division, Howmet Turbine Components, Arconic Howmet Castings, WYMAN GORDAN Forgings Inc. and Otto Fuchs KG, with an aggregated share of about a quarter of MTU’s supplier volume for aero engine manufacturing based on management estimates of the Company.

The largest suppliers of MTU for commercial MRO are IAE LLC, IAE AG, GE Aviation and Aviall. Purchases of goods from these suppliers represent a majority of MTU’s purchases from suppliers for commercial MRO based on management estimates of the Company.
If any risk associated with MTU's procurement and supply exposure materializes, production schedules, reputation and profitability as well as its business, cash flows, results of operations and financial conditions could be materially adversely affected.

**MTU’s research and development efforts may not be successful.**

The success of MTU depends on its R&D activities, most of which are carried out in its OEM segment. MTU funds its R&D expenses from own funds, government funding and, to a very limited extent, contributions of its commercial customers. The R&D activities may fail to meet the needs of customers on a cost-effective or timely basis.

In the fiscal year ended 31 December 2019, total R&D expenses (including customer-funded expenses and expenditure meeting the recognition criteria for assets) amounted to 4.6% of MTU Group's revenue. However, the Company cannot assure that the capital expended on these efforts will create sales opportunities or lead to productivity increases that are commensurate with the level of resources invested. In addition, MTU may develop specific technologies and capabilities in anticipation of customers pursuing new programs with a focus to improve overall engine efficiency as a means of reducing the fuel consumption as well as emissions. If any of such programs do not proceed at all or are significantly delayed, MTU may be unable to recover its R&D costs and the related capital expenditure incurred in anticipation of such programs. If MTU is unable to recover these costs or expenditure or if any such programs do not progress as expected, MTU's business, cash flows, results of operations and financial conditions could be materially adversely affected.

Some of MTU’s development activities are also conducted in collaborative ventures. Any involvement in these ventures and partnerships spreads the risks associated with R&D beyond MTU's corporate boundaries and is ultimately beyond its control. Should development and production risks materialize with one of MTU’s cooperation partners, MTU may suffer significant adverse economic effects.

With regard to RRSP or similar agreements, a potential inability of MTU to produce the technological or design contribution required could lead to the incurrence of additional costs that are necessary to satisfy such obligations, or MTU could be required to make substantial cash payments under the RRSP in lieu of the technological or design contribution. In addition, MTU may be required to pay penalties to its RRSP partners if it fails to meet delivery schedules or specific development targets.

**MTU faces risks associated with price fluctuations of raw materials.**

MTU uses raw materials for production the prices of which may fluctuate for a variety of reasons, including changes in availability, major capacity additions or reductions, or significant facility operating problems. Potential price fluctuations limit the Company's ability to accurately forecast future raw material costs and hence its manufacturing costs and profitability. MTU is party to various RRSP agreements which are a special type of contractual relationship for the development, production and sale of commercial aircraft engines. Under RRSPs, MTU is not able to pass raw material price increases on to its partners. It may also not be able to pass price increases on to its customers. In contrast, many of MTU's suppliers may be able to pass on a part of the raw material cost increases to MTU.

Any unforeseen raw material price fluctuations could adversely affect MTU's business, cash flows, results of operations and financial conditions.

**MTU depends on key personnel and may not be able to retain those employees or recruit additional qualified personnel.**

The quality of MTU's products and services heavily relies on the personnel MTU is able to recruit and to retain, in particular engineers or other skilled professionals. MTU seeks access to talents and expe-
rienced workers through training programs, dual-study programs, an attractive working environment as well as marketing measures. However, there are few sources for new employees with the requisite skills for many of the key positions within the MTU Group. Competition for such employees has intensified in recent years and may become even more intense in the future. Furthermore, the shortage of skilled workers is expected to be exacerbated by demographic change.

Besides the risk of an inability to attract skilled personnel, MTU faces the risk of losing employees to other employers. The Company believes that some of MTU’s employees have a level of technological expertise that has made them attractive to competitors or other employers. MTU’s success depends on its ability not only to hire but also to retain technically skilled professionals.

The failure to recruit and retain qualified employees may impair MTU’s ability to obtain future contracts and could have a material adverse effect on MTU’s business, cash flows, results of operations and financial conditions.

*Loss or unauthorized manipulation of data stored on MTU’s IT systems may negatively affect its relationship with current and prospective customers, and also lead to potential liability.*

MTU stores and processes critical customer- and product-related data on its IT systems. Safeguarding data is of particular relevance for MTU’s customers in its military business. Despite substantial investment in data protection technology there can be no assurance that MTU will not face theft or unauthorized manipulation of confidential data as a result of industrial espionage and data loss due failure of its IT systems.

Any data theft, unauthorized manipulation or loss could negatively affect the relationships of MTU with its current and prospective customers, in particular with regard to data-security sensitive customers in the military business. It could also expose MTU to liability. Any such data incidents may have a material adverse effect on MTU’s business, cash flows, results of operations and financial conditions.

**III. Risks associated with Collaborations and Partnerships**

*MTU’s RRSP contracts expose MTU to significant risks, including a lack of control over the activities covered by the RRSP and losses arising from up-front design and development costs, cost overruns, warranties, guarantees and penalties.*

In its commercial business, MTU is party to a number of RRSP contracts with OEMs relating to the development, production and sale of commercial aircraft engines. OEMs with which RRSP contracts exist include Pratt & Whitney, GE Aviation, IAE LLC and IAE AG. Under RRSP contracts MTU contributes to the development and production of new engine programs. In return MTU is entitled to a share of the revenue generated by sales of engines, components and spare parts.

RRSP contracts are an important means of doing business for MTU, permitting MTU to build long-term relationships with OEMs and to participate in industry-leading engine programs of the major engine manufacturers. However, RRSP contracts are associated with certain risks, in particular:

- The relevant OEM controls the end customer relationship throughout the program lifetime, including with respect to price setting for engines and spare parts, granting concessions (including the financing of engine and aircraft purchases in ways that may ultimately provide for recourse to MTU under the RRSP contract), providing guarantees and establishing and amending warranty and other aftermarket service policies. This allows the OEM to control revenue that will be derived from sales, and in turn limits the Company’s ability to forecast its revenue and profits whenever the OEM decides to depart from any previously agreed pricing, discounting or service policy;
RRSP contracts generally give the OEM broad discretion to control many other aspects of the collaboration, including the right to make program changes (including design changes) that may be at MTU's sole expense; to determine whether to develop new engine models and the allocation of responsibility for any such development; to make adjustments for matters such as excessive overhead expenses or for under- or over-contribution to a program in any year of the contract; and to deal with, defend against or settle claims brought by third parties, including those for which MTU may be liable;

MTU has limited audit rights under RRSPs. As a result, it is not able to fully monitor whether OEMs comply fully with their obligations or exercise their rights in a fair manner;

OEMs may employ repair processes that do not use spare parts of MTU or work with used replacement parts, which would adversely affect spare parts sales;

MTU is required to make significant upfront expenditures to design and develop the components of the engine for which it is allocated design and development responsibility, which expenditures need to be made before any engines have been sold, and hence before there is any certainty about future revenue under the engine program;

similarly, MTU may be required to make upfront payments (so-called "entry fees") to OEMs in order to participate in programs, as compensation for development or other efforts already made by the OEMs. These "entry fees" again become due before there is any certainty for MTU with regard to future revenue under the engine program;

aircraft manufacturers may require OEMs to make upfront payments to participate in new aircraft programs and to cover a percentage of the manufacturer's R&D expenditures. OEMs have begun to pass on some of the costs for such payments to their RRSP partners. MTU is required to effectively contribute to the OEMs' upfront payments to aircraft manufacturers under its RRSP contracts, even though the success of the aircraft and the engine program in which it participates may be uncertain;

the value of MTU's contribution (by way of work in designing, developing and producing engine modules and components) is generally fixed, based on cost assumptions established at the time of entering into the contract (with limited adjustments for design changes or extraordinary changes in the costs of raw materials). Thus, if MTU experiences cost overruns in the development or production of parts for which it is responsible, MTU may not be able to recoup these costs from its program share, and its profits on the engine program may be compromised as a result. If MTU is unable to make the R&D contribution required by the program, or if it is not able to meet the specifications required by the program, MTU may incur additional costs necessary to satisfy such obligations or be required to make up the value of the contribution with cash payments;

because MTU cannot control the activities of the OEM or any other participant in the RRSP, any failure by such other parties to perform their obligations may result in an engine that does not meet customer requirements, for example, as to design or performance of parts. To the extent such failures result in penalties, liquidated damages or other third-party liabilities, MTU is generally responsible for its share of such penalties or liabilities, notwithstanding that it may not be "at fault". Such failure could also lead to a require-
ment to re-design non-conforming parts which would require additional development efforts of other RRSP participants. As a result of these efforts, the development or production shares of the RRSP may be recalculated accordingly which, in turn, could reduce MTU’s share in the RRSP;

- aero engine programs may be delayed as a result of the failure of the OEM or any other participant in the RRSP to perform. MTU would likely experience a delay in revenue from such engine programs, notwithstanding that it has already incurred substantial expenses. Furthermore, the delayed entry to the market may harm an engine's market position. An end customer may decide to terminate the agreement for the purchase of engines in the event of any delays or may claim penalties. To the extent such delays result in penalties, MTU is generally responsible for an amount of those penalties proportional to its share in the RRSP;

- some of the RRSP contracts provide the OEM with the right to cancel the relevant engine program at any time. Any such cancellation would generally be on the basis that each participant in the RRSP will bear its own costs and investments without reimbursement from other RRSP participants. Hence, if an engine program were to be cancelled, MTU would lose all cash contributions that it has made to the program (including "entry fees"), development and production costs and other program contributions; and

- As part of their sales strategy, OEMs frequently offer financing arrangements to their end customers in the form of predelivery payments and backstop commitments. As a result of its participation in engine programs, MTU is a party of such financing agreements and hence has the obligation to participate in the financing of the OEM's commitment according to MTU's share in the RRSP. MTU also assumes liability – again proportionately to its share in the RRSP – with respect to any guarantees provided by the OEM in connection with the financing of new engine sales.

The realization of any one or more of these RRSP contract-associated risks may have a material adverse effect on MTU's business, cash flows, results of operations and financial conditions.

**MTU is party to several collaboration and partnership agreements that prevent it from participating in programs or providing modules and components for aero engines that compete with aero engine programs in which MTU participates, or that could be terminated upon events beyond the control of the Company. These provisions may restrict the future development of MTU’s business.**

MTU is party to agreements related to collaborations and partnerships. In particular with regard to partnerships in the form of joint ventures, a joint decision-making process among the joint venture partners is required. In case a joint decision cannot be agreed upon (for example as a result of disagreements, or cultural and political differences), this may lead to a reduced or slowed down ability to act through the joint venture.

In the commercial business and military business, collaboration agreements prevent MTU from entering into arrangements with third parties in connection with programs that compete with its current aero engine programs. These agreements, which include the General Collaboration Agreement with Pratt & Whitney and many of the RRSPs with OEMs, may also prohibit MTU from providing modules and components to programs relating to aero engines that compete with the relevant aero engines. Competition restrictions may last 20 to 25 years for individual engine programs or for the life of a program. These provisions also link MTU's engine revenue to the success of its partners' programs.
As a result, MTU may not be able to pursue alternative business opportunities than the programs in which MTU currently participates and the future development of the commercial business and military business may thereby be limited. This could materially adversely affect MTU’s business, financial condition or results of operations.

Collaboration and partnership agreements may also contain clauses that give MTU’s counterparty a termination right upon certain change-of-control events. A number of agreements allow for termination or modification if one of MTU’s material competitors acquires a certain percentage of the Issuer’s shares (typically 25-30% of the outstanding shares). The Company is not able to implement measures to avoid that these change-of-control provisions are triggered. Although German securities law requires publication of voting rights notifications, the Company is not in a position to prevent an acquisition of its shares by third parties. In case of a change-of-control event, MTU could lose valuable relationships with its partners, leading to declining revenue.

Collaborations and partnerships also carry risks with regard to the commercial MRO Business of MTU. MTU is dependent on licenses and the know-how of business partners with respect to certain of the MRO services provided by MTU. This dependency exists in particular with respect to components manufactured by other aero engine component manufacturers. MTU obtains the relevant licenses and know-how from its business partners based on long-term agreements. However, these agreements may not be renewed in the future and, consequently, MTU may not be able to generate revenue from MRO services provided under such agreements. In its MRO business, MTU does also not have full control over the joint ventures in which it participates. Although these joint ventures were formed to build long-term relationships with its business partners, there is a risk that such joint ventures will be terminated. In addition, joint ventures may not perform in accordance with MTU’s expectations. Any termination of a joint venture could result in the loss of MTU’s know-how and any competitive advantages based on such know-how.

All of these risks could materially adversely affect MTU’s business, cash flows, results of operations and financial conditions.

IV. Regulatory and Political Risks

The design and development of aviation products is heavily regulated and the failure to comply with applicable laws could affect MTU’s sales or require MTU to incur additional costs to achieve compliance.

Various national and international regulatory bodies for the aviation industry, including the FAA and the European Aviation Safety Agency (the “EASA”; formerly the Joint Aviation Authorities), set standards and qualification requirements for all commercial and general aviation products, including aero engine modules and components. These bodies also approve MRO service providers. If MTU fails to qualify or to obtain a required license for one of its products or services or loses a qualification or license previously granted, the sale of that product or service would be prohibited by law until such license is obtained or renewed. In addition, designing new products to meet existing regulatory requirements and retrofitting installed products to comply with new regulatory requirements can be expensive and time consuming.

From time to time, the FAA, EASA and comparable agencies propose new regulations or changes to existing regulations. Regulations in general as well as new regulations or changes of existing regulations cause an increase in the cost of compliance. For example, as MTU also processes materials such as nickel and cobalt alloys, uses chemical substances in manufacturing processes, and produces emissions, it could become subject to more stringent environmental and occupational safety requirements. To the extent the FAA, EASA or comparable agencies implement regulatory changes, MTU may in-
cur significant additional costs to achieve compliance, which could have a material adverse effect on its business, cash flows, results of operations and financial conditions.

**A decline in German or other European defense budgets or changes in funding priorities may adversely affect MTU’s sales of engine modules and components in the military business and may reduce revenue of MTU and increase its costs.**

MTU’s military business is to a large extent dependent upon the defense budgets of the German and other European governments and their defense funding priorities, which in turn are subject to the overall political landscape. A reduction of national defense budgets may lead to postponements or cancellation of orders. Reduced budgets may also require agreements that have already been concluded to be renegotiated. Thus, if there is an overall decline or alteration of contractual terms regarding national defense spending, MTU’s business, financial condition or results of operations may be adversely affected.

The military sales of MTU (including sales of military aero engines) are also affected by governmental procurement regulations (such as competitive bidding policies) as well as political uncertainties. Changes in such regulations or in the overall political landscape will have an almost immediate effect on MTU’s military business.

The realization of any of these risks may have a material adverse effect on MTU’s military business, which could materially adversely affect its business, cash flows, results of operations and financial conditions.

**Agreements with governments are subject to detailed rules and regulations, and the entry into such agreements can be subject to administrative and legislative delays.**

The military business of MTU may also experience difficulties as governments are significant direct and indirect customers, and MTU as well as the governments are subject to specific rules and regulations regarding the procurement of MTU’s products and services. These rules and regulations may increase the volatility of MTU’s business and lead to increased costs.

MTU supplies modules and components to alliances through which it develops and manufactures aero engines for military aircraft together with its other alliance partners. The customers’ businesses, and by extension, MTU’s business, is affected by the relevant government’s continued commitment to programs under contract with the customers. The terms of defense contracts with governments generally permit the government to terminate contracts at any time in part or in full and with or without cause. Any termination of a significant government contract could have a material adverse effect on MTU’s business, financial condition or results of operations or the business of MTU’s customers that manufacture military aircraft.

The government sales of MTU and MTU’s customers are also subject to government procurement policies which may change due to alleged violations of laws or regulations by MTU. A reduction in expenditures by governments for aircraft using products of MTU, lower margins resulting from increasingly competitive procurement policies, a reduction in the volume of contracts or subcontracts awarded to MTU, or substantial cost overruns would have an adverse effect on MTU’s cash flow and operations. MTU bears the risk that governments may unilaterally suspend customers or MTU itself from new contracts pending the resolution of alleged violations of procurement or other laws or regulations.

The German government is a key customer of MTU. The military procurement process in Germany, however, is highly regulated. Procurement is subject to extensive administrative procedures and it is based upon a regulatory framework of various laws and regulations. Procurement rules and regulations provide for unilateral termination rights in favor of the German Ministry of Defense. The rules
also allow for the deferral of payments by the German Ministry of Defense in accordance with budget appropriations.

For joint military projects, procurement is generally based on agreements between the participating nations, European procurement directives and, for NATO programs, applicable NATO rules.

If MTU fails to qualify under these regulations, or if new and more stringent regulations governing the military aerospace industry were adopted, or industry oversight was heightened, MTU’s business, cash flows, results of operations and financial conditions could be materially adversely affected.

Exports of MTU’s products and services are subject to customs and tax legislation, and its products and services for military aero engines are subject to export and import control regulations and offset obligations may be imposed upon MTU.

The majority of MTU’s products and services get exported and are hence subject to customs and export control laws. These laws govern which products, services or technical data MTU is permitted to sell or pass on to whom, for what purpose and where. The regulations also require MTU to provide precise descriptions, itemizations and accurate declaration of the goods intended for cross-border trade activity. The legal environment for customs and tax may change, and MTU may also be subject to audits and legal proceedings regarding customs and tax matters.

The majority of MTU’s products and services for its military business and commercial business are subject to German, European and U.S. export control regulations. In particular, MTU has to comply with the provisions of the German Foreign Trade Act (Außenwirtschaftsgesetz) and the German War Weapons Control Act (Kriegswaffenkontrollgesetz) which govern the export of certain products, or the export of products to certain countries or persons generally. The most common restrictions on exports are embargos, permit requirements for the export of products and reporting obligations towards the German Office of Foreign Trade (Bundesamt für Außenwirtschaft). Certain services that complement weapons exports, such as technical support, product maintenance and the training of customer employees, are also subject to regulation by the German Foreign Trade Act.

Violations of these regulations may result in heavy sanctions, including penalties, export prohibitions and criminal liability of MTU’s employees. Export control regulations are subject to frequent changes, and recently these regulations have been tightened as a result of political decisions targeting at economic relations with other countries. Future restrictions and changes to export control regulations could adversely impact MTU’s ability to market and export its products, which would have an adverse effect on its business.

Many countries also impose offset obligations on their business partners. These obligations require their business partners to make investments in connection with their business involving exports of MTU’s products. Investments in this context include giving business to local suppliers or facilitating imports of similar products to Germany. Offset obligations may be significant to MTU, and changes to existing offset obligations may adversely affect MTU’s ability to export products or the price of exports, which could materially adversely affect its business.

Any of the above factors could materially adversely affect MTU’s business, cash flows, results of operations and financial conditions.

V. Legal Risks

Product liability claims, including defects in items produced by collaboration partners, and the cost of insurance may adversely affect MTU’s financial conditions.

MTU operates in an environment with potential liability for personal injury, death or damage to property. Liability could arise in particular as a result of the failure of an aircraft component designed, de-
veloped, manufactured or delivered by MTU or any of its RRSP partners, including those related to aftermarket activities.

In the military engine business, MTU is largely exempt from product risk liability. However, in the commercial business MTU is party to consortium and RRSP contracts. Most of those relationships provide that liabilities arising out of third-party claims are borne irrespective of the individual partner’s fault but rather by the consortia or partners in proportion to their respective contribution to the consortium or RRSP. Hence, product liability claims could include claims based on defects in items not produced by MTU. In these RRSP programs the consortium leader typically has the right to settle or resolve third party claims unilaterally on behalf of all program participants. As a result, MTU may face material liability for problems not related to its products’ performance, and MTU may also have little or no control over this liability.

Most of MTU’s RRSP contracts require that insurance is purchased to cover potential liabilities arising out of such arrangements, and MTU makes its participation in these programs subject to such arrangements. This type of insurance is expensive, and in the future may not be available to MTU at reasonable costs. In addition, such insurance generally does not cover all liabilities that could arise under RRSPs, such as penalties arising from delays. Any material liability not covered by insurance or for which sufficient third-party indemnification is not available could have a material adverse effect on MTU’s business, cash flows, results of operations and financial conditions.

**MTU may incur significant costs due to environmental liabilities and contamination not caused by MTU, which could have a material adverse effect on its business, financial condition or results of operations.**

MTU’s facilities and operations are subject to environmental and occupational health and safety laws and regulations in each of the jurisdictions in which it operates. Some of its operations require permits or licenses intended to prevent or reduce pollution, and these permits are subject to renewal, modification, suspension and revocation by issuing authorities. Even though MTU has made, and will continue to make, capital and other expenditures in order to achieve or maintain compliance with these laws and regulations, it may not always be compliant with the current and potential future laws and provisions on the environment and occupational safety, and as a result could be subject to significant fines or penalties, including criminal sanctions, and some of its permits or licenses could be revoked or may not be renewed in the future.

Under some laws, owners and operators of contaminated properties can be held responsible for the cost of investigating and remediating contamination, regardless of whether they caused the contamination. Some of MTU’s facilities have a long history of industrial activity conducted by MTU but other entities as well, and remediation might be required in connection with contamination that occurred prior to MTU’s use of the site. In the future, MTU could incur significant costs if historical or new contamination is discovered at MTU’s facilities or at off-site locations where it sends waste. In addition, the enactment of new laws or stricter enforcement of existing laws may require MTU to make additional expenditures or subject it to unexpected liabilities, which could materially adversely affect MTU’s business, cash flows, results of operations and financial conditions.

**VI. Financial Risks**

*Changes to expectations concerning the growth of air travel and the aircraft industry or a deterioration of the sales number of aircrafts may result in significant impairments or further adjustments in the assumptions and estimates underlying valuation of assets and liabilities of MTU and the presentation of the financial condition of MTU.*

The preparation of consolidated financial statements in accordance with IFRS and consolidated financial information requires the use of assumptions and estimates that affect not only the amounts of as-
sets and liabilities and contingent liabilities and customer financing commitments but also the manner in which these items are reported. These assumptions and estimates correspond to the circumstances at the respective reporting date and therefore also affect the amount of income and expenses recorded in the reporting periods presented.

The assumptions and estimates used in the preparation of the consolidated financial statements and consolidated financial information relate in particular to the MTU Group’s own assessment of the recoverability and therefore value of non-current intangible and other assets and property, plant and equipment, as well as the determination of the amortization and useful lives. The main factors affecting these assumption-based estimates are regularly the expected volume of revenue and their distribution over the course of the engine programs in which MTU has invested or which compete with the latter. Other significant aspects of the financial reporting of the MTU Group are the assumption-sensitive calculations of the fair values of financial instruments, the assessment of the effectiveness of hedging relationships, the measurement of provisions and accruals, and the recognition of deferred tax assets as well as the assessment of the required back-financing of customer financing commitments.

The engine industry is characterized by high levels of investment, both in the form of initial payments to the engine OEM and MTU’s own development activities, at the start of a new engine program. The amortization of these investments must take into account the long-term product life cycles of both the aircraft and, hence, the engine programs. Empirically, it can be observed that the lifetime of successful commercial aircraft engine programs significantly exceeds 30 years. Due to the long product lifecycle, the above-mentioned estimation requirements relate to long-term developments, with the consequence that updated assumptions (including changes in the competitive situation, expectations regarding the growth of air traffic and the aircraft industry, deterioration in aircraft sales figures, which may affect the creditworthiness of the Group’s customers) therefore have a significant impact on the systematic estimates and hence on MTU’s key financial figures.

Due to the COVID-19 pandemic, demand for passenger air transport has decreased significantly in the first half of 2020 and is expected to remain at a low level for the full year 2020. MTU Group’s commercial business is likely to be affected, at least temporarily, by a significant decline in demand, both in the sale of new engines and in the aftermarket business, and by an acceleration of the trend towards a shift towards the use of smaller aircraft on medium-haul routes. The commercial MRO business is likely to be affected by a decline in demand, at least temporarily. The impact of the COVID-19 pandemic on the MTU’s business makes it difficult for the Company to reassess or confirm assumptions and estimates originally based on conditions and assessments prior to the COVID-19 pandemic in individual cases, as estimates and assessments are based on assumptions that relate to currently available information about macroeconomic factors, microeconomic factors in the aviation industry and certain suppliers and customers, and expectations about their development. Changes in these assumptions and estimates could materially adversely affect MTU’s business, cash flow, operating result and financial conditions.

**Because MTU's assets, liabilities, revenue and costs are denominated in multiple currencies, MTU is vulnerable to exchange rate fluctuations.**

MTU’s reporting currency is the Euro. MTU conducts, and will continue to conduct, transactions in currencies other than the Euro. This includes in particular the currency of U.S. dollars as in the fiscal year ended 31 December 2019 more than 80% of MTU Group’s revenue was generated in U.S. dollars, and MTU expects this to continue in the future. Even though MTU may benefit from a natural hedge as a large proportion of its expenses are invoiced in U.S. Dollars, it may nevertheless be vulnerable to foreign exchange rate fluctuations because:

- In particular, MTU incurs the majority of its manufacturing costs for its OEM business in Euro and generates most of its revenue in U.S. Dollars and other currencies; therefore, a
strengthening of the Euro relative to the U.S. Dollar and such other currencies in which MTU receives revenue could negatively impact its operating margins and cash flows; and

- a portion of MTU Group's assets, liabilities, revenue and costs are denominated in various currencies other than Euro; as a result, MTU's financial position and operating results, which are reported in Euro, are affected by currency exchange rate fluctuations.

