Convenience translation of the German original

CONTRACT REPORT

Joint report

of the management board of

OSRAM Licht AG, Munich,

and

the management of

ams Offer GmbH, Ismaning,

pursuant to

section 293a of the German Stock Corporation Act (*Aktiengesetz*)

on the Domination and Profit and Loss Transfer Agreement

between

OSRAM Licht AG and ams Offer GmbH

dated

22 September 2020

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The management board of OSRAM Licht AG (hereinafter ***OSRAM***, and together with the companies controlled by OSRAM within the meaning of section 17 of the German Stock Corporation Act (*Aktiengesetz* - ***AktG***) the ***OSRAM Group***) and the management of ams Offer GmbH (hereinafter ***ams Offer***) have jointly prepared the following report pursuant to section 293a AktG (hereinafter the ***Contract Report***) on the Domination and Profit and Loss Transfer Agreement (hereinafter the ***Agreement***) between ams Offer as the controlling company and OSRAM as the controlled company (together hereinafter the ***Parties***).

A. Introduction

ams Offer, a 100% subsidiary of ams AG, having its corporate address at Tobelbader Straße 30, 8141 Premstätten, Austria (hereinafter ***ams*** and, together with its subsidiaries, the ***ams Group***), on 18 October 2019 published its decision to submit a voluntary public takeover offer to all shareholders of OSRAM (hereinafter, the ***OSRAM Shareholders***).

Prior to this, Luz (C-BC) Bidco GmbH, a company jointly controlled by investment funds advised by or affiliated with Bain Capital Private Equity and The Carlyle Group, had published a voluntary public takeover offer (the ***Luz Offer***) on 22 July 2019. The Luz Offer failed to achieve the requisite minimum acceptance threshold and therefore was not completed. On 3 September 2019, Opal BidCo GmbH, another 100% subsidiary of ams, published a voluntary public takeover offer to OSRAM (the ***Opal Offer***). The Opal Offer also failed to achieve the requisite minimum acceptance threshold and therefore was not completed.

On 7 November 2019, ams Offer published a voluntary public takeover offer (hereinafter the ***Takeover Offer***) to the OSRAM Shareholders for the acquisition of all no-par value registered shares in OSRAM (hereinafter the ***OSRAM Shares***). Among other things, it was a condition for the completion of the Takeover Offer that a minimum acceptance threshold of 55% of all shares issued by OSRAM (including the OSRAM Shares already held by ams) was achieved.

The acceptance period of the Takeover Offer ended on 5 December 2019 at 24:00 hours (Frankfurt am Main local time). The additional acceptance period began on 11 December 2019 and ended on 24 December 2019 at 24:00 hours (Frankfurt am Main local time). The Takeover Offer was accepted for 36,386,823 OSRAM Shares at the end of the acceptance period and for an additional 549,335 OSRAM Shares at the end of the additional acceptance period, making a total of 36,936,158 OSRAM Shares, which corresponds to approximately 38.14% of the voting rights and share capital in OSRAM. The total quantity of OSRAM Shares for which the Takeover Offer was accepted by the cut-off date, plus the OSRAM Shares already held by ams, amounted to 56,296,087 OSRAM Shares. Including the treasury shares held by OSRAM, this equated to a share of approximately 58.13% of the share capital and the voting rights of OSRAM or, alternatively, deducting the 2,796,275 treasury shares held by OSRAM at the time of publication of the offer document, a share of approximately 59.86%. This meant the minimum acceptance threshold of 55% was achieved.

The Takeover Offer was completed on 9 July 2020. As of the date of the Contract Report, ams Offer holds 66,605,912 OSRAM Shares, which equate to about 68.77% of all OSRAM Shares.

On 10 February 2020, ams announced in an ad hoc notification that it intended to conclude a domination and profit and loss transfer agreement between ams Offer as the controlling company and OSRAM as the controlled company.

At the joint request of the management board of OSRAM and the management of ams Offer, the Munich Regional Court (*Landgericht*), by decision dated 19 May 2020 appointed Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Kronenstraße 30, 70174 Stuttgart, Germany, as the joint contract auditor (hereinafter the ***Contract Auditor*** or ***Ebner Stolz***) to audit the Agreement.

On 29 July 2020 ams firmed up its intention to have a domination and profit and loss transfer agreement formed between ams Offer and OSRAM by communicating in the context of an ad-hoc announcement on the results of the second quarter of its 2020 fiscal year that, in view of the preparations that had already been made, it was expected that the domination and profit and loss transfer agreement between ams Offer and OSRAM would be implemented on or around the end of 2020.

The Agreement which forms the subject matter of the present joint Contract Report was concluded on 22 September 2020. Before signing the Agreement, the ams supervisory board approved its conclusion by way of a written resolution. Before signing the Agreement, the OSRAM supervisory board in a meeting held on 22 September 2020 resolved to recommend the approval of the Agreement to the OSRAM Shareholders prior to the conclusion of the Agreement. When passing the resolution, the supervisory board of OSRAM had available to it:

(i) the final draft of the Agreement,

(ii) the final draft of this Contract Report,

(iii) a signed copy of the expert opinion by Wirtschaftsprüfungsgesellschaft, Friedrich-Ebert-Anlage 35-37, 60327 Frankfurt am Main, Germany (hereinafter the ***Valuation Expert*** or ***PwC***), dated 21 September 2020 (hereinafter the ***Expert Opinion***), and

(iv) e-mail confirmation by the Contract Auditor that the determination of the recurring compensation payment (*Ausgleichszahlung*) and the compensation (*Abfindung*) in the Agreement will be confirmed as being appropriate in the report on the audit of the Agreement to be executed on 23 September 2020 (hereinafter the ***Audit Report***).

Through the Agreement, OSRAM places the management of its company under the control of ams Offer and undertakes to transfer all of its profits to ams Offer. ams Offer undertakes to assume any OSRAM annual net loss and to pay an appropriate recurring compensation payment (*Ausgleich*) or appropriate compensation (*Abfindung*) to outside OSRAM Shareholders. On 22 September 2020, the management board of ams approved the Agreement. The ams Offer approval resolution is to be passed on 2 November 2020. The ams Offer approval resolution is to be

passed on 3 November 2020. Pursuant to section 294(2) AktG, the Agreement will become effective upon registration in the commercial register (*Handelsregister*) at the registered seat of OSRAM. On 22 September 2020, ams Offer submitted a letter of comfort to OSRAM with regard to performance of the duties of ams Offer under and in conjunction with the Agreement.

B. The Parties

I. OSRAM and the OSRAM Group

1. Overview

The OSRAM Group is an international light and photonics group. In addition to lighting, its focus is increasingly on the areas of sensors, visualisation and treatment using light. In this regard, the mainly semiconductor-based products are used in a wide variety of applications in the fields of mobility, security, networking and health and wellbeing. Example applications range from virtual reality to autonomous driving or smartphone-related high tech and networked, intelligent lighting solutions in buildings or for growing plants indoors. The OSRAM Group bundles these activities into three business units: Opto Semiconductors, Automotive and Digital.

Strategically, the OSRAM Group continues to concentrate on changing from what was previously purely a manufacturer of lighting products to a leading high-tech photonics company, focused particularly on rapidly growing high-tech markets. Global trends and challenges, such as the progressive automation of personal transport, the growing demand for digital services in increasingly networked systems, and the combined demographic issues of a growing and, in western societies, aging population, are opening up opportunities for light-based applications that go far beyond lighting for people. Intelligent sensors and digital technologies are building blocks of the systems of the future that enable these social issues to be tackled. OSRAM is playing an active part in this regard, for example in the development of new optical sensors and in the field of intelligent building services (smart buildings).

As of 30 September 2019, the OSRAM Group employed a total of 24,685 “full-time equivalent” employees. In the 2019 fiscal year, the OSRAM Group generated a consolidated revenue (according to IFRS) of EUR 3.464 billion and an adjusted EBIT margin of 8.9%. In the 2019 fiscal year, the Opto Semiconductors segment accounted for approximately 35%, Automotive for approximately 43% and Digital for approximately 22% of consolidated revenue.

2. History and development of business

The history of OSRAM goes back more than one hundred years. In 1906, the trademark OSRAM, an artificial word combining osmium and wolfram (tungsten), was registered as a word mark by the Deutsche Gasglühlicht-Anstalt (Auer-Gesellschaft) with the Imperial Patent Office in Berlin. In 1918, “Deutsche Gasglühlicht AG” spun off its lightbulb business and founded “OSRAM Werke GmbH KG” for this area of production, which “Auer-Gesellschaft” joined as a limited partner. Both Siemens & Halske AG and AEG joined “OSRAM Werke GmbH

KG". The joint company now received the name "OSRAM GmbH KG". In 1919, the following figurative mark came into being: a stylised light bulb which, having undergone various modifications over time, still stands for OSRAM today. In the years following the merger, especially in the 1920s, many production sites, branches and sales offices were established outside Germany.

In 1929, the US International General Electric became a shareholder in OSRAM GmbH Kommanditgesellschaft by acquiring shares from AEG. As a consequence of the Second World War, OSRAM lost its production sites in East Berlin and the Soviet occupation zone as well as foreign holdings and trademark rights worldwide by way of expropriation. In the 1950s and 60s, the company was able to reacquire and expand foreign holdings. In 1954, OSRAM's headquarters were moved to Munich. When OSRAM G.E.C. (General Electric Company) Ltd was founded in 1986, the company regained the rights to the OSRAM trademark in the United Kingdom and the British Commonwealth. Initially, OSRAM held a 49% share before the remaining 51% was acquired from G.E.C. in 1990 and the name of the company changed to OSRAM Ltd.

In 1976 and 1978, Siemens AG took over the company shares of AEG Telefunken and General Electric and thus became the sole shareholder. In 1993, OSRAM acquired SYLVANIA North American Lighting, the second-largest light manufacturer in North America, and its US, Canadian and Puerto Rican businesses. On 1 January 1999, OSRAM took over 51% of the LED division belonging to the group parent Siemens (Infineon Technologies AG received 49%) and since this time has traded as OSRAM Opto Semiconductors GmbH & Co. OHG. Since then, OSRAM has supplied semiconductor light sources for all applications. In August 2001, OSRAM obtained the remaining 49% of the LED business from Infineon Technologies AG and changed the legal form of OSRAM Opto Semiconductors to that of a GmbH. Between 2001 and 2003, the company built a modern LED production facility in Regensburg. In 2002, OSRAM Opto Semiconductors GmbH began to develop organic light emitting diodes (OLEDs).

In 2009, chip production began at the second LED site in Penang (Malaysia). This meant OSRAM became the first LED manufacturer with high-volume chip production sites in Europe and Asia. In the 2009 fiscal year, OSRAM acquired Amtech and a 51% share in Traxon, which was increased to 100% in November 2011. In October 2011, the takeover of Encelium was finalised. Encelium, a leading US software-technology development company, specialises in highly developed lighting control and energy management systems for commercial properties and industrial buildings. In August 2012, construction started in Wuxi in the Chinese province of Jiangsu for a new LED assembly plant.

From 1989 to 2013, OSRAM GmbH was run as a division of Siemens AG with its own legal form, before Siemens decided to perform a hive-down in July 2013 and took OSRAM Licht AG public. In October 2017, Siemens AG sold its last shares in OSRAM.

In 2014 OSRAM acquired Clay Paky, the leading provider of entertainment lighting for shows and events. In addition to that, the company put its new LED assembly plant in Wuxi, China into operation.

In 2015 OSRAM sold its 13.5% holding in the Chinese company Foshan Electrical and Lighting Co., Ltd (Felco) to a subsidiary of Guangdong Rising Assets Management Co., Ltd. as part of its strategic realignment.

In 2016 OSRAM set up a Group-owned business accelerator called Fluxunit GmbH in order to promote internal and external ideas for innovation.

In 2017, as part of the transition to a photonics champion, OSRAM sold its lightbulb business in general lighting under the name Ledvance for roughly EUR 500 million to a Chinese consortium and expanded its production capacities by opening a new LED plant in Kulim, Malaysia.

In 2018, by its takeover of US specialist Vixar Inc., OSRAM strengthened its expertise in semiconductor-based optical security technology and in Fluence Bioengineering Inc. it acquired a US specialist in plant lighting. In addition, OSRAM set up a joint venture with automotive supplier Continental AG for digital solutions of the future in the automotive sector.

In 2019 OSRAM sold its European luminaires business, trading as Siteco, to Stern Stewart Capital as part of its focus on semiconductor-based photonics products.

In future, OSRAM will concentrate even more on digitalisation and future markets. In this regard, the management board decided in November 1998 to continue the development of its strategy, which included a far-reaching reorganisation and transformation process, combined with a realignment of the divisions of OSRAM. This focused positioning has helped OSRAM move even closer to its markets, with the goal of developing from a vertically integrated lighting expert to a high-tech photonics player. The transition in the lighting market to semiconductor-based technologies and digitalisation creates new opportunities which OSRAM would like to resolutely pursue. From the perspective of both the management and supervisory boards, the transformation process which has been initiated is also necessary to ensure OSRAM's future success in the challenging market environment in which the company finds itself.

After first the Luz Offer and then the Opal Offer failed in 2019, ams Offer published the Takeover Offer to the OSRAM Shareholders. The Takeover Offer was completed on 9 July 2020.

3. Legal form, registered seat, fiscal year and object

OSRAM is a stock corporation under German law with its registered seat in Munich, Germany, registered in the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Munich under HRB 199675. OSRAM's business address is Marcel-Breuer-Str. 6, 80807 Munich, Germany. The OSRAM fiscal year commences on 1 October and ends on 30 September.

The company's object as defined by its Articles of Association is:

"(1) The object of the company is heading a group of enterprises that operate, in particular, in the following areas of activity:

a) the development, design, manufacture, and distribution

(i) of electronic components, electronic systems and software, and lighting, illumination, and photonic, especially light-converting, products, systems, and solutions, including lamps, luminaires, operating and manufacturing devices and machinery, control systems, pre-materials, parts and accessories for such products, systems, and solutions, as well as products, systems, and solutions in associated or related areas of activity, and

(ii) of components and systems for vehicles of any kind;

b) the provision of consulting, servicing and other services in the areas of activity specified in (a).

(2) The company may itself also operate in the areas of activity specified in paragraph 1. It is authorised to engage in any action, implement any measure, or operate any business that is associated with the object of the company or appropriate to supporting the object of the company, either directly or indirectly. The company may also establish, acquire, or hold investments in other enterprises, either in Germany or other countries, especially such enterprises in which the object of the enterprise covers, either partially or as a whole, the areas of activity specified in paragraph (1), and may lead or manage such enterprises or limit itself to the administration of the investment. The company may have its operations, including the investments that it holds, managed entirely or partially by affiliated companies or may transfer or outsource its operations to such affiliated companies and enter into corporate agreements. The company is also permitted to set up branches and permanent establishments in Germany and in other countries. The company may limit its operations to a portion of the areas of activity specified in paragraph 1."

4. Capital, shareholders and stock exchange trading

4.1 Share capital

The share capital of OSRAM amounts to EUR 96,848,074.00 and is divided into 96,848,074 no-par value registered shares (*Stückaktien*) with a proportionate amount of the share capital of EUR 1.00 per OSRAM Share. The registered shares of OSRAM are ordinary shares. There are no other classes of shares.

4.2 Authorised Capital 2018

On 20 February 2018, the general shareholders' meeting of OSRAM resolved to authorise the OSRAM management board until 19 February 2023 to increase the share capital of OSRAM with the approval of the supervisory board once or multiple times in return for cash contributions and/or contributions in kind by up to a total of EUR 24,078,562.00 by way of a one-time or multiple issuance of a total of 24,078,562 new, registered no-par value shares with a proportionate amount of the share capital of EUR 1.00 each in return for cash contributions and/or contributions in kind (§ 4(5) of the Articles of Association of OSRAM, ***Authorised Capital 2018***).

Fundamentally, the new shares must be offered to the shareholders for subscription. The new shares may also be subscribed to by one or more banks or companies defined by the Executive Board in the sense of Section 186(5) sentence 1 AktG

subject to the condition that the credit institutes or undertakings in turn offer the new shares for subscription to the shareholders (indirect pre-emption rights).

However, the management board is authorised, subject to the consent of the supervisory board, to disapply shareholders' pre-emption rights

- so far as the new shares are issued in return for a cash contribution and, at the time of the final determination of the issue price, which should be as close as possible to the time of placement of the new shares, the issue price of the new shares is not significantly lower (as defined in sections 203(1), 186(3) sentence 4 AktG than the market price of the company's shares of the same class and type that are already listed. This disapplication of pre-emption rights is limited to a maximum of 10% of the existing capital stock of the company, calculated on the basis of the capital stock of the company at the time this authorisation comes into effect or, if lower, at the time the authorisation is used. This limit is reduced by the capital stock attributable to those shares which are to be issued to service conversion or option rights / conversion or option obligations arising from bonds, debt instruments, or profit-sharing rights, so far as these have been issued in accordance with section 186(3) sentence 4 AktG during the period up to the time this authorisation is used on a non-pre-emptive basis or that is attributable to shares that are issued or sold during the period up to the time this authorisation is used on a simplified non-pre-emptive basis pursuant to or in accordance with section 186(3) sentence 4 AktG;

- so far as the new shares are issued in return for non-cash capital contributions, especially in order to be able to offer the new shares to third parties in connection with mergers or for the direct or indirect acquisition of businesses, parts of businesses, or investments in businesses, or other assets, or of rights to acquire assets, or of receivables due from the company or its subsidiaries within the meaning of section 18 AktG;

- so far as this is necessary to grant the holders or beneficiaries of convertible bonds and/or warrant-linked bonds, profit-sharing rights and/or income bonds or warrants that are issued by the company or by subsidiaries within the meaning of section 18 AktG, a pre-emption right to new shares that is equal to the right they would have after exercising the conversion right or option or after fulfilling the conversion obligation or option obligation;

- so far as the new shares are to be issued as part of a share ownership or other share-based scheme to members of the management board of the company or the representative body of a company affiliated with the company or to employees of the company or of a company affiliated with it, whereby the recipient must be employed by, or a member of an executive or supervisory body of, the company or one of its affiliated companies at the time the commitment to issue the shares was given; within the framework permitted by section 204(3) sentence 1 AktG, the capital contribution to be paid on the new shares may be covered from the part of the profit for the year which the management board and supervisory board may allocate to other retained earnings in accordance with section 58(2) AktG; the company's supervisory board decides whether and to what extent members of the management board may be granted shares;

- to disapply pre-emption rights for fractional amounts.

The proportionate amount of the capital stock attributable to shares issued on a non-pre-emptive basis for OSRAM Shareholders may not exceed a total of 10% of the company's capital stock existing at the time this authorisation becomes effective or, if lower, at the time this authorisation is used. This limit is reduced by the capital stock attributable to those shares which are to be issued to service conversion or option rights / conversion or option obligations arising from bonds, debt instruments, or profit-sharing rights, so far as these have been issued during the period up to the time this authorisation is used on a non-pre-emptive basis or that is attributable to shares that are issued or sold during the period up to the time this authorisation is used on a non-pre-emptive basis.

The management board is authorised, subject to the consent of the supervisory board, to determine the further content of the share rights and the conditions for the issue of shares when implementing capital increases under Authorised Capital 2018, in particular the issue price.

4.3 Contingent Capital 2018

On 20 February 2018, the general shareholders' meeting of OSRAM resolved to conditionally increase the company's share capital by up to EUR 10,468,940.00 by issuing up to 10,468,940 new, registered no-par value shares (§ 4(6) of the OSRAM Articles of Association, ***Contingent Capital 2018***). The contingent capital increase will be carried out only in so far as, on the basis of convertible bonds or warrant-linked bonds, profit-sharing rights or income bonds (or combinations of these instruments) in each case with conversion or option rights / conversion or option obligations, which are issued by 19 February 2023 by OSRAM or subsidiaries of OSRAM as defined in section 18 AktG on the basis of the authorisation resolved by the general shareholders' meeting on 20 February 2018, conversion or option rights are exercised or holders of bonds with conversion or option obligations fulfil their conversion or option obligations, or the company exercises its right, upon maturity of bonds, to grant the holders of the individual bonds no-par-value shares in the company instead of paying out all or part of the due amount in cash, and provided that no other form of fulfilment has been utilised. The new shares are issued at the conversion or option price to be determined in each case in accordance with the aforementioned authorisation resolution. The new shares issued are eligible to participate in profit-sharing from the start of the fiscal year in which they are created; so far as permitted by law, the management board may alternatively resolve, subject to the consent of the supervisory board, that the new shares are eligible to participate in profit-sharing from the start of the fiscal year for which - at the time of the exercise of the conversion or option right or the fulfilment of the conversion or option obligation - no resolution has yet been adopted by the general shareholders' meeting concerning the appropriation of profits. Subject to the consent of the supervisory board, the managing board is authorised to specify the further details of the implementation of the contingent capital increase.

4.4 Treasury shares

On the basis of a resolution by the general shareholders' meeting of 14 February 2017, the management board of OSRAM was authorised pursuant to section 71(1) no. 8 AktG until 13 February 2022 to acquire treasury shares totalling up to 10% of

the share capital in the period that the authorisation is valid or, if this value is lower, at the time the authorisation is exercised. The shares acquired on the basis of this authorisation together with other treasury shares which the company has already acquired and which are owned by the company or to be allocated to the company may at no time account for more than 10% of the share capital.

On 6 November 2018, OSRAM announced a share buy-back programme with a volume of up to EUR 400 million (without ancillary purchase costs) and running from January 2019 to June 2020. In connection with this, the management board made partial use of the authorisation to acquire treasury shares in the context of the share buy-back programme in the 2019 fiscal year with the approval of the supervisory board. In the period from 10 January 2019 to 28 May 2019 inclusively, OSRAM acquired 2,663,125 treasury shares for a total of EUR 76,705,542.25 (without ancillary purchase costs), which corresponds to a share of approximately 2.75% of the share capital of OSRAM.

OSRAM holds 2,664,388 treasury shares as of the signing date of this Contract Report. This corresponds to approximately 2.75% of the share capital.

4.5 Shareholders

At the time of signing of this Contract Report ams Offer holds 66,605,912 OSRAM Shares. This corresponds to an ownership interest of approximately 68.77% of OSRAM's share capital, which is divided into 96,848,074 shares (for further details, reference is made to paragraph B.III.8).

Apart from the interest held by ams Offer, the OSRAM shareholder structure as at 22 September 2020, according to the published voting rights notifications pursuant to sections 33 et seqq. of the German Securities Trading Act (*Wertpapierhandelsgesetz*), which are published on OSRAM's website at https://www.osram-group.de/de-DE/investors/regulatory-news, is broken down as follows:

Shareholder	**Total proportion of voting rights held in %**
Bank of America Corporation	4.89
Barclays PLC	4.79
Citigroup Inc.	3.97
BlackRock, Inc.	3.90
Credit Suisse Group AG	3.71
DNCA FINANCE	3.05

After deducting the 2,664,388 treasury shares held by OSRAM (corresponding to approximately 2.75% of the share capital) and the 66,605,912 OSRAM Shares held by ams Offer from the OSRAM share capital, which is divided into 96,848,074 shares, the number of OSRAM Shares held in free float is 27,577,774. This corresponds to approximately 28.48% of the total share capital of OSRAM.