MTU has adopted cashflow hedging policies to limit its exposure to exchange rate fluctuations. Hedging instruments are used exclusively to control and minimize any impact of the volatility of the U.S. Dollar on MTU Group's EBIT. However, movements of the exchange rate of the Euro against the U.S. Dollar and other currencies may continue to have a negative impact on MTU’s reported results. Currency fluctuations also have and could continue to have a significant effect on the comparability of performance between financial periods. MTU’s exchange rate hedging strategies have a horizon of up to four years and uses a phased model. Even though only a small portion of the net U.S. Dollar exposure is exposed to currency risk, MTU's hedging strategy may not be successful for various reasons.

As a result, MTU's business, cash flows, results of operations and financial conditions may be materially adversely affected.

**Risks related to the Notes**

**VII. Risks related to the structural subordination of the Notes and the Issuer’s solvency**

*The market value of the Notes could decrease if the creditworthiness of the Issuer worsens or is perceived to worsen.*

If, for example, because of the materialization of any of the risks regarding MTU, the Issuer is less likely to be in a position to fully perform all of their obligations under the Notes, when they come due, the market value of the Notes may suffer. Even if the Issuer is not actually less likely to be in a position to fully perform all such obligations when they come due, market participants including rating agencies could nevertheless have a different perception. In addition, the market participants' estimation of the creditworthiness of corporate debtors in general or debtors operating in the same business areas as MTU could adversely change. Also, changes in accounting standards may lead to adjustments in the relevant accounting positions of MTU which could have a material adverse effect on the presentation of MTU’s financial condition and could impact the market value of the Notes.

If any of these risks occurs, the market value of the Notes could decrease, potentially by a significant amount.

*The Notes will be structurally subordinated to indebtedness of the subsidiaries of the Issuer.*

The Notes will not be guaranteed by any of the subsidiaries of the Issuer. In the event of a liquidation, winding-up or dissolution or a bankruptcy, administration, reorganization, insolvency, receivership or similar proceeding of any subsidiary of the Issuer, such subsidiary will pay the holders of its own debt (including holders of third-party debt which such subsidiaries have guaranteed) before they would be able to distribute any of their assets to the Issuer. As a result, the Issuer may not have sufficient assets to make payments on the Notes, respectively.

*The Notes will be effectively subordinated to the debt of the Issuer or any of its subsidiaries to the extent such debt is secured by assets of the Issuer or such subsidiaries.*

The Notes will be effectively subordinated to the debt of the Issuer or any of its subsidiaries to the extent such debt is secured by assets of the Issuer or its subsidiaries that are not also securing the Notes. Although the Terms and Conditions require the Issuer to secure the Notes equally if they pro-
vide security for the benefit of Capital Markets Indebtedness (as defined in the Terms and Conditions),
the requirement to provide equal security to the Notes is subject to a number of significant exceptions
and carve-outs as set out in detail in the Terms and Conditions included in this Prospectus. To the ex-
tent the Issuer or any of its subsidiaries provides security interest over its assets for the benefit of debt
without also securing the Notes, the Notes will be effectively junior to such debt to the extent of such
assets. As a result, the holders of (present or future) secured debt of the Issuer may recover dispropor-
tionately more on their claims than the Noteholders in case of an insolvency, bankruptcy or similar
proceeding of the Issuer or any of its subsidiaries.

Credit ratings may not reflect all risks and are subject to change.

Fitch Polska SA ("Fitch") and Moody's Deutschland GmbH ("Moody's") have assigned a credit rat-
ing to the Issuer and are expected to assign a credit rating to the Notes. The market value of the Notes
is likely to be dependent upon the level of such credit ratings assigned. In April and May 2020,
Moody's and Fitch have revised the Issuer's outlook to negative from stable, respectively. This revised
outlook reflects the potential for a more extended COVID-19 pandemic and the forecasted recovery
pattern post outbreak.

However, such credit ratings only reflect the assessment by the aforementioned rating agencies of the
credit risks associated with MTU or the Notes. They may not reflect the potential impact of all risks
related to the structure, market and additional factors discussed herein, recent developments and other
factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or
hold the Notes and may be revised, suspended or withdrawn by the respective rating agency at any
time. In the event of a change, suspension or withdrawal of a credit rating the price and the market
value of the Notes may be affected. As a result, an investor may incur financial losses as he may only
be able to sell the Notes at a lower price.

VIII. Risks related to the admission to trading of the Notes on a regulated market

The Notes do not have an established trading market and an active trading market for the Notes
may not develop.

The Notes represent a new issue of securities for which there is currently no established trading mar-
ket. There can be no assurance that a market for the Notes will develop or, if it does develop, continue,
or that it will be liquid, thereby enabling investors to sell their Notes when desired, or at all, or at pric-
es they find acceptable.

Investors may not be able to sell Notes readily or at prices that will enable investors to realize their
anticipated yield. No investor should purchase Notes unless the investor understands and is able to
bear the risk that the Notes may not be readily saleable, that the value of the Notes will fluctuate over
time and that such fluctuations may be significant.

Such fluctuations could result from interrelated factors, including economic, financial and political
conditions and events in Germany, the United States and other jurisdictions in which the MTU Group
is active as well as economic conditions and, to varying degrees, market conditions, interest rates, cur-
rency exchange rates and inflation rates in other European and other industrialized countries. There
can be no assurance that events in Germany, Europe or elsewhere will not cause market volatility or
that such volatility will not adversely affect the market price of the Notes or that economic and market
conditions will not have any other material adverse effect. The liquidity of, and the trading market for,
the Notes may also be adversely affected by a decline in the market for similar debt securities gener-
ally. Such a decline may affect the liquidity and trading of the Notes independently of our financial per-
formance and prospects. Accordingly, the price at which an investor in the Notes will be able to sell
the Notes prior to maturity may be at a discount, which could be substantial, from the issue price of
the Notes or the purchase price paid by such investor.
IX. Risks related to the Notes being long-term securities

The Notes bear specific risks typical for fixed rate notes.

The Notes are fixed rate notes. Therefore, each Noteholder is exposed to the risk that the price of the Notes may fall as a result of changes in market interest rates. While the nominal interest rate of the Notes is fixed during the term of the Notes, as specified in the Terms and Conditions, market interest rates typically change on a daily basis. As the market interest rates change, the price of fixed rate notes also changes, but in the opposite direction. If the market interest rate increases, the price of fixed rate notes typically decreases, until the yield of such notes is approximately equal to the market interest rate of comparable issues. If the market interest rate decreases, the price of fixed rate notes typically increases, until the yield of such notes is approximately equal to the market interest rate of comparable issuances. Noteholders should be aware that movements of market interest rates can adversely affect the market price of the Notes and can lead to losses for Noteholders if they sell their Notes.

The Notes are subject to a risk of early redemption.

The Issuer will have the right to redeem the Notes as set out in the Terms and Conditions, which include, among others, a redemption right at the discretion of the Issuer within a specified period prior to maturity and a redemption right in case of minimal outstanding amount. The Issuer will also have the right to redeem the Notes in the event that the Issuer is required to pay Additional Amounts on the Notes for reasons of taxation as set out in the Terms and Conditions. If the Issuer redeems the Notes prior to their maturity or if the Notes are subject to early redemption, the respective Noteholders are exposed to the risk that due to such early redemption their investment may have a lower yield than expected. Additionally, such Noteholders may only be able to reinvest on less favorable conditions as compared to the original investment.

Although the occurrence of specific change of control events will permit the Noteholders to require redemption of their Notes, the Issuer may not be able to redeem such Notes.

Upon the occurrence of specific change of control events, the Noteholders will have the right to require the redemption of their Notes at the principal amount, plus accrued and unpaid interest. The Issuer's ability to redeem the Notes upon such a change of control event will be limited by their access to funds at the time of redemption. Upon a change of control event, the Issuer may be required to immediately repay the outstanding principal, any accrued interest on and any other amounts owed by it under other debt outstanding. There can be no assurance that there will be sufficient funds available upon a change of control event to make these repayments and any required redemption of the Notes.

X. Risks related to the investors of the Notes and application of certain laws

The Terms and Conditions of the Notes, including the terms of payment of principal and interest, can be amended by a Noteholders' resolution and any such resolution will be binding for all Noteholders. Any such resolution may effectively be passed with the consent of less than a majority of the aggregate principal amount of the Notes outstanding.

Since Terms and Conditions provide for meetings of Noteholders or the taking of votes without a meeting, the Terms and Conditions of the Notes may be amended (as proposed or agreed by the Issuer) by majority resolution of the Noteholders and any such majority resolution will be binding on all Noteholders. Any Noteholder is therefore subject to the risk that its rights against the Issuer under the Terms and Conditions, including the terms of payment of principal and interest, are amended, reduced or even cancelled by a majority resolution of the Noteholders. Any such majority resolution will even be binding on Noteholders, who have declared their claims arising from the Notes due and payable based on the occurrence of an event of default, but who have not received payment from the Issuer.
prior to the amendment taking effect. According to the German Act on Debt Securities of 2009 (Schuldverschreibungsgesetz – "SchVG"), the relevant majority for Noteholders' resolutions is generally based on votes cast, rather than on the aggregate principal amount of Notes outstanding. Therefore, any such resolution may effectively be passed with the consent of less than a majority of the aggregate principal amount of the Notes outstanding.

**In the event of certain events of default, the Notes will only be redeemable if the holders of at least 10% of the aggregate principal amount of the Notes then outstanding declare the Notes due and payable. Such declaration of acceleration may be rescinded by majority resolution of the Noteholders.**

The Terms and Conditions of the Notes provide that, in the event of certain events of default, any notice declaring the Notes due and payable shall become effective only when the Principal Paying Agent has received such default notices from Noteholders representing at least 10% of the aggregate principal amount of the Notes then outstanding. In addition, under the SchVG, even if a default notice is given by a sufficient number of Noteholders, such acceleration could be rescinded by majority resolution of the Noteholders within three months. A simple majority of votes would be sufficient for a resolution on the rescission of such acceleration but, in any event, more Noteholders would have to consent to such rescission than those who have delivered the relevant default notice.

Noteholders should be aware that, as a result, they may not be able to accelerate their Notes upon the occurrence of certain events of default, unless the required quorum of Noteholders delivers a default notice and such acceleration is not rescinded by majority resolution of the Noteholders.

**Since no Noteholders' Representative will be appointed as from the issue date of the Notes, it will be more difficult for Noteholders to take collective action with respect to the Notes.**

No initial joint representative of the Noteholders (a "Noteholders' Representative") will be appointed under the Terms and Conditions. Any appointment of a Noteholders' Representative following the issuance of the Notes will, therefore, require a majority resolution of Noteholders. If the appointment of a Noteholders' Representative is delayed or does not occur, this will make it more difficult for Noteholders to take collective action to enforce their rights under the Notes, respectively. If a Noteholders' Representative is appointed, it is possible that a Noteholder may be deprived of its individual right to pursue and enforce its rights against the Issuer under the Terms and Conditions, because the Noteholders' Representative will then have the exclusive responsibility to claim and enforce the rights of all Noteholders.

**The Notes are subject to transaction costs and charges.**

When Notes are purchased or sold, several types of incidental costs (including transaction fees and commissions) are incurred in addition to the purchase or sale price of the Notes. These incidental costs may significantly reduce or eliminate any profit from holding the Notes. Credit institutions generally charge commissions which are either fixed minimum commissions or pro-rata commissions, depending on the value of the order. To the extent that additional parties are involved in the execution of an order, including domestic dealers or brokers in foreign markets, Noteholders may also be charged for the brokerage fees, commissions and other fees and expenses of such parties (third-party costs). In addition to such costs directly related to the purchase of securities (direct costs), potential investors must also take into account any follow-up costs (such as custody fees). Potential investors should inform themselves about any additional costs or fees incurred in connection with the purchase, custody or sale of the Notes before investing in the Notes.
USE OF PROCEEDS

In connection with the offering of the Notes, the Issuer will receive aggregate net proceeds of approximately EUR 495,150,000. The Issuer intends to use these net proceeds for general corporate purposes of MTU Group, including refinancing of existing financial liabilities of the MTU Group.
INFORMATION ABOUT THE ISSUER AND MTU GROUP

General

The Issuer is a stock corporation (Aktiengesellschaft) organized under German law.

The Issuer was originally incorporated under the name of Deukalion Neunzehnte Vermögensverwaltungs-GmbH as a limited liability company (Gesellschaft mit beschränkter Haftung – GmbH) with its registered office in Frankfurt am Main, Germany, on 15 July 2003. In November 2003, Deukalion Neunzehnte Vermögensverwaltungs-GmbH was renamed to Blade Erste Holding GmbH. In February 2004, its registered seat was relocated to Munich, Germany and renamed to MTU Aero Engines Erste Holding GmbH. In May 2005, MTU Aero Engines Erste Holding GmbH was transformed into a stock corporation under the name of MTU Aero Engines Holding AG. In 2013, MTU Aero Engines Holding AG was renamed to MTU Aero Engines AG, when merged with its fully owned subsidiary MTU Aero Engines GmbH.

The Issuer's registered office is in Munich, Germany. It is registered with the commercial register of the Local Court (Amtsgericht) of Munich under registration number HRB 157206. The commercial name and legal name of the Issuer is MTU Aero Engines AG. The Issuer's Legal Entity Identifier (LEI) is: 529900807L67JY81RD65.

The Issuer's principal office is located at Dachauer Straße 665, 80995 Munich, Germany (telephone number +49 89 1489-0).

Information on the Issuer's website www.mtu.de and information accessible via this website does not form part of this Prospectus unless it is explicitly incorporated by reference.

Corporate Purpose

Pursuant to Section 2 of the Issuer's articles of association, the object of the Issuer is:

- the development, manufacture, maintenance, repair and marketing of gas turbines and control and monitoring systems, including their accessories and spare parts for aircraft and stationary uses;
- the development, production, acquisition and sale of other industrial products; and
- the provision of services related to the development, production, maintenance, repair and sale of the aforementioned products.

The Issuer may conduct any business and take any suitable action that directly or indirectly serves the object of the Issuer. In this context the Issuer may set up, take over and participate in other enterprises. The Issuer may set up branches at home or abroad under the same or a different company name.

Organizational Structure

The Issuer is the parent company of MTU Group. The Issuer is the main legal entity for MTU Group's activities in the OEM business which develops and manufactures new commercial and military aircraft engine modules and components and is a provider of maintenance, repair and overhaul services for military flight engines. Moreover, it carries out certain management services for the MTU Group.

The following diagram depicts, in simplified form, the MTU Group's material corporate structure (considering contribution to net income in the fiscal year 31 December 2019), as of 31 March 2020.
As of the date of the Prospectus, there have been no material changes to the corporate structure of MTU Group compared to the simplified overview presented above.

Business Description of MTU

Business Overview

MTU is one of the leading commercial aircraft engine module and component manufacturers as well as an independent provider of maintenance, repair and overhaul services for commercial jet engines (according to company estimates). MTU also manufactures modules and components for key European military engine programs as part of the respective consortia and is a provider of maintenance, repair and overhaul services for military flight engines. MTU's products for the commercial aviation industry are found in almost all thrust and power classes for applications ranging from megaliner passenger aircraft, such as the Airbus A380 and the Boeing 747, to large passenger aircraft, such as the Boeing 787 and Boeing 777, Airbus A330, the Airbus A320 and A320neo families or the Airbus A220, and to regional and combat aircraft, such as the Panavia Tornado and the Eurofighter Typhoon, transport aircraft programs, such as the Boeing C-17 or the Airbus A400M, the heavy transport helicopter Sikorsky CH-53K, and helicopters such as the Airbus Helicopters Tiger.

The headquarters of the Company are located in Munich. Other important facilities of MTU Group are located in Hanover, Ludwigsfelde, Zhuhai (China), Vancouver (Canada) and Rzeszow (Poland).

Industry and Markets

The global aero engines industry serves the primary markets of commercial aero engines and military aero engines, with specific products designed for each market. The commercial aero engines industry includes engines for the air transport of passengers and cargo. Similarly, the military aero engines market serves demand for engines for combat aircraft, transport aircraft and helicopters, and the engines for each of these segments can be further divided based upon mission requirements. The global aero engines industry also serves the market of commercial and military MRO.

In both markets, the role of individual aircraft drives the design and properties of aero engines. In the commercial engines market, safety, reliability, economic considerations such as fuel efficiency as well as the reduction of exhaust and noise emissions are currently the main technology drivers. The development of military engines is mainly driven by operational considerations in addition to safety and economic considerations. Even though commercial and military aero engines are purpose built, some
commonality exists in the research, development, design and manufacturing of engines and the process for the commissioning of new engine programs. As a result, participants in the global aero engines industry, including MTU, tend to be active in both end markets.

Participants in the aero engine industry can be grouped into the following three categories: Manufacturers of complete aero engines (commonly known as “OEMs”), manufacturers of engine modules, and manufacturers of components. In the commercial as well as the military aero engine markets, OEMs, engine module manufacturers and, to a lesser degree, manufacturers of components closely cooperate in the development and manufacture of new engine programs. The participants in the aero engine industry are specialized in different modules and technologies, and the market generally has an oligopolistic structure.

Commercial aero engines

MTU believes that the following OEMs dominate the commercial aero engine market: Pratt & Whitney, GE Aviation, Rolls-Royce, and Safran Aircraft Engines. For each large commercial aircraft program, the airframer generally selects two OEMs to design, develop and certify an engine platform. Engines are generally sold separately from the respective aircraft, giving the customer (airlines, cargo operators, leasing companies and corporate customers) a choice regarding which engine to buy based on technical capability and operational and economic considerations (including costs associated with spare parts and MRO). In the business jet segment, however, typically only one engine platform is certified for a particular aircraft.

OEMs typically form alliances with module manufacturers and component manufacturers for the development and production of new aero engine platforms. Forming these alliances serves the desire of OEMs to spread the risks and costs associated with new engine developments, and to benefit from competition among manufacturers that supply similar modules and components. Alliance members, on the other hand, benefit from a share of the engine program’s revenue. Module and component manufacturers commonly pay fees to the OEMs to participate in new engine programs (so-called "entry fees"). OEMs are also required to pay entry fees to aircraft manufacturers to participate in new aircraft programs.

Alliances for the development and production of commercial aero engines usually provide for RRSPs, which have become industry practice. In an RRSP, alliance members share a set percentage of the costs and risks associated with the development of a new engine program. Similarly, all members are liable for penalties and liabilities incurred as a result of production delays or defective engine parts, regardless of whether or not an alliance member was responsible for any such delays or involved in the production or assembly of such engine part or otherwise is "at fault". Costs incurred in connection with the engine program (such as discounts or guarantee payments) are shared proportionally to the relevant program shares or on the basis of cost assumptions, independent of individual costs incurred (such as development and manufacturing costs). In return, alliance members receive a share of revenue from the sale of the engines and spare parts in accordance with the respective RRSP agreement. Such revenue, however, may be reduced by discounts on the list price of an engine (known as concessions) and adjusted considering effective manufacturing and servicing efforts realized by each RRSP member. Generally, RRSPs are entered into for a specific engine platform and have a term of the lifetime of the respective engine platform. While OEMs are entitled to the largest share of RRSPs, engine module manufacturers typically have program shares of 5-30% (depending on the technology provided). Component manufacturers typically provide technology and supply specific and, in most cases, less complex engines parts and therefore usually have much lower program shares (less than 10%).

Profit margins related to the sales of new engine platforms are typically low or even negative (particularly at the start of a new program), due to significant research and development costs incurred by the participants and high concessions typically offered to aircraft buyers (such as airlines). OEMs and
their RRSP partners generally accept lower or negative margins on the sale of new aero engines to secure the spare parts and aftermarket business, which is the primary return on investment in the commercial aero engine industry. The willingness to accept these margins depends on the number of OEMs competing for the production of the aero engine for any given application, the size of the engine program and the number of orders. Spare part sales typically generate high margins and are therefore considered to be the main value driver for the OEM business. Also, considering industry regulation regarding flight safety, the spare parts business has high barriers to entry, as most spare parts can only be sourced through OEMs, which in turn obtain the relevant parts from the module and component manufacturers that are RRSP partners or suppliers with respect to the engine platform. This is mainly a result of the necessary technological expertise possessed by manufacturers, OEM warranties on engines (which generally do not cover engines using generic components) and stringent airworthiness authority and OEM certification requirements.

Military aero engines

European military engines are developed mainly by alliances which are formed primarily for political reasons. Many countries also rely on local manufacturers for the military equipment of their armed forces. In case military engines are exported, alliance members are generally required to comply with so-called "offset" obligations, which include making investments in the importing country, giving business to local suppliers or facilitating imports to the country of the exporting alliance member.

In contrast to commercial aero engine platforms, only one engine is developed for a particular aircraft. The customers of military engines, usually one or more national governments, used to fully compensate development as well as manufacturing expenses incurred by manufacturers in connection with a new engine program. Starting with the development and production of the TP400-D6 engine, an engine model for the Airbus 400M transport aircraft, the compensation policy changed. Pricing for development and manufacturing production of this engine was agreed in advance to the launch of the engine program. Therefore, as for commercial engines programs, the profitability of military engine programs depends largely on the ability to develop and manufacture on a cost-efficient basis, including the use of economies of scale and the ability to improve operating margins by reducing manufacturing cost over the life of the program. Synergies and technological innovations resulting from shared resources applied for development and manufacturing of military and commercial engine programs is a key success factor.

As part of the initial contract to develop and manufacture a military engine, alliance members and customers negotiate terms for the aftermarket and associated support, including MRO services and training. Spare parts are sourced exclusively from alliance members, while the MRO and other support business, to the extent not performed by national armed forces, have generally been awarded to the local alliance member.

Commercial MRO

The commercial MRO services are typically provided by the engine OEMs themselves, airline in-house MRO shops (such as Lufthansa Technik, Air France/KLM, Delta Techops and American Airlines), and independent service providers. MTU, according to own estimates, ranks among the top 3 MRO providers worldwide by the number of engines under contract and is the largest independent MRO provider worldwide by the number of engines under contract. MTU believes that its broad MRO engine portfolio is suitable to potentially cover approximately 80% of active jet engines. Furthermore, and according to own estimates, MTU offers services for the largest engine portfolio among independent MRO providers. The criteria for airlines to select an MRO service provider are case specific, but generally linked to total service, quality, turnaround time and price offered. Typically, there are three different types of arrangements: fixed price contracts, "time and material" contracts and "flight hour" or "Power by the Hour" contracts. Fixed price contracts are usually entered into for rou-
tine MRO work. Under "time and material" contracts, services are paid on an hourly basis and spare parts are sold at list price plus a handling fee. "Flight hour" or "Power by the Hour" contracts are priced on estimated flight hours for the life of the contract as well as the estimated scope of required MRO services. This pricing model requires complex analysis of engine usage, including assumptions on shop visit rates.

**Business of MTU**

MTU acts in two business segments comprising three different business areas: Commercial and military engine business (OEM) integrates the commercial OEM Business and the military OEM Business, and the commercial MRO Business (MRO).

**Commercial OEM Business**

MTU engages in the development and production of commercial aero engine modules and components for commercial engine programs, and considers itself as a trusted partner to all large industry participants. MTU also produces and provides spare parts for such engine programs. In the commercial business, MTU offers a balanced product portfolio in almost all thrust categories and focuses on low-pressure turbines, high-pressure compressors and turbine center frames. According to company estimates, approximately 30% of all active aircraft are equipped with MTU technology. Commercial OEM Business sales accounts for more than 30% of MTU Group's revenue and the business includes supply of goods and services for new engine as well as aftermarket sales (i.e. spare parts business). Substantially all revenue from commercial OEM Business were generated under RRSPs, which allow MTU to participate in the commercial success of the respective whole engine platform.

**Military OEM Business**

MTU develops and produces military aero engine modules and components and manufactures related spare parts. The MTU Group considers itself as a leading participant in joint European programs for the development and production of key military engine platforms, including the EJ200 engine for the Eurofighter Typhoon combat aircraft which is considered to be a major component in future European combat air systems. Key military engine platforms also include the TP400-D6 engine for the Airbus A400M transport aircraft (of which 170 have been ordered and 84 thereof have been delivered) and the MTR390 engine for the Airbus Helicopters Tiger (of which 181 have been delivered). MTU, in cooperation with Safran Aircraft Engines and ITP, is about to start technology development for the Next European Fighter Engine (NEFE) with a potential of approximately 1,100 engines (including spares) to be delivered, and for the Next Generation Weapon System (NGWS) as part of the Future Combat Air System (FCAS) of Airbus and Dassault Aviation. The demonstrator phase is expected to start in 2020. While the first prototype is expected by around 2031, by around 2040, the NGWS is expected to replace the Eurofighter fleet. In addition, the military business provides military aero engine MRO services. The MTU Group is, according to its own view, a leading contractor for almost all aircraft engines of the German Armed Forces and, as part of the military MRO Business, has been overhauling EJ200 (Eurofighter), RB199 (Panavia Tornado) and Tyne (Transall) engines for many years. MTU currently has 140 Eurofighters and 85 Tornados in service in Germany. The MRO work is performed in close cooperation with German Air Force personnel. In addition, MTU is participating in some military programs of GE Aviation like the F414 or the T408, the engine for Sikorsky's heavy military transport helicopter CH-53K.

**Commercial MRO**

MTU operates a global network of MRO facilities and aftermarket service facilities (e.g., mobile repair, engine-lease services) to serve its broad and diversified customer base. Its largest facility and center of excellence for mid-sized and large flight engine MRO services is based in Hanover (Germany). The second largest facility, MTU Maintenance Zhuhai, is based in Zhuhai (China) and operates
as a joint venture with China Southern, China's largest commercial airline group by fleet and passengers served. Other locations of MRO facilities include subsidiaries in Ludwigsfelde (Germany), Amsterdam (The Netherlands), Vancouver (Canada), Dallas (United States) and joint ventures with Lufthansa Technik in Malaysia and Poland.

MTU believes that it has a strong position in growth platforms and provides MRO services for a wide range of commercial aircraft engines. In addition to engines that are manufactured with the participation of the commercial business of MTU, such as the Pratt & Whitney GTF family of engines, the V2500, GE90, PW2000 or the CF6 engine family, MTU also services engines that are manufactured without its participation. For example, MTU holds licenses for the widely used CFM56 engine series (used on the Boeing 737 and the Airbus A320), the CF34 engine (an important engine family in the regional jet sector) and the GE90, currently the world's largest commercial engine by diameter and thrust in service. MTU also aims to strengthen its position in all segments of the commercial MRO market. It has improved its market position with regard to business jets (according to its estimates). With regard to regional jets, MTU believes that the GTF engine is the sole engine for the majority of new regional jets which should provide opportunities for further growth, given that previous regional jet aircraft generations were not equipped with MTU content. In the narrowbody segment the excellent market position of MTU should further improve (according to MTU’s estimates), while new market opportunities may open up with regard to widebodies.

MTU further believes to be well positioned to participate in future growth in the MRO market which is backed by independent MRO campaign wins between 2015 and 2019 with a volume of USD 7.5 billion in fiscal year 2019, USD 4.5 in fiscal year 2018, USD 3.0 billion in fiscal year 2017, USD 2.2 billion in fiscal year 2016 and USD 2.1 billion in fiscal year 2015. MRO revenues grew from fiscal year 2015 to fiscal year in 2018. In fiscal year 2019 the MRO revenues were slightly below 2018 revenues. This fall in revenue should be viewed also in light of a change of consolidation of revenue at the level of the joint venture MTU Maintenance Zhuhai. Certain MRO businesses formerly contracted by 3rd party customers to MTU Maintenance Hannover GmbH and 100% subcontracted to MTU Maintenance Zhuhai, have been contracted to MTU Maintenance Zhuhai directly since 2019. Therefore, since fiscal year 2019 revenues of MTU Maintenance Zhuhai are no longer reported in MTU's consolidated revenue.

**MTU’s Business Strategy**

The business strategy of MTU is geared to profitable growth and customer satisfaction. To implement the growth strategy of MTU, the following four target areas have been defined:

*Balanced product portfolio to participate in new engine programs*

Through its balanced product portfolio, MTU participates in rapidly growing and high-volume commercial and military engine applications and it collaborates with various partners in this context. MTU continuously participates in varying thrust classes and fields of applications with the aim to optimize its risk profile as well as growth opportunities. MTU is currently focusing on ramping up production of Geared Turbofan engines for regional and medium-haul jets, and focused developments supporting MTU’s participation in current and future widebody aircraft engine programs. These programs complement MTU’s positioning in the MRO segment, as MTU’s participation in these engine programs provides the opportunity to provide services in the associated future aftermarket business.

With regard to MTU’s military business, MTU and Safran Aircraft Engines have agreed to take a leading role in the development, manufacture and maintenance of the engine for the next-generation European fighter aircraft. MTU's share in the U.S. military program for the T408 for the CH-53K heavy-lift cargo helicopter positions MTU on one of the world's most relevant military markets.
Maintaining and expanding technological leadership

MTU aims to extend its technological leadership by focusing on the development of high-temperature materials and modern manufacturing. In combination with optimized cyclic processes, MTU aims to be able to achieve greater efficiency in the medium term with its core modules (low-pressure turbine, high-pressure compressor and turbine center frame), and therefore greater profitability and environmental friendliness, while simultaneously reducing component weight.

On a long-term perspective, MTU aims to provide products and services to achieve emission-free aviation. Hence, MTU cooperates with research institutions and industrial partners on assessing engine concepts such as cyclic processes and electric propulsion systems.

The digitalization of products, services and value creation processes is also growing in importance. This can be seen, for instance, in the extensive use of simulation techniques in all areas of development through to the virtual engine.

Enhancing competitiveness by increased productivity and reduced capital tie-up

MTU encourages a corporate culture of continuous improvement in order to secure its competitiveness in the future. MTU’s focus is directed at optimizing structures, processes and capital tie-up within the MTU Group. In this context, MTU pays particular attention to digitalization and automation technologies with a view to optimize its supply chain and its production and service network in terms of delivery capability, quality and costs. MTU regards responsible economic actions as an important factor driving its competitiveness, and MTU acts in compliance with its sustainability strategy.

Innovative and creative corporate culture

The success of MTU, its growth and ability to achieve MTU’s strategic objective relies on its workers. Therefore, MTU’s corporate culture focuses on personal development and achievement coupled with social responsibility aspects. The innovative corporate culture of MTU is driven by providing more scope and greater responsibility for its employees, as well as catering for short decision paths. All of MTU’s employees are encouraged and empowered to contribute ideas and translate them into new products and services, innovative business models and improved processes. MTU also promotes cultural and individual diversity, flexible working conditions and training opportunities for its workforce.

Principal Products and Services of MTU

MTU focuses on the development and manufacturing of technologically advanced and highly complex engine modules and components, such as high-pressure compressors, low-pressure turbines for all thrust and power categories, and turbine center frames. In addition, it provides MRO services to operators of commercial and military jet engines and operators of industrial and marine gas turbines.

Commercial aero engine programs

MTU’s modules and components for commercial aero engines can be found in almost all thrust and power classes for applications ranging from wide-body over narrow-body aircrafts to business jets. The engine portfolio contains a mix of engine types in widespread use, including the V2500, the Pratt & Whitney GTF family of engines, the CF6 family, PW2000 and the GEnx.

The following table provides an overview of MTU’s participation in major commercial aero engine programs. MTU is a partner in each of the RRSPs that develops and manufactures these engines and holds significant stakes in most of these programs.
<table>
<thead>
<tr>
<th>Aircraft segment</th>
<th>Engine</th>
<th>Program share</th>
<th>Aircraft application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Widebody</strong>&lt;br&gt;(50 – 120 lb.)</td>
<td>GP7000</td>
<td>22.5%</td>
<td>A380</td>
</tr>
<tr>
<td></td>
<td>PW4000G</td>
<td>12.5%</td>
<td>B777</td>
</tr>
<tr>
<td></td>
<td>CF6-80</td>
<td>9.1%</td>
<td>A300, A310, A330, B747, B767, DC-10, MD-11, KC-10</td>
</tr>
<tr>
<td></td>
<td>GEnx</td>
<td>6.6%</td>
<td>B787 Dreamliner, B747-8</td>
</tr>
<tr>
<td></td>
<td>GE9X</td>
<td>4%</td>
<td>B777X</td>
</tr>
<tr>
<td></td>
<td><strong>Engine</strong></td>
<td><strong>Program share</strong></td>
<td><strong>Aircraft application</strong></td>
</tr>
<tr>
<td><strong>Narrowbody</strong>&lt;br&gt;(20 – 50 klb)</td>
<td>PW2000</td>
<td>21.2%</td>
<td>B757, C-17</td>
</tr>
<tr>
<td></td>
<td>PW1100G-JM</td>
<td>18%</td>
<td>A320neo family</td>
</tr>
<tr>
<td></td>
<td>PW6000</td>
<td>18%</td>
<td>A318</td>
</tr>
<tr>
<td></td>
<td>V2500</td>
<td>16%</td>
<td>A320 family, MD-90</td>
</tr>
<tr>
<td></td>
<td>JT8D-200</td>
<td>12.5%</td>
<td>MD-80 range</td>
</tr>
<tr>
<td><strong>Regional Jets</strong>&lt;br&gt;(13 – 24 klb)</td>
<td>PW1500G</td>
<td>17%</td>
<td>A220</td>
</tr>
<tr>
<td></td>
<td>PW1700G/1900G</td>
<td>15-17%</td>
<td>Embraer E-Jet Gen 2 MRJ</td>
</tr>
<tr>
<td></td>
<td>PW1200G</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td><strong>Business Jets</strong>&lt;br&gt;(3 – 16 klb)</td>
<td>PW300</td>
<td>25% (PW305/306)</td>
<td>Learjet60, Do328 JET, GulfstreamG200, Hawker</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15% (PW307)</td>
<td>1000, DassaultFalcon 7X, Cessna Sovereign</td>
</tr>
<tr>
<td></td>
<td>PW500</td>
<td>25%</td>
<td>Cessna Bravo, Cessna Excel</td>
</tr>
<tr>
<td></td>
<td>PW800</td>
<td>15%</td>
<td>GulfstreamG500, G600</td>
</tr>
</tbody>
</table>

**Military aero engine programs**

The following table provides an overview of the participation in key military aero engine programs. MTU is, except for engine program F414 where MTU acts as supplier, a member of each of the alliances that develops and manufactures these engines, and MTU holds significant stakes in each program.

<table>
<thead>
<tr>
<th>Aircraft segment</th>
<th>Engine</th>
<th>Program share</th>
<th>Aircraft application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fighter aircraft</strong></td>
<td>EJ200</td>
<td>30%</td>
<td>Eurofighter Typhoon</td>
</tr>
<tr>
<td></td>
<td>RB199</td>
<td>40%</td>
<td>Panavia Tornado</td>
</tr>
<tr>
<td></td>
<td>F414</td>
<td>4.4%</td>
<td>Boeing F/A-18 E/F, Super Hornet, EA-18G Growler; Saab Gripen Next Generation</td>
</tr>
<tr>
<td></td>
<td>NEFE</td>
<td>Under negotiation</td>
<td>NGWS</td>
</tr>
<tr>
<td><strong>Transport aircraft</strong></td>
<td>TP400</td>
<td>22.2%</td>
<td>A400M</td>
</tr>
</tbody>
</table>
MTU has been providing MRO services for key military aircraft and helicopter engine programs for many years, such as EJ200 (Eurofighter Typhoon), Tyne (Transall) and the RB199 (Panavia Tornado) engines or the T64 and MTR390 helicopter engines. Apart from engine repair and overhaul, MTU's services also include engineering and logistic support, on-site support, training of military personnel and supply chain management. MTU offers these services to the German Armed Forces and other export customers, and expects the trend towards outsourcing of MRO and related services by national and foreign armed forces to continue.

**Commercial MRO**

MTU aims to differentiate itself in the market by tailoring the MRO process to the requirements of its customers, improving the reliability and durability of engines and offering greater cost control. MTU is well positioned to benefit from further market growth as it operates with a market approach via independent MRO as well as MRO partnerships, including its joint venture with China Southern in Zhuhai. The entire overhaul process is focused on quality, cost, turnaround time and the agreed delivery date. The MRO service portfolio of MTU aims to fulfil the needs of operators who increasingly require tailor-made solutions across the lifecycle in order to control and optimize cost. It also aims to serve the needs of asset owners and lessors for whom residual value and cost of ownership is key. According to company estimates, MTU is a leading provider in customized engine service solutions in its commercial MRO Business. The service portfolio of MTU is divided into four tailored solutions approaches PERFORM\textsuperscript{Plus}, SAVE\textsuperscript{Plus}, VALUE\textsuperscript{Plus} and MOVE\textsuperscript{Plus}. It also operates a service cluster SERVICE\textsuperscript{Plus} which deals with single and ad-hoc requests. The PERFORM\textsuperscript{Plus} solutions are designed for operators of current generation engines and focuses on generating more flight hours at lower cost with customized MRO services. SAVE\textsuperscript{Plus} aims to achieve reduced costs by implementing smart strategies for operators of mature engines. VALUE\textsuperscript{Plus} is a solution offered to asset owners to maximize value with effective asset management at end-of-life. MOVE\textsuperscript{Plus} targets lessors and asset owners and the services focus on risk mitigation and generating more revenue through portable MRO across the lifecycle. Individual services offered under SERVICE\textsuperscript{Plus} complement and strengthen the products of MTU.

MTU provides services for a variety of engine types, e.g. PW1100G-JM (A320neo family), V2500 (A320 family) GEnx (Boeing 787, 747-8) GP7000 (A380), GE90Growth (Boeing 777), CFM56 (A320, B737), CF6-family, CF34, industrial gas turbines like LM2500 or LM6000, CFM Leap (A320neo family and B737Max) and small commercial engines for business jets and helicopters.

**Customers**

The customers served by OEM commercial engines programs are primarily major commercial airlines and cargo operators, while customers of MTU's commercial business are the OEM RRSP partners, such as GE Aviation, Pratt & Whitney or alliances dominated by these OEMs, such as IAE LLC and IAE AG.

The customers of MTU's military business are generally domestic and foreign air forces, acting through their armament procurement agencies. Engine-specific alliances, such as EPI (consisting of ITP, Rolls-Royce, Safran Aircraft Engines and the Company), Eurojet Turbo GmbH (consisting of Rolls-Royce, the Company, GE Avio and ITP) and Turbo-Union, Ltd. (consisting of Rolls-Royce, the Company and GE Avio) act as agents. In the military business, according to its own view, MTU is a leading supplier of aircraft engines and spare parts to the German Armed Forces through the consor-
tia. In addition, MTU provides external aero engine MRO services to the German Armed Forces. MTU also provides directly and through alliances products and services to other armed forces, including the armed forces of the United Kingdom, Italy, Saudi Arabia, France, the United States and Spain.

MTU’s customers in the commercial MRO Business are airlines, leasing companies and users of industrial and marine gas turbines as well as engine OEMs (subcontracting). These include major passenger and cargo airlines, such as China Southern Airlines, Jetblue, Atlas Air, Air Canada, United Airlines or United Parcel Service as well as leasing companies, such as ILFC or AerCap and energy companies like Statoil.

**Suppliers**

MTU has well-established and long-standing relationships with most of its suppliers in the commercial and military OEM Business. The largest suppliers include PCC Minerva Division, Howmet Turbine Components, Arconic Howmet Castings and Wyman Gordon Forgings Inc.

The largest suppliers for commercial MRO include IAE LLC, IAE AG, Pratt & Whitney, GE Aviation and Aviall, who mainly provide spare parts and parts repair services for aero engine MRO activities and with whom the MTU has agreements which provide licenses to use their processes in servicing engines.

MTU aims to reduce its reliance on individual suppliers by securing the services of several equally qualified vendors for materials, parts and services. All ramp-up programs have a second – and in individual cases a third – supplier for the majority of components. In case of single-source suppliers, MTU enters into long-term agreements aiming to protect itself against unforeseen shortages and to reduce the risk of unforeseen price hikes.

**Competition**

*Competition in the market for commercial aero engines, engine modules and components and spare parts*

Competition in the market for commercial aero engines, engine modules, engine components and spare parts is intense, with competition primarily based on technological innovation, efficiency, quality and price. The commercial engine modules, components and spare parts business is primarily exposed to two types of competition: First, the aero engine programs in which MTU participates as RRSP partner effectively faces competition from other engine programs for installation on aircraft. Second, MTU faces competition for involvement in aero engine programs, both from the OEMs themselves, who may source components and parts in-house, and from other engine module and component manufacturers, some of which are highly specialized and may offer a directly competing technology. With respect to spare parts, MTU’s engine program participation faces competition from suppliers of PMA parts, generic parts that are nearly identical in design and functionality to original parts supplied by the respective engine programs and approved for use as modification and replacement articles by the FAA. MTU also faces competition from DER repair processes that are approved by the FAA. DERs are independent specialists that are approved by the FAA and develop repair processes for engine parts which meet all specifications for development, performance, liability and safety.

According to company estimates, MTU is one of the largest commercial aero engine module and component manufacturers in terms of worldwide revenue in 2019. The largest competitors in this market are the major OEMs, Pratt & Whitney, GE Aviation, Rolls-Royce and Safran Aircraft Engines. Other key competitors include GE Avio, ITP, GKN Aerospace and a number of Japanese companies (IHI, Kawasaki Heavy Industries and Mitsubishi Heavy Industries).
In Europe, many military aircraft and aero engine programs are designed as multinational projects, with manufacturers from a number of nations driven by the desire to spread the costs and risks associated with such programs. Military aircraft engines are generally developed and manufactured by alliances consisting of OEMs and engine component manufacturers from participating nations. The governments of participating nations, through their respective armament procurement agencies, subscribe for a certain number of aircraft and aero engines with an alliance, through which the work is subsequently allocated among its members. Although most European countries are open to allow foreign companies to participate in any contract auctions and consortia, they often establish selection criteria linked to their economic interests, such as employment and local investments. As a result, the European military aircraft and aero engine market tends to favor national manufacturers. National manufacturers only face limited or no competition in their home countries, and program shares of national alliance members tend to reflect such member's country's procurement volume. A number of European military aero engine programs were structured to include multiple manufacturers from different participating nations.

As a group with a German parent company, MTU Group (directly or indirectly through alliances) is the supplier of substantially all military aero engines used by the German Armed Forces. The only relevant competitor on a national level is Rolls-Royce whose business volume is substantially lower than MTU’s. Similarly, Safran Aircraft Engines (France), GE Avio (Italy), GKN Aerospace (Sweden), Rolls-Royce (United Kingdom) and ITP (Spain) are the suppliers of choice of the armed forces in their respective home countries.

**Competition in the market for commercial MRO**

Competition in the commercial aero engine MRO market is also intense, with competition focused on technological capability, process, experience, quality, turn-around time and price. In addition, competition is affected by OEMs' warranties on engines and the different types of MRO service agreements.

The commercial aero engine MRO market is dominated by the leading OEMs, GE Aviation, Pratt & Whitney and Rolls-Royce, and the in-house MRO operations of major airlines (such as Lufthansa Technik, Air France/KLM, Delta Techops and American Airlines). With a view to reduce costs and focus on core competencies most airlines, however, especially low-cost carriers, start-ups, charter and freight operators traditionally outsource aero engine MRO operations to aero engine manufacturers, the aero engine MRO operations of other airlines or independent suppliers of MRO services such as MTU.

**Research and Development**

The research and development activities of MTU focus on the Geared Turbofan programs and future enhancements as well on components of wide body aircraft engines as well as technology studies relating to future-generation engine design and digitalization in engine construction.

MTU Group's total research and development expenses (including customer-funded expenses and expenditure meeting the recognition criteria for assets) amounted EUR 214 million in the fiscal year ended 31 December 2019, which was 6.5% higher than in the fiscal year ended 31 December 2018. Total research and development expenses, measured as the percentage of revenue of overall research and development total expenses, amounted to 4.6% of MTU Group's revenue in the fiscal year ended 31 December 2019, which is above the level of 4.4% achieved by the MTU Group in the fiscal year ended 31 December 2018.

MTU Group's customer-funded development expenses amounted to EUR 31 million in the fiscal year ended 31 December 2019 (MTU Group's fiscal year ended 31 December 2018: EUR 24 million), with
most of this coming from public grants for research and development for noise-reduced and eco-efficient engines, and to very limited extent from contributions of MTU’s commercial customers.

**Intellectual Property**

MTU seeks the protection of its know-how through patents mainly in Germany, the United States, the United Kingdom and France. MTU actively manages its patent portfolio with focus on the protection of intellectual property related to its main technologies and competencies in jurisdictions of strategic importance. As of 31 December 2019, MTU owned approximately 3700 patents. Approximately 24% of the patents related to compressors, engine concepts and miscellaneous parts, approximately 38% related to turbines, approximately 32% related to production and approximately 6% relate to maintenance. MTU typically applies for approximately 80 patents per calendar year in Germany and about 500 applications for such patents per calendar year in other jurisdictions. MTU holds over 20 trademark families to brand its business and products. Due to MTU’s affiliation as subsidiary of DaimlerChrysler AG between 2000 and 2003, the trademark "MTU" has also been used by MTU Friedrichshafen GmbH, a manufacturer of engines for ships, heavy vehicles, power plants and trains. In connection with the sale of MTU from DaimlerChrysler AG to Kohlberg Kravis Roberts & Co. in 2003, the Company and MTU Friedrichshafen GmbH entered into an agreement regarding the use of their trademarks. Pursuant to the terms of this agreement, the use of "MTU" in company names and trademarks may be restricted in certain instances.

MTU also relies on trade secrets, unpatented know-how, innovative product development and continuous technological progress to maintain its competitive position, and seeks to protect its position by entering into confidentiality, cooperation and similar agreements.

**Regulation**

The commercial aerospace industry is highly regulated by the FAA in the United States, the EASA and other similar airworthiness agencies in different countries. MTU and the aero engines which are manufactured with partners are required to be approved by one or more of these agencies to ensure that stringent safety and performance standards are met. In addition, MTU must comply with the certification requirements of individual OEMs and regulatory agencies for specific engine programs.

Military contracts are subject to regulation by national defense procurement agencies, such as the Bundesamt für Wehrtechnik und Beschaffung in Germany, and, with respect to certain armament programs, supra-national agencies that manage collaborative multinational defense programs, such as the Organization for Joint Armament Cooperation (the "OCCAR") in Europe. Military procurement policies are competitive and based upon extensive administrative frameworks of various laws and regulations that, among other things, require certification of aero engine and aero engine component manufacturers by procurement agencies. Procurement laws and regulations generally provide for unilateral termination rights in favor of defense procurement agencies.

The performance of MRO services on aero engines and engine components is regulated by the FAA, EASA and other agencies worldwide and by OEM guidelines, each of which generally requires the engines to be serviced and parts to be replaced at specified intervals. In addition, such regulations and guidelines may require that MRO services be performed only by approved repair facilities and certified technicians. As of the date of this Prospectus, MTU satisfies or exceeds MRO standards imposed by airworthiness authorities and OEMs, and maintains approved repair facilities with certified technicians.
Employees

As of 31 December 2019 and 31 December 2018, MTU had 10,660 and 9,731 employees, respectively. As of 31 March 2020 and 31 March 2019, MTU had 10,771 and 9,942 employees, respectively.

Investments

MTU Group's capital expenditure on intangible assets was EUR 128 million and on property, plant and equipment EUR 302 million in the fiscal year ended 31 December 2019, which was approximately 77% and 51% above the levels achieved in the previous fiscal year ended 31 December 2018 (capital expenditure on intangibles: EUR 72 million, capital expenditure on property, plant and equipment: EUR 199 million). MTU used these funds primarily to drive forward new engine program development activities and automation and digitalization and to enhance its international manufacturing and service capacities.

Selected Financial Information

The following table sets out selected financial information relating to MTU. The financial information has been extracted or derived from MTU's audited consolidated financial statements prepared in accordance with IFRS, as adopted by the European Union, and the additional requirements of German commercial law pursuant to Section 315e (1) of the German Commercial Code (Handelsgesetzbuch) as of and for the fiscal year ended 31 December 2019 and as of and for the fiscal year ended 31 December 2018 as well as from MTU's unaudited quarterly statement as of and for the three-month period ended 31 March 2020, unless otherwise stated. All amounts are rounded to millions of euros (€ million). Due to rounding, it is possible that item values may not add up exactly to the stated total. IFRS 16, Leases, was adopted for the first time by MTU on and has been applied since 1 January 2019 in its audited consolidated financial statements as of and for the fiscal year ended 31 December 2019 using the modified retrospective approach, under which the figures from the periods prior to 1 January 2019 are shown unadjusted. As a result, some of the following figures as of and for the fiscal year ended 31 December 2019 are not comparable with the prior-year period. Where financial information in the following tables is labelled "audited", this means that it has been taken from the audited MTU's consolidated financial statements mentioned above. The label "unaudited" is used in the following tables to indicate financial information that has not been taken from the audited MTU’s consolidated financial statements mentioned above but has been taken or derived from MTU's unaudited quarterly statement mentioned above or MTU’s accounting records or has been calculated on the basis of financial information from the above-mentioned sources. MTU's unaudited quarterly statement as of and for the three-month period ended 31 March 2020 has neither been reviewed nor does it constitute an interim financial report as defined in International Accounting Standard (IAS) No. 34.
### Consolidated Balance Sheet Data

<table>
<thead>
<tr>
<th></th>
<th>As of 31 December 2019 (audited, unless stated otherwise)</th>
<th>As of 31 March 2020 (unaudited)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total assets</strong></td>
<td>7,765</td>
<td>8,024</td>
</tr>
<tr>
<td><strong>Total non-current assets</strong></td>
<td>4,155</td>
<td>4,183(1)</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>3,610</td>
<td>3,841(1)</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td>2,421</td>
<td>2,438</td>
</tr>
<tr>
<td><strong>Total non-current liabilities</strong></td>
<td>2,130</td>
<td>2,197(1)</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>3,214</td>
<td>3,389(1)</td>
</tr>
<tr>
<td><strong>Net financial debt (unaudited)(2) ...............</strong></td>
<td>961</td>
<td>943</td>
</tr>
</tbody>
</table>

### Consolidated Income Statement Data

<table>
<thead>
<tr>
<th></th>
<th>As of 31 December 2019 (audited, unless stated otherwise)</th>
<th>As of 31 March 2020 (unaudited)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>4,628</td>
<td>1,273</td>
</tr>
<tr>
<td><strong>Earnings before interest, taxes, depreciation and amortization (EBITDA) (unaudited)(1)(3)(4) ...............</strong></td>
<td>965</td>
<td>235</td>
</tr>
<tr>
<td><strong>Adjusted earnings before interest and taxes (adjusted EBIT)(3) ...............</strong></td>
<td>757</td>
<td>182</td>
</tr>
<tr>
<td><strong>Earnings before interest and taxes (EBIT)(3) ...............</strong></td>
<td>706</td>
<td>169(1)</td>
</tr>
<tr>
<td><strong>Adjusted net income (unaudited)(3) ...............</strong></td>
<td>538</td>
<td>128</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>488</td>
<td>112</td>
</tr>
</tbody>
</table>

### Consolidated Cash Flow Statement Data

<table>
<thead>
<tr>
<th></th>
<th>As of 31 December 2019 (audited, unless stated otherwise)</th>
<th>As of 31 March 2020 (unaudited)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flow from operating activities</strong></td>
<td>832</td>
<td>149(1)</td>
</tr>
<tr>
<td><strong>Cash flow from investing activities</strong> .........</td>
<td>-472</td>
<td>-80(1)</td>
</tr>
<tr>
<td><strong>Free cash flow (unaudited)(4) ...............</strong></td>
<td>358</td>
<td>69</td>
</tr>
<tr>
<td><strong>Cash flow from financing activities</strong> ..........</td>
<td>-324</td>
<td>-50(1)</td>
</tr>
</tbody>
</table>

(1) This figure is not taken from MTU's audited consolidated financial statements as of and for the fiscal year ended 31 December 2019 and as of and for the fiscal year ended 31 December 2018 or MTU's unaudited quarterly statement as of and for the three-month period ended 31 March 2020 but derived from MTU's accounting records.