4.6 Trading on the stock exchange

OSRAM Shares are admitted to trading on the regulated market with additional post-admission obligations (Prime Standard) on the Frankfurt Stock Exchange under ISIN DE000LED4000 and to trading on the regulated market on the Munich Stock Exchange. Beyond this, OSRAM Shares may be traded via the (Exchange Electronic Trading System) of Deutsche Börse AG, Frankfurt am Main, Germany (***XETRA***). In addition, OSRAM Shares are traded on the regulated unofficial market of the regional stock exchanges in Berlin, Düsseldorf, Hamburg, Hanover and Stuttgart and on the Tradegate Exchange. OSRAM Shares are included in the MDAX stock index.

5. Management board and supervisory board of OSRAM

5.1 Management board

Pursuant to § 5(1) of the OSRAM Articles of Association, the management board (*Vorstand*), subject to precise determination by the supervisory board (*Aufsichtsrat*), consists of multiple persons.

The management board of OSRAM has the following members:

- Dr Olaf Berlien (CEO, since January 2015)
- Kathrin Dahnke (CFO, since April 2020) and
- Dr Stefan Kampmann (CTO, since July 2016).

Pursuant to § 6(2) of the OSRAM Articles of Association, OSRAM is represented by two members of the management board or jointly by one member of the management board and an authorised signatory (*Prokurist*). The supervisory board may generally or in specific cases issue an exemption to all or to specific members of the management board from the prohibition on representing more than one party pursuant to section 181 2nd alternative of the German Civil Code (*Bürgerliches Gesetzbuch* - ***BGB***).

5.2 Supervisory board

Pursuant to §7(1) of the OSRAM Articles of Association, the OSRAM supervisory board shall consist of twelve members, with the composition of members from shareholder and employee representatives arising from the legal requirements with regard to principles of equality.

The shareholder representatives are:

- Mr Peter Bauer, chairman of the supervisory board;
- Dr Christine Bortenlänger;
- Mr Johann Christian Eitner;
- Dr Margarete Haase;
- Mr Johann Peter Metzler, deputy chairman of the supervisory board; and
- Dr Thomas Stockmeier.

The employee representatives are:

- Mr Klaus Abel, deputy chairman of the supervisory board;
- Mr Alexander Müller;
- Ms Olga Redda;
- Ms Ulrike Salb;
- Ms Irene Weininger; and
- Mr Thomas Wetzel.

6. Structure of the OSRAM Group

6.1 Legal structure and substantial holdings

The OSRAM Group is an international light and photonics group. The parent company of the OSRAM Group is OSRAM, an undertaking with the legal form of a stock corporation (*Aktiengesellschaft*) which has its registered seat in Munich, Germany, and a business address of Marcel-Breuer-Straße 6, 80807 Munich.

OSRAM is the management holding and within the OSRAM Group exercises the governance role. Since the beginning of the 2019 fiscal year, the management roles in Marketing and Communication for the OSRAM Group have been pooled at OSRAM.

As of 30 September 2019, the OSRAM Group comprises OSRAM as the parent company, along with 103 subsidiaries and 22 affiliates. A complete list of all subsidiaries and affiliates is attached to this Contract Report as **Annex 1**.

6.2 Governance structures

The governance and organisational structure of the OSRAM Group is divided into the following functional areas:

Chief Executive Officer (CEO) Dr Olaf Berlien	**Chief Financial Officer (CFO)** Kathrin Dahnke	**Chief Technical Officer (CTO)** Dr Stefan Kampmann
Business Unit Opto Semiconductors (OS)	Accounting & Controlling	Corporate Innovation
Business Unit Automotive Lighting (AM)	Corporate Finance & Treasury	Innoventures (Fluxunit GmbH)
Business Unit Digital (DI)	Taxes & Subsidiaries	Procurement & Supply Chain (incl. Logistics)
Corporate Strategy	Investor Relations	Quality Management & Operations
Corporate Sales	Corporate Audit	Environment, Health & Safety

Corporate Communications & Brand Strategy	Real Estate	R&D Organisations at Business Units (functional)
Legal & Compliance	Mergers & Acquisitions, Post Closing Management	Manufacturing at Business Units (functional)
Human Resources	Global Shared Services	Information Technology
	Financial Organisation of the Business Units and Countries (functional)	

7. Business activities of the OSRAM Group

OSRAM is a photonics company and supplies lighting technologies in the fields of automotive and special lighting, light management systems and lighting solutions. In particular, its product portfolio comprises high-tech applications on the basis of semiconductor-based technologies such as infrared or laser. OSRAM sells its products in over 120 countries and has 26 production sites worldwide. The business activities of the OSRAM Group are divided into three divisions: Opto Semiconductors (OS), Automotive (AM) and Digital (DI). The former division Lighting Solutions was dissolved at the beginning of the 2018 fiscal year.

7.1 Opto Semiconductors (OS)

The OS division develops and manufactures optical semiconductors, which are important elements in lighting, visualisation and sensor technology. The product range of the OS division offers a wide array of LEDs in the visible and infrared areas in the low power, mid-power, high power und ultra-high-power performance classes for general lighting, automotive, consumer and industrial applications as well as laser diodes and optical sensors. The most important markets for the components include the automotive industry, smartphones and wearables, general lighting, horticulture and industrial markets.

As of 30 September 2019, approximately 11,400 staff were employed in the OS division.

7.2 Automotive (AM)

The AM division develops, produces and distributes lamps, light modules and sensors in the OEM business to vehicle manufacturers and their suppliers and in addition is involved in automotive lighting and product categories beyond lighting in the replacement parts business. Automotive lighting products include both conventional and LED and laser-based solutions. In the joint venture with Continental AG, which is part of the AM sector, expertise in lighting and electronics are combined to develop and distribute intelligent lighting solutions for automotive use, for example intelligent matrix light for front headlights. OSRAM expanded its position in automotive lighting in 2016 by taking over Novità Technologies, a manufacturer of LED12 modules for rear and fog lights as well as daylight running lights based in the United States of America (***USA***). With its investments in the LiDAR2 companies LeddarTech and Blickfeld, it has also strengthened its position in the field of autonomous driving.

As of 30 September 2019, approximately 5,500 staff were employed in the AM division.

7.3 Digital (DI)

The DI division bundles the parts of OSRAM's business which are intended to profit most heavily from progressive digitalisation. This ranges from electronic components to light systems and hard and software for light management as well as products which go beyond light. For example, the Boston-based subsidiary Digital Lumens addresses industrial customers with energy-efficient lighting and sensor and software-based added-value services such as measuring and monitoring environmental parameters (temperature etc.). The DI division also includes entertainment applications, which cover shows and also cover stage, studio and film sets. Traxon, a specialist in effective facade illumination, is also in the DI division. OSRAM acquired Fluence Bioengineering, a Texan specialist and leading company in light for indoor plant cultivation. Lamps for cinematic projection and light solutions for medical and industrial applications are also found in the DI division. These also include high-intensity UV lamps used to sterilise surfaces, gasses or fluids, and textile-integrated lighting.

As of 30 September 2019, approximately 4,475 staff were employed in the DI division.

8. Development of business and earnings situation of the OSRAM Group

8.1 Key financial figures for the 2019, 2018 and 2017 fiscal years

The results of the individual segments were consolidated in the table below. The consolidated financial statements were prepared in accordance with the International Financial Report Standards (IFRS) as applicable in the European Union. In addition, the provisions of section 315a(1) of the German Commercial Code (*Handelsgesetzbuch* - ***HGB***) were applied. However, due to the restructuring as of the 2017 fiscal year (dissolution of the Lighting Solutions (LS) division), it is largely not possible to compare the 2018 fiscal year with publicly available, financial information.

Selected key financial figures for the 2019, 2018 and 2017 fiscal years:

in EUR million, unless otherwise stated	**2019**	**2018**	**2017**
Revenue	3,464	3,789	4,128
OS	1,453	1,725	1,685
AM	1,776	1,920	n/a
DI	916	914	n/a
Reconciliation to consolidated financial statements	-681	-770	n/a
EBITDA	176*	522*	621
EBITDA margin (%)	5.1%	13.8%	15.1%
Adjusted EBITDA	307	622	695
Adjusted EBITDA margin	8.9%	16.4 %	16.8%
Earnings before taxes (EBT)	-377*	263*	389

Earnings for the period	-343*	188*	275
Earnings per share (EUR) (continuing operations)	-2.94*	1.92*	2.79
Free cash flow	17*	-118*	99
Total assets	4,335	4,730	4,238
Total equity	2,083	2,676	2,460
Equity ratio in %	48 %	57 %	58 %
Net debt/net liquidity	-350	-51	411
Employees (FTE period average)	24,685	25,637	25,934

* continuing operations

8.2 Development of business and results of operations in the fiscal year 2019

The 2019 fiscal year was a difficult one for OSRAM. Business was mainly characterised by the negative dynamic of the environment – in macro-economic terms, but above all in OSRAM's core businesses. In contracting markets, the volume of business also declined. Revenue amounted to around EUR 3.5 billion, a year-on-year decrease of approximately 13.1% on a comparable basis (previous year: growth of approximately 1.9%). With an adjusted EBITDA of EUR 307 million, the corresponding EBITDA margin sharply declined to approximately 8.9% compared to the previous year's figure (approximately 16.4%).

This trend was reflected in the income (loss) of OSRAM (continuing operations), which decreased from income of EUR 188 million in the previous year to a loss of EUR 343 million. The main reason for this was the reduction of EUR 348 million in gross profit. As the volume of business decreased while the cost of goods sold and services rendered remained high, the gross profit margin (gross profit as a percentage of revenue) declined by a substantial 699 basis points. This was mainly caused by negative volume effects and the loss of economies of scale, primarily related to the underutilisation of capacity at production facilities, reflecting the high operating leverage of OSRAM's vertically integrated business units with their high fixed costs. Moreover, impairment losses totalling EUR 210 million were recognised on goodwill. Ultimately, this led to a loss in OSRAM's continuing operations and corresponding negative, diluted earnings per share (continuing operations) of EUR -2.94.

The loss also impacted on free cash flow. Nevertheless, OSRAM's free cash flow (continuing operations) improved sharply to reach positive territory at EUR 17 million (previous year: EUR -118 million). This was predominantly because of a decrease in net operating working capital and a fall in capital expenditure. As of 30 September 2019, OSRAM's net debt increased to EUR 350 million (previous year: EUR 51 million).

In operational terms, OSRAM supplemented the performance improvement programmes already initiated in the previous year with further reaching structural measures to counteract the deteriorating conditions. In strategic terms, OSRAM continued to forge ahead with its transformation into a high-tech photonics compa-

ny by making changes to its organisational structure and selling both its luminaires business and the luminaire service business. OSRAM boasts a high equity ratio of approximately 48%, a balanced asset structure and solid finances, meaning it is well equipped to achieve further growth, regardless of the current gloomy economic situation.

8.3 Development of business and results of operations for the nine-month period up to 30 June 2020

In the first nine months of the 2020 fiscal year, OSRAM's revenue fell on a comparative basis by approximately -12.4% to EUR 2,300 million; however, positive free cash flow of EUR 64 million was achieved, thanks to targeted cash management in particular. Compared to the relevant period in the previous year, the adjusted EBITDA margin declined and was at approximately 7.9%. At EUR 182 million, the EBITDA adjusted for special items was below the equivalent value for the previous year. At EUR -178 million the net income was negative.

8.4 Outlook for the 2020 fiscal year

Compared to the 2019 fiscal year, OSRAM is expecting the 2020 fiscal year to see a comparable revenue decline of -14.0%, an adjusted EBITDA margin of roughly 8% and a close-to-balance free cash flow.

OSRAM withdrew the guidance for fiscal year 2020 in March 2020 due to the unpredictable impacts of the COVID-19 pandemic. After an expected decline of business development in the third quarter of the fiscal year (1 April to 30 June 2020), the management board now expects a slight demand recovery in the second half of 2020. The profound weakness of the global automotive business as well as demand weakness in OSRAM's core markets in Europe and the U.S. will also burden development in the 4th quarter of 2020. This is countered by currently increasing revenues in China and the early measures taken by the company which helped to moderate the impact of the COVID-19 pandemic on liquidity and financial results. These measures will continue to be consistently implemented. The same applies to the started structural initiatives for the sustainable improvement of profitability by which gross savings of at least EUR 300 million should be realised by the end of fiscal year 2022.

9. Employees and co-determination

9.1 Employees

As of 30 September 2019, the OSRAM Group employed a total of 24,685 "full-time equivalent" employees.

9.2 Co-determination

Pursuant to §7(1) of the company's Articles of Association, the OSRAM supervisory board shall consist of twelve members, with the composition of members from shareholder and employee representatives arising from the legal requirements with regard to principles of equality.

II. ams and the ams Group

1. Overview

ams is a worldwide leader in sensor solutions which develops and manufactures high-performance sensor solutions, sensor integrated circuits (***ICs***), related algorithms and software. The ams Group's operations focus on the design, development and manufacture of high-performance sensor solutions in the strategic areas of optical, image and audio sensor applications.

The ams Group intends to secure a leading position with solutions for optical, image and audio sensors by continuously developing its technological capabilities and performance of its various sensor types and by providing differentiated (multi-sensor) application solutions. The key elements of this strategy include (i) the focus on fast growing sensor segments; (ii) the transfer of sensor technologies which were developed for one application area to another application are; (iii) a product range that stands out from competition by offering customised sensor solutions and micromodule integration; (iv) the cooperation with innovative customers for all applications; (v) the creation of a diversified business portfolio of sensor technologies and solutions as well as applications for end markets and customers; and (vi) the focus of inhouse manufacturing on steps which are decisive for a product range that stands out from competition or to secure attractive growth opportunities.

On average, the ams Group had 8,811 employees in 2019 (thereof approximately 1,100 engineers) and generated revenues of around EUR 1,885.3 million in the fiscal year ended on 31 December 2019, an operating result (EBIT) of around EUR 391.7 million and a net profit of around EUR 299.7 million.

2. History and development

ams was established in 1981 as American Micro System Incorporated-Austria GmbH, a joint venture between American Micro Systems and Voestalpine AG with head office in Premstätten, Austria. In 1983, the first production facility, a 100mm wafer factory, was opened in Premstätten with around 300 employees. In 1987, after the exit of Voestalpine AG, the company was renamed Austria Mikro Systeme International Gesellschaft m.b.H and opened branches in California (USA) and Germany. In 1991-1992, the company was converted into a stock corporation and, in 1993, went public on the Vienna Stock Exchange. In 1994, ams opened its first branch in Asia.

In the year 2000, the company was delisted from the Vienna Stock Exchange in the course of a restructuring and renamed austriamicrosystems AG. In the same year, a 200mm wafer factory was opened in Premstätten, Austria. The expansion continued in 2002 with the opening of a new location in Singapore and the expansion of existing branches in Hong Kong, Japan and the USA, followed by the opening of new locations in South Korea, China, Finland and Sweden in 2003. In 2004, austriamicrosystems AG went public on the Swiss Stock Exchange in Zurich. In 2006, the company opened a new test centre in the Philippines and a new design centre in India and further expanded its 200mm wafer factory.

In 2011, the company acquired 100% of the shares in the light sensor technology provider Texas Advanced Optoelectronic Solutions Inc. with registered seat in Pla-

no, Texas, USA, and changed its name to “ams” in order to combine the brands “austriamicrosystems” and “TAOS“.

To further enhance its successful Radio-Frequency Identification (RFID), Near-Field Communication (NFC) and Wireless offerings and technology leadership in these markets, ams acquired 100% of the shares in IDS, a global RFID design leader, in 2012. The IDS group comprised IDS d.o.o., with registered seat in Ljubljana, Slovenia, and IDS IP Holding AG, with registered seat in Ljubljana, Slovenia, with its wholly-owned subsidiary IDS Microchip AG, with registered seat in Switzerland.

In 2014, ams acquired 100% of the shares in AppliedSensor Sweden Holding AB, with registered seat in Linköping, Sweden, including its subsidiaries Applied-Sensor GmbH, with registered seat in Germany, and APPLIEDSENSOR Inc., with registered seat in the USA, a global leader in solid-state chemical gas sensor solutions for high volume markets in order to add AppliedSensor’s MEMS gas sensor technology to ams’ expertise in advanced sensor design. In the same year, ams acquired 100% of the shares in acam-messelectronic gmbh, with registered seat in Stutensee, Germany, a leading provider of accurate time-based measurement and related sensor solutions.

In 2015, ams acquired the CMOS sensor business from NXP B.V., with registered seat in Eindhoven, Netherlands. The acquisition expanded ams’ portfolio of “environmental sensors” with advanced monolithic and integrated CMOS sensors that measure several environmental variables such as relative humidity, pressure and temperature in one sensor device. In the same year, ams acquired 100% of the shares in CMOSIS International N.V., with registered seat in Antwerp, Belgium, a leader in advanced area and line scan CMOS image sensors for high-end imaging applications. The acquisition of CMOSIS was aimed at a complementary expansion of ams’ sensor portfolio.

In 2016, ams acquired 100% of the shares in MAZeT GmbH, with registered seat in Jena, Germany, a colour and spectral sensing specialist. This strategic acquisition was aimed at extending ams’ market leadership in optical sensors and strengthening ams’ position in emerging optical sensor applications. In the same year, ams acquired 100% of the shares in Cambridge CMOS Sensors Ltd, with registered seat in Launceston, United Kingdom, the technology leader in micro hot-plate structures for gas sensing and infrared applications. The acquisition was aimed at realising synergies from the know-how of Cambridge CMOS Sensors Ltd. In 2016, ams also acquired Incus Laboratories Ltd, with registered seat in Stokenchurch, United Kingdom, a provider of IP for digital active noise cancellation in headphones and earphones. The acquisition was aimed at strengthening ams’ position in the market for Active Noise Cancellation (ANC) solutions.

In 2017, ams acquired 100% of the shares in Heptagon Advanced MicroOptics Pte. Ltd., with registered seat in Singapore, the worldwide leader in high-performance optical packaging and micro-optics. With this transaction, ams became the clear global leader in optical sensor technologies anticipating industry and technology trends to drive growth in new applications. In the same year, ams acquired 100% of the shares in Princeton Optronics, Inc., with registered seat in Mercerville, New

Jersey, USA, a leading provider of Vertical Cavity Surface-Emitting Lasers (VCSELs), in order to expand ams' optical sensor solutions offering.

To accelerate the adoption of 3D face recognition and help original equipment manufacturers (***OEMs***) to achieve a faster time-to-market, ams acquired KeyLemon S.A., with registered seat in Martigny, Switzerland, a leading provider of face recognition software, in 2018. In 2018, ams also acquired 30% of the shares in 7Sensing Software N.V., with registered seat in Leuven, Belgium. 7Sensing Software NV is a software and software licensing company that primarily develops software solutions and IP for optical, imaging, ambient and audio sensor solutions. In the same year, ams also acquired 100% of the shares in ixellence GmbH, with registered seat in Wildau, Germany.

In 2020, ams and Wise Road Capital, a private equity firm focusing on the semiconductor industry and other emerging high-tech industries, created the joint venture ScioSense, with registered seat in Eindhoven, Netherlands, in order to advance the development and sales of environmental, flow and pressure sensor solutions for the global market. Under the joint venture agreement, ams agreed to transfer employees, IP, sensor products and solutions and related customers from ams to ScioSense, while Wise Road Capital will provide its expert joint venture guidance, deep market knowledge and strength in channel and customer relationships, especially in China. The ams Group holds indirectly 49% of the shares in ScioSense.

On 7 November 2019, ams Offer published the Takeover Offer to the OSRAM Shareholders for the acquisition of all OSRAM Shares. The Takeover Offer was completed on 9 July 2020 (see B.III.8.1).

3. Legal form, registered seat, fiscal year and object

ams is a stock corporation incorporated under the laws of the Republic of Austria, having its registered seat in Premstätten, Austria, registered with the commercial register (*Firmenbuch*) of the civil district court of Graz (*Landesgericht für Zivilrechtssachen Graz*) under FN 34109k. The fiscal year is the calendar year.

The object of ams according to its articles of association is the development, manufacturing and sale of electronic products, including but not limited to integrated circuits (microsystems) and other microelectronic products, and the provision of related services, trading in such products and the brokerage of such transactions, as well as the acquisition of relevant production machines and equipment.

ams may establish branches in Austria and abroad, hold shares in companies in Austria and abroad, acquire, establish and sell such companies and enter into any transactions, including joint ventures, which are indirectly or directly conducive to the Company's interests, except for banking transactions. ams is also entitled to collect and process personal data by automated means.

4. Share capital, shareholders and stock exchange trading

4.1 Share capital

The share capital of ams amounts to EUR 274,289,280.00 and is divided into 274,289,280 no-par value shares, each representing the same pro rata amount of

the share capital (***ams Shares***). All ams Shares are ordinary bearer shares. There are no other classes of shares.

4.2 Capital increase 2020

On the basis of the capital increase resolved by the company's extraordinary general meeting on 24 January 2020, the management board of ams resolved on 11 March 2020 to issue 189,869,454 new ordinary no-par value bearer shares by way of a discounted rights offering at an offer price of 9.20 Swiss francs (***CHF***) per share (***Capital Increase 2020***). In the course of the offering, 15,023,697 ams Shares were successfully placed with investors at a price of CHF 9.20. Together with 117,451,512 shares already subscribed by ams shareholders and holders of subscription rights at the completion of the rights exercise period, a total of 132,475,209 shares were taken up by investors. The remaining 57,394,245 ams Shares were taken up by the syndicate banks involved in the capital increase for their own account according to their respective underwriting quota. As a result of the Capital Increase 2020, ams' share capital was increased from EUR 84,419,826.00 to EUR 274,289,280.00.

The gross proceeds from the issue in the amount of CHF 1.75 billion (which corresponds to approximately EUR 1.65 billion) was used to partially refinance the takeover of OSRAM including the related transaction costs.

4.3 Authorised Capital 2018

In June 2018, the general meeting of ams resolved to authorise the management board to increase the company's share capital until 5 June 2023 by up to EUR 8,441,982.00 by issuing up to 8,441,982 new no-par value shares against contributions in cash and/or in kind and to determine, in agreement with the supervisory board, the issue price as well as the terms of issue and the further details of the implementation (***Authorised Capital 2018***).

The management board of ams was authorised to offer the new shares for subscription to the shareholders by way of indirect subscription rights pursuant to section 153(6) of the Austrian Stock Corporation Act (*Aktiengesetz* - ***ÖAktG***) or, with the approval of the supervisory board, to exclude the shareholders' subscription rights if

- the capital increase is made against contributions in kind, i.e. if shares are issued for the purpose of acquiring companies, parts of companies, businesses, parts of businesses or equity interests in one or more companies in Austria or abroad;
- the capital increase is made for the purpose of listing the company's shares on another non-European stock exchange;
- it is intended to exclude fractional amounts from the shareholders' subscription rights; or
- it is intended to cover an over-allotment option granted to the underwriting banks.

As of the date of this Contract Report, the full amount of the Authorised Capital 2018 is still available.

4.4 Conditional Capital 2020

In June 2020, the general meeting of ams resolved to conditionally increase the share capital of ams pursuant to section 159(2) no. 1 ÖAktG by up to EUR 27,428,928.00 by issuing up to 27,428,928 no-par value bearer shares, each representing a pro-rata amount of EUR 1.00 of the share capital, for the purpose of issuing them to creditors of financial instruments (***Conditional Capital 2020***). As of the date of this Contract Report, no portion of the Conditional Capital 2020 has been committed for the possible conversion of a financial instrument. Therefore, no shares have been issued out of the Conditional Capital 2020.

4.5 Conditional Capital 2017

In June 2017, the general meeting of ams resolved to conditionally increase the share capital of ams pursuant to section 159(2) no. 1 ÖAktG by up to EUR 8,441,982.00 by issuing up to 8,441,982 no-par value bearer shares, each representing a pro-rata amount of EUR 1.00 of the share capital, for the purpose of issuing financial instruments in accordance with section 174 ÖAktG (***Conditional Capital 2017***). In September 2017, the management board resolved to issue a convertible bond for which a portion of the Conditional Capital 2017 of, in total, 3,273,858 new no-par value bearer shares was committed for the possible conversion of the convertible bond. In February 2018, the management board resolved to issue another convertible bond for which a portion of the Conditional Capital 2017 of, in total, 4,410,412 new no-par value bearer shares was committed for the possible conversion of the convertible bond. In March 2019, ams launched a buyback programme for the outstanding convertible bonds and, as a result, the number of ams Shares committed for the possible conversion of the convertible bonds was reduced. As a result of the Capital Increase 2020, the number of ams Shares to be committed for the possible conversion of the convertible bond changed again because the terms and conditions of the convertible bonds had to be amended in accordance with dilution adjustment provisions. As at the date of this Contract Report, no shares have been issued out of the Conditional Capital 2017, and a total of 4,224 convertible bonds (1,602 under the USD Convertible Bond 2022 and 2,622 under the EUR Convertible Bond 2025) entitling their holders to subscribe for a total of 11,117,887 ams Shares (4,863,056 shares under the USD Convertible Bond 2022 and 6,254,831 shares under the EUR Convertible Bond 2025) were outstanding.

4.6 Conditional Capital 2015

In June 2015, the general meeting of ams resolved to conditionally increase the share capital of ams pursuant to section 159(2) no. 3 ÖAktG by up to EUR 5,000,000.00 by issuing up to 5,000,000 no-par value bearer shares for the purpose of granting stock options over a period of five years under the Performance Stock Unit Plan (PSP) 2014-2018 to selected employees, officers and members of the management board of ams and companies affiliated with ams (***Conditional Capital 2015***). In 2014, a total of 5,000,000 stock options for the same number of ams Shares was granted under the Performance Stock Unit Plan (PSP) 2014-

2018. All granted options must be exercised 10 years after the granting date at the latest. As of the date of this Contract Report, no shares have been issued out of the Conditional Capital 2015, and 1,695,305 options were outstanding.

4.7 Treasury shares

In line with the resolution of the general meeting adopted in 2019, which authorises the management board of ams to acquire up to 10% of the outstanding treasury shares, ams started to repurchase treasury shares representing up to 5% of the share capital. The buyback programme expired on 24 April 2020. The purpose of the share buyback programme was to repurchase the necessary shares to service obligations under long-term employee incentive programmes. On 27 April 2020, ams announced that, based on the then current outstanding number of 274,289,280 bearer shares, the maximum repurchase volume under the current share buyback programme of max. 5% or 13,714,464 bearer shares had been achieved and the share buyback programme was completed.

As of the date of this Contract Report, ams holds 13,702,448 treasury shares. This corresponds to approximately 5% of the share capital of ams.

4.8 Shareholders

As of the date of this Contract Report, the shareholder structure of ams is, according to the notifications published on the website of SIX Exchange Regulation under https://www.ser-ag.com/en/resources/notifications-market-participants/significant-shareholders.html#/, as follows:

Shareholder	**Total percentage of voting rights held in %**
Temasek Holdings (Singapore State Fund)	5.40
BlackRock Inc.	4.48
UBS Fund Management AG	3.94

4.9 Trading on the stock exchange

The ams Shares (ISIN AT0000A18XM4) are listed on the main segment on the SIX Swiss Exchange and are traded on the regulated unofficial market (*Freiverkehr*) of the stock exchanges in Berlin, Frankfurt am Main and Stuttgart and on the Global Market of the Vienna Stock Exchange. In addition, the ams Shares can be traded on XETRA.

5. Management board and supervisory board

5.1 Management board

Pursuant to § 4(1) of the articles of association of ams, the management board of ams comprises up to five members.

As of the date of this Contract Report, the management board of ams has the following members:

- Alexander Everke (Chief Executive Officer (CEO), since March 2016 and member of the management board since October 2015);
- Ingo Bank (Chief Financial Officer (CFO), since May 2020);
- Dr Thomas Stockmeier (Chief Operating Officer (COO), since October 2014); and
- Mark Hamersma (Chief Business Development Officer (CBDO), since January 2018).

Pursuant to § 5(2) of the articles of association of ams, the company is represented, if more than one member of the management board is appointed, by two members of the management board or by one member of the management board acting jointly with a holder of a general commercial power of attorney (*Prokurist*). Within the scope of their legal power of representation, ams may also be represented by two holders of a general commercial power of attorney (*Prokuristen*) acting jointly.

5.2 Supervisory board

Pursuant to § 8(1) of the articles of association of ams, the supervisory board of ams comprises at least three and not more than six members elected by the general meeting and the members appointed by the employees pursuant to section 110(1) of the Austrian Labour Constitution Act (*Arbeitsverfassungsgesetz* - ***ArbVG***). The supervisory board has a maximum of 9 members.

The shareholder representatives are:

- Mag Hans Jörg Kaltenbrunner (chairperson);
- Dipl-Kfm Michael Grimm (deputy chairperson);
- Dr Monika Henzinger;
- Brian Krzanich;
- Kin Wah Loh; and
- Yen Tan.

The employee representatives are:

- Andreas Pein; and
- Bianca Stotz.

On 24 July 2020, the employee representative Johann Eitner retired from the supervisory board of ams. The works council of ams will appoint a new employee representative as member of the supervisory board.

DI Guido Klestil is the honorary chairperson of the supervisory board of ams.

6. Structure of the ams Group

6.1 Operating and legal structure

ams is the ultimate parent company of the ams Group. It is responsible for the main group-wide management functions and duties, such as management of the individual business areas, production and production planning, research & development, as well as the typical support functions finance and accounting, human resources, quality assurance, IT and organisational development. Furthermore, ams is responsible for internal legal advice, risk management and compliance.

In addition to its main location in Premstätten, Austria, the ams Group has locations in Belgium, Germany, Italy, the Netherlands, Portugal, Slovenia, Switzerland, Spain, Sweden, the United Kingdom, the People's Republic of China, India, Japan, South Korea, the Philippines, Singapore, Taiwan and the USA. ams has subsidiaries in Switzerland, Italy, Germany, France, Belgium, the Netherlands, the United Kingdom, Spain, Portugal, Sweden, the USA and other locations.

The subsidiaries in the USA, Switzerland, Italy, Spain, the United Kingdom, Germany, Japan and India are engaged in development, marketing and sales activities, whereas the subsidiaries in France and China are engaged in marketing, sales and technical support. The subsidiary in the Philippines is responsible for production activities in testing, while the subsidiary in South Korea is responsible for sales and assembly in the region. The subsidiary in Singapore conducts production, marketing, sales and research & development activities.

Prior to the completion of the Takeover Offer on 31 December 2019, the ams Group comprised 45 subsidiaries and 12 affiliates. A complete list of all subsidiaries and affiliates as of 31 December 2019 is attached to this Contract Report as **Annex 2**.

6.2 Governance structures

The governance and organisational structure of the ams Group is divided into the following functional areas:

Chief Executive Officer Alexander Everke	**Chief Financial Officer** Ingo Bank	**Chief Operating Officer** Dr Thomas Stockmeier	**Chief Business Development Officer** Mark Hamersma
Commercial management of the business areas	Finance and accounting	Production & production planning	Corporate development
Global Sales & Marketing	Controlling	Supply Chain Management	M&A activities
Human Resources	Taxes	Quality assurance	Post-merger integration

Public Relations	Legal & Risk management	Research & Development	
Investor Relations	IT & Organisational development	Property management	
Corporate Social Responsibility			

7. Business of the ams Group

ams is a worldwide leader in sensor solutions which develops and manufactures high-performance sensor solutions, sensor integrated circuits (ICs), related algorithms and software. The ams Group's operations focus on the design, development and manufacture of high-performance sensor solutions, including detector, sensor interface and sensor processor integrated circuits, active and passive optical components, including driver ICs, and related sensing software algorithms and selective application software.

The range of products and services offered by the ams Group is divided into three strategic areas:

- Optical sensor applications;
- Image sensor applications; and
- Audio sensor applications.

The ams Group's sensors and sensor solutions are used by OEMs in a wide range of end-market applications. In the fiscal year 2019, the ams Group reported in the following three business segments in which products and sensor solutions of ams are used:

- Consumer;
- Non-Consumer; and
- Foundry.

The "Consumer" segment is comprised of products and sensor solutions targeting the mobile, consumer and communications markets. The "Non-Consumer" segment is comprised of products and sensor solutions targeting the industrial, medical, and automotive markets. In the "Foundry" segment, ams reports the contract manufacturing of analogue/mixed signal ICs based on its customers' designs.

In the fiscal year 2020, ams reorganised its segments and integrated the "Foundry" segment in the "Non-Consumer" segment.

7.1 Optical sensor applications

The ams Group's optical sensor applications comprise a suite of complex and advanced light sensing solutions. Optical sensors efficiently, quickly and accurately measure and translate external light stimuli – including colour and intensity changes – into electronic signals for use by a wide range of end-market applications. The ams Group's optical sensor offering includes, in particular, ambient light sensors

and combined ambient light and proximity sensors (which are used, in particular, in smartphones, tablets, medical diagnostics, touchscreen control and industrial process control), colour sensors and combined colour and proximity sensors as well as spectral sensors (which are used in various industries such as product authentication, document verification and chemical analysis). In addition, the ams Group focuses on the development of advanced 3D sensing capabilities and on the development of a LiDAR system (a critical building block to enable assisted and autonomous driving via optical object detection similar to a radar, but with better high resolution).

7.2 Image sensor applications

The ams Group's image sensor applications comprise a variety of technologies used to create the high-quality, precision images that are required in technical fields, such as hospital, medical practice, industrial and infrastructure applications. Image sensors convert the variable attenuation of light waves (as they pass through or reflect off objects) into signals or small bursts of current that convey information. Image sensors are used in both analogue and digital electronic imaging devices, which include digital cameras, camera modules, medical imaging equipment and night vision equipment. The ams Group's image sensor offering includes, in particular, area scan sensors, line scan sensors and miniature camera modules.

7.3 Audio sensor applications

The ams Group's audio sensor applications are used in a variety of advanced audio applications. These sensors mimic human hearing by receiving, processing and converting audio signals to an electric current for applications in complex consumer and non-consumer products. Audio sensors are used, in particular, in microphones (which are used in telephones, computers, baby monitors and music systems) and also for speech recognition, as well as for non-acoustic purposes such as ultrasonic sensors or knock sensors. The ams Group's audio sensor portfolio increasingly focuses on applications in active noise control technologies. The ams Group's audio sensors can be advantageously combined with other ams sensor products (such as proximity sensors) and applied in devices that require a broad array of advanced sensing technologies, such as smart headphones and wireless earbuds. The ams Group's audio sensor applications are regularly used by OEMs involved in consumer technology fields, in particular mobile phone producers as well as producers of voice-activated devices and wireless earbuds for smartphones.

8. Development of business and earnings situation of the ams Group

8.1 Financial information for the fiscal years 2019, 2018 and 2017

The consolidated financial statements of the ams Group were prepared in accordance with the International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB) and as to be applied in the European Union, as well as additional requirements relating to section 245a of the Austrian Commercial Code (*Unternehmensgesetzbuch* - ***UGB***).

In millions of EUR, unless otherwise stated	**2019**	**2018**	**2017**
Revenue	1,885.3	1,426.3	1,063.8
Consumer segment	1,403.6	1,003.0	683.5

Non-Consumer segment	439.0	377.8	328.7
Foundry segment	42.6	45.6	51.6
Gross margin (adjusted)[1)]	41%	32%	43%
Gross margin (IFRS reported)	38%	27%	39%
R&D expenses	261.2	239.1	214.0
Operating result (EBIT) (adjusted)[1)]	391.7	127.6	168.7
EBIT margin in % (adjusted)[1)]	21%	9%	16%
EBITDA	621.9	225.5	224.4
Net result (adjusted)[3)]	299.7	10.6	127.5
Earnings per share (in EUR, basic)[3)]	3.73	0.13	1.56
Earnings per share (in CHF, basic)[2) 3)]	4.15	0.15	1.74
Operating cash flow	645.7	315.4	-3.6
Total order backlog (as of 31 December)	239.6	291.8	541.9
Acquisition of intangibles, property, plant and equipment	181.6	412.9	582.0
Total assets (as of 31 December)	4,433.4	3,584.5	3,261.3
Equity ratio	38%	36%	25%
Employees (average)	8,811	10,322	7,016

1) Excluding acquisition-related and share-based compensation costs.

2) Earnings per share in CHF were converted using the average currency exchange rate for the respective periods.

3) Net result and earnings per share excluding valuation effect of the option element of the issued USD convertible bond.

8.2 Development of business and results of operations in the fiscal year 2019

In the fiscal year 2019, ams recorded substantial growth. Consolidated group revenues for the fiscal year 2019 increased by around 32% to EUR 1,885.3 million compared to EUR 1,426.3 million in 2018. This development was primarily due to the exceptional growth in demand in the target market Consumer (increase of around 39%) in conjunction with solid overall demand for ams' solutions in the automotive, industry and medical markets. The revenue increase in the Consumer business was particularly driven by further deployment of optical sensing solutions in 3D sensing and high-quality light sensors for advanced display management, as well as the business development of leading smartphone manufactures using ams-solutions.

The Consumer segment, the Non-Consumer segment and the Foundry segment accounted for around 74%, 23% and 2%, respectively, of consolidated revenues.

The full year gross margin excluding acquisition-related amortisation and share-based compensations costs increased to around 41% in 2019 compared to around 32% in 2018. Gross margin including acquisition-related amortisation and share-based compensations costs also increased to around 38% compared to around 27% in the previous year. The improved utilisation of production capacities in Singa-

pore in 2019 had a positive effect on the gross margin. This improved capacity utilisation resulted from significantly higher customer volumes in the consumer business compared to 2018. Furthermore, the price trend for the company's products was stable overall.

Due to the increase in sales and improved capacity utilisation, the operating result (EBIT) (including acquisition-related amortisation and share-based compensations costs) increased by EUR 315.8 million to EUR 328.7 million in 2019. EBITDA (earnings before interest and taxes plus depreciation and amortisation) increased by EUR 396.4 million to EUR 621.9 million. The return on equity reached around 18% (2018: around 7%).

The operating cash flow increased significantly to EUR 645.7 million in 2019 compared to EUR 315.4 million in the previous year. This increase was primarily due to the improved operating result.

8.3 Development of business and results of operations in the first half of 2020

The results of the first half of 2020 show ams' business performing very well despite the ongoing global Covid-19 pandemic and its macro-economic and end market impact. The demand environment in the consumer market remained clearly supportive during the first two quarters while end markets in the automotive and industrial businesses seeing continued weakness worldwide. Group revenues for the first half of 2020 were EUR 872.3 million, a significant increase of around 22% compared to EUR 713.4 million recorded in the first half of 2019. The adjusted EBIT for the first half of 2020 was EUR 173.4 million (excluding acquisition-related and share-based compensation costs), significantly up from EUR 65.2 million in the same period 2019 (EUR 89.8 million including acquisition-related and share-based compensation costs, significantly up from EUR 15.5 million in the first half year 2019). Adjusted net income for the first half year 2020 was EUR 74.7 million (excluding acquisition-related and share-based compensation costs), compared to EUR -63.7 million for the same period 2019 (first half 2020: EUR -8.9 million including aforementioned costs).

8.4 Outlook for the fiscal year 2020

For the third quarter 2020, ams expects very good growth for ams' business despite the ongoing Covid-19 pandemic impacting economies and ams' end markets, on a sequential basis. This growth will be driven by volume ramps for smartphone sensing solutions while ams' non-consumer business in the automotive and industrial markets continues to show limited demand and provide a muted contribution to ams' results. ams will be fully consolidating OSRAM as of the beginning of the third quarter 2020 and intends to include OSRAM as a separate reporting segment.

Based on available information, ams expects revenues for ams' business of USD 530-570 million in the third quarter 2020, up 20% from the previous quarter. This positive outlook encompasses strength in ams' consumer business compensating for ongoing demand weakness in the majority of ams' non-consumer business. Despite this situation, ams also expects robust profitability for the third quarter 2020 with an expected adjusted operating (EBIT) margin of 21-24%. The expectations above assume no further unforeseen negative effects from the Covid-19 pandemic that would result in a meaningful negative impact on ams' business.

9. Employees and co-determination

9.1 Employees

In the fiscal year 2019, the ams Group had, on average, 8,811 employees of which around 15% worked at the company headquarters in Premstätten, Austria, and around 85% outside of Austria.

9.2 Co-determination

Pursuant to § 8(1) of the articles of association of ams, the supervisory board of ams comprises at least three and not more than six members elected by the general meeting. Pursuant to section 110(1) of the Austrian Labour Constitution Act (*Arbeitsverfassungsgesetz* - ***ArbVG***), the responsible employee representative body appoints one employee representative for every two shareholder representatives as members of the supervisory board (one-third parity (*Drittelparität*)). The supervisory board of ams has a maximum of 9 members.

III. ams Offer

1. Overview

ams Offer is a wholly-owned direct subsidiary of ams. The business address of ams Offer is: Marcel-Breuer-Straße 6, 80807 Munich.

2. Legal form, registered seat, fiscal year and object

ams Offer is a German limited liability company (*Gesellschaft mit beschränkter Haftung*) with registered seat in Ismaning, registered in the commercial register of the local court (*Amtsgericht*) of Munich under registration number HRB 252979. The share capital of ams Offer amounts to EUR 25,100.00.

The fiscal year of ams Offer begins on 1 February of each calendar year and ends on 31 January of the following calendar year.

The object of ams Offer according to its articles of association is the administration of its assets as well as the acquisition and holding of participations. In addition, the object of ams Offer comprises the provision of services to affiliated companies, in particular management services. ams Offer is entitled to engage in any business activities and to take any actions which are suitable to promote the object of the company directly or indirectly. It may acquire companies of the same or similar type and hold participations in such companies, also as a general partner. ams Offer may establish branches that have the same or similar name in Germany or abroad.

3. History and development

3.1 Formation

ams Offer was formed with the name Blitz F19-566 GmbH with registered seat in Frankfurt am Main and a share capital of EUR 25,000.00 by Blitzstart Holding AG on 18 July 2019 and registered in the commercial register of the local court (*Amtsgericht*) of Frankfurt am Main under registration number HRB 116376 on 13 August 2019.

3.2 Acquisition by ams, amendment to the articles of association and relocation of registered seat

Pursuant to a purchase and assignment agreement dated 16 October 2019, ams acquired Blitz F19-566 GmbH from Blitzstart Holding AG. In this connection, it was resolved to change the name of the company to ams Offer GmbH and to change the company's object and fiscal year, and the economic new formation (*wirtschaftliche Neugründung*) of ams Offer was filed for registration in the commercial register with the local court (*Amtsgericht*) of Frankfurt am Main.

On 14 November 2019, it was resolved to relocate the registered seat of Blitz F19-566 GmbH, which had been renamed ams Offer GmbH on 28 October 2019, from Frankfurt am Main to Ismaning. On 26 November 2019, the relocation of the registered seat was registered in the commercial register.

3.3 Capital increase

By shareholder resolution of 9 July 2020, registered in the commercial register on 14 July 2020, the share capital of ams Offer was increased, in return for the granting of 100 new shares, from EUR 25,000.00 by EUR 100.00 to EUR 25,100.00. All new shares were subscribed by ams. ams' contribution for the new shares was not made in cash but by the contribution of 28,007,603 OSRAM Shares. The amount by which the value of the OSRAM Shares exceeded the sum of the nominal amounts of all new shares granted in return for the OSRAM Shares was allocated to the capital reserve of ams Offer in accordance with section 272(2) no. 1 HGB.

4. Governing bodies and representation

Pursuant to § 6(1) of the articles of association of ams Offer, the management of the company consists of one or more managing directors which are appointed and dismissed by the shareholders' meeting. Pursuant to § 7(1) of the articles of association of ams Offer, the company is represented, if only one managing director is appointed, by such managing director alone, and otherwise by two managing directors acting jointly or by one managing director acting jointly with a holder of a general commercial power of attorney (*Prokurist*).

The managing directors of ams Offer are:

- Alexander Everke;
- Dr Thomas Stockmeier;
- Ingo Bank; and
- Dr Franz Michael Fazekas.

Each of the managing directors was appointed with the authority to enter into legal transactions in the name of the company with himself in his own name or as an agent of a third party.

ams Offer has neither a supervisory board nor any equivalent body.

5. Business activities

As of 18 October 2019, ams Offer has not commenced any business activity. On 18 October 2019, ams Offer published its decision to make the Takeover Offer and took all necessary and useful measures in relation thereto. By publication of the offer document on 7 November 2019, ams Offer made the Takeover Offer. Since completion of the Takeover Offer on 9 July 2020, ams Offer has been acting as an intermediate holding in the ams Group.

As at the date of this Contract Report, ams Offer holds 66,605,912 OSRAM Shares; this corresponds to approximately 68.77% of the share capital and voting rights in OSRAM, and ams Offer also holds all the shares in ams R&D Spain, S.L. Apart from that, ams Offer does not hold any further shares or interests. ams Offer has 12 employees itself.

6. Earnings situation and financial position of ams Offer

ams Offer was registered in the commercial register on 19 August 2019 as a shelf company. Until its economic new formation following its acquisition by ams on 16 October 2019, ams Offer did not engage in any business activity. Since then, the economic activity of ams Offer has been limited to making the Takeover Offer to the OSRAM Shareholders and to its function as intermediate holding in the ams Group. Therefore, ams Offer has not generated any revenues.

ams Offer has a registered share capital in the amount of EUR 25,100.00. The capital reserve pursuant to section 272(2) no. 1 HGB resulting from the contribution of the total number of 28,007,603 OSRAM Shares in the context of the capital increase resolved on 9 July 2020 amounts to approximately EUR 1,115 million. For the financing of the Takeover Offer, ams Offer took up a shareholder loan and, as a result, the total liabilities of ams Offer as of 22 September 2020 amounted to approximately EUR 1,685.0 million. On the other side, the assets of ams Offer consist of a total number of 66,605,912 OSRAM Shares and the shares held by ams Offer in ams R&D Spain, S.L.