(2) The Company defines net financial debt as the difference between gross financial debt and financial assets (as set out below). The Company reports its net financial debt as it believes this measure serves as an indicator of the MTU Group's financial situation. Net financial debt is not a performance indicator recognized under IFRS. The net financial debt reported by the Company is not necessarily comparable to the performance measures published by other companies as net financial debt or the like. The following table provides a reconciliation of gross financial debt and financial assets to net financial debt:

<table>
<thead>
<tr>
<th></th>
<th>As of 31 December 2019 (audited, unless stated otherwise)</th>
<th>As of 31 March 2020 (unaudited)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>bonds and notes</strong></td>
<td>100</td>
<td>101</td>
</tr>
<tr>
<td><strong>convertible bonds</strong></td>
<td>562</td>
<td>563</td>
</tr>
<tr>
<td><strong>financial liabilities to banks</strong></td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td><strong>loans from third parties</strong></td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td><strong>lease liabilities / finance lease liabilities</strong></td>
<td>147</td>
<td>176</td>
</tr>
<tr>
<td><strong>financial liabilities arising from acquisition of stakes in programs</strong></td>
<td>300</td>
<td>350</td>
</tr>
</tbody>
</table>

54
The company uses the adjusted net income and adjusted earnings before interest and taxes (adjusted EBIT) to eliminate special items from the key earnings figures of the MTU Group and its business segments. The company reports its adjusted net income and adjusted EBIT because it considers this to be a useful measure of the success of its management of operating activities. The company defines earnings before interest, taxes, depreciation and amortization (EBITDA) as net income before financial income/expense, income taxes, amortization/value adjustments/depreciation/impairment losses. The company defines earnings before interest and taxes (EBIT) as net income before net financial income/expense and income taxes. The company defines adjusted earnings before interest and taxes (adjusted EBIT) as net income adjusted for the contributions resulting from the "special items from purchase price allocation" and the "special items from the increase in the stake in IAE-V2500" before financial income/expense and income taxes. The company defines earnings before taxes (EBT) as net income before interest taxes. The company defines adjusted net income as net income adjusted for the contributions resulting from the "special items from purchase price allocation" and the "special items from the increase in the stake in IAE-V2500", and adding net interest income/expense and the interest shares in other financial income/expense connected with provisions for pensions and liabilities from pensions and plan assets and subtracting normalized income taxes, which are calculated on the basis of the expected average tax rate for the group (fiscal year 2019 and 2018: 29%) and in consideration that profit/loss contribution of companies accounted for using the equity method does not form part of the tax basis. The company discloses its EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income because it considers these to be useful measures of the MTU Group's operating performance. EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income are not performance measures recognized under IFRS. The EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income reported by the company are not necessarily comparable with the performance measures reported by other companies as EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income or similarly named. The following table provides a reconciliation of adjusted EBIT, EBIT and EBT to net income and adjusted net income:

<table>
<thead>
<tr>
<th>Financial assets (unaudited)</th>
<th>189</th>
<th>178</th>
<th>206</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net financial debt (unaudited)</td>
<td>961</td>
<td>854</td>
<td>943</td>
</tr>
</tbody>
</table>

![Table]

<table>
<thead>
<tr>
<th>Gross financial debt</th>
<th>1,150</th>
<th>1,032</th>
<th>1,150</th>
</tr>
</thead>
<tbody>
<tr>
<td>less:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cash and cash equivalents</td>
<td>140</td>
<td>99</td>
<td>156</td>
</tr>
<tr>
<td>loans to third parties</td>
<td>50</td>
<td>60</td>
<td>51</td>
</tr>
<tr>
<td>loans to related companies</td>
<td>-</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

(3) The company uses the adjusted net income and adjusted earnings before interest and taxes (adjusted EBIT) to eliminate special items from the key earnings figures of the MTU Group and its business segments. The company reports its adjusted net income and adjusted EBIT because it considers this to be a useful measure of the success of its management of operating activities. The company defines earnings before interest, taxes, depreciation and amortization (EBITDA) as net income before financial income/expense, income taxes, amortization/value adjustments/depreciation/impairment losses. The company defines earnings before interest and taxes (EBIT) as net income before financial income/expense and income taxes. The company defines adjusted earnings before interest and taxes (adjusted EBIT) as net income adjusted for the contributions resulting from the "special items from purchase price allocation" and the "special items from the increase in the stake in IAE-V2500" before financial income/expense and income taxes. The company defines earnings before taxes (EBT) as net income before interest taxes. The company defines adjusted net income as net income adjusted for the contributions resulting from the "special items from purchase price allocation" and the "special items from the increase in the stake in IAE-V2500", and adding net interest income/expense and the interest shares in other financial income/expense connected with provisions for pensions and liabilities from pensions and plan assets and subtracting normalized income taxes, which are calculated on the basis of the expected average tax rate for the group (fiscal year 2019 and 2018: 29%) and in consideration that profit/loss contribution of companies accounted for using the equity method does not form part of the tax basis. The company discloses its EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income because it considers these to be useful measures of the MTU Group's operating performance. EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income are not performance measures recognized under IFRS. The EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income reported by the company are not necessarily comparable with the performance measures reported by other companies as EBITDA, adjusted EBIT, EBIT, EBT and adjusted net income or similarly named. The following table provides a reconciliation of adjusted EBIT, EBIT and EBT to net income and adjusted net income:

<table>
<thead>
<tr>
<th>(in EUR million)</th>
<th>Year ended 31 December</th>
<th>Three months ended 31 March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Adjusted EBIT</td>
<td>757</td>
<td>671</td>
</tr>
<tr>
<td>Adjustments (unaudited)</td>
<td>-51</td>
<td>-51</td>
</tr>
<tr>
<td>Thereof “special items from purchase price allocation”</td>
<td>-21</td>
<td>-21</td>
</tr>
<tr>
<td>Thereof “special items from the increase in the stake in IAE-V2500”</td>
<td>-30</td>
<td>-30</td>
</tr>
<tr>
<td>Earnings before interest and taxes (EBIT)</td>
<td>706</td>
<td>620</td>
</tr>
<tr>
<td>Net financial income/expense</td>
<td>-39</td>
<td>-13</td>
</tr>
<tr>
<td>Earnings before taxes (EBT)</td>
<td>667</td>
<td>607</td>
</tr>
<tr>
<td>Income taxes</td>
<td>-178</td>
<td>-154</td>
</tr>
<tr>
<td>Net income</td>
<td>488</td>
<td>453</td>
</tr>
<tr>
<td>Adjustments to net income (unaudited)</td>
<td>-49</td>
<td>26</td>
</tr>
<tr>
<td>Thereof “special items from purchase price allocation”</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Thereof “special items from the increase in the stake in IAE-V2500”</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Thereof adjustment of net financial income / expense to net interest income / expense (unaudited)</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Thereof adjustment of income taxes to normalized income taxes (unaudited)</td>
<td>-9</td>
<td>-24</td>
</tr>
<tr>
<td>Adjusted net income (unaudited)</td>
<td>538</td>
<td>479</td>
</tr>
</tbody>
</table>

(a) Adjustments for the contributions resulting from the "special items from purchase price allocation" and the "special items from the increase in the stake in IAE-V2500". As of 1 January 2004, the company passed into the ownership of Kohlberg Kravis Roberts & Co. Ltd., following the latter's purchase of 100% of the company's shares from the then DaimlerChrysler AG. In the context of the acquisition, assets, liabilities and contingent liabilities were identified.
in accordance with IFRS 3 and measured at fair value. Since then, the identified intangible assets in connection with the purchase price allocation, in particular, have resulted in substantial scheduled amortization. The latter are referred to collectively as “special items from purchase price allocation”. The contributions from the “special items from the increase in the stake in IAE-V2500” result from the increase in the stake in the V2500 engine program in 2012, which is capitalized as an acquired program asset and is accounted for as a reduction of revenue over its estimated economic life of 25 years.

The following table provides a reconciliation of EBITDA to EBIT:

<table>
<thead>
<tr>
<th></th>
<th>Year ended 31 December</th>
<th>Three months ended 31 March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>(in EUR million)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBITDA (unaudited)</td>
<td>965</td>
<td>821</td>
</tr>
<tr>
<td>Amortization/value</td>
<td>-260</td>
<td>-201</td>
</tr>
<tr>
<td>adjustments/depreciation/impairment losses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earnings before interest and taxes (EBIT)</td>
<td>706</td>
<td>620</td>
</tr>
</tbody>
</table>

(4) The Company defines its free cash flow by combining its cash flow from operating activities with its cash flow from investing activities and eliminating components of cash flow from investing activities (non-recurring cash flows) that lie outside the operational management of the core business (as set out below). The Company reports its free cash flow as it believes this measure serves as an indicator of the MTU Group's liquidity situation. Free cash flow is not a performance indicator recognized under IFRS. The free cash flow reported by the Company is not necessarily comparable to the performance measures published by other companies as free cash flow or the like. The following table provides a reconciliation of free cash flow:

<table>
<thead>
<tr>
<th></th>
<th>Year ended 31 December</th>
<th>Three months ended 31 March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>(in EUR million)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash flow from operating activities</td>
<td>832</td>
<td>595</td>
</tr>
<tr>
<td>Cash flow from investing activities</td>
<td>-472</td>
<td>-336</td>
</tr>
<tr>
<td>Non-recurring cash flows (unaudited)</td>
<td>-2</td>
<td>-56</td>
</tr>
<tr>
<td>Thereof payments made to acquire stakes in engine programs (unaudited)</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>Thereof proceeds related to interest-bearing loans in connection with aircraft / engine financing commitments (unaudited)</td>
<td>-31</td>
<td>-79</td>
</tr>
<tr>
<td>Free cash flow (unaudited)</td>
<td>358</td>
<td>203</td>
</tr>
</tbody>
</table>

Administrative, Management and Supervisory Bodies

In accordance with the German Stock Corporation Act (Aktiengesetz), the Company has both an executive board (Vorstand) (the "Executive Board") and a supervisory board (Aufsichtsrat) (the "Supervisory Board"). The Executive Board is responsible for the management of the Company's business; the Supervisory Board supervises the Executive Board and appoints its members. The two boards are separate, and no individual may simultaneously be a member of both boards.

Executive Board

As of the date of this Prospectus, the members of the Executive Board include:

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
<th>Membership on other management or supervisory boards and comparable bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reiner Winkler</td>
<td>Chief Executive Officer (CEO)</td>
<td>Chairman of the supervisory board</td>
</tr>
<tr>
<td></td>
<td>Responsible for human resources, corporate strategy, corporate communications, and legal affairs</td>
<td>- MTU Maintenance Hannover GmbH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Member of the executive board</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- IAE International Aero Engines AG</td>
</tr>
</tbody>
</table>
Supervisory Board

As of the date of this Prospectus, the members of the Supervisory Board are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Principal occupation</th>
<th>Function</th>
<th>Membership in other supervisory boards and comparable bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klaus Eberhardt</td>
<td>Independent consultant</td>
<td>Chairman</td>
<td>Chairman of the supervisory board - ElringKlinger AG, Dettingen/Erms, Germany</td>
</tr>
<tr>
<td>Josef Mailer*</td>
<td>Chairman of the works council of MTU Aero Engines AG, Munich, Germany</td>
<td>Deputy Chairman</td>
<td>None</td>
</tr>
<tr>
<td>Roberto Armellini*</td>
<td>Second authorized representative and director of IG Metall, Munich, Germany</td>
<td>Member</td>
<td>Member of the supervisory board - RENK AG, Augsburg, Germany</td>
</tr>
<tr>
<td>Dr. Christine Bortenländer</td>
<td>Chief Executive of Deutsches Aktieninstitut e.V., Frankfurt, Germany</td>
<td>Member</td>
<td>Member of the supervisory board - Covestro AG, Leverkusen, Germany - Covestro Deutschland AG, Leverkusen, Germany - OSRAM Licht AG, Munich, Germany</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
<td>Position</td>
<td>Company/Institution</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Thomas Dautl*</td>
<td>Member</td>
<td>None</td>
<td>OSRAM GmbH, Munich, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TÜV Süd AG, Munich, Germany</td>
</tr>
<tr>
<td>Dr. Jürgen M. Geißinger</td>
<td>Member</td>
<td>Member of the board of directors</td>
<td>Hilotherm Holding AG, Oberwil bei Zug, Switzerland</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AAA Accelerator Group Europe AG, Oberwil bei Zug, Switzerland</td>
</tr>
<tr>
<td>Anita Heimerl*</td>
<td>Member</td>
<td>None</td>
<td>Member</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Member of the board of directors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hilotherm Holding AG, Oberwil bei Zug, Switzerland</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AAA Accelerator Group Europe AG, Oberwil bei Zug, Switzerland</td>
</tr>
<tr>
<td>Heike Madan*</td>
<td>Member</td>
<td>None</td>
<td>Member</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Member of the supervisory board</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B. Braun Melsungen AG, Melsungen, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>creditshelf AG, Frankfurt am Main, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>J.H.K. GmbH, Bremerhaven, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stabilus S. A., Luxembourg, Luxembourg</td>
</tr>
<tr>
<td>Dr. Joachim Rauhut</td>
<td>Member</td>
<td>Member of the advisory board</td>
<td>Poppe &amp; Potthoff GmbH, Bielefeld, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Member of the board of directors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Morvern Group Limited, Ripley, United Kingdom</td>
</tr>
<tr>
<td>Prof. Dr. Klaus Steffens</td>
<td>Member</td>
<td>Member of the supervisory board</td>
<td>HeidelbergCement AG, Heidelberg, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rheinmetall AG, Dusseldorf, Germany</td>
</tr>
<tr>
<td>Prof. Dr. Marion A. Weissenberger-Eibl</td>
<td>Member</td>
<td>Member of the supervisory board</td>
<td>MTU Maintenance Berlin-Brandenburg GmbH, Ludwigsfelde, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael Winkelmann*</td>
<td>Member</td>
<td>Member of the supervisory board</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Employee representative

The members of the Executive Board and the Supervisory Board can be contacted at the Issuer’s business address: Dachauer Straße 665, 80995 Munich, Germany.
Conflicts of Interest

As of the date of this Prospectus, the above-mentioned members of the Executive Board and of the Supervisory Board of the Company do not have potential conflicts of interests between any duties to the Company and their private interests or other duties.

Board Practices

The governing bodies of the Company are the Executive Board, the Supervisory Board and the Annual General Meeting (**Hauptversammlung**). The powers of these bodies are set forth in the German Stock Corporation Act, the Company's articles of association (**Satzung**) and the rules of procedure (**Geschäftsordnung**) of the Executive Board and the Supervisory Board, respectively, and the committees of the Supervisory Board. The Executive Board and the Supervisory Board work independently of each other. No person may serve on both boards at the same time.

The Executive Board is responsible for managing the Company's day-to-day business and for representing the Company in dealings with third parties. The Supervisory Board appoints and may dismiss members of the Executive Board. The Supervisory Board supervises and advises the Executive Board in its management of the Company and represents the Company in all (legal) matters between a member of the Executive Board and the Company. In general, the Supervisory Board is not directly involved in the day-to-day management of the MTU Group. However, pursuant to the rules of procedure of the Executive Board, certain transactions require the prior consent of the Supervisory Board.

In performing their duties, members of both the Executive Board and the Supervisory Board must exercise the duty of care expected of a prudent and diligent business person and a duty of loyalty. Members of the Executive Board and the Supervisory Board must consider a broad range of interests, including those of the Company and its shareholders and employees.

The members of the Executive Board and the Supervisory Board may be held personally liable to the Company for breaches of their duties of loyalty and care. The Company must bring an action for breach of duty against the Executive Board or Supervisory Board upon a resolution of the stockholders passed at a Shareholders' Meeting by a simple majority of votes cast. Furthermore, minority shareholders representing at least 1 per cent. of the Company's share capital or shares with a nominal value of EUR 100,000 can be admitted by the competent court to assert claims for damage of the Company against members of either of the Company's boards in their own name.

Executive Board

The Executive Board conducts the business of the Company by common responsibility shared among all its members. The Executive Board determines entrepreneurial goals, the fundamental strategic direction, corporate policy and MTU Group's organization.

Generally, the members of the Executive Board are appointed by the Supervisory Board for a term of up to five years. Extensions of the term of office by re-appointment are permitted. Pursuant to the Company's articles of association, the Executive Board must have at least two members. The Supervisory Board determines the number of members of the Executive Board. As of the date of this Prospectus, the Executive Board has four members.

Any two members of the Executive Board or any individual Executive Board member together with an authorized signatory with statutory power of attorney (**Prokurist**) may legally represent the Company.
The Executive Board must report regularly to the Supervisory Board, particularly on business policy and strategy, on profitability and on the current business of the Company, as well as on any exceptional matters that may arise. If not otherwise required by law, the Executive Board decides with a simple majority of the votes cast (unless if it consists of two members in which case it may only pass resolutions unanimously). Under certain circumstances, such as a serious breach of duty or a vote of no confidence by the stockholders in an Annual General Meeting, a member of the Executive Board may be removed by the Supervisory Board prior to the expiration of his/her term. A member of the Executive Board may not deal with, or vote on, matters relating to proposals, arrangements or contracts between him/herself and the Company.

**Supervisory Board**

The Supervisory Board's main functions are supervising and advising the Executive Board in its management of the Company, appointing members of the Executive Board, approving the financial statements, and consenting to matters that are subject to the Supervisory Board's consent under German law or the Company's articles of association and to matters which the Supervisory Board has made subject to its prior consent pursuant to the rules of procedure of the Executive Board.

The Supervisory Board consists of 12 members, including six members elected by the shareholders at the Annual General Meeting in accordance with the provisions of the German Stock Corporation Act and six members elected by the Company's employees in accordance with the provisions of the German Co-Determination Act (Mitbestimmungsgesetz).

The Supervisory Board members are elected for a fixed term. Each term usually expires at the end of the Annual General Meeting in the fourth financial year after the year in which such Supervisory Board member was elected, i.e. after five years. Supervisory Board members may be re-elected.

Unless otherwise provided by law, resolutions of the Supervisory Board are passed by a simple majority of the votes cast. In case of a tied vote, and if a second vote held on the same item also results in a tied vote, a third round of votes is cast, with the Chairman of the Supervisory Board being entitled to cast a second vote.

The Chairman is usually a shareholder representative elected by a two-third majority of all members of the Supervisory Board.

The Supervisory Board may form committees and establish their duties and powers. To the extent permitted by law, the Supervisory Board may also delegate to such committees decision-making powers of the Supervisory Board. Currently the Supervisory Board maintains the following committees:

As of the date of this Prospectus, the Supervisory Board has established four committees: the audit committee, the personnel committee, the mediation committee pursuant to section 27 paragraph 3 of the German Co-Determination Act (Mitbestimmungsgesetz), and the nomination committee.

**Corporate Governance**

The German Corporate Governance Code (Deutscher Corporate Governance Kodex) (the "Corporate Governance Code") in the version dated 16 December 2019 and effective since 20 March 2020 replaced the Corporate Governance Code in the version dated 7 February 2017. It contains certain recommendations (Empfehlungen) and suggestions (Anregungen) for the management and supervision of German listed companies with regard to shareholders, their corporate bodies, transparency, accounting, and the audit of financial statements. Such companies are under no legal obligation to comply with the recommendations or suggestions in the Corporate Governance Code unless, and to the extent, they have publicly declared that they will do so. Section 161 of the German Stock Corporation Act merely requires the management and supervisory board of a listed company to declare annually to
what extent they comply with the recommendations of the Corporate Governance Code or to explain why certain recommendations were or are not followed.

In its declaration of compliance issued in December 2019, the Executive Board and Supervisory Board had declared that the recommendations of the German Corporate Governance Code in the version dated 7 February 2017 have been and are being complied with in their entirety. A declaration with regard to the Corporate Governance Code in the version dated 16 December 2019 has not been published by the Company as of the date of this Prospectus.

The declarations of compliance are available on the Company’s website (https://www.mtu.de).

**Share Capital**

As of the date of this Prospectus, the registered share capital of the Issuer amounts to EUR 53,095,488.00 divided into 53,095,488 ordinary registered shares with no par value (no par value shares), each such share representing a notional amount of the share capital of EUR 1.00.

The registered share capital in the amount of EUR 53,095,488.00 is fully paid in. Each share (except those held in treasury) carries one vote at the shareholders' meeting of the Company. There are no restrictions on voting rights.

**Statutory Auditor**

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Arnulfstraße 59, 80636 Munich, Germany ("EY"), a member of the German Chamber of Public Accountants (Wirtschaftsprüferkammer), Berlin, is the independent auditor of the Company.

EY has audited the consolidated financial statements of the Company as of and for the fiscal years ended 31 December 2019 and 31 December 2018, each prepared in accordance with IFRS, as adopted by the European Union and the additional requirements of German commercial law pursuant to Section 315e (1) of the German Commercial Code (Handelsgesetzbuch), in accordance with Section 317 of the German Commercial Code (Handelsgesetzbuch) and German generally accepted standards of financial statement audits and issued in each case an unqualified independent auditor's report (Bestätigungsvermerk des unabhängigen Abschlussprüfers) thereon.

**Fiscal Year**

The Company's fiscal year is identical to the calendar year.

**Major Shareholders**

Based on notices the Company received pursuant to Section 33 et seq. of the German Securities Trading Act (Wertpapierhandelsgesetz) until 18 June 2020, the following shareholders held (directly or indirectly), as per the day of the notice, five per cent. or more of its outstanding voting rights.

<table>
<thead>
<tr>
<th>Name</th>
<th>Total voting rights proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allianz Global Investors GmbH</td>
<td>5.09%</td>
</tr>
<tr>
<td>BlackRock, Inc.</td>
<td>7.64%</td>
</tr>
<tr>
<td>The Capital Group Companies, Inc.</td>
<td>14.62%*</td>
</tr>
</tbody>
</table>

* Including voting rights attributed to The Capital Group Companies, Inc and held by EuroPacific Growth Fund as notified to the Issuer.

As of the date of the Prospectus, the Company held 54,410 treasury shares. This corresponds to 0.1025% of the total voting rights in the Company.
The remaining shares of the Company are in free float. All shares of the Company have identical voting rights and there are no multiple voting rights.

Trend information and significant changes in financial performance or financial position

The negative economic effects of the ongoing spread of the COVID-19 pandemic on MTU Group, including the Issuer, cannot be adequately determined or reliably quantified for the time being. Other than as set forth under "Risk Factors - MTU faces risks associated with the outbreak and spread of COVID-19 and the implications of this global pandemic on the global economy" and under "Recent Events and Outlook" there has been no material adverse change in the prospects of the Issuer since 31 December 2019.

The negative economic effects of the ongoing spread of the COVID-19 pandemic on MTU Group, including the Issuer, cannot be adequately determined or reliably quantified for the time being. Other than as set forth under "Risk Factors - MTU faces risks associated with the outbreak and spread of COVID-19 and the implications of this global pandemic on the global economy" and under "Recent Events and Outlook" there have been no significant changes in the financial performance or the financial position of the MTU Group since 31 March 2020.

Borrowing and Funding

In May 2020, the Company has extended its existing EUR 600 million revolving credit facility by an additional tranche of EUR 100 million committed for 12 months with two extension options at six months.

In April 2020, the Company has issued EUR 100 million promissory notes (Schuldschein) with a tenor of 400 days.

Other than that, there have been no material changes in the borrowing and funding structure of the Issuer since 31 December 2019.

Material Debt Financings

MTU has the following material debt instruments outstanding as of the date of this Prospectus:

- EUR 600 million revolving credit facility with five banks which runs until October 2023; this revolving credit facility was extended in May 2020 by an additional tranche of EUR 100 million committed for 12 months (with two extension options for six months);
- EUR 500 million senior unsecured convertible bond issued by the Company in 2016 with a maturity in May 2023, entitling bondholders to convert their convertible bonds into common shares of the Company at any time since June 2016; as of 31 March 2020, the nominal amount outstanding was EUR 89.9 million;
- EUR 500 million senior unsecured convertible bond issued by the Company in 2019 with a maturity in March 2027, entitling bondholders to convert their convertible bonds into common shares of the Company at any time since September 2024;
- EUR 30 million note purchase agreement issued by the Company in 2014 with a maturity in March 2021;
- EUR 100 million promissory note (Schuldschein) issued by the Company in April 2020 with a maturity in June 2021;
- EUR 100 million bond issued by the Company in 2013 with a maturity in June 2028.
Expected Financing of the Issuers' activities

Access to adequate liquidity, avoiding financial risks, and safeguarding financial flexibility are the main objectives of MTU Group's financial management. MTU’s main source of liquidity is cash flow from its operating activities. Surplus liquidity is managed by utilizing a cash pooling system within the MTU Group to reduce external borrowing requirements. Furthermore, other external and internal financing instruments are used to safeguard liquidity. This includes corporate bonds, loan agreements, lease agreements and company pension plans.

Material Contracts

The products in the commercial and military business of MTU are usually developed and produced in alliances formed as RRSPs or military program joint venture companies. The rights and obligations of the parties to such alliances are contained in agreements which are crucial for the business of MTU. For details regarding the alliances in which MTU participates see above the tables under "Information about the Issuer and MTU Group – Business Description of MTU – Principal Products and Services of MTU".

For MTU’s material debt financings see "Material Debt Financings" above.

Legal and Arbitration Proceedings

MTU is involved in certain legal proceedings arising in the normal course of its business. The Company believes that none of these proceedings or proceedings in which MTU was involved over the course of its last two fiscal years, either individually or in the aggregate, is likely to have a material adverse effect on the business, financial condition or results of operations of MTU. To the Company’s knowledge, no proceeding that could have such a material adverse effect is threatened.

Recent Events and Outlook

The spread of COVID-19 started to affect the commercial aviation sector in February 2020, and had a more significant impact on the sector from March 2020 onwards. As a result, the Company suspended its dividend payments proposal, postponed its Annual General Meeting, suspended operations at its facilities in Germany and Poland for three weeks, and withdrew its guidance for the fiscal year 2020.

For the fiscal year 2020 the Company expects an overall decline in demand. Passenger traffic demand is expected to fall due to the COVID-19 pandemic as global commercial flights experienced nearly a standstill in the second quarter of the fiscal year of 2020. However, freight demand is expected to stay robust. While the impact of this demand reduction did not materialize in the results of MTU Group for the first quarter of the fiscal year 2020, the Company assumes that the COVID-19 pandemic will have a negative impact on demand and consolidated earnings of the MTU Group from the second quarter of the fiscal year 2020. The military business of MTU should remain largely unaffected. However, the commercial business is likely to be affected by a significant reduction in demand for both new engine sales and aftermarket business, as well as by an acceleration of the trend to the use of smaller aircrafts on medium haul routes. Commercial MRO will likely be affected by reduction in demand at least in the second and third quarter of the fiscal year 2020, in particular in the global passenger traffic airline sector, while demand from freight companies could safeguard capacity utilization.

According to company estimates, prior to the spread of COVID-19 global aircraft manufacturers had an order backlog of approximately eight years of production, while MTU had an order backlog of approximately four years of production. MTU has further proactively identified and initiated cost and cash saving measures to react with a view to limit the financial impact of COVID-19 on MTU. The reduction of impact should be facilitated given the cost base of MTU which is variable between 60%
to 70%. Measures identified include a reduction of general expenses (including travel, consultancy, and R&D) by 20% to 30%, the use of part time working schemes, as well as salary freezes and a reduction of contracts with increased working hours. Given the dynamic global developments associated with the COVID-19 pandemic, the Company’s expectations for the fiscal year 2020 and beyond cannot be set out in detail at the date of this Prospectus. However, in the event of a market recovery from the impact of the spread of COVID-19, regional traffic should be restarted at first and hence the narrowbody business of MTU is expected to be one of the first beneficiaries of the recovery, as its portfolio is overweight to single-aisles.

As long-term market trends affecting MTU’s business, the commercial OEM Business should grow as global passenger traffic growth for the next 20 years is expected to be 4.3% (according to Airbus Global Market Forecast 2019-2038) or, respectively, 4.6% (according to Boeing Commercial Market Outlook 2019-2038). The military OEM Business of MTU could benefit from the implications of the NATO guideline for its members (including Germany) to increase national defense budgets to a level not below 2% of the respective national GDP by 2024. According to a NATO communiqué published in November 2019, the defense spending of Germany was forecasted at 1.39% of national GDP for 2019, and could hence converge to meet this guideline. For its commercial MRO Business, MTU sees the potential of doubling total engine MRO revenue over the next ten years. This growth potential could be driven by current narrowbody engines which have not yet reached their shop visit peak, as well as by new engine platforms.
TERMS AND CONDITIONS OF THE NOTES

Anleihebedingungen

Diese Anleihebedingungen sind in deutscher Sprache abgefasst und mit einer Übersetzung in die englische Sprache versehen. Der deutsche Wortlaut ist allein rechtsverbindlich. Die englische Übersetzung dient nur zur Information.

Terms and Conditions

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be the only legally binding version. The English language translation is provided for convenience only.

§ 1 (Verbrieftung und Nennbetrag)

(1) Die MTU Aero Engines AG, München, Bundesrepublik Deutschland (die "Emitte
tentin") begibt auf den Inhaber lautende Schuldverschreibungen (die "Schul
dverschreibungen") im Gesamtnennbetrag (vorbehaltlich § 1(3)) von EUR 500.000.000, eingeteilt in Schuldverschreibungen im Nennbetrag von je EUR 1.000 (der "Nennbetrag").


§ 1 (Form and Denomination)

(1) MTU Aero Engines AG, Munich, Federal Republic of Germany (the "Issuer") issues bearer Notes (the "Notes") in the aggregate principal amount (subject to § 1(3)) of EUR 500,000,000 divided into Notes in a denomination of EUR 1,000 (the "Principal Amount") each.

(2) The Notes are initially represented by a temporary global bearer Note (the "Temporary Global Note") without interest coupons. The Temporary Global Note will be exchangeable for Notes in the Principal Amount represented by a permanent global note (the "Permanent Global Note" and together with the Temporary Global Note, the "Global Notes") without coupons. The details of such exchange shall be entered in the records of the ICSDs (as defined below). The Global Notes shall each be signed manually by authorized signatories of the Issuer and shall each be authenticated by or on behalf of the Principal Paying Agent. Definitive Notes and interest coupons will not be issued. The right of the Noteholders to require the issue and delivery of definitive notes or interest coupons is excluded.

"Vereinigte Staaten" bezeichnet die Vereinigten Staaten von Amerika (einschließlich deren Bundesstaaten und des District of Columbia) sowie deren Territorien (einschließlich Puerto Rico, der U.S. Virgin Islands, Guam, American Samoa, Wake Island und Northern Mariana Islands).

(3) Die Globalurkunden werden solange von dem Clearingsystem oder im Auftrag des Clearingsystems verwahrt, bis sämtliche Verpflichtungen der Emittentin aus den Schuldverschreibungen erfüllt sind. "Clearingsystem" meint jeweils Clearstream Banking, société anonyme, Luxemburg ("Clearstream, Luxemburg") und Euroclear Bank SA/NV ("Euroclear") (Clearstream, Luxemburg und Euroclear jeweils auch ein The Temporary Global Note shall be exchanged for the Permanent Global Note on a date (the "Exchange Date") not earlier than 40 days after the date of issue of the Notes. Such exchange shall only be made upon delivery of certifications to the effect that the beneficial owner or owners of the Notes is not a U.S. person (other than certain financial institutions or certain persons holding Notes through such financial institutions). Payment of interest on Notes represented by a Temporary Global Note will be made only after delivery of such certifications. A separate certification shall be required in respect of each such payment of interest. Any such certification received on or after the 40th day after the date of issue of the Notes will be treated as a request to exchange the Temporary Global Note pursuant to this § 1(2). Any Notes delivered in exchange for the Temporary Global Note shall be delivered only outside of the United States.

"United States" means the United States of America (including the States thereof and the District of Columbia) and its possessions (including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and Northern Mariana Islands).

(3) The Global Notes will be held in custody by or on behalf of the Clearing System until all obligations of the Issuer under the Notes have been satisfied. "Clearing System" means each of Clearstream Banking, société anonyme, Luxembourg ("Clearstream, Luxembourg") and Euroclear Bank SA/NV ("Euroclear") (Clearstream, Luxembourg and Euroclear each also an "ICSD" and together the "ICSDs"). The Notes are issued in new
"ICSD" und zusammen die "ICSDs"). Die Schuldverschreibungen werden in Form einer New Global Note (NGN) ausgegeben und von einer gemeinsamen Verwahrstelle im Namen beider ICSDs verwahrt.

Der Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen entspricht dem jeweils in den Registern beider ICSDs eingetragenen Gesamtbetrag. Die Register der ICSDs (unter denen man die Register versteht, die jeder ICSD für seine Kunden über den Betrag ihres Anteils an den Schuldverschreibungen führt) sind schlüssiger Nachweis über den Nennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen und eine zu diesen Zwecken von einem ICSD jeweils ausgestellte Bestätigung mit dem Nennbetrag der so verbrieften Schuldverschreibungen ist zu jedem Zeitpunkt ein schlüssiger Nachweis über den Inhalt des Registers des jeweiligen ICSD.

Bei Rückzahlung oder Zinszahlung bezüglich der durch die Globalurkunde verbrieften Schuldverschreibungen bzw. bei Kauf und Entwertung der durch die Globalurkunde verbrieften Schuldverschreibungen stellt die Emittentin sicher, dass die Einzelheiten über jede Rückzahlung und Zahlung bzw. Kauf und Entwertung bezüglich der Globalurkunden pro rata in die Unterlagen der ICSDs eingetragen werden, und nach dieser Eintragung vom Nennbetrag der in die Register der ICSDs aufgenommenen und durch die Globalurkunde verbrieften Schuldverschreibungen der Gesamtnennbetrag der zurückgezahlten bzw. gekauften und entwerteten Schuldverschreibungen abgezogen wird.


The aggregate principal amount of Notes represented by the Global Note shall be the aggregate amount from time to time entered in the records of both ICSDs. The records of the ICSDs (which expression means the records that each ICSD holds for its customers which reflect the amount of such customer's interest in the Notes) shall be conclusive evidence of the principal amount of Notes represented by the Global Note and, for these purposes, a statement issued by an ICSD stating the principal amount of Notes so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or interest being made in respect of, or purchase and cancellation of, any of the Notes represented by the Global Note the Issuer shall procure that details of any redemption, payment or purchase and cancellation (as the case may be) in respect of the Global Note shall be entered pro rata in the records of the ICSDs and, upon any such entry being made, the principal amount of the Notes recorded in the records of the ICSDs and represented by the Global Note shall be reduced by the aggregate principal amount of the Notes so redeemed or purchased and cancelled.

(4) The holders of Notes ("Noteholders") are entitled to co-ownership participations in the Global Notes or other comparable rights, which are transferable in accordance with applicable laws and the rules and regulations of the Clearing System.
werden können.

Bei Austausch nur eines Teils von Schuldverschreibungen, die durch eine vorläufige Globalurkunde verbrieft sind, wird die Emittentin sicherstellen, dass die Einzelheiten dieses Austauschs pro rata in die Register der ICSDs aufgenommen werden.

On an exchange of a portion only of the Notes represented by a Temporary Global Note, the Issuer shall procure that details of such exchange shall be entered pro rata in the records of the ICSDs.

§ 2
(Status, Negativverpflichtung)

(1) Die Schuldverschreibungen begründen nicht nachrangige und nicht besicherte Verbindlichkeiten der Emittentin, die untereinander und mit allen anderen nicht besicherten und nicht nachrangigen Verbindlichkeiten der Emittentin gleichrangig sind, soweit diesen Verbindlichkeiten nicht durch zwingende gesetzliche Bestimmungen ein Vorrang eingeräumt wird.

(1) The obligations under the Notes constitute unsubordinated and unsecured obligations of the Issuer ranking pari passu among themselves and pari passu with all other unsecured and unsubordinated obligations of the Issuer, unless such obligations are accorded priority under mandatory provisions of statutory law.

(2) Die Emittentin verpflichtet sich, solange Schuldverschreibungen ausstehen, jedoch nur bis zu dem Zeitpunkt, an dem alle Beträge an Kapital und Zinsen an das Clearingsystem oder an dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearingsystems zur Verfügung gestellt worden sind,

(2) The Issuer undertakes, so long as any of the Notes are outstanding, but only up to the time that all amounts of principal and interest have been placed at the disposal of the Clearing System or to its order for credit to the accounts of the relevant account holders of the Clearing System,

(a) kein Grundpfandrecht, Mobiliarpfandrecht, Pfandrecht oder sonstiges dingliches Sicherungsrecht (jedes ein "Sicherungsrecht") an ihren gesamten Vermögenswerten oder Teilen davon zur Besicherung einer anderen gegenwärtigen oder zukünftigen Kapitalmarktvverbindlichkeit zu gewähren oder fortbestehen zu lassen; und

(a) not to create or permit to subsist any mortgage, charge, pledge or other form of encumbrance in rem (each a "Security Interest") over the whole or any part of its assets to secure any present or future Capital Market Indebtedness; and

(b) ihre Wesentlichen Tochtergesellschaften zu veranlassen (soweit rechtlich möglich und zulässig), kein Sicherungsrecht an ihren jeweiligen gesamten Vermögenswerten oder jeweiligen Teilen davon zur Besicherung einer eigenen oder fremden gegenwärtigen oder zukünftigen Kapitalmarktvverbindlichkeit zu gewähren oder fortbestehen

(b) to procure (to the extent legally possible and permissible) that none of its Material Subsidiaries creates or permits to subsist any Security Interest over the whole or any part of its assets to secure any present or future own or third-party Capital Market Indebtedness,
zu lassen,

ohne zuvor oder gleichzeitig die Anleihegläubiger gleichrangig an einem solchen Sicherungsrecht gleichwertig zu beteiligen oder zu Gunsten der Anleihegläubiger ein Sicherungsrecht zu gleichwertigen Bedingungen zu bestellen, welches von einem unabhängigen Sachverständigen als gleichwertige Sicherheit beurteilt wird.

Diese Verpflichtung findet keine Anwendung auf (A) ein Sicherungsrecht, das (i) nach dem anzuwendenden Recht zwingend notwendig ist, (ii) als Voraussetzung einer staatlichen Genehmigung erforderlich ist, oder (iii) durch eine Wesentliche Tochtergesellschaft an ihren gegenwärtigen oder zukünftigen Ansprüchen gegenüber der Emittentin oder einer ihrer Tochtergesellschaften aus der Weiterleitung des Erlöses dieser Wesentlichen Tochtergesellschaft aus dem Verkauf von Schuldforschreibungen bestellt wird, sofern die bestellten Sicherheiten der Sicherung der Verpflichtungen dieser Wesentlichen Tochtergesellschaft aus den Schuldschreibungen dienen, (iv) am Vermögen einer Tochtergesellschaft der Emittentin bestellt wurde, die erst nach dem Tag der Begebung Wesentliche Tochtergesellschaft wird, sofern das betreffende Sicherungsrecht bereits zu diesem Zeitpunkt bestand und nicht im Zusammenhang mit einem Erwerb der Wesentlichen Tochtergesellschaft durch die Emittentin bestellt wurde, oder (v) im Zusammenhang mit einem asset/mortgage backed financing (ABS/MBS) bestellt wird, oder (B) die Erneuerung, Verlängerung oder den Austausch irgendeines Sicherungsrechts gemäß vorstehenden (A)(i) bis (A)(v).

Eine nach diesem § 2(2) zu leistende Sicherheit kann auch zu Gunsten eines Treuhänders der Anleihegläubiger bestellt werden.

"Kapitalmarktverbindlichkeit" bezeichnet eine gegenwärtige oder zukünftige without prior thereto or at the same time letting the Noteholders share pari passu and equally in such Security Interest or benefit from an equal Security Interest, which shall be approved by an independent expert as being equivalent security.

This undertaking shall not apply to a (A) Security Interest which (i) is mandatory according to applicable laws, (ii) is required as a prerequisite for governmental approvals, or (iii) is provided by a Material Subsidiary over any claims of the Material Subsidiary against the Issuer or any of its Subsidiaries, which claims exist now or arise at any time in the future, as a result of the passing on of the proceeds from the sale by the Material Subsidiary of any bonds, provided that any such security serves to secure obligations under such bonds of the Material Subsidiary, (iv) was granted over assets of a subsidiary of the Issuer that becomes a Material Subsidiary after the Issue Date, provided that the Security Interest has been in existence at this time and has not been granted in connection with an acquisition of the Material Subsidiary by the Issuer, or (v) is granted in connection with an asset/mortgage backed financing (ABS/MBS), or (B) the renewal, extension or replacement of any Security Interest pursuant to foregoing (A)(i) through (A)(v).

Any security which is to be provided pursuant to this § 2(2) may also be provided to a person acting as trustee for the Noteholders.

"Capital Market Indebtedness" means a present or future obligation for the
Verpflichtung zur Zahlung von Geldern (einschließlich Verpflichtungen aus Garantien oder anderen Haftungsvereinbarungen für Verbindlichkeiten von Dritten) aus Schuldverschreibungen oder aus Anleihen, Schuldverschreibungen und anderen ähnlichen Instrumenten mit einer ursprünglichen Laufzeit von mehr als einem Jahr und soweit sie an einer Wertpapierbörse oder an einem anderen anerkannten Wertpapiermarkt notiert, zugelassen oder gehandelt werden oder notiert, zugelassen oder gehandelt werden können.

"Wesentliche Tochtergesellschaft" ist eine Tochtergesellschaft (wie nachstehend definiert) der Emittentin, (i) deren Nettoumsatz gemäß ihres geprüften nicht konsolidierten Jahresabschlusses (bzw. falls diese Tochtergesellschaft selbst konsolidierte Jahresabschlüsse erstellt, deren konsolidierter Nettoumsatz gemäß ihres geprüften konsolidierten Jahresabschlusses) der für die Zwecke des letzten geprüften konsolidierten Jahresabschlusses der Emittentin benutzt wurde, mindestens 5 % der in diesem geprüften Konzernjahrabschluss ausgewiesenen gesamten Umsatzerlöse der Emittentin und ihrer konsolidierten Tochtergesellschaften beträgt oder (ii) deren Bilanzsumme gemäß ihres geprüften nicht konsolidierten Jahresabschlusses (bzw. falls diese Tochtergesellschaft selbst einen Konzernabschluss erstellt, deren konsolidierte Bilanzsumme gemäß ihres geprüften Konzernjahresabschlusses) der für die Zwecke des letzten geprüften konsolidierten Jahresabschlusses der Emittentin benutzt wurde, mindestens 5 % der im Konzernjahresabschluss ausgewiesenen Bilanzsumme der Emittentin und ihrer konsolidierten Tochtergesellschaften entspricht.

Eine "Tochtergesellschaft" im Sinne der Definition einer Wesentlichen Tochtergesellschaft ist jede Gesellschaft, Personen-

"Material Subsidiary" means any Subsidiary (as defined below) of the Issuer (i) whose net sales as shown in the audited non-consolidated annual accounts (or, if such Subsidiary itself prepares consolidated accounts, whose consolidated net sales as shown in the audited consolidated annual accounts) of such Subsidiary used for the purposes of preparing the latest audited consolidated annual accounts of the Issuer are at least 5 per cent. of the total net sales (Umsatzerlöse) of the Issuer and its consolidated subsidiaries as shown in such audited consolidated annual accounts or (ii) whose total assets as shown in the audited nonconsolidated annual accounts (or, if such Subsidiary itself prepares consolidated annual accounts, whose consolidated total assets as shown in the audited consolidated annual accounts) of such Subsidiary used for the purposes of preparing the latest audited consolidated annual accounts of the Issuer are at least 5 per cent. of the total assets of the Issuer and its consolidated subsidiaries as shown in the latest audited consolidated annual accounts.

"Subsidiary", as used in the definition of Material Subsidiary, means any corporation, partnership or other enterprise in
gesellschaft oder sonstiges Unternehmen an der bzw. dem die Emittentin direkt oder indirekt insgesamt mehr als 50 % des Kapitals oder der Stimmrechte hält und die bzw. das die Emittentin vollständig in ihren Konzernabschluss einzubeziehen hat.

§ 3
(Zinsen)


(2) Falls die Emittentin die Schuldverschreibungen bei Fälligkeit nicht einlöst, erfolgt die Verzinsung der Schuldverschreibungen mit dem gemäß § 3(1) anwendbaren Zinssatz ab dem Tag der Fälligkeit (einschließlich) bis zum Tag der tatsächlichen Rückzahlung der Schuldverschreibungen (ausschließlich). Die Geltendmachung eines weiteren Schadens ist nicht ausge- schlossen.

(3) Sind Zinsen für einen Zeitraum zu berechnen, der kürzer als eine Zinsperiode ist oder einer Zinsperiode entspricht, so werden die Zinsen auf der Grundlage der tatsächlichen Anzahl der Tage in dem jeweiligen Zeitraum ab dem ersten Tag des jeweiligen Zeitraums (einschließlich) bis zu dem letzten Tag des jeweiligen Zeitraums (ausschließlich) berechnet, geteilt durch die Anzahl der Tage in der Zinsperiode, in die der jeweilige Zeitraum fällt (einschließlich des ersten Tages der betroffenen Zinsperiode, aber ausschließlich des letzten Tages der betroffenen Zinsperiode).

"Zinsperiode" bezeichnet den Zeitraum ab dem Zinslaufbeginn (einschließlich) bis zu dem ersten Zinszahlungstag (ausschließlich) which the Issuer directly or indirectly holds in the aggregate more than 50 per cent. of the capital or the voting rights and which is required to be fully consolidated in the Issuer's consolidated accounts.

§ 3
(Interest)

(1) The Notes shall bear interest on their Principal Amount at the rate of 3.000 per cent. per annum (the "Interest Rate") from and including 1 July 2020 (the "Interest Commencement Date") to but excluding the date of redemption. Interest shall be payable in arrear on 1 July in each year (each such date, an "Interest Payment Date"), commencing on 1 July 2021.

(2) If the Issuer fails to redeem the Notes when due, interest shall continue to accrue from and including the due date to but excluding the date of the actual redemption of the Notes at the rate of interest which applies pursuant to § 3(1). Claims for further damages are not excluded.

(3) Where interest is to be calculated in respect of a period which is shorter than or equal to an Interest Period, the interest will be calculated on the basis of the actual number of days elapsed in the relevant period, from and including the first date in the relevant period to but excluding the last date of the relevant period, divided by the actual number of days in the Interest Period in which the relevant period falls (including the first such day of the relevant Interest Period but excluding the last day of the relevant Interest Period).

"Interest Period" means the period from and including the Interest Commencement Date to but excluding the first Interest
lich) und danach ab dem jeweiligen Zinszahlungstag (einschließlich) bis zu dem nächstfolgenden Zinszahlungstag (ausschließlich).

§ 4 (Rückzahlung bei Endfälligkeit)
Soweit nicht zuvor bereits ganz oder teilweise zurückgezahlt oder angekauft und entwertet, wird jede Schuldverschreibung am 1. Juli 2025 (der "Endfälligkeitstag") zu ihrem Nennbetrag zurückgezahlt.

§ 5 (Vorzeitige Rückzahlung, Rückkauf)
(1) Vorzeitige Rückzahlung aus steuerlichen Gründen.

Die Emittentin ist berechtigt, durch Mitteilung an die Anleihegläubiger gemäß § 13, die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit einer Kündigungsfrist von nicht weniger als 30 und nicht mehr als 60 Tagen vorzeitig zu kündigen und zu ihrem Nennbetrag zuzüglich bis zum Tag der vorzeitigen Rückzahlung (ausschließlich) aufgelaufener Zinsen zurückgezahlt werden, falls die Emittentin infolge einer Änderung oder Ergänzung der Steuer- oder Abgabensätze und -vorschriften der Bundesrepublik Deutschland oder deren politischen Untergliederungen oder Steuerbehörden oder infolge einer Änderung oder Ergänzung der Anwendung oder der amtlichen Auslegung dieser Gesetze und Vorschriften (vorausgesetzt, diese Änderung oder Ergänzung wird am oder nach dem Tag, an dem die Schuldverschreibungen begeben werden, wirksam) am nächstfolgenden Zinszahlungstag zur Zahlung von Zusätzlichen Beträgen (wie in § 7(1) definiert) verpflichtet sein wird und diese Verpflichtung nicht durch das Ergreifen der Emittentin zur Verfügung stehender zumutbarer Maßnahmen vermieden werden kann. Die Kündigung darf nicht (i) früher als 90 Tage vor dem frühestmöglichen Termin erfolgen, an dem die Emittentin verpflichtet

§ 4 (Redemption at Maturity)
Unless previously redeemed in whole or in part or purchased and cancelled, each Note shall be redeemed at its Principal Amount on 1 July 2025 (the "Maturity Date").

§ 5 (Early Redemption, Repurchase)
(1) Early Redemption for Reasons of Taxation.