7. Financial resources of ams Offer to meet its liabilities under the Domination and Profit and Loss Transfer Agreement

Prior to the conclusion of the Domination and Profit and Loss Transfer Agreement, the management board of OSRAM and the management of ams Offer examined whether ams Offer will at all times be able to fulfil its payment obligations under the Domination and Profit and Loss Transfer Agreement. Based on the current economic, financial and contractual situation of ams Offer, the management board of OSRAM and the management of ams Offer came to the conclusion that ams Offer will be able to fulfil its obligations under the Domination and Profit and Loss Transfer Agreement.

The management board of OSRAM and the management of ams Offer based this conclusion on the following considerations:

Following effectiveness of the profit transfer obligation under the Domination and Profit and Loss Transfer Agreement, the profit of OSRAM will be available to meet the future payment obligations of ams Offer (see section D.I.2), with ams Of-

fer being obliged, pursuant to section 302 AktG, to assume any annual loss of OSRAM that may arise during the term of the Agreement.

In addition, ams, without joining the Domination and Profit and Loss Transfer Agreement as a party, issued a comfort letter to OSRAM, which is attached to this Contract Report together with the Domination and Profit and Loss Transfer Agreement as **Annex 3**.

In this comfort letter, ams undertook without limitation and irrevocably to ensure, that ams Offer will be financially equipped in such a way that ams Offer is at all times able to fulfil all its liabilities arising from or in connection with the Agreement completely when they become due. This applies in particular to the obligation to compensate losses pursuant to section 302 AktG. In addition, in the event that ams Offer fails to fulfil its obligations towards the outside shareholders of OSRAM arising from or in connection with the Agreement completely when they become due, ams undertook without limitation and irrevocably vis-à-vis the outside shareholders of OSRAM that ams Offer will fulfil all its obligations towards them arising from or in connection with the Agreement completely when they become due, in particular with respect to the recurring compensation payment (*Ausgleichszahlung*) and the cash compensation (*Abfindung*). To that extent the outside shareholders of OSRAM have an own claim according to section 328 para. 1 BGB directed at payment to ams Offer (see section D.I.7).

8. Takeover Offer and potential share acquisitions by ams Offer

8.1 Takeover Offer and additional share acquisitions

Prior to the publication of the decision to make the Takeover Offer to the OSRAM Shareholders for the acquisition of their OSRAM Shares on 18 October 2019 by ams Offer, ams had acquired 19,359,929 OSRAM Shares. This corresponded to a holding of approximately 19.99% of the OSRAM shares and voting rights in OSRAM.

On 7 November 2019, ams Offer published the Takeover Offer to the OSRAM Shareholders for the acquisition of their OSRAM Shares at an offer price of EUR 41.00 per share of OSRAM. The completion of the Takeover Offer was, among other things, subject to the conditions of (i) a minimum acceptance threshold of 55% of all OSRAM Shares issued at the end of the acceptance period but excluding the 2,796,275 treasury shares held by OSRAM at the time of publication of the Offer Document, and (ii) the receipt of various merger control clearances.

The acceptance period for the Takeover Offer expired at the end of 5 December 2019. By the end of the acceptance period, the Takeover Offer had been accepted for a total of 36,386,823 OSRAM Shares, corresponding to approximately 37.57% of the share capital of OSRAM and voting rights in OSRAM. At the end of 5 December 2019, ams continued to directly hold 19,359,929 OSRAM Shares. Accordingly, the total number of OSRAM Shares to be taken into account for the minimum acceptance threshold of the Takeover Offer at the end of the acceptance period amounted to 55,746,752 OSRAM Shares, corresponding to approximately 59.27% of the share capital and voting rights. As a result, the minimum acceptance threshold of 55% was exceeded within the acceptance period and the relevant completion condition was fulfilled.

The additional acceptance period for the Takeover Offer expired at the end of 24 December 2019. By the end of the additional acceptance period, the Takeover Offer had been accepted for a total of 36,936,158 OSRAM Shares, corresponding to approximately 38.14% of the share capital of OSRAM and the voting rights in OSRAM.

After the end of the additional acceptance period and until completion of the Takeover Offer, ams purchased additional OSRAM Shares on the stock exchange. As a result, the indirect holding of ams in OSRAM prior to the completion of the Takeover Offer increased from 19,359,929 to 23,342,258 OSRAM Shares, corresponding to approximately 24.1% of the share capital of OSRAM and voting rights in OSRAM.

In addition, on 10 April 2020, ams entered into a purchase agreement with funds advised by Sand Grove Capital Management LLP for the acquisition of a total of 4,665,345 OSRAM Shares off the stock exchange; this corresponded to approximately 4.82% of the OSRAM Shares and voting rights in OSRAM. The completion of this purchase agreement was also conditional upon the receipt of various merger control clearances.

After all relevant merger control clearances had been received, first of all, the purchase agreement with funds advised by Sand Grove Capital Management LLP was completed immediately after completion of the Takeover Offer on 9 July 2020. On 9 July 2020, ams also contributed the total number of 28,007,603 OSRAM Shares held by it to ams Offer by way of a capital increase against contributions in kind (see B.III.3.3).

An additional number of 1,662,151 OSRAM Shares, corresponding to approximately 1.72% of the share capital of OSRAM and voting rights in OSRAM were acquired by ams Offer since 6 July 2020 through additional purchases on the exchange.

8.2 Potential acquisitions outside the compensation offer

ams reserves the right to directly or indirectly acquire at any time, to the extent permitted by law, additional OSRAM Shares outside the compensation offer pursuant to clause 5 of the Domination and Profit and Loss Transfer Agreement on or off the stock exchange.

C. Reasons for concluding the Domination and Profit and Loss Transfer Agreement

I. Economic and legal reasons

1. Enhancing the strength and integration of the ams Group

The Agreement is essential in establishing an integrated group for sensor and photonics solutions. It will enable closer and more effective cooperation between OSRAM, ams Offer and the ams Group. The contractual right to give instructions enables the management of ams Offer to implement single managerial control in the group's interest and single Group structures and strategies also in respect of

OSRAM. This is a vital requirement for the proposed cooperation between ams Offer and OSRAM.

OSRAM and ams Offer expect in future to be able to leverage synergies together, particularly on the cost side, which necessitates the conclusion of the Agreement. Concluding the Agreement enables OSRAM to be integrated even more effectively and cost-efficiently into the ams Group.

Therefore, after conclusion of the Agreement, OSRAM's development is to be promoted in accordance with the business plan to be developed together with the management of OSRAM. On the basis of the Agreement, OSRAM and ams Offer have set themselves the goal of further strengthening and improving OSRAM's position in global competition. The intended purpose of the integration is to set up the ams Group more efficiently for the goal of becoming a worldwide market leader for photonics and sensor solutions and to ensure improved knowledge sharing within the Group. This will significantly strengthen the positions of the ams Group and the OSRAM Group on the photonics and sensor systems market. In addition to this, the integration will allow capitalising on the OSRAM Group's size of operations, customer base and existing expertise with a view to expanding the range of solutions offered by OSRAM and the ams Group and/or their international orientation.

The conclusion of the Agreement promotes the intentions and goals of ams and OSRAM, as the Parties agreed in the Business Combination Agreement on 11 November 2019, namely

- to create a worldwide leading company offering sensor and photonics solutions with tangible benefits for customers, and
- to accelerate revenue growth and drive margin development through product enhancements as well as size, power and cost reductions as a result of the business combination.

Furthermore, the Agreement promotes the future strategic goals jointly agreed in the Business Combination Agreement,

- to continue pursuing OSRAM's vision of transformation into a photonics champion, in particular by leveraging leading capabilities in (traditional and non-traditional) emitters, drivers, processing ICs (integrated circuits), micro-optics and optical packaging, detectors and algorithm development;
- to deliver best-in-class optical sensor and photonics solutions for sizeable, high-growth sensing, illumination, visualisation and treatment applications in various attractive business fields with a focus on automotive, consumer and industrial;
- to benefit, as a result of the business combination, from a more diversified, less cyclical revenue and cash flow mix;
- to target for sizeable cost reductions through the optimisation of the manufacturing footprint between OSRAM's Opto Semiconductors division and ams Group;

- to look, together with OSRAM, at the front-end manufacturing strategy and the footprint of optical semiconductors to address the structural utilisation issues under current revenue projections as well as assure the long-term cost competitiveness of the business;
- to realise, in relation to the integration of the manufacturing organisations of OSRAM's Opto Semiconductors division and ams, savings from combining the manufacturing overhead and indirect labour of the two businesses, as well as procurement synergies; and
- to leverage OSRAM's existing resources and capabilities to build a world-class optical semiconductor solution manufacturing organisation.

2. Limits and restrictions to cooperation in the current de facto corporate group

Due to the majority holding by ams Offer in OSRAM, a de facto corporate group exists between OSRAM and ams Offer at the present time. Strict limits apply to controlling and coordinating activities in a de facto corporate group. In addition, pursuant to section 76(1) AktG, the management board of OSRAM is obliged to take sole responsibility for managing OSRAM. If influence exerted interferes with the independent managerial control of OSRAM's management board and results in adverse effects on OSRAM, then OSRAM's management board must not comply with it unless the adverse effects caused by such influence are compensated by ams Offer or the entity of the ams Group exerting influence, section 311(1) AktG. Such compensation of adverse effects must be effected by the end of the OSRAM fiscal year in which such adverse influence was exerted, meaning within a narrow time frame, by providing factual compensation or by granting a relevant legal entitlement, section 311(2) AktG. OSRAM's management board must not execute the relevant measure or transaction if the adverse effect cannot be quantified and hence not be compensated. Therefore, OSRAM's management board must examine for each measure effected or omitted and each legal transaction of OSRAM effected or omitted upon request or in the interest of ams Offer whether such influence is legally permitted and whether it results in adverse effects on OSRAM. Such a case-by-case examination may require extensive analyses and tie up significant resources of the management board without resulting in legal certainty in each case. In many cases, in particular measures with a long-term objective, it is very difficult to determine whether the relevant measure has adverse effects. Adverse effects in the short term may be offset by positive effects in the long term. However, it is often uncertain whether and to what extent such positive effects will materialise. In addition, OSRAM's management board must always take the interests of minority shareholders into consideration when performing its assessment.

Furthermore, all measures and transactions in a de facto corporate group which are taken on the initiative or in the interest of the controlling company or one of its affiliates must be documented in detail. The management board of OSRAM must report thereon in an annual control report (*Abhängigkeitsbericht*), quantifying any potential adverse effects (section 312 AktG). This control report must then be audited by an auditor and thereafter by OSRAM's supervisory board (sections 313, 314 AktG).

All of these provisions require substantial amounts of time and financial and personnel resources on both sides, and in particular on the side of OSRAM as the con-

trolled entity. This is because all measures and legal transactions by OSRAM which are effected upon request of ams Offer or any of its affiliated entities or effected or omitted in their interest, either with ams Offer or with third parties, must be reviewed with the involvement of the management board and other departments of OSRAM (e.g. the legal, accounting and tax or finance departments) to ensure compliance with the applicable rules in a de facto corporate group. In addition to tying up resources and the impossibility of achieving complete legal certainty, this necessary audit also causes delays in implementing the planned cooperation between the OSRAM Group and the ams Group. This complicates the expeditious and efficient implementation of urgent business decisions to be taken and of those decisions that are in both parties' mutual interest.

In addition, setting the compensation for adverse effects, in particular quantifying and determining the nature and scope of adverse effects' eligibility for compensation, generally causes practical difficulties. Problems are often encountered in relation to measures and legal transactions that go beyond the mere exchange of performance and consideration (e.g. receipt of goods or provision of services) or for which a market price cannot be determined (with sufficient certainty), such as for example in relation to sharing knowledge and commercial information. In these cases it is practically difficult, or often even impossible, to quantify and compensate adverse effects or corresponding advantages that may result for the controlled entity. As a result, such measures may not be taken in a de facto corporate group with sufficient legal certainty and may require substantial audit and documentation efforts or may have to be omitted in their entirety.

3. Establishment of a contractual corporate group by concluding the Domination and Profit and Loss Transfer Agreement

These difficulties in a de facto corporate group are avoided where a domination and profit and loss transfer agreement exists, as this creates a contractual basis for the planned close cooperation. The provisions on case-by-case compensation for adverse legal transactions or measures caused by the controlling entity or any of its affiliated entities or effected or omitted in their interest do not apply in a contractual corporate group. The controlling party to the contract especially has the right, under the provisions relating to domination, to directly issue instructions to the management board of the controlled company to take measures or engage in transactions in the interest of the controlling party to the contract or one of its affiliated companies. This is true even if such measures or transactions might be adverse for the controlled company when viewed on a stand-alone basis (section 308 AktG), the adverse effects cannot be compensated within the same fiscal year and/or an exact quantification of the adverse effect is not possible. This makes it possible to use resources more efficiently Group-wide and also to implement those measures for cooperation for which the quantification of any adverse effect and any corresponding benefit is not possible with legal certainty. Measures by management can accordingly be focused towards the common interest of the affiliated enterprises without great effort being required to control every measure and its effects on the controlled company. Furthermore, no expenditure is required for preparing and auditing the control report, as no such report needs to be prepared in a contractual corporate group.

For ams Offer, the Agreement enables better control of the planned cooperation with the OSRAM Group in the mutual interest of the group of undertakings as a whole. Furthermore, the Agreement will facilitate the unrestricted exchange of information, including with regard to best-practice policies between OSRAM and the ams Group.

Concluding the Agreement thus proves to be a suitable legal means of implementing the proposed comprehensive cooperation of the undertakings involved, which is also applied by other undertakings in similar cases and is provided for by law precisely for this purpose.

The interests of OSRAM are further protected after conclusion of the Agreement by the fact that the right to give instructions is not unlimited (see paragraph D.I.1). In particular, OSRAM must not be deprived of its capability to continue existing as a result of adverse instructions, as the legal provisions assume the controlled entity's continued existence even after the Agreement may have been terminated. Furthermore, adverse instructions are prohibited and do not trigger an obligation to comply where they obviously do not serve the interests of the controlling company or any affiliate of the controlling company or of the controlled company.

Due to the combination of a domination agreement with a profit and loss transfer agreement, ams Offer is entitled to a claim to OSRAM's distributable profit. The profit transfer obligation exists for the first time for the entire OSRAM fiscal year beginning on 1 October 2020, provided that the general shareholders' meeting of OSRAM approves the conclusion of the Agreement on 3 November 2020 and the Agreement is registered in the commercial register at the registered seat of OSRAM by 30 September 2021. If registration occurs after 30 September 2021, there will be a profit transfer obligation for the first time for the OSRAM fiscal year in which the Agreement becomes effective. In exchange, OSRAM receives a claim for assumption of losses under the Agreement in the event that an annual loss by OSRAM arises during the term of the Agreement. Provided that the general shareholders' meeting of OSRAM approves the conclusion of the Agreement on 3 November 2020 and the Agreement is registered in the commercial register at the registered seat of OSRAM by 30 September 2021, there will be an obligation – corresponding to OSRAM's profit transfer obligation to transfer profit – to assume losses for the entirety of the OSRAM fiscal year beginning on 1 October 2020. Contrary to the situation in a merely de facto corporate group, after entering into the Agreement OSRAM is no longer forced to rely on individual compensation for potentially adverse impact suffered as a result of the exercise of influence and instead receives by force of law a claim for full compensation of losses from ams Offer regardless of the issue of the exercise of influence or other factors (see section 302 AktG).

For outside OSRAM Shareholders, the Agreement provides a safeguard of interests that does not exist in a de facto corporate group. Outside OSRAM Shareholders obtain a statutory claim against ams Offer for receipt of an appropriate annual recurring compensation payment (*Ausgleichszahlung*) for the duration of the Agreement pursuant to section 304 AktG (see paragraph D.I.4) or for acquisition of their shares in return for appropriate compensation (*Abfindung*) pursuant to section 305 AktG as determined in the Agreement (see paragraph D.I.5).

These obligations borne by ams Offer are secured by the comfort letter which ams issued to OSRAM (see paragraph D.I.7).

4. Summary result

The establishment of a contractual corporate group between OSRAM and ams Offer strengthens and expands the opportunities for a closer and strong cooperation between OSRAM and its major shareholder, ams Offer. Compared to the de facto corporate group currently existing, the contractual corporate group will result in saving costs and avoiding expenditure as, for example, no audit and documentation obligations have to be fulfilled in respect of adverse effects of influence exerted. The contractual corporate group also establishes legal certainty in the cooperation between OSRAM and ams Offer and in implementing organisational and structural measures. It offers more flexibility to issue instructions and makes decision processes and their implementation faster and more efficient. After the Agreement has become effective, the close cooperation could further achieve additional synergies. Finally, the contractual corporate group grants OSRAM as the controlled entity a claim for compensation of any annual net loss, irrespective of influence exerted or of the amount of any adverse effects, and offers outside shareholders a safeguard in the form of an appropriate recurring compensation payment (*Ausgleichszahlung*) or appropriate compensation (*Abfindung*).

II. Tax reasons

If further requirements are fulfilled, the conclusion of the Agreement will result in the establishment of a consolidated tax group for corporate income tax and trade tax purposes (consolidated tax group for income tax purposes) between ams Offer as the controlling entity and OSRAM as the controlled entity in this tax group.

The existence of a consolidated tax group for income tax purposes requires, among other things, that ams Offer has continuously held a participation in OSRAM since the beginning of the latter's fiscal year which grants to it the majority of voting rights attaching to the shares in the controlled entity in the tax group (section 14(1) sentence 1 no. 1 sentence 1 of the German Corporation Tax Act (*Körperschaftsteuergesetz* - ***KStG***), and that this participation is continuously attributable to a German permanent establishment of ams Offer during the entire existence of the consolidated tax group (section 14(1) sentence 1 no. 2 sentence 4 KStG). Furthermore, the Agreement must have been concluded for a minimum term of five years and must in fact be performed during its entire term (section 14(1) sentence 1 no. 3 sentence 1 KStG).

The consolidated tax group for income tax purposes would first come into existence on 1 October 2020 provided that the general shareholders' meeting of OSRAM approves the conclusion of the Agreement on 3 November 2020 and the Agreement is registered in the commercial register at the registered seat of OSRAM by the end of the fiscal year beginning on 1 October 2020. If the Agreement is registered on a later date only, the consolidated tax group for income tax purposes would be established as of the beginning of such fiscal year of OSRAM in which the registration takes place.

The existence of a consolidated tax group for income tax purposes will not make OSRAM's general tax law obligations inapplicable. As before, OSRAM will have to determine its tax results separately from ams Offer in accordance with general provisions. For corporate income tax purposes, OSRAM's income will be determined separately, and uniformly and with binding effect towards ams Offer and OSRAM. As a result of the existence of a consolidated tax group for income tax purposes, however, OSRAM's taxable income will be attributed to ams Offer starting from the fiscal year as from which the consolidated tax group first exists, taking into consideration certain statutory limitations, and will then be taxed at the level of ams Offer. However, OSRAM will be liable to pay tax on income in the amount of currently 20/17 of recurring compensation payments made to the outside OSRAM Shareholders (section 16 KStG). For trade tax purposes, the trade income is also to be separately determined for ams Offer and OSRAM irrespective of the consolidated tax group established for income tax purposes. The trade income figures achieved during the same tax period are then added, with any necessary corrections, and taxed at the level of ams Offer as from the tax period in which the consolidated tax group established for income tax purposes starts to exist.

Establishment of the consolidated tax group for income tax purposes will result in positive liquidity effects for ams Offer, as profit transfers under commercial law from OSRAM to ams Offer in a consolidated tax group for income tax purposes, contrary to profit distributions, are not subject to the deduction of withholding tax plus solidarity surcharge. If the Agreement was not concluded and OSRAM's profit was distributed as a dividend, withholding tax plus solidarity surcharge would be credited or refunded, since the dividend should generally be excluded when determining ams Offer's income (section 8b(1) KStG). However, this credit or refund would generally only occur in the context of the assessment of corporate income tax after filing the tax declaration for the tax period in which the dividend was received. In addition, a transfer of profits under commercial law in a consolidated tax group for income tax purposes, in contrast to a dividend distribution, is not subject to the prohibition to deduct a fictitious amount of five percent as business expenses, as provided for in section 8b(5) KStG.

In addition, as a result of the establishment of a consolidated tax group for income tax purposes, ams Offer will be able to offset its tax result against the tax result of OSRAM, meaning that financing expenditure will be offset against operative earnings, which due to the lower tax payments on balance results in a corresponding liquidity benefit. Due to the resulting 95% tax exemption, such offset would be available to a very limited extent only in the event of dividend distributions by OSRAM to ams Offer.

III. Alternatives

The management board of OSRAM and the management of ams Offer have thoroughly examined alternatives to concluding the Agreement. They arrived at the conclusion that no other structural measure they examined is suitable to achieve the described objectives in a similar or even more beneficial manner. Against this background, the following other structures were examined in particular:

1. Conclusion of an isolated domination agreement and an isolated profit and loss transfer agreement

The conclusion of an isolated domination agreement between OSRAM and ams Offer would be permitted by law. However, an isolated domination agreement does not permit profits to be transferred, but would nevertheless create an obligation to assume losses. In addition, the tax advantages sought by establishing a consolidated tax group for corporate income tax and trade tax purposes (consolidated tax group for income tax purposes) and the liquidity benefit resulting from the transfer of profits could not be achieved by means of an isolated domination agreement.

The conclusion of an isolated profit and loss transfer agreement between OSRAM and ams Offer would also be permitted by law. However, a profit and loss transfer agreement provides no sufficient legal basis to allow the intended comprehensive cooperation and the unrestricted exchange of information between OSRAM and the ams Group. The intended close cooperation can only be achieved with legal certainty if a contractual basis is established for the current *de facto* corporate group by means of a domination agreement which gives ams Offer comprehensive rights to give instructions to OSRAM (see paragraphs C.I.2 and C.I.3). Accordingly, the benefits of comprehensive cooperation that are also sought to be achieved could not be realised by means of a mere profit and loss transfer agreement.

Therefore, the Parties have decided to conclude a domination and profit and loss transfer agreement. This contractual form, by providing for a recurring compensation payment (*Ausgleichszahlung*) and compensation (*Abfindung*), pays due consideration to the interests of OSRAM minority shareholders and has been tried and tested in practice in stock corporation law.

2. Exclusion of minority shareholders (squeeze-out)

The minority shareholders of OSRAM cannot be excluded pursuant to sections 327a et seqq. AktG (squeeze-out under stock corporation law) on the date the Agreement is signed, as this would require that ams Offer holds a minimum participation of 95% in OSRAM's share capital.

The same holds true for excluding OSRAM's minority shareholders pursuant to section 62(5) of the German Transformation Act (*Umwandlungsgesetz* - ***UmwG***) in conjunction with section 327a et seqq. AktG after a previous merger (squeeze-out under merger law), as this requires a minimum participation of 90%.

Furthermore, the minority shareholders of OSRAM cannot be excluded pursuant to sections 39a et seqq. of the German Securities Takeover Act (*Wertpapierübernahmegesetz* - ***WpÜG***) (squeeze-out under takeover law), as ams Offer does not hold a minimum participation of 95% in OSRAM's share capital and hence does not meet the requirements for a squeeze-out under takeover law.

Even if a squeeze-out was possible and implemented, the consequent position of ams Offer as sole shareholder in OSRAM would not remove the limitations and difficulties that result from the continued existence of a *de facto* group (see paragraph C.I.2) for as long as OSRAM is organised as a stock corporation (*Aktiengesellschaft*) or a European company (*Societas Europaea*) with its registered seat in Germany. Furthermore, the objectives pursued with the Domination and Profit

and Loss Transfer Agreement (see paragraphs C.I.1 and C.I.3), in particular the establishment of a consolidated tax group for income tax purposes (see paragraph C.II), could not be achieved.

To the extent that OSRAM owns real property in Germany or holds a minimum participation, directly or indirectly, of 95% in the capital or assets of corporations or partnerships owning real property in Germany, a squeeze-out would further trigger real estate transfer tax (*Grunderwerbsteuer*).

3. Integration or merger

Integration into a group by way of integration pursuant to sections 319 et seqq. AktG is not possible. As ams Offer is neither the sole shareholder (section 319(1) sentence 1 AktG) nor holds a participation of at least 95% in OSRAM's share capital, it does not fulfil the requirements for integration. Apart from that, ams Offer as a limited liability company (*Gesellschaft mit beschränkter Haftung*) does not have the legal structure of a stock corporation (*Aktiengesellschaft*) or European company (*Societas Europaea*) with registered seat in Germany as would be required for such integration, and would first have to be transformed into a company with either of the two legal structures.

A merger of ams Offer with OSRAM (downstream merger) is no alternative as is, conversely, a merger of OSRAM with ams Offer (upstream merger). On a downstream merger, ams Offer would cease to exist as a result of the merger and a *de facto* group would then exist with ams directly (see paragraph C.I.2). Therefore, a downstream merger would not change anything about the requirement of a domination and profit and loss transfer agreement to implement the envisaged integration of OSRAM. Nor is an upstream merger a suitable alternative. In this case, outside OSRAM Shareholders would obtain the same participation in value in ams Offer as their previous participation in OSRAM. In addition, OSRAM Shares would cease to be tradable because OSRAM Shares would be cancelled and ams Offer is organised as a limited liability company (*GmbH*).

Under the same conditions as in a squeeze-out, an upstream merger would also trigger real estate transfer tax (*Grunderwerbsteuer*).

4. Change of legal form

A transformation of OSRAM changing its legal form into that of another corporation or a partnership is not suitable either to achieve the objectives pursued with the Agreement. Furthermore, OSRAM's corporate structure as a stock corporation (*Aktiengesellschaft*) is to be maintained for the time being.

First of all, the intended consolidated tax group for income tax purposes would not be achieved by means of a change of legal form, and would still have to be established, in particular, by means of a profit and loss transfer agreement. Further, a change of legal form to a partnership limited by shares (*Kommanditgesellschaft auf Aktien*) would not change anything about the applicability of the rules for a *de facto* corporate group and the consequent disadvantages compared to the legal situation if a domination and profit and loss transfer agreement was concluded.

If its legal form was changed to that of a limited liability company (*Gesellschaft mit beschränkter Haftung*) or a partnership, instructions issued in the group's interest would also have to be examined on a case-by-case basis as to whether they cause adverse effects to OSRAM. This is because the fiduciary duty the controlling company has as a shareholder or partner would have to be observed also in relation to a limited liability company or a partnership, which would cause difficulties when implementing adverse measures.

Finally, a change of legal form would have caused additional expenditure and delays and, in the case of a change of legal form to a limited liability company (*Gesellschaft mit beschränkter Haftung*) or a partnership, the loss of the OSRAM Shares' admission to exchange trading. This would affect the tradability of OSRAM Shares. There is no legal obligation to change the legal form when concluding a domination and profit and loss transfer agreement.

5. Relationship agreement

The conclusion of a relationship agreement between OSRAM and ams Offer is not suitable either to achieve the objectives pursued with the Agreement.

A relationship agreement describes an agreement under the law of obligations between a controlling shareholder (ams Offer) and a controlled company (OSRAM), which agree on specific aspects of the *de facto* corporate group equally and with mutual binding effects, without establishing a contractual corporate group. A relationship agreement, which can provide for common coordination in operational and strategic matters and the consolidation of specific business functions, allows to obtain legally certain and factual controlling influence on the business activities of the controlled company and hence the intra-group exemption under cartel law. The contractual definition of the *de facto* corporate group further enables the controlling company to assume group-wide compliance responsibility and to minimise liability risks arising from the "single economic entity" concept under Union law. A corresponding contractual design also enables agile management with only few hierarchical levels while maintaining positive economies of scope.

However, the *de facto* corporate group that would continue to exist between OSRAM and ams Offer despite the conclusion of a relationship agreement would continue to restrict the management and coordination of activities (see paragraph C.I.2). Any relationship agreement must still comply with the central provisions of sections 76, 111, 291 et seqq. AktG. This means that the management board of OSRAM would still be required under section 76(1) AktG to manage OSRAM in its own responsibility, even though the management board's managerial independence could be restricted in the well-understood interest of the company.

A relationship agreement between OSRAM and ams Offer would not be permitted to exclude or impede the companies' independent performance of their statutory responsibilities, as would be the case, for example, where the controlling shareholder's management would be granted substantial reservations of consent. This is why relationship agreements in practice provide neither for rights to give instructions nor for reservations of consent for the controlling company, as this would counteract an agile group structure and may exceed the threshold for such relationship agreements to be considered covert domination agreements.

6. Conclusions

The management board of OSRAM and the management of ams Offer, after thorough and careful consideration, have arrived at the conclusion that the intended close and efficient cooperation between OSRAM and ams Offer as well as the ams Group can only be achieved by concluding a domination and profit and loss transfer agreement. Concluding a domination and profit and loss transfer agreement is the only option that allows avoiding the limitations of a *de facto* corporate group (see paragraph C.I) and establishing a consolidated tax group for corporate income tax and trade tax purposes (see paragraph C.II).

D. The Domination and Profit and Loss Transfer Agreement

I. Explanation of the Agreement's content

The individual provisions of the Agreement are explained below.

1. Management Control (Clause 1 of the Agreement)

Clause 1 of the Agreement contains the constitutive provision for a domination agreement that OSRAM as the controlled company submits the management control of its company to ams Offer as the controlling company. In accordance therewith, ams Offer is entitled to issue instructions to the management board of OSRAM with regard to the management of the company (Clause 1.1 sentence 2 of the Agreement). Notwithstanding this right to issue instructions, OSRAM will continue to be a legally independent company with its own corporate bodies. Accordingly, the management board of OSRAM continues to be responsible for the management and representation of the company. To the extent that instructions have not been issued, the management board of OSRAM is entitled to and must manage the company on its own responsibility.

The scope of the right of management control and the right to issue instructions is governed primarily by section 308 AktG. The management board of OSRAM is required to comply with permissible instructions given to it (Clause 1.2 sentence 1 of the Agreement). Section 308(1) sentence 2 AktG allows to issue instructions which have adverse effects for OSRAM to the extent that they serve the interests of ams Offer or of the group companies affiliated with it and with OSRAM. The management board of OSRAM is not entitled to refuse to comply with an instruction given unless the instruction does obviously not serve these interests. The management board does not have to follow any impermissible instructions, for example instructions the compliance with which would violate mandatory statutory provisions or provisions of the articles of association of OSRAM. Instructions which endanger the existence of OSRAM are impermissible in any event. A controlled company is further not required to comply with instructions given if and as long as the controlling company does not fulfil its obligations under the domination and profit and loss transfer agreement, in particular the obligations to assume losses and to pay the recurring compensation (*Ausgleich*) and the compensation (*Abfindung*) to outside shareholders (sections 304, 305 AktG) or to the extent that the controlling company is not expected to be able to comply with these obligations (for the termination right of the controlled company, see paragraph D.I.6.4). Fur-

thermore, instructions to amend, maintain or terminate the Agreement cannot be issued pursuant to section 299 AktG (Clause 1.2 sentence 2 of the Agreement).

The right of management control and the right to issue instructions exists only towards the management board but not towards the supervisory board, the general shareholders' meeting or employees of OSRAM nor towards the corporate bodies or employees of any subsidiary of OSRAM. If the OSRAM management board is instructed to engage in a transaction which requires the consent of the supervisory board and if the supervisory board does not give its consent or does not give it within a reasonable period of time, the consent of the supervisory board can be substituted by repeating the instruction in accordance with section 308(3) sentence 2 AktG. The participation rights of OSRAM's general shareholders' meeting are not affected by the Agreement.

Any instruction must be issued in text form (*Textform*) within the meaning of section 126b BGB, for example by telefax or email (Clause 1.3 of the Agreement), and if instructions are issued orally, they must be confirmed in text form without undue delay.

Pursuant to section 294(2) AktG, Clause 6.2 of the Agreement, ams Offer's right to issue instructions and OSRAM's corresponding obligation to comply with such instructions pursuant to Clause 1 of the Agreement exist only from the time the Agreement becomes effective by virtue of its registration in the commercial register of OSRAM (see paragraph D.I.6.2).

2. Transfer of Profit (Clause 2 of the Agreement)

Clause 2 of the Agreement contains the constitutive provision for a profit and loss transfer agreement that OSRAM undertakes to transfer its entire annual profit (*Gewinnabführung*) to ams Offer during the term of the Agreement (Clause 2.1 sentence 1 of the Agreement). With regard to the scope of the profit to be transferred – subject to establishing or dissolving reserves in accordance with Clause 2.2 of the Agreement – Clause 2.1 sentence 2 of the Agreement refers to the statutory provision in section 301 AktG as amended from time to time.

Pursuant to the current version of section 301 AktG, the amount of profit to be transferred is the annual profit arising without such transfer of profits, reduced by any loss carryforward from the previous year, by the amount to be allocated to the statutory reserve pursuant to section 300 AktG and by the amount that must not be distributed pursuant to section 268(8) of the German Commercial Code (*Handelsgesetzbuch* - ***HGB***). The amount to be allocated to the statutory reserve is determined in accordance with section 300 no. 1 AktG and depends on the amount of share capital and the net income for the year and the amount already allocated to the statutory reserve. The statutory reserve of OSRAM has been established in the full amount at present. The allocation of additional amounts under section 300 no. 1 AktG is not required where the statutory reserve has been established in full.

The ban on distribution pursuant to section 268(8) sentence 1 HGB applies if intangible assets created by the company itself are capitalized as fixed assets on the balance sheet (section 248(2) sentence 1 HGB). In this case, profits may be distributed only to the extent that the amount of freely available reserves after the distri-

bution, plus a profit carried forward and less a loss carried forward, at least equals the total amounts capitalised as internally created intangible assets less deferred tax liabilities established in respect thereof. If deferred taxes (section 274(1) sentence 2 HGB) are capitalised on the balance sheet, the amount of freely available reserves after the distribution, plus a profit carried forward and less a loss carried forward, must at least equal the amount of deferred tax assets less deferred tax liabilities (section 268(8) sentence 2 HGB). In the case of assets to which no creditors have access and whose sole purpose is to fulfil pension obligations or similar obligations that are due in the long term (section 246(2) sentence 2 HGB), section 268(8) sentence 3 HGB requires that the amount of freely available reserves after the distribution, plus a profit carried forward and less a loss carried forward, must at least equal the difference between the sum of the fair values stated in the balance sheet for these assets, reduced by deferred tax liabilities established in respect thereof, and the historical cost of these assets. The term "freely available reserves" (*frei verfügbare Rücklagen*) includes both profit reserves and certain capital reserves. Accordingly, profit reserves whose distribution is not prevented by statutory provisions or provisions of the articles of association as well as freely available capital reserves pursuant to section 272(2) no. 4 HGB must be taken into account in determining the maximum distribution amount.

The amount to be transferred as profit pursuant to Clause 2.1 of the Agreement is reduced pursuant to Clause 2.2 sentence 1 of the Agreement if and to the extent that OSRAM, with the written consent of ams Offer, allocates amounts from the net income for the year generated without the profit transfer to other profit reserves (section 272(3) sentence 2 HGB). The allocation of such amounts to other profit reserves is only recognised for the purposes of the consolidated tax group for income tax purposes (see paragraph D.I.6.4) if this is economically justified in accordance with a reasonable commercial assessment (section 14(1) sentence 1 no. 4 KStG). Clause 2.2 sentence 1 of the Agreement takes this standard into account. Pursuant to Clause 2.2 sentence 2 of the Agreement, ams Offer can demand that other profit reserves established during the term of the Agreement (section 272(3) sentence 2 HGB) be dissolved and transferred as profit (section 301 sentence 2 AktG) or be used to compensate for any annual loss (section 302(1) AktG).

Furthermore, Clause 2.2 sentence 3 of the Agreement stipulates that other reserves or profits carried forward from the time prior to the effectiveness of the Agreement may neither be transferred as profit nor used to compensate for any annual loss. The term "other reserves" (*sonstige Rücklagen*) includes any reserves pursuant to section 272 HGB except for other profit reserves established during the term of the Agreement. Therefore, the statutory reserve, reserves in accordance with the articles of association as well as the capital reserves are excluded from contractual transfer regardless of when they were established. Likewise, other profit reserves within the meaning of section 272(3) sentence 2 HGB that have been established prior to the effectiveness of the Agreement are excluded from profit transfer. This provision corresponds to the requirements of section 301 AktG and supreme court rulings on the use of reserves under a domination and profit and loss transfer agreement.

The Agreement becomes effective upon registration in the commercial register at the registered seat of OSRAM, and at the earliest at the beginning of the fiscal year beginning on 1 October 2020 (Clause 6.2 of the Agreement, section 294(2) AktG). The obligation to transfer the annual profit applies for the first time to the profit generated in the entire fiscal year in which the Agreement becomes effective according to Clause 6.2 of the Agreement (Clause 2.3 of the Agreement). Hence, if the Agreement is registered in the commercial register prior to 30 September 2021, the profit transfer obligation applies to the entire profit generated in the fiscal year that begins on 1 October 2020.

The claim of ams Offer for a profit transfer becomes due at the end of a fiscal year of OSRAM for which the relevant claim exists (Clause 2.3 sentence 2 of the Agreement). Interest in the amount of 5% p.a. will be due for the period of time between the date the claim for profit transfer becomes due and the date it is actually satisfied (Clause 2.3 sentence 2 of the Agreement). This corresponds to the statutory rate of interest that applies between commercial parties (section 352(1) sentence 1 HGB).

3. Assumption of Losses (Clause 3 of the Agreement)

Clause 3.1 of the Agreement provides for the obligation of ams Offer to assume any losses of OSRAM according to the provisions of section 302 AktG as amended from time to time. Pursuant to section 302(1) AktG in its current version, this means that ams Offer must compensate for any annual loss that would arise "otherwise", that is to say without the obligation to compensate for such loss, during the term of the Agreement. The obligation to compensate for losses does not exist to the extent that the annual loss is compensated for by withdrawing from other profit reserves (section 272(3) sentence 2 HGB) amounts which have been allocated to such profit reserves during the term of the Agreement.

The obligation to compensate for losses ensures that OSRAM's equity stated on its balance sheet on the date the Agreement becomes effective will not reduce during the term of the Agreement. Hence, this obligation to assume losses serves to safeguard the property interests of OSRAM, its shareholders and creditors during the existence of the Agreement.

Pursuant to Clause 3.2 of the Agreement, the obligation to assume losses applies for the first time to the entire fiscal year in which the Agreement becomes effective according to Clause 6.2 of the Agreement. Hence, if the Agreement is registered in the commercial register prior to 30 September 2021, this obligation exists for a potential loss in OSRAM's fiscal year that begins on 1 October 2020. The obligation to assume losses will be due at the end of each fiscal year of OSRAM. Interest in the amount of 5% p.a. will be due for the period of time between the date the claim for the assumption of losses becomes due and the date it is actually satisfied (Clause 3.2 sentence 2 in conjunction with Clause 2.3 sentence 2 of the Agreement). This corresponds to the statutory rate of interest that applies between commercial parties (section 352(1) sentence 1 HGB).

4. Recurring Compensation Payment (Clause 4 of the Agreement)

A duty to grant appropriate recurring compensation to outside OSRAM Shareholders is created upon effectiveness of the Agreement pursuant to sec-

tion 304(1) AktG. To fulfil this duty, ams Offer undertakes towards outside shareholders to make a recurring compensation payment (***Recurring Compensation Payment***, Clause 4.1 of the Agreement).

After the obligation to transfer profits becomes effective pursuant to Clause 2 of the Agreement, that is for the first time for the fiscal year of OSRAM in which the Agreement is registered in the commercial register of OSRAM, and at the earliest at the beginning of OSRAM's fiscal year beginning on 1 October 2020, OSRAM will generally no longer report any balance sheet profit for the relevant fiscal year and subsequent fiscal years. As from that date, OSRAM Shareholders no longer have the right to resolve on the attribution of any balance sheet profit, except for a resolution in the event of a dissolution of reserves established before the Agreement was concluded. As compensation for the loss of dividend claims, Clause 4.1 of the Agreement provides for the obligation of ams Offer to grant an appropriate Recurring Compensation Payment to outside OSRAM Shareholders. Such Recurring Compensation Payment will be made as from and including the fiscal year of OSRAM in relation to which the claim of ams Offer for the transfer of the annual profit pursuant to Clause 2 of the Agreement takes effect, and for the further duration of the Agreement. The Recurring Compensation Payment is due on the first banking day following the ordinary general shareholders' meeting of OSRAM for the relevant preceding fiscal year, and in any event within eight months following expiration of the relevant fiscal year of OSRAM (Clause 4.2 sentence 4 of the Agreement).

4.1 Type of the Recurring Compensation Payment

(i) Legal bases

A domination and profit and loss transfer agreement must provide for an appropriate recurring compensation payment for outside shareholders of the controlled company, which in the present case is OSRAM (section 304(1) sentence 1 AktG). If only an isolated domination agreement exists, such domination agreement must guarantee an appropriate guaranteed dividend to outside shareholders (section 304(1) sentence 2 AktG). Both the guaranteed dividend and the recurring compensation payment must consist of a recurring payment of money in relation to each share of outside shareholders (section 304(1) sentence 1 and 2 AktG). The Stock Corporation Act differentiates between two types of recurring compensation payments (see paragraphs (a) and (b) below).

(a) Fixed recurring compensation payment

In the case of a fixed recurring compensation payment, the annually recurring payment of a fixed cash amount is guaranteed. The amount of the fixed recurring compensation payment must equal the amount which could be expected to be distributed on each individual share as average profit share, that is to say as distributable profit for commercial law purposes, in view of the controlled company's past profitability and future earnings prospects, taking into account adequate depreciation, amortisation and value allowances, but excluding the establishment of other profit reserves (section 304(2) sentence 1 AktG).

(b) Variable recurring compensation payment

The variable recurring compensation payment guarantees a recurring compensation payment based on the controlling company's profit. However, the controlling company must be a German stock corporation (*Aktiengesellschaft*), a partnership limited by shares (*Kommanditgesellschaft auf Aktien*) or a European company (*Societas Europaea*) which has its registered seat in Germany. The variable recurring compensation payment must correspond to the amount which, using an appropriate conversion ratio, is attributable to each share of the controlling company as a profit participation (section 304(2) sentences 2 and 3 AktG).

(ii) Reasons for determining a fixed Recurring Compensation Payment

The Agreement between OSRAM and ams Offer provides for a fixed annual recurring compensation payment. The main reasons for this are essentially the following:

ams Offer as the controlling company is a limited liability company (*Gesellschaft mit beschränkter Haftung*) under German law, meaning that the option to choose the type of recurring compensation payment is not available. Instead a fixed recurring compensation payment is the only available option. This means that a variable recurring compensation payment based on the profit of ams Offer is not legally possible without previously transforming the company into a stock corporation (*Aktiengesellschaft*) or a partnership limited by shares (*Kommanditgesellschaft auf Aktien*). Irrespective thereof, a recurring compensation payment based on the profit of ams Offer would not be suitable to guarantee the right of outside OSRAM Shareholders to receive an appropriate recurring compensation payment. The interest ams Offer holds in OSRAM is the only major asset of ams Offer, which is why outside OSRAM Shareholders, in economic terms, would only receive a recurring compensation payment based on the profit of OSRAM. However, ams Offer could use its control of OSRAM in a manner that results in the reduction of OSRAM's profit. This, in turn, would lead to a lower recurring compensation payment for outside OSRAM Shareholders.

4.2 Determination of the Recurring Compensation Payment as a gross payment, amount of the Recurring Compensation Payment

Pursuant to Clause 4 of the Agreement, ams Offer guarantees an annual Recurring Compensation Payment to outside shareholders of OSRAM for the duration of the Agreement. The amount as well as the determination of the appropriate Recurring Compensation Payment are explained and substantiated in more detail below and in paragraph E.II.

(i) Amount of the Recurring Compensation Payment

Clauses 4.1 and 4.2 of the Agreement provide for an annual Recurring Compensation Payment of EUR 2.24 (corresponding to an amount of EUR 2.57 before current corporate income tax and solidarity surcharge) per OSRAM Share, starting from and including the fiscal year of OSRAM in relation to which the profit transfer claim of ams Offer takes effect, and for the further duration of the Agreement. This amount will be due in full in each year because a balance sheet profit will no longer be reported after the profit transfer obligation will become effective and

OSRAM Shareholders will no longer have the right to resolve on the appropriation of balance sheet profits. For the avoidance of doubt, it was agreed in Clause 4.2 sentence 4 of the Agreement that any withholding tax (such as capital gains tax plus solidarity surcharge thereon) will be withheld from the Recurring Compensation Payment to the extent required by statutory law.

(ii) Adjustment mechanism for the Recurring Compensation Payment

In determining the Recurring Compensation Payment, the Parties have taken into account the rulings of the German Federal Court of Justice (*Bundesgerichtshof* - ***BGH***) (decision of 21 July 2003, file no. II ZB 17/01 – "Ytong"). In this decision, the BGH decided that outside shareholders must be granted a recurring compensation payment within the meaning of section 304(1) sentence 1 and 2, sub-section 2 sentence 1 AktG, using the gross profit share that is expected to be distributable on each share as a fixed basis and deducting therefrom the corporate income tax burden in the relevant statutory amount. This is to ensure that a decreased corporate income tax rate compared to the applicable rate on the valuation date will not result in an unjustified benefit to the other contracting party (the controlling company) at the expense of outside shareholders. Conversely, this also is to prevent that the stipulation of a recurring compensation payment results in an unjustified advantage to outside shareholders at the expense of the other contracting party (the controlling company) in the event of a tax increase. These principles are to be applied accordingly to the solidarity surcharge levied as a surtax to corporate income tax.

On this basis, a fixed compensation payment in the form of the Recurring Compensation Payment is to be determined as an expected gross profit share per OSRAM Share (***Gross Amount of Recurring Compensation***) from which corporate income tax plus solidarity surcharge at the applicable rate for the relevant fiscal year are to be deducted (***Net Amount of Recurring Compensation***). In the event the rates of corporate income tax or solidarity surcharge change, this provides a variable provision which immediately results in a corresponding adjustment to the Net Amount of Recurring Compensation. However, withholding tax and solidarity surcharge are to be deducted only from the portion of the Gross Amount of Recurring Compensation which relates to profits subject to German corporate income tax.