The Issuer may, upon not more than 60 days' nor less than 30 days' prior notice of redemption given to the Noteholders in accordance with § 13, redeem the Notes (in whole but not in part) at their Principal Amount together with interest accrued to but excluding the date of early redemption, if as a result of any change in, or amendment to, the laws or regulations applicable in the Federal Republic of Germany or any political subdivision or taxing authority thereof or therein affecting taxation or the obligation to pay duties of any kind, or any change in, or amendment to, an official interpretation or application of such laws or regulations, which amendment or change is effective on or after the date on which the Notes were issued, the Issuer is required to pay Additional Amounts (as defined in § 7(1)) on the next succeeding Interest Payment Date, and this obligation cannot be avoided by the use of reasonable measures available to the Issuer. No such notice of redemption may be given (i) earlier than 90 days prior to the earliest date on which the Issuer would be obliged to pay such Additional Amounts were a payment in respect of the Notes then due, or (ii) if at the time such notice is given, such obligation to pay such Additional Amounts does not remain in effect. Any
wäre, solche Zusätzlichen Beträge zu zahlen, falls eine Zahlung auf die Schuldverschreibungen dann fällig sein würde, oder (ii) erfolgen, wenn zu dem Zeitpunkt, zu dem die Kündigung erfolgt, die Verpflichtung zur Zahlung von Zusätzlichen Beträgen nicht mehr besteht. Die Kündigung ist unwiderruflich, muss den für die Rückzahlung festgelegten Termin nennen und eine Erklärung in zusammengefasster Form enthalten, welche die das Rückzahlungsrecht der Emittentin begründenden Umstände darlegt.

(2) Vorzeitige Rückzahlung nach Wahl der Anleihegläubiger infolge eines Kontrollwechselereignisses.

(a) Tritt ein Kontrollwechselereignis ein, (i) verpflichtet sich die Emittentin, innerhalb von 15 Tagen (x) den Wahl-Rückzahlungstag (wie nachstehend definiert) zu bestimmen und (y) das Kontrollwechselereignis und den Wahl-Rückzahlungstag den Anleihegläubigern durch Mitteilung gemäß § 13 (die "Kontrollwechselereignis-Mitteilung") und der Hauptzahlstelle bekannt zu machen und (ii) hat jeder Anleihegläubiger das Recht (sofern nicht die Emittentin, bevor die nachstehend beschriebene Ausübungserklärung (wie nachstehend definiert) gemacht wird, die Rückzahlung der Schuldverschreibungen nach § 5(1) oder § 5(3) angezeigt hat), alle oder einige seiner Schuldverschreibungen mit einer Frist von mindestens 15 Tagen vor dem Wahl-Rückzahlungstag fällig zu stellen. Im Falle einer solchen Ausübungserklärung hat die Emittentin die Schuldverschreibungen an dem Wahl-Rückzahlungstag zu ihrem Nennbetrag zuzüglich bis zum Wahl-Rückzahlungstag (ausschließlich) aufgelaufener Zinsen zurückzuzahlen.

Ein "Kontrollwechselereignis" tritt such notice shall be irrevocable, must specify the date fixed for redemption and must set forth a statement in summary form of the facts constituting the basis for the right of the Issuer to redeem the Notes.

(2) Early Redemption at the option of the Noteholders following a Change of Control Event.

(a) If a Change of Control Event occurs (i) the Issuer undertakes to (x) fix the Optional Redemption Date (as defined below) and (y) give notice to the Noteholders in accordance with § 13 and to the Principal Paying Agent of the Change of Control Event and the Optional Redemption Date (the "Change of Control Event Notice"), in each case within 15 days, and (ii) each Noteholder will have the option (unless, prior to the giving of the Put Notice (as defined below) referred to below, the Issuer gives notice to redeem the Notes in accordance with § 5(1) or § 5(3)) to declare, on giving not less than 15 days' notice prior to the Optional Redemption Date, all or some only of his Notes due. In the case a Put Notice is given, the Issuer will redeem the Notes at their Principal Amount together with interest accrued to but excluding the Optional Redemption Date.
ein, wenn ein Kontrollwechsel (wie nachstehend definiert) eintritt und es innerhalb des Kontrollwechselzeitraums zu einer Absenkung des Ratings (wie nachstehend definiert) kommt.

"Wahl-Rückzahlungstag" bezeichnet den von der Emittentin in der Kontrollwechselereignis-Mitteilung festgelegten Tag, der (i) ein Geschäftstag (wie nachstehend definiert) sein muss und (ii) nicht weniger als 60 und nicht mehr als 90 Tage nach Bekanntmachung der Kontrollwechselereignis-Mitteilung liegen darf.

(b) Für Zwecke dieses § 5(2) gilt Folgendes:

Eine "Absenkung des Ratings" tritt ein, wenn ein Kontrollwechsel vorliegt und (i) wenn innerhalb des Kontrollwechselzeitraums ein zuvor für die Emittentin oder ein für die ausstehenden langfristigen Verbindlichkeiten der Emittentin vergebenes Rating einer Ratingagentur (A) zurückgezogen oder (B) von einem Investment Grade Rating (Baa3 von Moody's oder BBB- von Fitch oder BBB- von S&P, oder besser) in ein non-Investment Grade Rating (Ba1 von Moody's oder BB+ von Fitch oder BB+ von S&P, oder schlechter) geändert wird oder (ii) wenn zum Zeitpunkt des Kontrollwechsels kein Investment Grade Rating von einer Ratingagentur für die Schuldverschreibungen oder die Emittentin vergeben ist und keine Ratingagentur innerhalb des Kontrollwechselzeitraums ein Investment Grade Rating für die Schuldverschreibungen vergibt.

Ein "Kontrollwechsel" gilt jedes Mal als eingetreten, wenn eine Person eine solche Anzahl von Stimmrechten an der Emittentin gemäß §

curs if a Change of Control (as defined below) occurs and within the Change of Control Period a Rating Downgrade (as defined below) occurs.

"Optional Redemption Date" means the date fixed by the Issuer in the Change of Control Event Notice, which (i) must be a Business Day (as defined below) and (ii) must fall not less than 60 and not more than 90 days after publication of the Change of Control Event Notice.

(b) For the purposes of this § 5(2) the following shall apply:

A "Rating Downgrade" shall be deemed to occur if a Change of Control has occurred and (i) if within the Change of Control Period any rating previously assigned to the Issuer or the outstanding long-dated liabilities of the Issuer by any rating agency is (A) withdrawn or (B) changed from an investment grade rating (Baa3 by Moody's or BBB- by Fitch or BBB- by S&P, or better) to a non-investment grade rating (Ba1 by Moody's or BB+ by Fitch or BB+ by S&P, or worse) or (ii) if at the time of the Change of Control, there is no investment grade rating assigned to the Notes by a rating agency or the Issuer and no rating agency assigns during the Change of Control Period an investment grade credit rating to the Notes.

A "Change of Control" shall be deemed to have occurred at each time that any person holds such a number of voting rights in the Issuer
33 WpHG hält und/oder ihr gemäß § 34 WpHG zugerechnet werden, die insgesamt 50 % oder mehr der Gesamtzahl der Stimmrechte der Emittentin entsprechen der "Kontrollerwerber";

"Kontrollwechselzeitraum" bezeichnet den Zeitraum, der (i) mit dem früheren der folgenden Ereignisse beginnt: (x) einer öffentlichen Bekanntmachung oder Erklärung der Emittentin oder des Kontrollerwerbers hinsichtlich eines möglichen Kontrollwechsels oder (y) dem Tag der ersten öffentlichen Bekanntmachung des eingetretenen Kontrollwechsels und (ii) am 90. Tag (einschließlich) nach dem Eintritt des Kontrollwechsels endet; und

(c) Die wirksame Ausübung des Rechts auf Rückzahlung für eine Schuldverschreibung nach Maßgabe dieses § 5(2) setzt voraus, dass der Anleihegläubiger unter Beachtung der Kündigungsfrist gemäß § 5(2)(a)

(i) bei der angegebenen Geschäftsstelle der Hauptzahlstelle eine ordnungsgemäß ausgefüllte und unterzeichnete Ausübungserklärung einreicht, die in ihrer jeweils maßgeblichen Form bei der angegebenen Niederlassung der Hauptzahlstelle erhältlich ist (die "Ausübungserklärung"); und

(ii) seine Schuldverschreibung(en), für die das Recht ausgeübt werden soll, an die Hauptzahlstelle liefert, und zwar durch Lieferung (Umbuchung) der Schuldver-

in accordance with section 33 of the German Securities Trading Act (WpHG) and/or such number of voting rights are attributed to the person in accordance with section 34 of the German Securities Trading Act that in total correspond to 50 per cent. or more of the total number of voting rights of the Issuer (the "Control Acquirer");

"Change of Control Period" means the period (i) commencing on the earlier of (x) any public announcement or statement of the Issuer or any Control Acquirer relating to any potential Change of Control or (y) the date of the first public announcement of the Change of Control having occurred and (ii) ending on and excluding the 90th day after the occurrence of the relevant Change of Control; and

(c) The valid exercise of the option to require the redemption of a Note under this § 5(2) is conditional upon the Noteholder in observation of the notice period provided in § 5(2)(a)

(i) submitting at the specified office of the Principal Paying Agent a duly signed and completed notice of exercise in the form (for the time being current) obtainable from the specified office of the Principal Paying Agent (a "Put Notice"); and

(ii) delivering to the Principal Paying Agent the Note(s) for which the right shall be exercised, by transferring (book-entry transfer) the Notes to the account of the Principal
Eine einmal abgegebene Ausübungserklärung ist unwiderruflich. Die Ausübungserklärung hat unter anderem die folgenden Angaben zu enthalten:

- Name und Anschrift des ausübenden Anleihegläubigers;
- den Gesamtnennbetrag der Schuldverschreibungen, für die das Recht gemäß diesem § 5(2) ausgeübt werden soll; und
- die Bezeichnung eines auf Euro lautenden Bankkontos des Anleihegläubigers, auf das auf die Schuldverschreibungen zahlbare Beträge zu leisten sind.

(d) Die Emittentin wird Zahlungen in Bezug auf solchermaßen gelieferte Schuldverschreibung(en) am Wahl-Rückzahlungstag auf das Euro-Bankkonto des Anleihegläubigers, welches dieser in der Ausübungserklärung ordnungsgemäß bezeichnet hat, überweisen.

(3) Vorzeitige Rückzahlung nach Wahl der Emittentin bei geringfügig ausstehendem Gesamtnenfbetrag.

Die Emittentin ist berechtigt, wenn 80 % oder mehr des Gesamtnennbetrags der ursprünglich begebenen Schuldverschreibungen (einschließlich Schuldverschreibungen, die gemäß § 12 zusätzlich begeben worden sind) durch die Emittentin oder eine direkte oder indirekte Tochtergesellschaft zurückgezahlt oder zurückgekauft wurde durch eine Bekanntmachung an die Anleihegläubiger gemäß § 13 unter Einhaltung einer Frist von nicht weniger als 30 und nicht mehr als 60 Tagen.
mit Wirkung zu dem von der Emittentin in der Bekanntmachung festgelegten Rückzahlungstermin, die Schuldverschreibungen (insgesamt und nicht nur teilweise) zu kündigen. Im Falle einer solchen Kündigung hat die Emittentin die Schuldverschreibungen am festgelegten Rückzahlungstermin zum Nennbetrag zuzüglich bis zum Rückzahlungstermin (ausschließlich) aufgelaufener Zinsen zurück zu zahlen.

(4) Vorzeitige Rückzahlung nach Wahl der Emittentin.

(a) Die Emittentin ist berechtigt, durch Kündigungserklärung gemäß § 5(4)(b), die Schuldverschreibungen (insgesamt und nicht nur teilweise) mit Wirkung zu jedem Optionalen Rückzahlungstag (wie nachstehend definiert) zur vorzeitigen Rückzahlung zu kündigen. Wenn die Emittentin ihr Kündigungsgesrecht gemäß Satz 1 ausübt, ist die Emittentin verpflichtet, die Schuldverschreibungen an dem in der Bekanntmachung festgelegten Optionalen Rückzahlungstag zu ihrem Nennbetrag zuzüglich der bis zu dem Optionalen Rückzahlungstag (ausschließlich) aufgelaufenen Zinsen zurückzuzahlen.

"Optionaler Rückzahlungstag" bezeichnet jeden Geschäftstag während des Zeitraums ab dem 1. April 2025 (einschließlich) bis zum Endfälligkeitstag (ausschließlich).

(b) Die Emittentin kann die Kündigung der Schuldverschreibungen zur vorzeitigen Rückzahlung gemäß § 5(4)(a) durch Veröffentlichung einer Bekanntmachung an die Anleihegläubiger gemäß § 13 unter Einhaltung einer Frist von nicht weniger als 20 und nicht mehr als 40 Tagen vor dem festgelegten Optionalen Rückzahlungstag erklären.

(5) Die Emittentin kann jederzeit im Markt such call notice is given, the Issuer shall redeem the remaining Notes on the specified redemption date at their Principal Amount together with interest accrued to but excluding the redemption date.

(4) Early Redemption at the Option of the Issuer.

(a) The Issuer may, upon giving a notice of redemption in accordance with § 5(4)(b) call the Notes for early redemption (in whole but not in part) with effect as of each Optional Redemption Date (as defined below). If the Issuer exercises its call right in accordance with sentence 1, the Issuer shall redeem the Notes at their Principal Amount together with interest accrued to but excluding the Optional Redemption Date on the Optional Redemption Date specified in the notice.

"Optional Redemption Date" means each Business Day during the period from and including 1 April 2025 to but excluding the Maturity Date.

(b) The Issuer may call the Notes for early redemption pursuant to § 5(4)(a) by publishing a notice to the Noteholders in accordance with § 13 subject to observing a notice period of not less than 20 nor more than 40 days prior to the specified Optional Redemption Date.

(5) The Issuer is entitled to purchase and re-
oder auf andere Weise Schuldverschreibungen ankaufen und verkaufen.

§ 6
(Zahlungen)
(1) Zahlungen auf Kapital und Zinsen in Bezug auf die Schuldverschreibungen erfolgen in Euro über die Hauptzahlstelle zur Weiterleitung an das Clearingsystem oder dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearingsystems außerhalb der Vereinigten Staaten.

(2) Die Emittentin wird durch Leistung der Zahlung an das Clearingsystem oder dessen Order von ihrer Zahlungspflicht befreit.

(3) Fällt der Fälligkeitstermin einer Zahlung auf eine Schuldverschreibung auf einen Tag, der kein Geschäftstag ist, so hat der Anleihegläubiger keinen Anspruch auf Zahlung vor dem nächsten Geschäftstag. Der Anleihegläubiger ist nicht berechtigt, weitere Zinsen oder sonstige Zahlungen aufgrund dieser Verspätung zu verlangen. "Geschäftstag" bezeichnet einen Tag (außer einem Samstag oder Sonntag), an dem das Clearingsystem sowie alle für die Abwicklung von Zahlungen in Euro wesentlichen Bereiche des Trans-European Automated Real-time Gross settlement Express Transfer systems (TARGET 2) betriebsbereit sind.

(4) Bezugnahmen in diesen Anleihebedingungen auf Kapital oder Zinsen auf Schuldverschreibungen schließen sämtliche gemäß § 7 zahlbaren Zusätzlichen Beträge ein.

§ 7
(Steuern)
(1) Sämtliche Zahlungen von Kapital und Zinsen in Bezug auf die Schuldverschreibungen sind ohne Einbehalt oder Abzug von oder wegen irgendwelcher gegenwärtigen oder zukünftigen Steuern oder Abgaben gleich welcher Art zu leisten, die von oder

sell Notes at any time in the market or otherwise.

§ 6
(Payments)
(1) Payment of principal and interest in respect of Notes shall be made in Euro to the Principal Paying Agent for on-payment to the Clearing System or to its order for credit to the accounts of the relevant account holders of the Clearing System outside the United States.

(2) The Issuer shall be discharged by payment to, or to the order of, the Clearing System.

(3) If the date for payment of any amount in respect of any Note is not a Business Day, then the Noteholder shall not be entitled to payment until the next such day that is a Business Day and shall not be entitled to further interest or other payment in respect of such delay. For these purposes, "Business Day" means any day which is a day (other than a Saturday or a Sunday) on which the Clearing System as well as all parts of the Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET 2) relevant for the settlement of payments made in Euro are operational.

(4) Reference in these Terms and Conditions to principal or interest in respect of the Notes shall be deemed to include, as applicable, any Additional Amounts which may be payable under § 7.
in der Bundesrepublik Deutschland oder für deren Rechnung oder von oder für Rechnung einer dort zur Steuerrhebung ermächtigten Gebietskörperschaft oder Behörde auferlegt oder erhoben werden, es sei denn, ein solcher Einbehalt oder Abzug ist gesetzlich vorgeschrieben. Falls die Emittentin gesetzlich zu einem solchen Einbehalt oder Abzug verpflichtet ist, wird die Emittentin diejenigen zusätzlichen Beträge (die "Zusätzlichen Beträge") zahlen, die erforderlich sind, damit die den Anleihegläubigern zufließenden Nettobeträge nach diesem Einbehalt oder Abzug jeweils den Beträgen entsprechen, die ohne einen solchen Einbehalt oder Abzug von den Anleihegläubigern empfangen worden wären; die Verpflichtung zur Zahlung solcher zusätzlicher Beträge besteht jedoch nicht im Hinblick auf Steuern und Abgaben,

(a) die auf andere Weise als durch Abzug oder Einbehalt von zahlbaren Beträgen zu entrichten sind; oder

(b) von einer als Depotbank oder Inkassobeauftragter des Anleihegläubigers handelnden Person oder sonst auf andere Weise zu entrichten sind als dadurch, dass die Emittentin aus den von ihr zu leistenden Zahlungen einen Abzug oder Einbehalt vornimmt; oder

(c) denen der Anleihegläubiger aus irgendeinem anderen Grund als allein der bloßen Tatsache, dass er Inhaber von Schuldverschreibungen oder Empfänger von Kapital oder Zinsen aus den Schuldverschreibungen ist, unterliegt, und zwar insbesondere wenn der Anleihegläubiger aufgrund einer persönlichen unbeschränkten oder beschränkten Steuerpflicht derartigen Steuern, Gebühren oder Abgaben unterliegt, oder wenn der Anleihegläubiger für die Zwecke der betreffenden Steuergesetze als gebietsansässige natürliche oder juristische Person in

the Federal Republic of Germany or by or on behalf of any political subdivision or any authority thereof having power to tax unless such withholding or deduction is required to be made by law. If the Issuer is required by law to make such withholding or deduction, the Issuer will pay such additional amounts (the "Additional Amounts") as will be necessary in order that the net amounts received by the Noteholders after such withholding or deduction shall equal the respective amounts which would otherwise have been receivable in the absence of such withholding or deduction, except that no Additional Amounts will be payable on account of any taxes or duties:

(a) which are payable otherwise than by deduction or withholding from amount payable; or

(b) are payable by any person acting as custodian bank or collecting agent on behalf of a Holder, or otherwise in any manner which does not constitute a deduction or withholding by the Issuer from payments made by it; or

(c) to which the Noteholder is subject for any reason other than the mere fact of his being a holder of Notes or receiving principal or interest in respect thereof, in particular if the Noteholder is subject to such taxes, duties or governmental charges because of a personal unrestricted or restricted tax liability or if the Noteholder for the purposes of the relevant tax laws is regarded as an individual or corporate resident in another member state of the European Union; or
einem anderen Mitgliedsstaat der Europäischen Union angesehen wird; oder

(d) aufgrund (i) einer Richtlinie oder Verordnung der Europäischen Union betreffend die Besteuerung von Zinserträgen oder (ii) einer zwischenstaatlichen Vereinbarung, eines zwischenstaatlichen Abkommens oder einer zwischenstaatlichen Verständigung über deren Besteuerung, an der der Staat, in dem die Emittentin steuerlich ansässig ist oder die Europäische Union beteiligt ist, oder (iii) einer gesetzlichen Vorschrift, die diese Richtlinie, Verordnung, Vereinbarung, Verständigung oder dieses Abkommen umsetzt oder befolgt, abzuziehen oder einzuhalten sind; oder

(e) wegen einer gegenwärtigen oder früheren persönlichen oder geschäftlichen Beziehung des Noteholers zur Bundesrepublik Deutschland zu zahlen sind, und nicht allein deshalb, weil Zahlungen auf die Schuldscheindarlehen aus Quellen in der Bundesrepublik Deutschland stammen (oder für Zwecke der Besteuerung so behandelt werden) oder dort besichert sind; oder

(f) durch die Erfüllung von gesetzlichen Anforderungen oder durch die Vorlage einer Nichtansässigkeitsklärung oder durch die sonstige Geltendmachung eines Anspruchs auf Befreiung gegenüber der betreffenden Steuerbehörde vermeidbar sind oder gewesen wären; oder

(g) abgezogen oder einbehalten werden, weil der wirtschaftliche Eigentümer der Schuldverschreibungen nicht selbst rechtlicher Eigentümer (Noteholder) der Schuldverschreibungen ist und der Abzug oder Einbehalt bei Zahlungen an

(d) are to be withheld or deducted pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty, agreement or understanding relating to such taxation and to which the Issuer's country of domicile for tax purposes or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty, agreement or understanding; or

(e) are payable by reason of the Noteholder having, or having had, some personal or business connection with the Federal Republic of Germany and not merely by reason of the fact that payments in respect of the Notes are, or for purposes of taxation are deemed to be, derived from sources in, or are secured in, the Federal Republic of Germany, or

(f) are avoidable or would have been avoidable through fulfilment of statutory requirements or through the submission of a declaration of non-residence or by otherwise enforcing a claim for exemption vis à vis the relevant tax authority; or

(g) are deducted or withheld because the beneficial owner of the Notes is not himself the legal owner (Noteholder) of the Notes and the deduction or withholding in respect of payments to the beneficial owner would not have been made or the
den wirtschaftlichen Eigentümer nicht erfolgt wäre oder eine Zahlung zusätzlicher Beträge bei einer Zahlung an den wirtschaftlichen Eigentümer nach Maßgabe der vorstehenden Regelungen hätte vermieden werden können, wenn dieser zugleich rechtlicher Eigentümer (Anleihegläubiger) der Schuldverschreibungen gewesen wäre; oder

(h) wegen einer Rechtsänderung zu zahlen sind, welche später als 30 Tage nach Fälligkeit der betreffenden Zahlung oder, falls dies später erfolgt, ordnungsgemäßer Bereitstellung aller fälligen Beträge und einer diesbezüglichen Bekanntmachung gemäß § 13 wirksam wird; oder.

(i) jegliche Kombination der Absätze (a) bis (h).


(2) Im Falle einer Sitzverlegung der Emittentin in ein anderes Land oder Territorium oder Hoheitsgebiet gilt jede in diesen Anleihebedingungen enthaltene Bezugsahme auf die Bundesrepublik Deutschland fortan auf dieses andere Land, Territorium oder

payment of Additional Amounts in respect of a payment to the beneficial owner in accordance with the above provisions could have been avoided if the latter had also been the legal owner (Noteholder) of the Notes; or

(h) are payable by reason of a change of law that becomes effective more than 30 days after the relevant pay- ment becomes due or is duly pro- vided for and notice thereof is published in accordance with § 13, whichever occurs later; or.

(i) any combination of items (a) to (h).

In any event, the Issuer will have no obli- gation to pay additional amounts deducted or withheld by the Issuer, the relevant Pay- ing Agent or any other party in relation to any withholding or deduction of any amounts required by the rules of U.S. In- ternal Revenue Code Sections 1471 through 1474 (or any amended or succes- sor provisions), pursuant to any inter- governmental agreement, or implementing legislation adopted by another jurisdiction in connection with these provisions, or pursuant to any agreement with the U.S. Internal Revenue Service ("FATCA Withholding"), or to indemnify any investor in relation to any FATCA Withholding.

(2) If the Issuer moves its corporate seat to another country or territory or jurisdiction, each reference in these Terms and Condi- tions to the Federal Republic of Germany shall be deemed to refer to such other country or territory or jurisdiction.
§ 8  
(Vorlegungsfrist, Verjährung)

Die Vorlegungsfrist gemäß § 801 Absatz 1 Satz 1 BGB wird für die Schuldverschreibungen auf zehn Jahre reduziert. Die Verjährungsfrist für Ansprüche aus den Schuldverschreibungen, die innerhalb der Vorlegungsfrist zur Zahlung vorgelegt wurden, beträgt zwei Jahre von dem Ende der betreffenden Vorlegungsfrist an.

§ 9  
(Kündigung)

(1) Jeder Anleihegläubiger ist berechtigt, seine Schuldverschreibungen zu kündigen und deren sofortige Rückzahlung zum Nennbetrag zuzüglich aufgelaufener Zinsen bis zum Tag der vorzeitigen Rückzahlung (ausschließlich) zu verlangen, falls

(a) Kapital bei Fälligkeit nicht gezahlt wird oder Zinsen nicht innerhalb von 15 Tagen ab dem betreffenden Fälligkeitstermin gezahlt sind; oder

(b) die Emittentin die ordnungsgemäße Erfüllung einer anderen Verpflichtung aus den Schuldverschreibungen unterlässt und diese Unterlassung nicht geheilt werden kann oder, falls sie geheilt werden kann, länger als 30 Tage fortan dauert, nachdem die Hauptzahlstelle hierüber eine Benachrichtigung von einem Anleihegläubiger erhalten hat; oder

(c) (i) eine andere Finanzverbindlichkeit (wie nachstehend definiert) der Emittentin oder einer Wesentlichen Tochtergesellschaft (wie in § 2(1) definiert) nicht innerhalb von 15 Tagen nach Fälligkeit, oder, falls länger, nach Ablauf einer etwaigen Nachfrist nicht bezahlt wird, oder (ii) eine Finanzverbindlichkeit der Emittentin oder einer Wesentlichen Tochtergesellschaft aus einem anderen Grund vor dem vorgesehenen Fälligkeitstermin aufgrund des Vor-

§ 8  
(Presentation Period, Prescription)

The period for presentation provided in § 801(1)(1) of the German Civil Code (Bürgerliches Gesetzbuch) will be reduced to 10 years for the Notes. The period of limitation for claims under the Notes presented during the period for presentation will be two years calculated from the expiration of the relevant presentation period.