According to the corporate income tax rate of 15% and the solidarity surcharge rate of 5.5% applicable on the signing date of the Contract Report, a total of EUR 0.33 per OSRAM Share is to be deducted from the Gross Amount of Recurring Compensation of EUR 2.57 per OSRAM Share. This results in a Net Amount of Recurring Compensation of EUR 2.24 per OSRAM Share for a full fiscal year.

The mechanism for adjusting the Recurring Compensation Payment based on changes to the tax rate can be illustrated by the following example: If the corporate income tax rate of 15% is reduced by two percentage points to 13%, the variable provision in Clause 4.2 of the Agreement results in the current deduction for corporate income tax and solidarity surcharge of EUR 0.33 per OSRAM Share being reduced by EUR 0.04 (2.0% plus solidarity surcharge of 5.5%, together 2.110% of the portion contained in the Gross Amount of Recurring Compensation which relates to the profits on which German corporate income tax is charged). This increases the Net Amount of Recurring Compensation from EUR 2.24 per OSRAM

Share by EUR 0.04 to EUR 2.28. Conversely, an increase in the corporate income tax rate by two percentage points to 17% results in a reduction in the Net Amount of Recurring Compensation from EUR 2.24 per OSRAM Share by EUR 0.04 to EUR 2.20.

4.3 Further explanations of Clause 4 of the Agreement

The Recurring Compensation Payment is granted for the first time for the full fiscal year of OSRAM for which the obligation of OSRAM to transfer profits under Clause 2 of the Agreement becomes effective (Clause 4.3 sentence 1 of the Agreement). Pursuant to Clause 2.3 of the Agreement, this applies for the first time to the entire profit generated in the fiscal year of OSRAM in which the Agreement becomes effective. If the Agreement becomes effective by 30 September 2021, the obligation to transfer profits exists for the fiscal year of OSRAM that begins on 1 October 2020. If the Agreement becomes effective in a subsequent fiscal year only, the obligation to transfer profits applies as from such subsequent fiscal year only.

As of the effectiveness of the profit transfer pursuant to Clause 2 of the Agreement, outside OSRAM Shareholders have no dividend entitlement unless a balance sheet profit is formed from reserves or profits carried forward from periods before the commencement of the Agreement and the general shareholders' meeting resolves to make a distribution.

If the Agreement ends during a fiscal year of OSRAM or if a Recurring Compensation Payment is payable for an abbreviated fiscal year (*Rumpfgeschäftsjahr*) of less than twelve months, the Recurring Compensation Payment is reduced for such fiscal year *pro rata temporis* (Clause 4.3 sentence 2 of the Agreement). This takes account of the fact that the determined amount of the Recurring Compensation Payment is based on a period of twelve months, that is a full fiscal year.

Clause 4.2 sentence 5 of the Agreement governs the due date of the Recurring Compensation Payment. The Recurring Compensation Payment to be made by ams Offer is due in each case on the first banking day following the ordinary general shareholders' meeting of OSRAM for the relevant preceding fiscal year, and in any event within eight months following the end of the fiscal year.

Clause 4.4 sentence 1 of the Agreement governs the adjustment of the Recurring Compensation Payment in the event the share capital is increased from company funds. If new OSRAM Shares are issued on a capital increase using company funds, the Recurring Compensation Payment per OSRAM Share is reduced to the extent of shares issued, so that the total amount of the Recurring Compensation Payment remains unchanged. This means in this case that the increase in the number of OSRAM Shares held by an outside OSRAM Shareholder and which results from a capital increase using company funds will not affect the total amount of the Recurring Compensation Payment to which such OSRAM Shareholder is entitled. This provision is necessary because a capital increase from company funds, that is the conversion of profit reserves or certain capital reserves into share capital, has no impact on the value or profitability of the company and because the new OSRAM Shares from the capital increase using company funds are issued to OSRAM Shareholders without consideration. Furthermore, this is in accordance

with the statutory provision of section 216(3) AktG, which provides that the economic substance of contractual relations between the company and third parties are not affected by the capital increase from company funds. If no new OSRAM Shares are issued in the capital increase from company funds, it is not necessary to adjust the Recurring Compensation Payment.

If the share capital of OSRAM is increased by issuing new OSRAM Shares against contributions in cash and/or in kind and by granting subscription rights to outside OSRAM Shareholders, the claim of outside shareholders for the Recurring Compensation Payment also extends to the newly created OSRAM Shares resulting from the capital increase. Clause 4.4 sentence 2 of the Agreement ensures in the event of such increases in OSRAM's share capital that not only the claims of existing outside OSRAM Shareholders to receive the Recurring Compensation Payment remain unaffected, but also that new outside OSRAM Shareholders are treated equally.

Clause 4.5 of the Agreement serves the purpose of protecting and treating all outside OSRAM Shareholders in the same way. If an OSRAM Shareholder claims that the Recurring Compensation Payment offered is too low, they can file an application for the court to determine the appropriate Recurring Compensation Payment in appraisal proceedings pursuant to section 1 et seqq. of the German Appraisal Proceedings Act (*Spruchverfahrensgesetz* - ***SpruchG***). In the event of appraisal proceedings, the provision in Clause 4.5 sentence 1 of the Agreement grants all outside OSRAM Shareholders claims to receive an additional payment to the Recurring Compensation Payment if the court adjudicates a legally binding higher Recurring Compensation Payment. The same applies pursuant to Clause 4.5 sentence 2 of the Agreement if ams Offer undertakes to pay a higher Recurring Compensation Payment to an outside OSRAM Shareholder in a court settlement (*gerichtlicher Vergleich*) for the purpose of avoiding or settling proceedings pursuant to section 1 et seqq. SpruchG. These claims are also available to those OSRAM Shareholders who in the meantime have accepted the offer for Compensation (*Abfindung*) pursuant to Clause 5 of the Agreement. Furthermore, these claims exist regardless of whether the OSRAM Shareholder was involved in any appraisal proceedings (see section 13 sentence 2 SpruchG).

5. Compensation (Clause 5 of the Agreement)

5.1 Type of compensation

In addition to the obligation to grant the recurring compensation payment pursuant to section 304 AktG, the Agreement must contain an obligation for ams Offer to acquire the shares of an outside OSRAM Shareholder upon demand by such shareholder in exchange for appropriate compensation (*Abfindung*) specified in the Agreement (section 305(1) AktG). In accordance with section 305(1) AktG, ams Offer offers a cash compensation in the amount of EUR 44.65 per OSRAM Share to outside OSRAM Shareholders who would like to divest their shareholding in the company on the occasion of the conclusion of the Agreement (Clause 5.1 of the Agreement).

With regard to the type of compensation, the German Stock Corporation Act (*Aktiengesetz*) makes a distinction between three categories:

(i) Compensation in shares of the other party

If the other party (ams Offer) is a non-controlled and non-majority-owned stock corporation (*Aktiengesellschaft*) or partnership limited by shares (*Kommanditgesellschaft auf Aktien*) with its registered seat in a Member State of the European Union or another contracting state to the Agreement on the European Economic Area, the Agreement has to provide for granting own shares of the relevant company as compensation (*Abfindung*) (section 305(2) no. 1 AktG).

(ii) Choice between cash compensation and compensation in shares of the controlling company or the company holding a majority interest in the other party

If the other party (ams Offer) is a controlled or majority-owned stock corporation (*Aktiengesellschaft*) or partnership limited by shares (*Kommanditgesellschaft auf Aktien*) and the controlling company is a stock corporation (*Aktiengesellschaft*) or partnership limited by shares (*Kommanditgesellschaft auf Aktien*) with its registered seat in a Member State of the European Union or another contracting state to the Agreement on the European Economic Area, the Agreement has to provide either for granting shares in the controlling company or the company holding a majority interest or for granting cash compensation (section 305(2) no. 2 AktG). In this case, the domination and profit and loss transfer agreement does not have to provide for both types of compensation. The parties can rather choose one type of compensation.

(iii) Cash compensation

In any other cases, the Agreement must provide for cash compensation (section 305(2) no. 3 AktG).

5.2 Amount of compensation

According to the Agreement, ams Offer undertakes, upon demand of each outside OSRAM Shareholder, to purchase such shareholder's OSRAM Shares in exchange for appropriate compensation (section 305(2) AktG). Each outside OSRAM Shareholder wishing to make use of the compensation offer will receive compensation within the meaning of section 305(2) AktG in the amount of EUR 44.65 for each OSRAM Share (Clause 5.1 of the Agreement). The amount as well as the determination of appropriate compensation are explained and substantiated in more detail in paragraph E.III.

5.3 Reasons for granting cash compensation

The main reasons for granting cash compensation were essentially the following:

ams Offer is organised in the legal form of a limited liability company (*Gesellschaft mit beschränkter Haftung*) under German law and is thus neither a stock corporation (*Aktiengesellschaft*) nor a partnership limited by shares (*Kommanditgesellschaft auf Aktien*) with its registered seat in a Member State of the European Union or another contracting state to the Agreement on the European Economic Area, and thus section 305(2) no. 1 and no. 2 AktG are not (directly) applicable.

However, ams AG as the sole shareholder of ams Offer (paragraph B.III.1 above) is a stock corporation with its registered seat in a Member State of the European Union. It has been a controversial issue in legal literature whether section 305(2) no. 2 AktG, with regard to its meaning and purpose, is to be analogously applied to such a case. If it was applicable, the Parties would have an option to offer outside shareholders either a participation in the company being economically closest to the company controlled under the intercompany agreement or a cash payment as compensation.

Finally, the question of whether an option does exist does not have to be answered because the Parties would have exercised the option in favour of the cash compensation. They would have exercised the option in favour of the cash compensation primarily because otherwise there would have been the need for considerable extra time and money for the preparation of a compulsory valuation of the company granting the shares, here ams AG. This would have resulted in a further delay in the conclusion of the Agreement.

For the aforementioned reasons, the Agreement thus provides for cash compensation.

5.4 Further explanations of Clause 5 of the Agreement

ams Offer's obligation to purchase OSRAM Shares in exchange for a Compensation (*Abfindung*) is for a limited period of time pursuant to Clause 5.2 of the Agreement. The limited period ends two months after the date on which the registration of the existence of the Agreement in the commercial register at the registered seat of OSRAM has been announced pursuant to section 10 HGB. The time limit on the compensation offer is permitted by the German Stock Corporation Act and is customary. The provision of a two-month period (Clause 5.2 sentence 2 of the Agreement) corresponds to the statutory provision in section 305(4) sentence 2 AktG.

Pursuant to section 4(1) SpruchG, outside OSRAM Shareholders can file a motion for a court decision on the compensation to be granted within three months after the date on which the registration of the existence of the Agreement in the commercial register at the registered seat of OSRAM has been announced pursuant to section 10 HGB. Section 305(4) sentence 3 AktG provides that if a court is requested to determine the recurring compensation payment or the compensation, the period for accepting the offer for transferring the shares to the controlling company against payment of the compensation will end no earlier than two months after the date on which the decision on a shareholder's last motion ruled on has been announced in the Federal Gazette (*Bundesanzeiger*). Clause 5.2 sentence 3 of the Agreement clearly states that this statutory provision shall apply without any restriction. If appraisal proceedings are initiated, the period for accepting the Compensation offer will accordingly end two months after the date on which the decision on the last motion of an OSRAM Shareholder ruled on has been announced in the Federal Gazette.

The declaration of outside OSRAM Shareholders that they want to accept the Compensation offer submitted by ams Offer must be received within the period to

be determined as explained above. After this period has expired, the Compensation offer can no longer be accepted.

Following registration of the Agreement in the commercial register, outside OSRAM Shareholders may decide to either withdraw from the company and, in return, to receive the Compensation offered, or to remain as OSRAM Shareholders and to receive the Recurring Compensation Payment offered in Clause 4 of the Agreement.

Clause 5.3 of the Agreement takes into account the principles already explained above with regard to Clause 4.4 of the Agreement in the event of an increase in the share capital using corporate funds or for contributions. Reference is made to the corresponding explanations (paragraph D.I.4.3 above).

Pursuant to Clause 5.4 of the Agreement, acceptance of the Compensation offered is free of costs for outside OSRAM Shareholders. This ensures that outside OSRAM Shareholders are not burdened with expenses, commissions or other handling fees by the banks and the amount of Compensation is maintained without any reduction. This does not affect taxes incurred by an outside OSRAM Shareholder on a potential gain on the sale. Such taxes shall be paid by the relevant outside OSRAM Shareholders themselves. Reference is made to paragraphD.I.4.2 with regard to the tax effects for outside OSRAM Shareholders.

Clause 5.5 of the Agreement, in turn, serves the purpose of protecting and treating all outside OSRAM Shareholders in the same way. In the event of appraisal proceedings pursuant to section 1 et seqq. SpruchG, the provision grants all outside OSRAM Shareholders claims to demand an additional payment to the Compensation if the court adjudicates a legally binding higher compensation or if ams Offer undertakes in a court settlement (*gerichtlicher Vergleich*) to pay a higher compensation to an outside OSRAM Shareholder for the purpose of avoiding or settling appraisal proceedings under section 1 et seqq. SpruchG. Such a claim will also exist if the outside OSRAM Shareholder has already received compensation, regardless of whether the outside OSRAM Shareholder participated in any appraisal proceedings.

6. Effectiveness and term (Clause 6 of the Agreement)

6.1 Effectiveness

In accordance with the statutory requirements for consent under section 293 AktG, Clause 6.1 of the Agreement stipulates that the Agreement requires for its effectiveness the consent of the shareholders' meeting of ams Offer as well as the consent of the general shareholders' meeting of OSRAM. The shareholders' meeting of ams Offer is supposed to give its consent to the Agreement on 2 November 2020. The general shareholders' meeting of OSRAM is supposed to pass a resolution on the consent to the Agreement on 3 November 2020.

Furthermore, due to the statutory provision in section 294(2) AktG, the Agreement only becomes effective upon its registration in the commercial register at the registered seat of OSRAM, however, at the earliest, upon the beginning of the fiscal year of OSRAM beginning on 1 October 2020 (Clause 6.2 of the Agreement).

6.2 Commencement of the term of the Agreement

(i) Effectiveness of the right of management control and the right to issue instructions under Clause 1 of the Agreement

The right of management control and the right to issue instructions under Clause 1 of the Agreement become effective as of the point in time the Agreement becomes effective upon its registration.

(ii) Effectiveness of the obligation to transfer profit under Clause 2 of the Agreement

The obligation to transfer the annual profit under Clause 2 of the Agreement applies for the first time to the entire profit generated in the fiscal year of OSRAM in which the Agreement becomes effective according to Clause 6.2 of the Agreement. Hence, if the Agreement is registered in the commercial register prior to 30 September 2021, the profit transfer obligation applies to the entire profit generated in the fiscal year that begins on 1 October 2020.

If the Agreement only becomes effective in the course of a subsequent fiscal year following the fiscal year of OSRAM that begins on 1 October 2020, for example due to a delay in registration because shareholders challenge the approval resolution passed by the general shareholders' meeting of OSRAM, the transfer of profit applies as of the beginning of the subsequent fiscal year in which the Agreement becomes effective.

(iii) Effectiveness of the obligation to compensate losses under Clause 3 of the Agreement

According to Clause 3.2 of the Agreement, the obligation to assume any losses applies for the first time to the entire fiscal year of OSRAM in which the Agreement becomes effective. If the Agreement, as is generally the case, is not registered in the commercial register at the registered seat of OSRAM on the date the fiscal year begins, the Agreement thus also claims retroactive effect with regard to the obligation to compensate losses for the part of the fiscal year that has already lapsed at the time of registration in the commercial register.

6.3 Term of the Agreement/minimum term

Pursuant to Clause 6.3 sentence 1 of the Agreement, the Agreement is concluded for an indefinite period of time. Clause 6.3 sentence 3 of the Agreement provides that the Agreement can be terminated for the first time as of the end of the fiscal year that ends at least five full time years (*Zeitjahre*) (60 months) after the beginning of the fiscal year of OSRAM in which the Agreement has become effective according to Clause 6.2 of the Agreement. If the Agreement is registered in the commercial register at the registered seat of OSRAM and thus becomes effective pursuant to Clause 6.2 of the Agreement before 30 September 2021, the minimum term will consequently end on 30 September 2025. Pursuant to section 14(1) sentence 1 no. 3 KStG, this fixed minimum term of the Agreement of five consecutive full-time years as stipulated by contract is a requirement for effectively establishing a consolidated tax group for corporate income tax and trade tax purposes between ams Offer and OSRAM. During the minimum term fixed in Clause 6.3 of the Agreement, the right to give regular notice of termination is excluded.

6.4 Termination of the Agreement

During the minimum term fixed in Clause 6.3 of the Agreement of five consecutive full-time years after the beginning of the fiscal year of OSRAM in which the Agreement has become effective, the right to give regular notice of termination is excluded. Therefore, the Agreement can be terminated by observing a six months' notice period for the first time as of the end of the fiscal year that ends at least five full time years (60 months) after the beginning of the fiscal year of OSRAM in which the Agreement has become effective (Clause 6.3 sentence 3 of the Agreement). Any notice of termination must be in writing (Clause 6.5 of the Agreement).

In accordance with Clause 6.4 of the Agreement, the provisions on the minimum term do not affect the Parties' right to terminate the Agreement for good cause (*wichtiger Grund*) without complying with any notice period. The right to terminate the Agreement for good cause exists by virtue of law and cannot be excluded by contract. For civil law purposes, good cause for termination exists where, considering all circumstances, the party wishing to terminate the agreement can no longer be reasonably expected to continue the contractual relationship. For instance, the deterioration of the financial or earnings situation of OSRAM as the controlled company gives ams Offer as the controlling company the right to terminate the Agreement if the risks are no longer acceptable to the controlling company and it is not responsible for the situation. OSRAM as the controlled company can terminate the Agreement, for example, if ams Offer as the controlling company is unable to satisfy its contractual obligations (assumption of losses, Recurring Compensation Payment (*Ausgleich*) and Compensation (*Abfindung*)).

Pursuant to Clause 6.4 sentence 1 of the Agreement, both Parties are entitled to terminate the Agreement for good cause (*wichtiger Grund*). Clause 6.4 sentence 2 provides that good cause also exists in particular if good cause for purposes of German tax law for the termination of the Agreement exists including those pursuant to R 14.5 (6) Corporation Tax Guidelines (*Körperschaftsteuer-Richtlinien – KStR*) (or a corresponding successor provision). Clause 6.4 sentence 2 of the Agreement ensures that ams Offer, in the case of a termination for good cause that does not impair the tax treatment, is also entitled to terminate the Agreement for good cause from a stock corporation law perspective.

The provision contained in Clause 6.4 sentence 2 of the Agreement must be seen in the light of applicable tax law. The conclusion of a profit and loss transfer agreement is necessary in order to be able to establish the intended status of a consolidated tax group between ams Offer and OSRAM for purposes of corporate income tax and trade tax. The prerequisite for this status of a consolidated tax group for purposes of corporate income tax and trade tax, in addition to the minimum term of the Agreement under section 14(1) sentence 1 no. 3 KStG, is, among others, that OSRAM as the controlled company is financially integrated into ams Offer as the controlling company in such a manner that the controlling company has the majority of the voting rights in the controlled company. Furthermore, the profit and loss transfer agreement must be entered into for a minimum term of five years and must actually be performed during its term. Terminating the profit and loss transfer agreement before the end of the minimum term in accordance with section 14(1) sentence 1 no. 3 KStG will, as a rule, result in the non-recognition for tax purposes

of the consolidated tax group from the outset. Only a termination for good cause, as a rule, does not affect the status of a consolidated tax group for fiscal years that have already been completed, even if the termination occurs within the minimum term of the profit and loss transfer agreement established under tax law, to the extent that the good cause is recognised for tax purposes.

The disposal or contribution of the interest may, as a rule, constitute good cause for the purposes of section 14(1) no. 3 KStG for the controlling company to prematurely terminate a domination and profit and loss transfer agreement, which does not affect the recognition of the status of a consolidated tax group for the past. This applies accordingly to the merger, demerger or liquidation of one of the two parties to the agreement. Clause 6.4 sentence 2 of the Agreement is supposed to also allow for a termination for good cause under stock corporation law in case any of the instances of termination for good cause recognised for tax purposes is given.

The abstract provisions on the reasons giving rise to a right to terminate an agreement for good cause are based on the following background: Pursuant to current rulings of German tax courts, the recognition for tax purposes of certain good causes which in previous contractual practice have been largely deemed non-detrimental always requires a case-by-case assessment. For example, an intra-group sale or contribution of the interest in the controlled company (OSRAM) to another ams Group company shall not automatically qualify as good cause recognised for tax purposes.

This formal approach concerning the recognition of a profit and loss transfer agreement for tax purposes involves quite a considerable risk that the agreement and the consequential consolidated tax group for purposes of corporate income tax and trade tax will altogether be invalid if the agreement explicitly provides for a list of good causes that are not recognised for tax purposes and do not properly consider the case-by-case assessment required by German tax courts. As a result, the Parties abstained from listing specific good causes for the extraordinary termination of the Agreement.

Furthermore, any termination of the Agreement will be subject to the statutory provision laid down in section 303 AktG: If a domination or a profit and loss transfer agreement ends, the controlling company (ams Offer) must provide security to creditors of the controlled company (OSRAM) if they make a corresponding request for this purpose to the controlling company within six months after the announcement of the registration. However, pursuant to section 303(1) and (2) AktG, this obligation only exists towards creditors whose claims were established before the registration of the termination of a domination or a profit and loss transfer agreement in the commercial register was announced pursuant to section 10 HGB and who, in the event of insolvency proceedings, would not have a right to preferential satisfaction from cover funds that have been established and state-monitored for their protection under statutory law. Instead of providing security, the controlling company may provide a guarantee for the claim; in this event, section 349 HGB concerning the exclusion of the defence of the failure to pursue remedies is not applicable (section 303(3) AktG).

7. Comfort letter (Clause 7 of the Agreement)

Clause 7 of the Agreement contains a reference that ams, without joining the Agreement as a party, provided a comfort letter to OSRAM by separate declaration. This comfort letter is attached to the Contract Report together with the Agreement as **Annex 3**.

In the comfort letter, ams undertakes without limitation and irrevocably to ensure that ams Offer will be financially equipped in a way that ams Offer is at all times able to fulfil all its obligations arising from or in connection with the Agreement completely when they become due. This applies, in particular, to the obligation to compensate losses pursuant to section 302 AktG. In addition, ams undertakes towards outside OSRAM Shareholders irrevocably and without limitation that ams Offer will fulfil all its obligations towards them arising from or in connection with the Agreement, in particular the obligation to make the Recurring Compensation Payment and to pay the Compensation completely when they become due; this also applies to any increase in the Recurring Compensation Payment and the Compensation as a result of potential appraisal proceedings taking place according to the German Act on Appraisal Proceedings (*Spruchverfahrensgesetz* - ***SpruchG***). To that extent outside OSRAM Shareholders have own claims against ams according to section 328(1) BGB directed at payment to ams Offer. This claim and a corresponding liability of ams towards outside OSRAM Shareholders only apply if ams Offer does not fulfil its obligations towards outside OSRAM Shareholders arising from or in connection with the Agreement completely when they become due and ams does not comply with its obligation to equip ams Offer as described above. This means that outside OSRAM Shareholders enjoy additional overall protection beyond the extent required by law.

The comfort letter provided by ams to OSRAM is subject to the laws of the Federal Republic of Germany. Exclusive place of jurisdiction for all disputes arising between the Parties from or in connection with the comfort letter is Munich, Germany, to the extent permitted by law.

8. Severability clause (Clause 8 of the Agreement)

Clause 8 of the Agreement (severability clause) ensures that the material content of the Agreement will continue to apply if, contrary to expectations, any provision of the Agreement proves to be invalid or impracticable in full or in part or the Agreement does not contain a necessary provision. This is a common provision included in domination and profit and loss transfer agreements.

II. Payment of the Compensation (*Abfindung*) and of the Recurring Compensation Payment (*Ausgleich*) (processing by banks)

ams Offer will commission a bank as central settlement agent (***Central Settlement Agent***) with the processing of the acquisition of the OSRAM Shares offered by outside OSRAM Shareholders in exchange for payment of an appropriate Compensation in accordance with Clause 5 of the Agreement. OSRAM Shareholders wishing to accept the Compensation offer must instruct their custodian bank to make available their OSRAM Shares to the Central Settlement Agent via the collective custody system for the purpose of receiving the Compensation. The Central

Settlement Agent will provide the custodian banks in advance with forms of such acceptance notice. The Compensation will then be paid out concurrently (*Zug um Zug*) with the proper transfer of these OSRAM Shares to the Central Settlement Agent. The closing date shall be no later than the 10th banking day (Frankfurt am Main) after the Central Settlement Agent has been informed of the relevant number of OSRAM Shares for which the Compensation offer is supposed to be accepted. The processing of the Compensation is free of any commissions and charges for outside OSRAM Shareholders (see paragraph D.I.5.4). Further details of the processing (including the specification of the Central Settlement Agent) will be announced without undue delay after registration of the Agreement in the commercial register.

The fixed Recurring Compensation Payment pursuant to Clause 4 of the Agreement will be processed in the same manner as a dividend payment.

III. Legal effects on outside OSRAM Shareholders

1. Corporate law effects

Performance of the Agreement will affect outside OSRAM Shareholders' administrative and property rights conferred on them by virtue of their ownership in the shares.

With ams Offer's right of management control and right to issue instructions to OSRAM in accordance with Clause 1 of the Agreement coming into effect, i.e. upon registration of the Agreement in the commercial register of OSRAM, but no earlier than 1 October 2020, ams Offer shall be entitled to issue binding instructions to OSRAM's management board with ams Offer being entitled to exclusively consider its own interests in controlling the management of OSRAM. Pursuant to the Agreement, ams Offer can also give adverse instructions to OSRAM provided that they serve the interests of ams Offer and are not otherwise impermissible, for example by violating mandatory legal provisions. Irrespective of ams Offer's obligation to assume any annual net loss that may arise to OSRAM, permissible adverse instructions may have considerable negative implications for OSRAM's financial and earnings situation, which may persist after termination of the Agreement.

ams Offer's right of management control and right to issue instructions to OSRAM as agreed in the Agreement will impair the administrative rights and potentially the property rights of outside OSRAM Shareholders. Outside OSRAM Shareholders will be financially compensated for such impairments by way of ams Offer's obligation to make an annual appropriate Recurring Compensation Payment (*Ausgleichszahlung*) or to pay an appropriate Compensation (*Abfindung*). The Compensation compensates for the loss of membership and the resulting administrative and property rights that existed unimpaired before conclusion of the Agreement; the Recurring Compensation Payment compensates for the loss of the property right to receive a dividend. Outside shareholders have the option of whether to request the Recurring Compensation Payment or the Compensation (for the amount, see also paragraph E.).

Once the obligation to transfer profit pursuant to Clause 2 of the Agreement has become effective, i.e. at the earliest from the fiscal year beginning on 1 October 2020 provided the Agreement is entered in the commercial register of OSRAM before the end of the fiscal year beginning on 1 October 2020, or in the relevant later fiscal year if registration is effected in a subsequent fiscal year only, OSRAM will no longer report any annual net income or distributable profit, apart from any earnings from the dissolution of reserves not subject to the contractual transfer of profit, or a distributable profit as a result of any pre-contractual profit brought forward. This means that, once the Agreement has become effective, outside OSRAM Shareholders will generally not receive any dividends during the term of the Agreement. They will generally not have the right to decide on the appropriation of distributable profits that arise during the term of the Agreement.

To safeguard the interests of outside shareholders, they have claims against ams Offer for an annual recurring compensation payment pursuant to section 304 AktG. The Recurring Compensation Payment to be made in accordance with Clause 4 of the Agreement will be made to outside OSRAM Shareholders without undue delay after the due date specified in Clauses 4.1 and 4.4 of the Agreement. This payment will be technically processed via the relevant custodian banks, as in the case of a dividend payment (see paragraph D.II).

As an alternative to receiving the Recurring Compensation Payment, outside OSRAM Shareholders can avail of the compensation offer pursuant to section 305 AktG and sell their shares to ams Offer in exchange for being granted the Compensation specified in Clause 5.1 of the Agreement. With regard to the details of the Recurring Compensation Payment and the Compensation, reference is made to the above explanations in paragraph D.I.4 and paragraph D.I.5 on Clause 4 and Clause 5 of the Agreement.

Upon effectiveness of the Agreement, ams Offer will be obliged to purchase OSRAM Shares from outside OSRAM Shareholders upon their demand and in exchange for payment of the Compensation specified in Clause 5.1 of the Agreement. As from this time, outside OSRAM Shareholders, by notice to their relevant custodian bank, can exercise their right to transfer their OSRAM Shares to ams Offer in exchange for payment of the Compensation fixed in the Agreement (for the details of acceptance, see paragraph D.II). As from the end of the day on which the Agreement becomes effective by registration in the commercial register, interest is payable on the Compensation pursuant to Clause 5.1 of the Agreement at an annual rate of five percentage points above the relevant base rate pursuant to section 247 BGB (section 305(3) sentence 3 AktG). OSRAM Shareholders who do not exercise their right to transfer their OSRAM Shares to ams Offer will remain OSRAM Shareholders and receive the Recurring Compensation Payment annually.

Outside OSRAM Shareholders do not lose the right to Compensation as a result of having received the Recurring Compensation Payment. If the offer of Compensation is only accepted after the Recurring Compensation Payment has been made, which can particularly be the case where the Compensation offer is accepted during or after conclusion of appraisal proceedings (see section 305(4) sentence 3 AktG and Clause 5.2 of the Agreement), Recurring Compensation Payments already received will be offset against the claim to the payment of interest

on the Compensation under section 305(3) sentence 3 AktG. The offset will be made on the basis of reference periods, which normally are fiscal years. The OSRAM Shareholder entitled to Compensation will have the right to receive the difference between the Recurring Compensation Payment and interest on Compensation for the relevant reference period if the Recurring Compensation Payment received is lower than the interest on Compensation and also if the interest on Compensation is lower than the higher Recurring Compensation Payment in each period. The Recurring Compensation Payment will be offset against the interest payable on Compensation only for the Recurring Compensation Payment that relates to the period that begins on the registration of the Agreement. Recurring Compensation Payments already received will not be offset against the Compensation payment itself. This conforms with the statutory provisions taking into consideration the German Federal Court of Justice (*Bundesgerichtshof*) rulings (judgment of 16 September 2002 – II ZR 284/01 – "Rütgers"; judgment of 2 June 2003 – II ZR 85/02; judgment of 10 December 2007 – II ZR 199/06).

Immediately after registration of the Agreement, the further details of the compensation process will be announced in the Federal Gazette (*Bundesanzeiger*) and communicated to outside OSRAM Shareholders via their custodian banks. The processing of the transfer of OSRAM Shares to ams Offer due to acceptance of the Compensation offer will be free of costs for OSRAM Shareholders (Clause 5.4 of the Agreement).

ams Offer's obligation to take over shares of outside OSRAM Shareholders in exchange for the payment of Compensation is for a limited period of time pursuant to Clause 5.2 of the Agreement. The notice by outside OSRAM Shareholders to accept the Compensation offered by ams Offer must be received by the Central Settlement Agent appointed by ams Offer within this period (see explanations in paragraph D.I.5.4 on the details of the period for which ams Offer's obligation exists). After this period has expired, the Compensation offer can no longer be accepted.

Aside from this, the entering into the Agreement has no legal effects on the shareholdings of outside OSRAM Shareholders. In particular, the conclusion of the Agreement or its registration in the commercial register will not cause any changes to the voting or other participation rights attaching to their shares.

The stock exchange listing of the OSRAM Shares will not be affected by the Agreement's registration in the commercial register. However, it cannot be excluded that a large number of outside OSRAM Shareholders will accept the Compensation offered and that the number of OSRAM Shares in free float will further decrease. The consequent reduced liquidity of OSRAM Shares may result in higher price fluctuations of OSRAM Shares than in the past.

The number of OSRAM Shares in free float will decrease to the extent the Compensation offered under the Agreement will be accepted. As a consequence, OSRAM may no longer meet the relevant criteria for remaining in stock market indices that contain the OSRAM Shares. Among other things, exclusion from a stock market index can cause institutional investors replicating the relevant index in their portfolio to sell their OSRAM Shares and refrain from acquiring OSRAM Shares in the future. Increased supply of OSRAM Shares combined with reduced

demand for OSRAM Shares can negatively influence the market price of OSRAM Shares.

2. Protection of outside OSRAM Shareholders

As described in more detail below, the protection of outside OSRAM Shareholders in connection with concluding the Agreement is ensured by granting a recurring compensation payment (*Ausgleichszahlung*) and compensation (*Abfindung*). Their appropriateness will be audited by a court-appointed Contract Auditor (see paragraph D.III.2.2). If, in the opinion of outside OSRAM Shareholders, the Recurring Compensation Payment and/or Compensation as specified in the Agreement is/are not appropriate, they can have the appropriateness reviewed in appraisal proceedings.

2.1 Compensation (*Abfindung*) and recurring compensation payment (*Ausgleich*)

The interests of outside OSRAM Shareholders are accounted for by the duty to grant compensation and a recurring compensation payment and their implementation in the Agreement in the form of the Recurring Compensation Payment and the Compensation.

For fiscal years for which OSRAM is under an obligation to transfer profit pursuant to Clause 2 of the Agreement, outside OSRAM Shareholders shall receive full financial compensation for the loss of their dividend by means of ams Offer's obligation to make an annual Recurring Compensation Payment pursuant to Clause 4.2 of the Agreement in conjunction with section 304 AktG.

In the Expert Opinion (**Annex 4**), PwC concludes that the relevant objectified business value of OSRAM pursuant to IDW S 1 as of the valuation date of 3 November 2020, which is referred to in court rulings for determining the compensation, is approx. EUR 4,205 million. PwC refers to the number of outstanding shares (the ***Outstanding OSRAM Shares***) when calculating the value per OSRAM Share. For 94,184,046 Outstanding OSRAM Shares, the objectified business value per Outstanding OSRAM Share is EUR 44.65.

Furthermore, the arithmetical objectified business value pursuant to IDW S1 as of 30 September 2020, i.e. the day preceding the beginning of the fiscal year for which ams Offer is likely to be required to make an annual recurring compensation payment to outside OSRAM Shareholders for the first time, is approx. EUR 4,174 million; the appropriate recurring compensation payment within the meaning of section 304 AktG derived therefrom, as determined by the Valuation Expert, is EUR 2.57 gross (EUR 2.24 net) per OSRAM Share.

On the basis of the Expert Opinion, the Parties fixed an annual Recurring Compensation Payment in the gross amount of EUR 2.57 (EUR 2.24 net).

As an alternative, outside OSRAM Shareholders can accept the compensation offered pursuant to section 305 AktG and, after registration of the Agreement, transfer the OSRAM Shares held by them to ams Offer in exchange for the payment of an appropriate compensation. The amount of the Compensation provided for in Clause 5.1 of the Agreement was determined to be EUR 44.65 per OSRAM Share by also considering the situation of OSRAM existing at the time of adoption of the relevant resolution in the general shareholders' meeting of OSRAM scheduled for

3 November 2020. The amount was determined by also taking into account, apart from the company valuation carried out by PwC, the volume-weighted average stock exchange price of the OSRAM Share for the three-month period prior to the announcement on 10 February 2020 of the intention to enter into a domination and profit and loss transfer agreement as well as, in addition, prior to the announcement of the more specific intention to enter into a domination and profit and loss transfer agreement on 29 July 2020. This three months' average price was determined by the Federal Financial Supervisory Authority (***BaFin***) to be EUR 42.20 for the period until (and including) 9 February 2020 and EUR 41.14 for the period until (and including) 28 July 2020. According to supreme court rulings, the three months' average price is the lower limit of the appropriate compensation (see the detailed explanations and substantiation of the appropriateness of the compensation in paragraph E.III).

2.2 Contract audit by expert auditor

At the joint request of the management board of OSRAM and the management of ams Offer, the Munich Regional Court I (*Landgericht München I*), by decision dated 19 May 2020, selected and appointed Ebner Stolz GmbH & Co. KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Kronenstraße 30, 70174 Stuttgart as expert auditor within the meaning of section 293b(1) AktG. This decision is attached to the Contract Report as **Annex 5**. Ebner Stolz will audit the Agreement and, in particular, the appropriateness of the compensation (*Abfindung*) and the annual recurring compensation payment (*Ausgleichszahlung*) and prepare a separate Audit Report thereon pursuant to section 293e AktG. This Audit Report together with the documents specified in section 293f(1) AktG will be available via OSRAM's website at https://www.osram-group.de/hauptversammlung as from the date the general shareholders' meeting scheduled for 3 November 2020 is convened. Upon request, copies of these documents will be provided to each OSRAM Shareholder without delay and free of charge. Please refer to the notice of the general shareholders' meeting to be held on 3 November 2020 for details.

2.3 Appraisal proceedings

If OSRAM Shareholders are of the opinion that the amount of the annual Recurring Compensation Payment specified in the Agreement in Clause 4.2 is not appropriate in accordance with section 304 AktG, they can have the appropriateness of the Recurring Compensation Payment reviewed by a court in appraisal proceedings pursuant to section 304(3) sentence 3 AktG in conjunction with section 1 no. 1 SpruchG after the Agreement has taken effect. The right to request the initiation of appraisal proceedings does not depend on whether objection was declared in the general shareholders' meeting to the resolution on the consent to the Agreement by electronic means and recorded in the minutes taken by the officiating notary. A motion for the judicial review of the Recurring Compensation Payment in appraisal proceedings pursuant to section 304(3) sentence 3 AktG in conjunction with section 1 no. 1 SpruchG can be filed within three months after the date on which the registration of the Agreement's existence in the commercial register of OSRAM was announced pursuant to section 10 HGB. A statement of reasons for the motion pursuant to section 4(2) SpruchG must be submitted within the above period of three months. If the competent court determines a higher annual Recurring Compensation Payment in a final and non-appealable decision in such ap-

praisal proceedings, such decision will be effective for and against all outside OSRAM Shareholders; therefore, OSRAM Shareholders not involved in the appraisal proceedings also have a claim against ams Offer for an increase of the Recurring Compensation Payment (section 13 sentence 2 SpruchG). ams Offer can terminate the Agreement in this event within two months after the court decision has become final and non-appealable (section 304(4) AktG). If such appraisal proceedings are terminated by a judicially recorded settlement, the rights of all outside OSRAM Shareholders are protected by the fact that section 11(2) SpruchG permits the termination of such proceedings only with the consent of the joint representative of the outside OSRAM Shareholders. Clause 4.5 of the Agreement provides that, in the event of a judicially recorded settlement, shareholders who have already been compensated according to Clause 5 of the Agreement are also entitled to demand a corresponding additional payment to the Recurring Compensation Payment already received by them, irrespective of whether they themselves were involved in the proceedings.

If outside OSRAM Shareholders are of the opinion that the Compensation specified in Clause 5.1 of the Agreement is not appropriate, they can also have the appropriateness of the offered Compensation reviewed by a court in appraisal proceedings pursuant to section 305(5) sentence 2 AktG in conjunction with section 1 no. 1 SpruchG. The above statements concerning the Recurring Compensation Payment apply accordingly with regard to the period for submitting the motion, the statement of reasons for the motion, the effect of the court decision in appraisal proceedings, the termination right of ams Offer after judicial determination of the Compensation as well as the termination of such proceedings by judicially recorded settlement.

IV. Tax effects on outside OSRAM Shareholders

1. Preliminary remarks

The following statements include a brief summary of some important German taxation principles which may be relevant in connection with the conclusion of the Agreement for outside OSRAM Shareholders subject to unlimited tax liability in Germany.

Tax effects for outside OSRAM Shareholders subject to limited tax liability in Germany are not explained below. These effects depend, among other factors, on special provisions of German tax law, the tax law in the country in which the relevant shareholder is domiciled and on the provisions of any existing treaty for the avoidance of double taxation (double taxation treaty).

The description in general relates only to corporate income tax, income tax, withholding tax and trade tax as well as solidarity surcharge which accrue in Germany, but not to church tax. The description only deals with some selected aspects of these types of taxes. For example, the description does not address the special characteristics of so-called lock-up shares acquired as consideration for a tax-privileged contribution under the German Transformation Tax Act (*Umwandlungsteuergesetz* - ***UmwStG***), nor the special provisions for certain companies in the financial and insurance industries. This summary is based only on the currently applicable law as applied by tax authorities and tax courts in their rulings as of the

date of this Contract Report. This situation can change, potentially also with retroactive effect.

No guarantee is provided for the completeness and correctness of this description. This summary describes selected tax aspects in general without addressing the tax situation of any individual concerned. It is, therefore, not intended to be, and should not be construed as, legal or tax advice. Shareholders are recommended to consult their tax advisors. Only tax advisors are able to reasonably consider the specific tax circumstances of the individual shareholder.

2. Taxation of recurring compensation payments at the shareholder level

The annual Recurring Compensation Payment (*Ausgleichszahlung*) to be made by ams Offer to OSRAM Shareholders as provided for in Clause 4.2 of the Agreement is likely to be subject to the general rules on the taxation of dividends at the level of the shareholders concerned.

2.1 Withholding tax

Withholding tax of 25% and solidarity surcharge levied thereon at a rate of 5.5% (resulting in a tax deduction including solidarity surcharge of 26.375%) will generally be deducted from the recurring compensation payment at the time it is made. Withholding tax is generally deducted and paid irrespective of the amount in which the payment is actually subject to tax at the level of OSRAM Shareholders.

With regard to OSRAM Shareholders holding their shares as private assets, the collection of withholding tax generally discharges the shareholder's tax liability for recurring compensation payments (referred to as flat-rate withholding tax (*Abgeltungsteuer*)). Subject to certain requirements, shareholders holding their shares as private assets can apply for exemption from such flat-rate withholding tax. By contrast, withholding tax accruing to OSRAM Shareholders holding their shares as part of their business assets is generally credited against the relevant shareholder's income tax or corporate income tax. Withholding tax deducted in excess of such shareholders' personal tax liability will be refunded. This applies accordingly to the solidarity surcharge.

2.2 Shares held as private assets

The recurring compensation payments for shares held as private assets constitute income from capital assets and, as such, are subject to income tax; in this case, the deduction of withholding tax has the effect of finally settling the tax liability (referred to as flat-rate withholding tax) and the recurring compensation payment no longer has to be declared in the OSRAM Shareholder's annual tax return. In certain cases (for example, where a non-assessment certificate from the tax office was submitted or where a sufficient exemption order was issued), the recurring compensation payment can be paid to OSRAM Shareholders without deduction of withholding tax and solidarity surcharge.

At the request of OSRAM Shareholders, their recurring compensation payments can also be subject to the income tax according to the basic scale instead of deducting flat-rate withholding tax if this leads to a lower tax burden for the shareholder (most favourable tax treatment test - *Günstigerprüfung*). In this event, the relevant amounts for taxation are the capital gains less the saver's tax-free allowance of

EUR 801.00 (or EUR 1,602.00 for jointly assessed spouses), and the deduction of actual income-related expenses is excluded. The income from capital investments so calculated is subject to the relevant OSRAM Shareholder's personal income tax rate in their income tax assessment. Withholding tax initially deducted will be credited against income tax so levied.

If an OSRAM Shareholder meets the relevant requirements and applies for exemption from flat-rate withholding tax, taxation will be similar to that of a sole proprietor (see paragraph D.IV.2.3(ii)).

2.3 Shares held as business assets

If shares are held as business assets, taxation will depend on whether the OSRAM Shareholder is a corporation, a sole proprietor or a partnership (joint proprietors):

(i) Corporations

Recurring compensation payments are generally subject to corporate income tax for corporations unless the OSRAM Shareholder held a share of at least 10% in OSRAM's share capital at the beginning of the relevant calendar year. In this event, recurring compensation payments are generally exempt from corporate income tax. However, 5% of this tax-exempt income is deemed to be expenses which must not be deducted as business expenses for tax purposes and is therefore subject to corporate income tax (plus solidarity surcharge). In return, business expenses actually incurred in relation to recurring compensation payments can generally be deducted in full (subject to other restrictions on deduction). Recurring compensation payments are subject to trade tax at their full amounts unless the OSRAM Shareholder held a minimum share of 15% in OSRAM's share capital (intercompany participation) at the beginning of the relevant tax period. In the latter case, the exemption of 95% of recurring compensation payments from corporate income tax applies accordingly for trade tax purposes.

(ii) Sole proprietors

In the case of sole proprietors (individuals), 60% of the recurring compensation payment is subject to the applicable income tax rate (referred to as partial income method (*Teileinkünfteverfahren*)). Accordingly, any expenses economically related to the recurring compensation payment are deductible for tax purposes at a rate of 60% only (subject to other restrictions on deduction). If the shares belong to the assets of a permanent establishment located in Germany, the full amount of the recurring compensation payment is subject to trade tax if and to the extent the OSRAM Shareholder is subject to trade tax and does not hold a minimum share of 15% in OSRAM's share capital at the beginning of the relevant tax period. However, trade tax is credited in full or in part against the OSRAM Shareholder's income tax by way of a flat-rate procedure.

(iii) Partnerships

If the shares are held by a partnership (joint proprietors), income tax or corporate income tax is assessed at the level of its partners only. For partners subject to corporate income tax which hold a minimum share of 10% in the share capital at the beginning of the relevant calendar year, 95% of the recurring compensation payment is finally exempt from taxation, while the remainder is taxable (see para-

graph (i) above). However, if the partner is liable to income tax, 60% of the recurring compensation payment is subject to taxation (see paragraph (ii) above). As regards the deductibility of business expenses, the statements made under (i) above apply to partners liable to corporate income tax and the statements made under (ii) above apply to partners liable to income tax. The full amount of the recurring compensation payment is subject to trade tax at the level of the partnership if the partnership is subject to trade tax and does not hold a minimum share of 15% in the company's share capital at the beginning of the relevant tax period. However, if individuals hold interests in the partnership, trade tax accruing at the level of the partnership is credited in full or in part against their income tax by way of a flat-rate procedure. If the partnership holds a minimum share of 15% in the company's share capital at the beginning of the relevant tax period, 5% of the recurring compensation payment is subject to trade tax if corporations hold interests.