§ 9  
(Events of Default)

(1) Each Noteholder shall be entitled to declare his Notes due and demand immediate redemption thereof at their principal amount together with interest accrued to but excluding the date of early redemption in the event that

(a) principal is not paid when due or interest is not paid within 15 days from the relevant due date, or

(b) the Issuer fails duly to perform any other obligation arising from the Notes which failure is not capable of remedy or, if such failure is capable of remedy, such failure continues for more than 30 days after the Principal Paying Agent has received notice thereof from a Noteholder, or

(c) (i) any other Financial Indebtedness (as defined below) of the Issuer or any Material Subsidiary (as defined in § 2(1)) is not paid within 15 days after falling due or, if longer, within any originally applicable grace period or (ii) any Financial Indebtedness of the Issuer or any Material Subsidiary is declared to be or otherwise becomes due and payable prior to its specified maturity for reason of the occurrence of an event of default (howsoever defined), or (iii) the Is-
liegens einer Nichterfüllung oder eines Verzuges (unabhängig davon, wie eine solche bzw. ein solcher de-
finiert ist) vorzeitig fällig gestellt oder anderweitig vorzeitig fällig wird, oder (iii) die Emittentin oder
eine Wesentliche Tochtergesell-
schaft einen Betrag, der unter einer bestehenden oder zukünftigen Ga-
rantie oder Gewährleistung im Zu-
sammenhang mit einer Finanzverbindlichkeit zu zahlen ist, nicht innerhalb von 15 Tagen nach Fälligkeit oder, falls länger, nach Ablauf einer etwaigen Nachfrist nicht zahlt, es sei denn, die Emittentin oder die betreffende Wesentliche Tochtergesellschaft bestreitet in gutem Glauben, dass diese Zahlungs-
verpflichtung besteht oder fällig ist, oder (iv) aufgrund des Eintritts eines Ereignisses, das zur Durchsetzung einer von der Emittentin oder einer Wesentlichen Tochtergesellschaft für eine solche Zahlungsverpflich-
tung gewährten Sicherheit berech-
tigt, eine solche Durchsetzung erklärt wird, jeweils vorausgesetzt, dass der Gesamtbetrag der betref-
fenden Finanzverbindlichkeit, be-
züglich derer eines oder mehrere der in diesem § 9(1)(c) genannten Er-
eignisse eintritt, mindestens dem Betrag von EUR 50.000.000 (oder dessen entsprechenden Gegenwert in einer oder mehreren anderen Währung(en)) entspricht oder diesen übersteigt;

(d) die Emittentin oder eine Wesentli-
che Tochtergesellschaft ihre Zahlungsunfähigkeit bekannt gibt oder ihre Zahlungen allgemein einstellt; oder

(e) ein zuständiges Gericht ein Insol-
venzverfahren gegen die Emittentin oder eine Wesentliche Tochterge-
sellschaft eröffnet, oder die Emittentin oder eine Wesentliche

(d) the Issuer or any Material Subsidi-
ary announces its inability to meet its financial obligations or ceases its payments generally, or

(e) a competent court opens insolvency proceedings against the Issuer or any Material Subsidiary or the Issu-
er or any Subsidiary applies for or institutes such proceedings, or a
Tochtergesellschaft ein solches Verfahren einleitet oder beantragt, oder ein Dritter ein Insolvenzverfahren gegen die Emittentin oder eine wesentliche Tochtergesellschaft beantragt und ein solches Verfahren nicht innerhalb einer Frist von 60 Tagen aufgehoben oder ausgesetzt worden ist; oder

(f) die Emittentin in Liquidation tritt, es sei denn, dies geschieht im Zusammenhang mit einer Verschmelzung oder einer anderen Form des Zusammenschlusses mit einer anderen Gesellschaft und diese Gesellschaft übernimmt alle Verpflichtungen, die die Emittentin im Zusammenhang mit diesen Schuldscheinen eingegangen ist; oder

"Finanzverbindlichkeit" bezeichnet jede bestehende oder zukünftige Verbindlichkeit aus Kapitalmarktverbindlichkeiten oder aus bei Finanzinstituten aufgenommenen Geldern unabhängig davon, ob sie verbrieft ist oder nicht.

(2) Das Kündigungsrecht erlischt, falls der Kündigungsgrund vor Ausübung des Rechts geheilt wurde.


(4) In den Fällen gemäß § 9(1)(b) und (c) wird eine Kündigungserklärung, sofern nicht bei deren Eingang zugleich einer der in § 9(1)(a), (d) bis (f) bezeichneten Kündigungsgründe vorliegt, erst wirksam, wenn bei der Zahlstelle Kündigungserklärungen von Anleihegläubigern im Nennbetrag von

---

third party applies for insolvency proceedings against the Issuer or any Material Subsidiary and such proceedings are not discharged or stayed within 60 days, or

(f) the Issuer goes into liquidation unless in connection with a merger or other form of combination with another company and such company assumes all obligations contracted by the Issuer in connection with the Notes; or

"Financial Indebtedness" means any present or future Capital Market Indebtedness or indebtedness for monies borrowed from financial institutions whether or not certificated.

(2) The right to declare Notes due shall terminate if the situation giving rise to it has been cured before the right is exercised.

(3) Any notice of default in accordance with § 9(1) above shall be made by means of a written declaration (Textform) in the German or English language to the Paying Agent together with evidence that such Noteholder at the time of such notice is a holder of the relevant Notes by means of a certificate of his depositary bank in accordance with § 15(4) or in any other appropriate manner.

(4) In the events specified in § 9(1)(b) and (c), any notice declaring Notes due shall, unless at the time such notice is received any of the events specified in § 9(1)(a), (d) through (f) entitling Noteholders to declare their Notes due has occurred, become effective only when the Paying Agent has
mindestens 10 % der Gesamtnennbetrages der zu diesem Zeitpunkt noch insgesamt ausstehenden Schuldverschreibungen eingegangen sind.

(5) Kündigungserklärungen, die die Zahlstelle nach 16:00 Uhr (Frankfurter Zeit) erhält, werden erst am unmittelbar darauffolgenden Geschäftstag wirksam.

§ 10 (Zahlstelle)

(1) Die Emittentin hat die Deutsche Bank Aktiengesellschaft als Hauptzahlstelle (die "Hauptzahlstelle") und gemeinsam mit etwaigen von der Emittentin nach § 10(2) bestellten zusätzlichen Zahlstellen, die "Zahlstellen") bestellt.

(2) Die Emittentin behält sich das Recht vor, jederzeit die Benennung einer Zahlstelle zu verändern oder zu beenden und Nachfolger bzw. zusätzliche Zahlstellen zu ernennen. Den Anleihegläubigern werden Änderungen in Bezug auf die Zahlstellen, deren angegebenen Geschäftsstellen umgehend gemäß § 13 bekannt gemacht.


§ 11 (Ersetzung)

(1) Die Emittentin ist jederzeit berechtigt, sofern sie sich nicht mit einer Zahlung von Kapital oder Zinsen auf die Schuldverschreibungen in Verzug befindet, ohne Zustimmung der Anleihegläubiger eine Tochtergesellschaft an ihrer Stelle als Hauptschuldnerin (die "Nachfolgeschuldnerin") für alle Verpflichtungen aus und im Zusammenhang mit diesen Schuldver-

received such default notices from Note-

holders representing at least 10 per cent. of the aggregate Principal Amount of Notes then outstanding.

(5) Termination notices received by the Paying Agent after 4:00 p.m. (Frankfurt time) only become effective on the immediately succeeding Business Day.

§ 10 (Paying Agent)

(1) The Issuer has appointed Deutsche Bank Aktiengesellschaft as principal paying agent (the "Principal Paying Agent" and, together with any additional paying agent appointed by the Issuer in accordance with § 10(2), the "Paying Agents").

(2) The Issuer reserves the right at any time to vary or terminate the appointment of any Paying Agent and to appoint successor or additional Paying Agents. Notice of any change in the Paying Agents or in the specified office of any Paying Agent will promptly be given to the Noteholders pursuant to § 13.

(3) The Paying Agents act solely as agents of the Issuer and do not assume any obligations towards or relationship of contract, agency or trust for or with any of the Noteholders. The Paying Agents are exempt from the restrictions of § 181 of the German Civil Code (Bürgerliches Gesetzbuch) and possible restrictions in other countries.

§ 11 (Substitution)

(1) The Issuer may, without the consent of the Noteholders, if no payment of principal of or interest on any of the Notes is in default, at any time substitute for the Issuer any subsidiary as principal debtor in respect of all obligations arising from or in connection with the Notes (the "Substitute Debtor") provided that:
schreibungen einzusetzen, vorausgesetzt, dass:

(a) die Nachfolgeschuldnerin alle Verpflichtungen der Emittentin in Bezug auf die Schuldverschreibungen übernimmt;

(b) die Emittentin und die Nachfolgeschuldnerin alle erforderlichen Genehmigungen erhalten haben und berechtigt sind, an die Zahlstelle die zur Erfüllung der Zahlungsverpflichtungen aus den Schuldverschreibungen zahlbaren Beträge in Euro zu zahlen, ohne verpflichtet zu sein, jeweils in dem Land, in dem die Nachfolgeschuldnerin oder die Emittentin ihren Sitz oder Steuersitz haben, erhobene Steuern oder andere Abgaben jeder Art abzuziehen oder einzubehalten;

(c) die Nachfolgeschuldnerin sich verpflichtet hat, jeden Anleihegläubiger hinsichtlich solcher Steuern oder Abgaben freizustellen, die einem Anleihegläubiger als Folge der Ersetzung auferlegt werden;

(d) die Emittentin unwiderruflich und unbedingt gegenüber den Anleihegläubigern die Zahlung aller von der Nachfolgeschuldnerin auf die Schuldverschreibungen zahlbaren Beträge garantiert und in dieser Garantie eine § 2(2) entsprechende Negativverpflichtung enthalten ist; und

(e) der Zahlstelle jeweils ein Rechtsgutachten bezüglich der betroffenen Rechtsordnungen von anerkannten Rechtsanwälten vorgelegt werden, die bestätigen, dass die Bestimmungen in den vorstehenden § 11(1)(a), (b), (c) und (d) erfüllt wurden.

(2) Jede Ersetzung ist gemäß § 13 bekanntzumachen.

(3) Im Fall einer Ersetzung gilt jede Bezugsannahme in diesen Anleihebedingungen auf

(a) the Substitute Debtor assumes all obligations of the Issuer in respect of the Notes;

(b) the Issuer and the Substitute Debtor have obtained all necessary authorisations and may transfer to the Paying Agent in Euro and without being obligated to deduct or withhold any taxes or other duties of whatever nature levied by the country in which the Substitute Debtor or the Issuer has its domicile or tax residence, all amounts required for the fulfilment of the payment obligations arising under the Notes;

(c) the Substitute Debtor has agreed to indemnify and hold harmless each Noteholder against any tax or duty imposed on such Noteholder in respect of such substitution;

(d) the Issuer irrevocably and unconditionally guarantees in favour of each Noteholder the payment of all sums payable by the Substitute Debtor in respect of the Notes and such guarantee contains a negative pledge undertaking corresponding to § 2(2); and

(e) there shall have been delivered to the Paying Agent one opinion for each jurisdiction affected by lawyers of recognised standing to the effect that § 11(1)(a), (b), (c) and (d) above have been satisfied.

(2) Notice of any such substitution shall be published in accordance with § 13.

(3) In the event of any such substitution, any reference in these Terms and Conditions to
die Emittentin ab dem Zeitpunkt der Ersetzung als Bezugnahme auf die Nachfolgeschuldnerin und jede Bezugnahme auf das Land, in dem die Emittentin ihren Sitz oder Steuersitz hat, gilt ab diesem Zeitpunkt als Bezugnahme auf das Land, in dem die Nachfolgeschuldnerin ihren Sitz oder Steuersitz hat.

For the avoidance of doubt this shall apply only to the extent that the meaning and purpose of the relevant condition requires that the relevant reference shall continue to be a reference only to MTU Aero Engines AG (i.e. in particular for § 5(2)), or that the reference shall be to the Substitute Debtor and MTU Aero Engines AG, in relation to their respective domicile for tax purposes and to MTU Aero Engines AG’s obligations under the guarantee pursuant to § 11(1)(d), at the same time (i.e. in particular for § 5(1), § 9(1)(c) to (f) and § 7).

§ 12 (Weitere Emissionen)

Die Emittentin kann ohne Zustimmung der Anleihegläubiger weitere Schuldverschreibungen begeben, die in jeder Hinsicht (oder in jeder Hinsicht mit Ausnahme des Tags der Begebung, der ersten Zinszahlung und/oder des Ausgabepreises) die gleichen Bedingungen wie die Schuldverschreibungen dieser Anleihe haben und die zusammen mit den Schuldverschreibungen dieser Anleihe eine einzige Anleihe bilden.

§ 13 (Bekanntmachungen)

(1) Alle Bekanntmachungen, die die Schuldverschreibungen betreffen, werden im Bundesanzeiger und (solange die Schuldverschreibungen an der Luxemburger Wertpapierbörse notiert sind und die Regularien dieser Börse dies verlangen) auf der Internet-Seite der Luxemburger Börse unter www.bourse.lu veröffentlicht. Für das Datum und die Rechtswirksamkeit sämtlicher Bekanntmachungen ist die erste Veröffentlichung maßgeblich. Jede derar-

§ 12 (Further Issues)

The Issuer may from time to time, without the consent of the Noteholders, create and issue further Notes having the same terms and conditions as the Notes in all respects (or in all respects except for the issue date, the first payment of interest and/or issue price) so as to form a single series with the Notes.

§ 13 (Notices)

(1) All notices regarding the Notes will be published in the Federal Gazette (Bundesanzeiger) and (so long as the Notes are listed on the Luxembourg Stock Exchange and the rules of that exchange so require) on the website of the Luxembourg Stock Exchange on www.bourse.lu. Any notice will become effective for all purposes on the date of the first such publication. Any notice so given will be deemed to have been validly given to the Noteholders on
tige Bekanntmachung gilt am fünften Tag nach dem Tag der Veröffentlichung als den Anleihegläubigern mitgeteilt.

(2) Die Emittentin ist berechtigt, alle die Schuldverschreibungen betreffenden Mitteilungen an das Clearingsystem zur Weiterleitung an die Anleihegläubiger zu übermitteln, sofern die Regularien der Börse dies zulassen. Jede derartige Bekanntmachung gilt am siebten Tag nach dem Tag der Mitteilung an das Clearingsystem als den Anleihegläubigern mitgeteilt.


§ 14
(Änderung der Anleihebedingungen durch Beschluss der Anleihegläubiger; Gemeinsamer Vertreter)


(2) Vorbehaltlich des nachstehenden Satzes gilt ein solcher Beschluss als den Anleihegläubigern mitgeteilt.

(2) Die Issuer will be entitled to deliver all notices concerning the Notes to the Clearing System for communication by the Clearing System to the Noteholders to the extent that the rules of the stock exchange so permit. Any such notice shall be deemed to have been validly given to the Noteholders on the seventh day following the day on which it was given to the Clearing System.

(3) Notices to be given by any Noteholder shall be made by means of a declaration in text format (Textform) to be delivered together with an evidence of the Holder’s entitlement in accordance with § 15(4) to the Principal Paying Agent. Such notice may be given through the Clearing System in such manner as the Principal Paying Agent and the Clearing System may approve for such purpose.

§ 14
(Amendments to the Terms and Conditions by resolution of the Noteholders; Joint Representative)

(1) The Issuer may agree with the Noteholders on amendments to the Terms and Conditions or on other matters by virtue of a majority resolution of the Noteholders pursuant to § 5 et seqq. of the German Act on Issues of Debt Securities (Gesetz über Schuldverschreibungen aus Gesamtmissionen – "SchVG"), as amended from time to time. In particular, the Noteholders may consent to amendments which materially change the substance of the Terms and Conditions, including such measures as provided for under § 5(3) of the SchVG by resolutions passed by such majority of the votes of the Noteholders as stated under § 14(2) below. A duly passed majority resolution shall be binding equally upon all Noteholders.

(2) Except as provided by the following sen-
und der Erreichung der erforderlichen Be-
schlussfähigkeit, beschließen die Anleihe-
gläubiger mit der einfachen Mehrheit der
an der Abstimmung teilnehmenden
Stimmrechte. Beschlüsse, durch welche
der wesentliche Inhalt der Anleihebedin-
gungen, insbesondere in den Fällen des § 5
Abs. 3 Nr. 1 bis 9 SchVG, geändert wird,
oden sonstige wesentliche Maßnahmen be-
schlossen werden bedürfen zu ihrer Wirk-
samkeit einer Mehrheit von mindestens
75 % der an der Abstimmung teilnehm-
den Stimmrechte (eine "Qualifizierte
Mehrheit").

(3) Die Anleihegläubiger können Beschlüsse
in einer Gläubigerversammlung gemäß
§§ 5 ff. SchVG oder im Wege einer Ab-
stimmung ohne Versammlung gemäß § 18
und § 5 ff. SchVG fassen.

(a) Die Teilnahme an der Gläubigerversam-
lung und die Ausübung der
Stimmrechte sind von einer vorheri-
gen Anmeldung der Anleihegläubiger
abhängig. Die Anmeldung muss unter
der in der Bekanntmachung der Ein-
berufung mitgeteilten Adresse spätest-
tens an dem dritten Tag vor der
Gläubigerversammlung zugehen. Mit
der Anmeldung müssen die Anleihe-
gläubiger ihre Berechtigung zur Teil-
nahme an der Abstimmung durch
einen in Textform erstellten besonde-
ren Nachweis der Depotbank gemäß
§ 15(4) und durch Vorlage eines
Sperrvermerks der Depotbank, aus
dem hervorgeht, dass die betreffenden
Schuldverschreibungen ab dem Tag
der Absendung der Anmeldung (ein-
schließlich) bis zum angegebenen En-
de der Gläubigerversammlung
(einschließlich) nicht übertragbar
sind, nachweisen.

(b) Zusammen mit der Stimmabgabe
müssen die Anleihegläubiger ihre
Berechtigung zur Teilnahme an der
Abstimmung ohne Versammlung
tence and provided that the quorum re-
quirements are being met, the Noteholders
may pass resolutions by simple majority of
the voting rights participating in the vote.
Resolutions which materially change the
substance of the Terms and Conditions, in
particular in the cases of § 5 (3) numbers 1
through 9 of the SchVG, or relating to ma-
terial other matters may only be passed by
a majority of at least 75 per cent. of the
voting rights participating in the vote (a
"Qualified Majority").

(3) The Noteholders can pass resolutions in a
meeting (Gläubigerversammlung) in ac-
cordance with § 5 et seqq. of the SchVG
or by means of a vote without a meeting
(Abstimmung ohne Versammlung) in ac-
cordance with § 18 and § 5 et seqq. of the
SchVG.

(a) Attendance at the meeting and exer-
cise of voting rights is subject to the
Noteholders' registration. The regis-
tration must be received at the address
stated in the convening notice no later
than the third day preceding the meet-
ing. As part of the registration, Note-
holders must demonstrate their
eligibility to participate in the vote by
means of a special confirmation of the
Custodian in accordance with § 15(4)
hereof in text form and by submission
of a blocking instruction by the Cus-
todian stating that the relevant Bonds
are not transferable from and including
the day such registration has been
sent until and including the stated end
of the meeting.

(b) Together with casting their vote,
Noteholders must demonstrate their
eligibility to participate in the vote
without a meeting by means of a
durch einen in Textform erstellten besonderen Nachweis der Depotbank gemäß § 15(4) und durch Vorlage eines Sperrvermerks der Depotbank, aus dem hervorgeht, dass die betreffenden Schuldverschreibungen ab dem Tag der Stimmabgabe (einschließlich) bis zum letzten Tag des Abstimmungszeitraums (einschließlich) nicht übertragbar sind, nachweisen.


(6) Bekanntmachungen betreffend diesen § 14

special confirmation of the Custodian in accordance with § 15(4) hereof in text form and by submission of a blocking instruction by the Custodian stating that the relevant Bonds are not transferable from and including the day such vote has been cast until and including the day the voting period ends.

(4) If it is ascertained that no quorum exists for the meeting pursuant to § 14(3)(a) or the vote without a meeting pursuant to § 14(3)(b), in case of a meeting the chairman (Vorsitzender) may convene a second meeting in accordance with § 15 (3) sentence 2 of the SchVG or in case of a vote without a meeting the scrutineer (Abstimmungsleiter) may convene a second meeting within the meaning of § 15 (3) sentence 3 of the SchVG. Attendance at the second meeting and exercise of voting rights is subject to the Noteholders' registration. The provisions set out in § 14(3)(a) shall apply mutatis mutandis to Noteholders' registration for a second meeting.

(5) The Noteholders may by majority resolution provide for the appointment or dismissal of a holders' representative (the "Noteholders' Representative"), the duties and responsibilities and the powers of such Noteholders' Representative, the transfer of the rights of the Noteholders to the Noteholders' Representative and a limitation of liability of the Noteholders' Representative. Appointment of a Noteholders' Representative may only be passed by a Qualified Majority if such Noteholders' Representative is to be authorised to consent, in accordance with § 14(2) hereof, to a material change in the substance of the Terms and Conditions or other material matters.

(6) Any notices concerning this § 14 shall be
erfolgen ausschließlich gemäß den Bestimmungen des SchVG.

(7) Die oben aufgeführten auf die Schuldverschreibungen anwendbaren Bestimmungen gelten entsprechend für die Bestimmungen einer etwaigen Garantie gemäß § 11(1)(d).

§ 15
(Schlussbestimmungen)

(1) Form und Inhalt der Schuldverschreibungen bestimmen sich nach dem Recht der Bundesrepublik Deutschland.

(2) Ausschließlicher Gerichtsstand für alle Rechtsstreitigkeiten aus den in diesen Anleihebedingungen geregelten Angelegenheiten ist, soweit gesetzlich zulässig, Frankfurt am Main, Bundesrepublik Deutschland.

Für Entscheidungen gemäß §§ 9 Absatz 2, 13 Absatz 3 und 18 Absatz 2 SchVG ist gemäß § 9 Absatz 3 SchVG das Amtsgericht zuständig, in dessen Bezirk die Emittentin ihren Sitz hat. Für Entscheidungen über die Anfechtung von Beschlüssen der Anleihegläubiger ist gemäß § 20 Absatz 3 SchVG das Landgericht ausschließlich zuständig, in dessen Bezirk die Emittentin ihren Sitz hat.

(3) Erfüllungsort ist Frankfurt am Main, Bundesrepublik Deutschland.

(4) Jeder Anleihegläubiger kann in Rechtsstreitigkeiten gegen die Emittentin im eigenen Namen seine Rechte aus den ihm zustehenden Schuldverschreibungen geltend machen unter Vorlage der folgenden Dokumente: (a) einer Bescheinigung seiner Depotbank, die (i) den vollen Namen und die volle Anschrift des Anleihegläubigers bezeichnet, (ii) den gesamten Nennbetrag der Schuldverschreibungen angibt, die am Ausstellungstag dieser Bescheinigung dem bei dieser Depotbank bestehenden Depot dieses Anleihegläubigers gutgeschrieben sind, und (iii) bestätigt, dass die Depotbank dem Clearingsystem made exclusively pursuant to the provisions of the SchVG.

(7) The provisions set out above applicable to the Notes will apply mutatis mutandis to any guarantee granted pursuant to § 11(1)(d).

§ 15
(Final Provisions)

(1) The form and content of the Notes are governed by the laws of the Federal Republic of Germany.

(2) To the extent legally permissible, exclusive place of jurisdiction for all proceedings arising from matters provided for in these Terms and Conditions shall be Frankfurt am Main, Federal Republic of Germany.

The court of the district (Amtsgericht) where the Issuer has its registered office shall have jurisdiction for all judgments pursuant to §§ 9(2), 13(3) and 18(2) SchVG in accordance with § 9(3) SchVG. The regional court (Landgericht) in the district where the Issuer has its registered office shall have exclusive jurisdiction for all judgments over contested resolutions by Noteholders in accordance with § 20(3) SchVG.

(3) Place of performance shall be Frankfurt am Main, Federal Republic of Germany.

(4) Any Noteholder may in any proceedings against the Issuer protect and enforce in its own name its rights arising under its Notes by submitting the following documents: (a) a certificate issued by its depositary bank (i) stating the full name and address of the Noteholder, (ii) specifying an aggregate denomination of Notes credited on the date of such certificate to such Noteholder’s securities account maintained with such depositary bank and (iii) confirming that the depositary bank has given a written notice to the Clearing System as well as to the Paying Agent containing the information pursuant to (i)
and the Zahlstelle a written notification, which contains the information as set out in (i) and (ii) and bears acknowledgments of the Clearing System and the relevant Clearing System account holder as well as (b) a copy of the Global Note certified by a duly authorized officer of the Clearing System or the Principal Paying Agent as being a true copy.

§ 16
(Language)

These Terms and Conditions are written in the German language and provided with an English language translation. The German text shall be the only legally binding version. The English language translation is provided for convenience only.
TAXATION WARNING

THE TAX LEGISLATION OF THE STATE OF RESIDENCE OF A PROSPECTIVE PURCHASER OF NOTES, OR OF A JURISDICTION WHERE A PROSPECTIVE PURCHASER IS SUBJECT TO TAXATION, AND THE TAX LEGISLATION OF THE ISSUER'S COUNTRY OF INCORPORATION OR COUNTRY OF RESIDENCE MAY HAVE AN IMPACT ON THE INCOME RECEIVED FROM THE NOTES.

PROSPECTIVE PURCHASERS OF NOTES ARE ADVISED TO CONSULT THEIR OWN TAX ADVISOR AS TO THE TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE NOTES.
OFFER, SALE AND SUBSCRIPTION OF THE NOTES

Offer of the Notes

The Notes will be offered to investors by the Joint Lead Managers during an offer period which will commence on 26 June 2020 and will end with the expiry of 1 July 2020 (being the date of issuance of the Notes) (the "Offer Period"), subject to a shortening or extension of the Offer Period.

Should the Issuer and the Joint Lead Managers determine any shortening or extension of the Offer Period (e.g., due to changing market conditions), such changes will be published by way of a supplement to the Prospectus in accordance with Art. 23 of the Prospectus Regulation and available on the website of the Luxembourg Stock Exchange (www.bourse.lu) and of the Issuer (www.mtu.de).

The Notes will be offered to institutional and retail investors in compliance with public offer restrictions. The Notes may be offered to the public in Luxembourg, Germany, Austria and The Netherlands during the Offer Period.

The identity and contact details of the Joint Lead Managers are as follows:

Commerzbank Aktiengesellschaft is a stock corporation (Aktiengesellschaft) incorporated and operating under German law. Its Legal Entity Identifier (LEI) is 851WYGJNUQLFZBSYGB56. Commerzbank Aktiengesellschaft is a multinational universal bank. Commerzbank Aktiengesellschaft can be contacted at its business address: Kaiserstraße 16 (Kaiserplatz), 60311 Frankfurt am Main, Federal Republic of Germany.

Deutsche Bank Aktiengesellschaft is a stock corporation (Aktiengesellschaft) incorporated and operating under German law. Its Legal Entity Identifier (LEI) is 7LTWFYICNSX8D621K86. Deutsche Bank Aktiengesellschaft is a multinational investment bank and financial services company. Deutsche Bank Aktiengesellschaft can be contacted at its business address: Mainzer Landstrasse 11-17, 60329 Frankfurt am Main, Federal Republic of Germany.

HSBC Bank plc is a public limited company incorporated and operating under the laws of the United Kingdom. Its Legal Entity Identifier (LEI) is MP6I5YZBEU3UXPYFY54. HSBC Bank plc is part of a multinational investment banking and financial services group. HSBC Bank plc can be contacted at its business address: 8 Canada Square, London, E14 5HQ, United Kingdom.

Conditions and details of the offer

There are no conditions to which the offer is subject. In particular, there is no minimum or maximum amount of Notes required to be purchased. Investors may place offers to purchase Notes in any amount, subject to the principal amount of EUR 1,000 per Note.

During the Offer Period, the Joint Lead Managers will offer the Notes upon request through banking institutions in Luxembourg, Germany, Austria and The Netherlands. These institutions will supply investors with the relevant information on such offers. Subscription rights for the Notes will not be issued. Therefore, there are no procedures in place for the exercise of any right of pre-emption, the negotiability of subscription rights and the treatment of subscription rights not exercised.

Subscription by the Joint Lead Managers

Pursuant to a subscription agreement to be signed on or about 25 June 2020 (the "Subscription Agreement") among the Issuer and the Joint Lead Managers, the Issuer has agreed to sell to the Joint Lead Managers, and the Joint Lead Managers have agreed, subject to certain customary closing conditions, to subscribe for the Notes ("firm commitment") on 1 July 2020.
The commission payable to the Joint Lead Managers in connection with the offering, placement and subscription of the Notes will be up to 0.4 per cent. of the aggregate principal amount of the Notes. The Issuer has furthermore agreed to reimburse the Joint Lead Managers for certain expenses incurred in connection with the issue of the Notes.

The Subscription Agreement provides that the Joint Lead Managers under certain circumstances will be entitled to terminate the Subscription Agreement. In such event, no Notes will be delivered to investors. Furthermore, the Issuer has agreed to indemnify the Joint Lead Managers against certain liabilities in connection with the offer and sale of the Notes.

The Joint Lead Managers or their respective affiliates have provided from time to time, and expect to provide in the future, investment services to the Issuer and its affiliates, for which the Joint Lead Managers or their respective affiliates have received or will receive customary fees and commissions. In addition, certain Joint Lead Managers or their respective affiliates are involved in financing initiatives relating to the Issuer including in connection with the revolving credit facility, please see "Information about the Issuer and MTU Group – Material Debt Financings". Furthermore, in the ordinary course of their business activities, the Joint Lead Managers and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer or its affiliates (including the Notes). Certain of the Joint Lead Managers or their respective affiliates that have a lending relationship with the Issuer routinely hedge their credit exposure to the Issuer consistent with their customary risk management policies. Typically, such Joint Lead Managers and their respective affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in the Issuer's securities, including potentially the Notes. Any such short positions could adversely affect future trading prices of the Notes offered hereby. The Joint Lead Managers and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Confirmation of offers placed by, and allotments to, investors

Any investor who has submitted an order in relation to the Notes and whose order is accepted by the Joint Lead Managers will receive a confirmation by electronic mail, fax or through commonly used information systems setting out its respective allotment of Notes. Before an investor receives a confirmation from the Joint Lead Managers that its offer to purchase Notes has been accepted, the investor may reduce or withdraw its purchase order.

Delivery of the Notes to investors

Delivery and payment of the Notes will be made on the Issue Date (1 July 2020). The Notes so purchased will be delivered via book-entry through the Clearing Systems (see "General Information – Clearing and Settlement; Security Codes") and their depository banks against payment of the Issue Price therefor.

Costs and expenses relating to the offer

The Issuer will not charge any costs, expenses or taxes directly to any investor in connection with the Notes. Investors must, however, inform themselves about any costs, expenses or taxes in connection with the Notes which are generally applicable in their respective country of residence, including any charges their own depository banks charge them for purchasing or holding securities.
Consent to the use of the Prospectus

Each Joint Lead Manager and each further financial intermediary subsequently reselling or finally placing the Notes is entitled to use the Prospectus in Luxembourg, Germany, Austria and The Netherlands for the subsequent resale or final placement of the Notes during the period from and including 26 June 2020 to and including 1 July 2020 during which subsequent resale or final placement of the Notes can be made, provided however, that the Prospectus is still valid in accordance with Article 11(1) of the Prospectus Regulation. The Issuer accepts responsibility for the information given in this Prospectus also with respect to such subsequent resale or final placement of the Notes.

The Prospectus may only be delivered to potential investors together with all supplements published before such delivery in. Any supplement to the Prospectus in accordance will be available for viewing in electronic form on the website of the Luxembourg Stock Exchange (www.bourse.lu).

When using the Prospectus, each relevant further financial intermediary must make certain that it complies with all applicable laws and regulations in force in the respective jurisdictions.

In the event of an offer being made by a further financial intermediary, such further financial intermediary shall provide information to investors on the Terms and Conditions at the time of that offer.

Any further financial intermediary using the Prospectus shall state on its website that it uses the Prospectus in accordance with the consent of the Issuer and the conditions attached to this consent.

Selling Restrictions

General

Each Joint Lead Manager will acknowledge that other than explicitly mentioned in this Prospectus no action has been, or will be, taken by the Issuer in any country or jurisdiction that would permit a public offering of the Notes, or the possession or distribution of this Prospectus or any other offering material relating to the Notes, in any country or jurisdiction where action for that purpose is required.

Each Joint Lead Manager has represented and agreed that it will comply with all applicable laws and regulations in each jurisdiction in which it purchases, offers, sells or delivers Notes or has in its possession or distributes any offering material relating to them.

European Economic Area and United Kingdom

In relation to each Member State of the European Economic Area and United Kingdom (each, a "Relevant State"), each Joint Lead Manager has represented and agreed that it has not made or will not make an offer of the Notes which are subject of the offering contemplated in this Prospectus to the public in that Relevant State other than the offers contemplated in this Prospectus in Luxembourg from the time once this Prospectus has been approved by the competent authority in Luxembourg and published, and in Germany, Austria and The Netherlands from the day on which this Prospectus has been notified to the relevant competent authorities in Germany, Austria and The Netherlands in accordance with the Prospectus Regulation until the expiry of the Offer Period, and provided that the Issuer has consented in writing to the use of this Prospectus for any such offers, except that an offer of such Notes to the public in that Relevant State may be made at any time under the following exemptions under the Prospectus Regulation:

(i) to legal entities which are qualified investors as defined under the Prospectus Regulation;
(ii) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), as permitted under the Prospectus Regulation, subject to obtaining the prior consent of the Joint Lead Managers for any such offer; or

(iii) in any other circumstances falling within Article 1(4) of the Prospectus Regulation, provided that no such offer of the Notes referred to above shall require the Issuer or any Joint Lead Manager to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purpose of the provisions above, the expression "an offer to the public" in relation to any Notes in any Relevant State means the communication in any form and by means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

United States

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act ("Regulation S").

Each Joint Lead Manager has represented that it has not offered, sold or delivered, and agreed that it will not offer, sell or deliver any Notes (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and the issue date, within the United States or to, for the account or benefit of, U.S. persons, and will have sent to each dealer to which it sells the Notes during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Notes within the United States or to, or for the account or benefit of, U.S. persons. Each Joint Lead Manager has represented that neither it, its affiliates, nor any persons acting on its or their behalf have engaged or will engage in any directed selling efforts with respect to the Notes. Terms used in this paragraph have the meanings given to them by Regulation S.

In addition, until 40 days after the commencement of the offering, an offer or sale of Notes within the United States by any dealer (whether or not participating in the offering) could violate the registration requirements of the Securities Act.

United Kingdom

Each Joint Lead Manager has represented and agreed that,

(i) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, as amended ("FSMA")) received by it in connection with the issue or sale of any Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and

(ii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.
GENERAL INFORMATION

Authorization

The creation and issue of the Notes has been authorized by resolutions of the Executive Board of the Issuer dated 6 June 2020 and the Supervisory Board of the Issuer dated 17 June 2020.

Expenses of the issue

The expenses of the issue of the Notes are expected to amount to approximately EUR 850,000 plus the commission to be paid in connection with the offer of the Notes to the Joint Lead Managers; such commission will be up to 0.4 per cent. of the aggregate principal amount of the Notes, resulting in total expenses of the issue of up to EUR 2,850,000.

Clearing and Settlement; Security Codes

Payments and transfers of the Notes will be settled through Euroclear Bank SA/NV, 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium and Clearstream Banking, société anonyme, 42 Avenue JF Kennedy L-1855 Luxembourg.

The Notes have been assigned securities code as follows:

- ISIN: XS2197673747;
- Common Code: 219767374;
- German Securities Code (WKN): A289QB

Eurosystem Eligibility

The Notes are intended to be held in a manner which would allow Eurosystem eligibility. This simply means that the Notes are intended upon issue to be deposited with one of the International Central Securities Depositaries (ICSDs) as common safekeeper and does not necessarily mean that the Notes will be recognised as eligible collateral for Eurosystem monetary policy and intraday credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the European Central Bank being satisfied that the Eurosystem eligibility criteria have been met.

Listing and Admission to Trading

Application has been made to list the Notes on the Official List of the Luxembourg Stock Exchange and to admit them to trading on the regulated market of the Luxembourg Stock Exchange. The Luxembourg Stock Exchange's regulated market is a regulated market for the purposes of Directive 2014/65/EU (as amended, "MiFID II").

Notices to Noteholders

For so long as the Notes are listed on the Official List of the Luxembourg Stock Exchange and admitted to trading on the regulated market of the Luxembourg Stock Exchange, all notices to the Noteholders regarding the Notes shall be published on the website of the Luxembourg Stock Exchange (www.bourse.lu). The Issuer will be entitled to deliver all notices concerning the Notes to the Clearing System for communication by the Clearing System to the Noteholders to the extent that the rules of the stock exchange on which the Notes are listed so permit.

Indication of Yield

The yield to maturity of the Notes is 3.125% per annum, calculated on the basis of the Issue Price.
Such yield is calculated in accordance with the ICMA (International Capital Markets Association) method and based on the issue price of the Notes. The ICMA method determines the effective interest rate of notes taking into account accrued interest on a daily basis.

**Ratings**

Fitch Polska SA\(^1\) has assigned a solicited long-term credit rating of "BBB"\(^3\) (outlook: negative) to the Issuer.\(^4\)

Moody's Deutschland GmbH\(^6\) has assigned a solicited long-term credit rating of "Baa3"\(^6\) (outlook: negative) to the Issuer.\(^8\)

The Notes are expected to be rated "BBB"\(^3\) by Fitch\(^1\) and "Baa3"\(^6\) by Moody's\(^5\).

A credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the rating agency at any time.

**Documents on Display**

For the term of this Prospectus, the following documents and, where appropriate, English translations thereof may be found on the website of the Luxembourg Stock Exchange or on the Issuer's website:

a) the Articles of Association (\emph{Satzung}) of the Issuer (accessed by using the hyperlink: https://www.mtu.de/fileadmin/EN/5_Investor_Relations/9_2_Corporate_Governance/Articles_of_Association/Articles_of_Association_MTU.pdf or on www.mtu.de section: "Investor Relations" – "Corporate Governance" – "Articles of Association");

b) a copy of this Prospectus;

c) the documents incorporated by reference into this Prospectus;

d) a copy of any supplements to this Prospectus.

This Prospectus, any supplement hereto as well as the documents incorporated by reference in this Prospectus are available on the website of the Luxembourg Stock Exchange (www.bourse.lu) and the website of the Issuer (www.mtu.de).

---

1 Fitch Polska SA is established in the European Union and is registered under Regulation (EC) No 1060/2009 of the European Parliament and of the Council of September 16, 2009 on credit rating agencies, as amended (the "CRA Regulation").

2 The European Securities and Markets Authority publishes on its website (http://www.esma.europa.eu/page/List-registered-and-certified-CRAs) a list of credit rating agencies registered in accordance with the CRA Regulation. That list is updated within five working days following the adoption of a decision under Article 16, 17 or 20 CRA Regulation. The European Commission shall publish that updated list in the Official Journal of the European Union within 30 days following such update.

3 According to Fitch: “'BBB' ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity. The modifiers '+' or '-' may be appended to a rating to denote relative status within major rating categories.”

4 Rating information is merely an aid for investors for the purposes of decision-making and cannot replace an individual judgment to be made by the investor and may not be taken as a recommendation to purchase or sell certain instruments. Ratings are merely intended as a support when making an investment decision and are only one of the factors relevant to an evaluation, which factor must be seen and weighted in the context of other factors. As ratings often are amended only after the creditworthiness of an issuer has changed, investors have to make their own judgments although a rating may exist.

5 Moody's Deutschland GmbH is established in the European Union and is registered under the CRA Regulation.

6 According to Moody's: “Obligations rated Baa are subject to moderate credit risk. They are considered medium-grade and as such may possess speculative characteristics. Moody's appends numerical modifiers 1, 2, and 3 to the respective rating classification. The modifier 3 indicates that the obligation ranks in the lower end of its generic rating category.”
INCORPORATION BY REFERENCE

The pages specified below of the following documents which have previously been published or which are published simultaneously with this Prospectus and which have been filed with the CSSF shall be incorporated by reference into this Prospectus:

The audited consolidated financial statements as of and for the fiscal year ended 31 December 2019 of MTU prepared in accordance with IFRS and the independent auditor’s report thereon as contained in the Annual Report 2019 (English language version):

<table>
<thead>
<tr>
<th>Document</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated income statement</td>
<td>124</td>
</tr>
<tr>
<td>Consolidated statement of comprehensive income</td>
<td>125</td>
</tr>
<tr>
<td>Consolidated balance sheet</td>
<td>126–127</td>
</tr>
<tr>
<td>Consolidated statement of changes in equity</td>
<td>128</td>
</tr>
<tr>
<td>Consolidated cash flow statement</td>
<td>129</td>
</tr>
<tr>
<td>Consolidated segment report (part of the Notes to the consolidated financial statements)</td>
<td>130–131</td>
</tr>
<tr>
<td>Notes to the consolidated financial statements</td>
<td>132–205</td>
</tr>
<tr>
<td>Independent auditor's report¹</td>
<td>206–211</td>
</tr>
</tbody>
</table>

The audited consolidated financial statements as of and for the fiscal year ended 31 December 2018 of MTU prepared in accordance with IFRS and the independent auditor’s report thereon as contained in the Annual Report 2018 (English language version):

<table>
<thead>
<tr>
<th>Document</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated income statement</td>
<td>130</td>
</tr>
<tr>
<td>Consolidated statement of comprehensive income</td>
<td>131</td>
</tr>
<tr>
<td>Consolidated balance sheet</td>
<td>132–133</td>
</tr>
<tr>
<td>Consolidated statement of changes in equity</td>
<td>134</td>
</tr>
<tr>
<td>Consolidated cash flow statement</td>
<td>135</td>
</tr>
<tr>
<td>Consolidated segment report (part of the Notes to the consolidated financial statements)</td>
<td>136–137</td>
</tr>
<tr>
<td>Notes to the consolidated financial statements</td>
<td>138–218</td>
</tr>
<tr>
<td>Independent auditor's report²</td>
<td>219–224</td>
</tr>
</tbody>
</table>

The English language consolidated financial statements as of and for the fiscal years ended 31 December 2019 and 31 December 2018 of MTU and English language independent auditor's reports

¹ The independent auditor's report (Bestätigungsvermerk des unabhängigen Abschlussprüfers) refers to the consolidated financial statements and the combined management report (the group management report, which is combined with the management report of MTU Aero Engines AG) as of and for the fiscal year ended 31 December 2019 of MTU as a whole and not solely to the consolidated financial statements incorporated by reference.

² The independent auditor's report (Bestätigungsvermerk des unabhängigen Abschlussprüfers) refers to the consolidated financial statements and the combined management report (the group management report, which is combined with the management report of MTU Aero Engines AG) as of and for the fiscal year ended 31 December 2018 of MTU as a whole and not solely to the consolidated financial statements incorporated by reference.
thereon set out above and incorporated by reference into this Prospectus are translations of the respective German language consolidated financial statements and independent auditor's reports (*Bestätigungsvermerke des unabhängigen Abschlussprüfers*).

**The unaudited quarterly statement as of and for the three-month period ended 31 March 2020 of MTU (English language version):**

| Key data for the first quarter of 2020 | page 3 |
| Explanatory information to the key data for the first quarter of 2020 | pages 1 – 2 |

Any information included in a document incorporated by reference that is not included in the above cross-reference list is considered as additional information and is not required by the relevant schedules of the Commission Delegated Regulation (EU) 2019/980.

**Availability of documents incorporated by reference**

As long as any Notes are listed on the Official List of the Luxembourg Stock Exchange and are admitted to trading on the regulated market of the Luxembourg Stock Exchange and any applicable laws so require, any documents incorporated herein by reference are available free of charge and may be inspected during usual business hours on any working day from the date hereof at the office of the Issuer, Dachauer Straße 665, 80995 Munich, Germany.

In addition, such documents will be available free of charge and may be inspected during usual business hours on any working day from the date hereof for the whole life of the Prospectus at the principal office in Luxembourg of the Listing Agent and will be published and be available on the website of the Luxembourg Stock Exchange (www.bourse.lu) as long as applicable law requires such publication, and can be accessed by using the following hyperlinks:

(i) Annual Report for the fiscal year 2019:  
http://dl.bourse.lu/dlp/1089295e59c70345bea12930a114507923

(ii) Annual Report for the fiscal year 2018:  
http://dl.bourse.lu/dlp/1043ac461d23e049c2bd63fe8b5384002c

(iii) Quarterly statement as of and for the three-month period ended 31 March 2020:  
http://dl.bourse.lu/dlp/103f427cc1522b4e1385e52fea41fc90a8
GLOSSARY

**Company**  
MTU Aero Engines AG.

**Compressor**  
A compressor ingests and compresses air before it is fed into the combustor. Compressors consist of bladed disks that rotate at a very high speed. In order to achieve a standard compression ratio, it is necessary to use multistage low-pressure and high-pressure compressors rotating at different speeds.

**Concessions**  
Discounts on the list price of an engine.

**COVID-19**  
Novel coronavirus 2019-nCoV.

**CRA Regulation**  

**DER**  
Designated Engineering Representative

**EASA**  
European Aviation Safety Agency

**FAA**  
U.S. Federal Aviation Administration

**Fan**  
First rotor of the low-pressure compressor which accelerates the bypass stream and provides the engine's main thrust. It is driven by the low-pressure turbine via the low-pressure shaft.

**FCAS**  
Future Combat Air Systems.

**Flight hour contract**  
Contract priced on estimated flight hours for the life of the respective contract as well as the estimated scope of required MRO services. Under this contract a customer makes monthly payments to the MRO provider based on actual engine usage.

**Geared Turbofan**  
Geared Turbofan propulsion systems feature a reduction gearbox between fan and low-pressure shaft on which the low-pressure compressor and the low-pressure turbine are seated. The gearbox allows the fan to rotate more slowly, and the low-pressure compressor and turbine to rotate much faster.

**High-pressure compressor**  
See Compressor.

**High-pressure turbine**  
See Turbine.

**IAE AG**  
Joint venture of Pratt & Whitney (a division of Raytheon Technologies), the Company and Japanese Aero Engines Corp.

**IAE LLC**  
Joint venture of Pratt & Whitney (a division of Raytheon Technologies), the Company and Japanese Aero Engines Corp.

**IDR**  
Issuer Default Rating.

**Industrial gas turbine**  
Industrial gas turbines feature a power turbine that delivers power to an additional attached power unit. Nearly all industrial gas turbines of the lower and intermediate power classes are aero-engine derivatives.

**Low-pressure compressor**  
See Compressor.

**Low-pressure shaft**  
See Fan.

**Low-pressure turbine**  
See Turbine.

**MRO**  
Maintenance, repair and overhaul.
MTU  MTU Aero Engines AG.
MTU Group  MTU Aero Engines AG together with its consolidated subsidiaries.
NEFE  Next European Fighter Engine.
NGWS  Next Generation Weapon System.
OCCAR  Organization for Joint Armament Cooperation.
OEM  Original equipment manufacturer.
Offset obligations  Requirements for alliances of military engine developers that export military engines. Obligations include making investments in the importing country, giving business to local suppliers or facilitating imports to the country of the exporting alliance member.
Power by the Hour contract  Contract priced on estimated flight hours for the life of the respective contract as well as the estimated scope of required MRO services, with the customer making monthly payments to MRO provider based on actual engine usage.
Risk- and revenue-sharing partnership / RRSP  In a risk- and revenue sharing partnership, each partner contributes a certain share of the resources needed for a specific engine program (work capacity and funding). All partners are liable for penalties and liabilities in connection with the program regardless of their responsibility, and all are entitled to a percentage of the overall sales revenue from that program.
Rotor  See Compressor.
Thrust class  Jet engines are generally grouped into three thrust classes: thrust of between 2,500 and approx. 20,000 pounds (approx. 10 to 90 kN), mainly for business and regional jets; thrust of between 20,000 and approx. 50,000 pounds (approx. 90 to 225 kN), for medium haul aircraft; and thrust ranging from 50,000 to over 100,000 pounds (approx. 225 to 450 kN), for long-haul aircraft.
Time and material contract  Contract under to which services are paid on an hourly basis and spare parts are sold at list price plus a handling fee.
TP400-D6 engine  Engine produced for the Airbus 400M transport aircraft
Turbine  In a turbine, the energy contained in the gases emerging from the combustor is converted into mechanical energy. Like the compressor, the turbine is subdivided into a high-pressure and a low-pressure section, each of which is directly connected to the corresponding compressor via the respective shaft.
Turbine center frame  Connects the high-pressure and low-pressure turbine. It has to be able to withstand high mechanical and thermal loads and includes struts to support the shaft bearings as well as the air and oil supply lines.
Turbofan engine  Turbofan engines separate the air stream behind an enlarged first compressor stage, the fan. Part of the air flows to the combustor and then the turbine, and a much larger fraction is channeled around the inner components resulting in a bypass ratio determining efficiency and noise.
NAMES AND ADDRESSES

Issuer
MTU Aero Engines AG
Dachauer Straße 665
80995 Munich
Germany

Principal Paying Agent
Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Federal Republic of Germany

Listing Agent in Luxembourg
Deutsche Bank Luxembourg S.A.
2, Boulevard Konrad Adenauer
1115 Luxembourg
Luxembourg

Joint Lead Managers
Commerzbank Aktiengesellschaft
Kaiserstraße 16 (Kaiserplatz)
60311 Frankfurt am Main
Germany
Deutsche Bank Aktiengesellschaft
Mainzer Landstraße 11-17
60329 Frankfurt am Main
Germany
HSBC Bank plc
8 Canada Square
London E14 5HQ
United Kingdom

Independent Auditor to the Issuer
Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft
Arnulfstraße 59
80636 Munich
Germany

Legal Advisors

To the Issuer
To the Joint Lead Managers

Freshfields Bruckhaus Deringer LLP
Linklaters LLP
Bockenheimer Anlage 44
Taunusanlage 8
60322 Frankfurt am Main
60329 Frankfurt am Main
Germany
Germany