3. Taxation of compensation at the level of OSRAM Shareholders

Pursuant to Clause 5.1 of the Agreement, ams Offer undertakes towards OSRAM Shareholders who want to exit OSRAM on the occasion of the conclusion of the Agreement to purchase their shares in exchange for appropriate Compensation (*Abfindung*) in the amount of EUR 44.65 per OSRAM Share. For the OSRAM Shareholders concerned, a gain generated from the resulting transfer of OSRAM Shares in exchange for the above compensation is likely to be subject to the rules on the taxation of gains from the sale of shares in a corporation. A capital gain is realised if the compensation less any costs of sale exceeds the acquisition costs for tax purposes or the book value for tax purposes for the relevant shares at the level of the OSRAM Shareholder. If the compensation less any costs of sale is less than the acquisition costs or the book value of the shares at the level of the OSRAM Shareholder, a capital loss is incurred.

3.1 Withholding tax

Capital gains are generally subject to the deduction of withholding tax at a rate of 25% plus solidarity surcharge thereon at a rate of 5.5% (resulting in a total rate of 26.375%). Such deduction requires the existence of a domestic paying agent (domestic or domestic branch office of a foreign credit institution, financial services institution, securities trading company or securities trading bank) which holds in custody or administers the OSRAM Shares or carries out their sale and pays out or issues a credit for capital gains.

Compensation paid for shares held as private assets and acquired prior to 1 January 2009 is not subject to withholding tax. Deduction of withholding tax also does not apply to capital gains for shares held as business assets by corporations with unlimited tax liability. The same applies under certain circumstances to shares held by individuals or by partnerships as business assets.

If withholding tax and solidarity surcharge are deducted, they generally discharge the shareholder's tax liability with regard to shares held as private assets. The deduction of withholding tax will not discharge the shareholder's tax liability in relation to shares held as private assets if the shareholder held a minimum interest of 1% in OSRAM's share capital at any time during the last five years prior to the sale, and in relation to shares held as business assets. In these cases, tax deducted

will rather be credited against the seller's tax liability for income or corporate income tax and solidarity surcharge or will be refunded in the amount of any excess.

3.2 Shares held as private assets

Capital gains from the sale of OSRAM Shares are always taxable, irrespective of their holding period. Corresponding capital losses may only be offset against capital gains from the sale of shares in the current year or in a subsequent year.

Capital gains resulting from compensation for shares are subject to the deduction of withholding tax if a German paying agent is involved. The deduction of withholding tax will generally discharge the relevant tax liability, meaning that the investor's relevant income tax liability is settled by the tax deduction, and the capital gain no longer has to be declared in the shareholder's annual tax return. In certain cases (for example, where a non-assessment certificate from the tax office was submitted or where a sufficient exemption order was issued), the recurring compensation payment can be paid to OSRAM Shareholders without deduction of withholding tax and solidarity surcharge. If no withholding tax is deducted in other cases (for example, where no German paying agent is involved), the OSRAM Shareholder must state the capital gain in their income tax return. However, the capital gain in these cases will not be subject to the shareholder's personal income tax rate; instead, the capital gain will be assessed at the flat rate of withholding tax.

At the request of the OSRAM Shareholder, the gain resulting from compensation can be taxed according to the basic scale of income tax instead of deducting flat-rate withholding tax if this leads to a lower tax burden for the shareholder. In this case, withholding tax initially deducted will be credited against income tax levied by way of assessment. When determining the income from investments only a saver's tax-free allowance of EUR 801.00 (or EUR 1,602.00 for jointly assessed spouses) may be deducted as income-related expenses. The deduction of actual income-related expenses is excluded.

60% of a capital gain is taxable if the OSRAM Shareholder held a minimum interest of 1% in OSRAM's share capital at any time during the last five years prior to the sale. The deducted withholding tax and solidarity surcharge will be credited against the OSRAM Shareholders' tax liability in their tax assessments, or refunded in the amount of any excess. In these cases, 60% of any capital losses and expenses economically related to the sale is deductible for tax purposes.

3.3 Shares held as business assets

If OSRAM Shares are held as business assets, taxation of the capital gains on their sale will depend on whether the OSRAM Shareholder is a corporation, a sole proprietor or a partnership (joint proprietors):

(i) Corporations

Capital gains from the sale of OSRAM Shares are generally exempt from corporate income tax and trade tax for corporations. However, 5% of the capital gains is deemed to be expenses which must not be deducted as business expenses for tax purposes and is therefore subject to corporate income tax (plus solidarity surcharge) and trade tax. Capital losses and other profit reductions related to the sold shares cannot be taken into account for tax purposes.

(ii) Sole proprietors

If OSRAM Shares are held by sole proprietors, 60% of the capital gains is taxable. Accordingly, only 60% of the business expenses related to such capital gains and only 60% of any capital losses can be taken into account for tax purposes. If OSRAM Shares are part of the assets of a permanent establishment located in Germany, 60% of the capital gains is subject to trade tax if the sole proprietor is liable to trade tax. However, such trade tax is credited in whole or in part against the investor's income tax by way of a flat-rate procedure.

(iii) Partnerships

If OSRAM Shares are held by a partnership (joint proprietors), taxation will depend on whether its partners are liable to income tax or corporate income tax. 95% of the capital gains from the sale of shares is generally exempt from taxation for partners liable to corporate income tax (see paragraph (i) above). 60% of the capital gains from the sale of shares is generally taxable for partners liable to income tax (see paragraph (ii) above). In addition, 60% (if individuals hold interests) and 5% (if corporations hold interests) of the capital gains from the sale of shares are subject to trade tax at the level of the partnership liable to trade tax if they are attributed to a domestic permanent establishment. However, if individuals hold interests in the partnership, trade tax is credited in full or in part against their income tax by way of a flat-rate procedure. As regards the deductibility of business expenses related to capital gains and of capital losses, the statements made under (i) above apply to partners liable to corporate income tax and the statements made under (ii) above apply to partners liable to income tax.

V. Tax effects on OSRAM

If the other statutory requirements for the existence of a consolidated tax group for corporate income tax and trade tax purposes are also met, the Agreement will have the effect that OSRAM's income will be attributed to, and tax thereon paid by, ams Offer for corporate income tax and trade tax purposes. However, OSRAM will be liable to pay tax on income in the amount of currently 20/17 of recurring compensation payments made (section 16 KStG). The consolidated tax group does not begin to exist before OSRAM's fiscal year in which the obligation to transfer profit pursuant to Clause 2 of the Agreement as well as the financial integration of OSRAM into ams Offer exist from the beginning of the year, which is expected to be 1 October 2020, provided the Agreement has been registered in the commercial register by the end of this fiscal year at the latest, that means before 30 September 2021, pursuant to Clause 6.2 of the Agreement. Whereas any loss carryforward for tax purposes existing on the date the consolidated tax group becomes effective will continue to exist, it cannot be deducted for tax purposes for the duration of the consolidated tax group.

Due to the consolidation for tax purposes, OSRAM is liable pursuant to section 73 of the German Fiscal Code (*Abgabenordnung*) for such taxes of the parent company of the consolidated tax group for which the consolidated tax group between them is relevant for tax purposes. The above provisions on taxes apply equally to claims for the reimbursement of tax credits.

VI. Costs of the Domination and Profit and Loss Transfer Agreement

One-time costs were incurred for the conclusion and audit of the Agreement. OSRAM incurred such costs in particular for appointing the Valuation Expert (see paragraph E.I), for providing the Audit Report (see paragraph D.III.2.2) and for obtaining legal advice. The costs for providing the Expert Opinion and the Audit Report will be borne by OSRAM and ams Offer in equal parts. Apart from that, each Party will bear its own costs, including the costs of its external advisors. The external costs to be borne by OSRAM are expected to amount to approx. EUR 1.1 million in total. The external costs to be borne by ams Offer are expected to amount to approx. EUR 1.0 million.

E. Type and amount of the recurring compensation payment (*Ausgleich*) and of the compensation (*Abfindung*) pursuant to sections 304, 305 AktG

I. Overview

Pursuant to section 304 AktG, a domination and profit and loss transfer agreement must provide for appropriate compensation for outside shareholders by way of a recurring cash payment related to their shares in the share capital. The type of the recurring compensation payment and the reasons for determining a fixed recurring compensation payment were explained under paragraph D.I.4.1 above.

According to section 304(1) sentence 1 and (2) sentence 1 AktG, the recurring compensation payment guaranteed must at least be equal to the annual payment of the amount which could be expected to be distributed for each individual share as average profit share in view of the company's past profitability and future earnings prospects, taking into account adequate depreciation, amortisation and value allowances, but excluding other profit reserves.

Section 305(1) AktG provides that a domination and profit and loss transfer agreement must further provide for the obligation of the controlling company to purchase the shares of outside shareholders upon their request in exchange for the payment of an appropriate compensation specified in the agreement. Section 305(3) sentence 2 AktG provides that the appropriate compensation must take into account the situation of the company at the time its general meeting resolves on the agreement. This applies accordingly to the recurring compensation payment within the meaning of section 304 AktG. According to a decision of the German Federal Constitutional Court (*Bundesverfassungsgericht*) of 27 April 1999 (BvR 1613/94), the stock exchange price, if existing, must also be taken into account when calculating the amount of compensation pursuant to section 305 AktG. The stock exchange price generally represents the lowest amount of compensation to be paid to the shareholder.

The relevant valuation date is the date of the planned general shareholders' meeting of OSRAM which is to resolve on the Agreement, that is 3 November 2020.

The management board of OSRAM and the management of ams Offer appointed PwC as Valuation Expert to prepare an Expert Opinion on the business value of OSRAM as of the date of the planned general shareholders' meeting, 3 November 2020, and on the amount of the appropriate recurring compensation

payment within the meaning of section 304 AktG and of the appropriate compensation within the meaning of section 305 AktG.

The Valuation Expert carried out the work necessary for the Expert Opinion from May 2020 to September 2020. On 21 September 2020, the Valuation Expert provided the Expert Opinion on the determination of OSRAM's business value as of the valuation date of 3 November 2020, that is the date of the general shareholders' meeting of OSRAM that resolves on the Agreement. In its function as neutral expert for the purposes of IDW S 1, PwC concludes in the Expert Opinion that the objectified business value of OSRAM within the meaning of IDW S 1 as of the valuation date of 3 November 2020 being relevant for the compensation is approx. EUR 4,205 million. This corresponds to a value of EUR 44.65 for each outstanding OSRAM Share based upon a total of 94,183,686 Outstanding OSRAM Shares.

The Valuation Expert further arrives at the conclusion that the relevant average stock exchange price is EUR 42.20 per OSRAM Share. The relevant price in this context is the volume-weighted average stock exchange price determined for OSRAM Shares by the BaFin for the three-month period preceding ams' announcement on 10 February 2020 of the intention to implement the conclusion of a domination and profit and loss transfer agreement between OSRAM and ams Offer (see also paragraph E.III). The value per OSRAM Share calculated by using the discounted cash flow method (*Ertragswertmethode*) is EUR 2.45 above the relevant stock exchange price; therefore, the value per OSRAM Share calculated by using the discounted cash flow method is relevant for the compensation. Accordingly, it results from the Expert Opinion that the appropriate compensation for the purposes of section 305 AktG is EUR 44.65 per OSRAM Share. The appropriate recurring compensation payment within the meaning of section 304 AktG derived from the arithmetical objectified business value pursuant to IDW S1 as of 30 September 2020, i.e. the day preceding the beginning of the fiscal year for which ams Offer is likely to be required to make an annual recurring compensation payment to outside OSRAM Shareholders for the first time, as determined by the Valuation Expert, is EUR 2.57 gross (EUR 2.24 net) per OSRAM Share.

The complete Expert Opinion of PwC on the business value of OSRAM dated 21 September 2020 is attached hereto as **Annex 4** and thus forms an integral part of this Contract Report.

Following their own reviews, the management board of OSRAM and the management of ams Offer adopt as their own the full content of PwC's statements in the above Expert Opinion on OSRAM's business value, on the appropriate recurring compensation payment and on the appropriate compensation and include such statements in this Contract Report. In their own assessments, the management board of OSRAM and the management of ams Offer consider as appropriate an amount of EUR 44.65 per OSRAM Share for the compensation within the meaning of section 305 AktG and a gross amount of EUR 2.57 (EUR 2.24 net) per OSRAM Share for the recurring compensation payment within the meaning of section 304 AktG.

The Expert Opinion as well as this Contract Report will be available, together with the other documents required under section 293f(1) AktG, via OSRAM's website at https://www.osram-group.de/hauptversammlung as from the date of the notice of

OSRAM's general shareholders' meeting that will resolve on the consent to the Agreement. Upon request, copies of these documents will be provided to each shareholder without delay and free of charge. With regard to the details of inspecting and requesting copies of these and other documents, reference is made to the notice of the general shareholders' meeting that resolves on OSRAM's consent to the Agreement.

For avoiding any liability risks, the management board of OSRAM and the management of ams Offer explicitly note that while OSRAM's plans on which the business valuation is based were prepared to the best of their knowledge and belief, they are also based on future circumstances or changes to market and competitive conditions whose realisation may be outside OSRAM's control, and that neither OSRAM nor ams Offer will or can assume any liability for the actual realisation of the facts and forecasts on which the plans are based. The sole purpose of this Contract Report is to comply with the statutory information duty pursuant to section 293a AktG.

II. Determination and fixing of the amount of the appropriate recurring compensation payment pursuant to section 304 AktG

Pursuant to Clause 4.2 of the Agreement, ams Offer will grant outside OSRAM Shareholders a fixed annual Recurring Compensation Payment from the fiscal year as of which the obligation to transfer profit under Clause 2 of the Agreement takes effect, which is expected to be the fiscal year beginning on 1 October 2020, for the duration of the Agreement. The annual Recurring Compensation Payment amounts to EUR 2.57 gross and EUR 2.24 net per OSRAM Share.

The reasons why the Parties agreed on a fixed recurring compensation payment were set out in paragraph D.I.4.1 above. The Parties agreed on a gross amount in accordance with the ruling of the German Federal Court of Justice (*Bundesgerichtshof*) (decision of 21 July 2003 - II ZB 17/01 - "Ytong"). Reference is made in this regard to the explanations in paragraph D.I.4.2 above.

The management board of OSRAM and the management of ams Offer, by mutual agreement, fixed the amount of the recurring compensation payment on the basis of the conclusions of the Expert Opinion dated 21 September 2020, in which the Valuation Expert arrives at the conclusion that the appropriate recurring compensation payment is EUR 2.57 gross (EUR 2.24 net) per OSRAM Share.

III. Determination and fixing of the amount of the appropriate compensation pursuant to section 305 AktG

Pursuant to Clause 5 of the Agreement, ams Offer is obliged, upon demand of each outside OSRAM Shareholder, to purchase such shareholder's OSRAM Shares in exchange for a Compensation (section 305(2) AktG). Each outside OSRAM Shareholder accepting the compensation offer will receive compensation in the amount of EUR 44.65 per OSRAM Share. The decisive reasons for agreeing on cash compensation as the offered type of compensation are set out in paragraph D.I.5.2 above.

The management board of OSRAM and the management of ams Offer agreed in fixing the amount of compensation paid on the basis of the conclusions of the Expert Opinion dated 21 September 2020. In that Expert Opinion, the Valuation Expert determined an amount of EUR 44.65 for the value per OSRAM Share based on the objectified business value pursuant to IDW S1.

The Valuation Expert and the Parties also considered the stock exchange price of the OSRAM Share in determining the amount of compensation. In accordance with the ruling of the German Federal Constitutional Court (*Bundesverfassungsgericht*) of 27 April 1999 (BvR 1613/94), the stock exchange price generally represents the lowest limit for determining the amount of compensation to be offered to outside shareholders. The German Federal Court of Justice (*Bundesgerichtshof*) (judgment of 12 March 2001 - II ZB 15/00) specified the requirements laid down by the German Federal Constitutional Court with regard to the relevance of the stock exchange price for determining the appropriate compensation. In its judgment of 19 July 2010 (II ZB 18/09 "Stollwerck"), it established additional requirements in this respect by specifying that the relevant stock exchange price must be determined on the basis of a sales-weighted average stock exchange price during a three-month reference period preceding the announcement of a structural measure.

On 10 February 2020, ams communicated by way of an ad-hoc announcement that it intended to initiate the conclusion of a domination and profit and loss transfer agreement between ams Offer as the controlling company and OSRAM as the controlled company. Furthermore, on 29 July 2020, ams specified its intention to enter into a domination and profit and loss transfer agreement by communicating within the scope of an ad-hoc announcement concerning its results achieved in the second quarter of the 2020 fiscal year that, given the preparations already finalised, it considered the domination and profit and loss transfer agreement between ams Offer and OSRAM to be implemented around the end of 2020. The volume-weighted average three months' stock exchange price of the OSRAM Share determined by the BaFin for the three-month period preceding the publication of the ad-hoc announcement on 10 February 2020 is EUR 42.20 and preceding the publication of the more specific ad-hoc announcement on 29 July 2020 EUR 41.41. As this value is below the objectified value per share in the amount of EUR 44.65 determined by PwC according to IDW S 1, the relevant value for fixing the compensation in the present case was the objectified value per share determined by PwC according to IDW S 1 in the amount of EUR 44.65.

The volume-weighted average three months' stock exchange price does not need to be adjusted. According to the Stollwerck decision of the German Federal Court of Justice (*Bundesgerichtshof*), an extrapolation of the average stock exchange price at the time of the public announcement of the structural measure would only be necessary if – cumulatively – a longer period of time has passed between the public announcement of the structural measure and the date of the general meeting and if the development of the stock exchange prices appears to make such adjustment necessary. In the present case, however, it is not necessary to adjust the volume-weighted average three-month stock exchange price even if a period of more than eight and a half months lies between the announcement of the intention to enter into a domination and profit and loss transfer agreement (10 February 2020) and the date on which the Agreement will be submitted to the general shareholders' meet-

ing for approval (3 November 2020) and it can thus not be excluded that a "longer period of time" in the sense of the aforementioned Stollwerck ruling might exist. The Valuation Expert has updated the volume-weighted average three months' stock exchange price of EUR 42.40 by using various methods; the various extrapolation mechanisms concerning the stock exchange price trend do not seem to require any adjustment, but rather seem to indicate that the use of the stock exchange price of EUR 42.20 continues to be appropriate as a lower limit. It should also be noted that the volume-weighted average three months' stock exchange price of EUR 41.14 as of 29 July 2020, the day on which the intention to enter into a domination and profit and loss transfer agreement was specified, was below the aforementioned average price and an adjustment would thus have been to the detriment of minority shareholders. Therefore, such an adjustment was not carried out in favour of minority shareholders.

F. Contract audit

The Contract Auditor prepared an Audit Report which, together with the documents referred to in section 293f(1) AktG, will be available on OSRAM's website at https://www.osram-group.de/hauptversammlung from the date the regular general shareholders' meeting is convened. Upon request, copies of these documents will be available to each OSRAM Shareholder without delay and free of charge (paragraph D.III.2.2).

OSRAM Licht AG

The management board

Munich, 22 September 2020

Dr Olaf Berlien

Chairman of the management board

Kathrin Dahnke

Member of the management board

Dr Stefan Kampmann

Member of the management board

ams Offer GmbH

The management

Munich, 22 September 2020

Alexander Everke	Ingo Bank
Managing director	Managing director

Annex 1 List of all subsidiaries and affiliates of OSRAM Licht AG

Status as of September 30, 2019

	Capital Share in %
Equity investments of OSRAM Licht AG, Munich / Germany	
OSRAM Beteiligungen GmbH, Munich	100.00
OSRAM GmbH, Munich	100.00
Subsidiaries of OSRAM GmbH, Munich / Germany	
Germany (as of September 30, 2019: 12 companies)	
BAG electronics GmbH, Arnsberg	100.00
Heramo Immobilien GmbH & Co. KG, Grünwald	100.00
OSRAM Beteiligungsverwaltung GmbH, Grünwald	100.00
Fluxunit GmbH, Munich	100.00
OSRAM CONTINENTAL GmbH, Munich	50.00 [2)]
OSRAM Innovation Hub GmbH, Munich	100.00
OSRAM Opto Semiconductors GmbH, Regensburg	100.00
OSRAM OLED GmbH, Regensburg	100.00
Siteco GmbH, Traunreut	100.00
Siteco Beleuchtungstechnik GmbH, Traunreut	100.00
Siteco Lighting GmbH, Traunreut	100.00
OSRAM Lighting Services GmbH, Wipperfürth	100.00
EMEA (excluding Germany) (as of September 30, 2019: 43 companies)	
OSRAM Sales EOOD, Trud / Bulgaria	100.00
OSRAM EOOD, Trud / Bulgaria	100.00
OSRAM A/S, Taastrup / Denmark	100.00
OSRAM Oy, Vantaa / Finland	100.00
Siteco France S.A.S., Fontenay-sous-Bois / France	100.00
OSRAM Lighting S.A.S.U., Molsheim / France	100.00
ADB STAGELIGHT S.A.S.U., Saint-Quentin / France	100.00
OSRAM Continental France SAS, Toulouse / France	50.00 [2)]
RGI Light Limited, Leeds / Great Britain	100.00
RGI Light (Holdings) Limited, Leeds / Great Britain	100.00
Ring Automotive Limited, Leeds / Great Britain	100.00
Siteco UK Limited, Manchester / Great Britain	100.00
LUX365 Limited, Manchester / Great Britain	100.00
OSRAM Ltd., Reading, Berkshire / Great Britain	100.00
Yekta Setareh Atllas Co. (P.J.S.), Tehran / Iran	100.00
OSRAM S.p.A. - Società Riunite OSRAM Edison Clerici, Milano / Italy	100.00
Siteco Italy S.r.l., Milano / Italy	100.00
Clay Paky S.p.A., Seriate / Italy	100.00
OSRAM Continental Italia S.r.l., Treviso / Italy	50.00 [2)]
OSRAM d.o.o., Zagreb / Croatia	100.00
OSRAM Benelux B.V., Capelle aan den Ijssel / Netherlands	100.00
Fluence Bioengineering B.V., Schiphol / Netherlands	100.00
OSRAM AS, Lysaker / Norway	100.00
Siteco Norway AS, Lysaker / Norway	100.00
OSRAM Continental Austria GmbH, Vienna / Austria	50.00 [2)]
Siteco Lighting Austria GmbH, Vienna / Austria	100.00
Siteco Österreich GmbH, Vienna / Austria	100.00
OSRAM Sp. z o.o., Warsaw / Poland	100.00
Siteco Poland Sp. z o.o., Warsaw / Poland	100.00
OSRAM, Lda, Carnaxide / Portugal	100.00
OSRAM Romania S.R.L., Bucharest / Romania	100.00
OSRAM Continental Romania S.R.L., Iasi / Romania	50.00 [2)]
OOO OSRAM, Moscow / Russia	100.00

OSRAM AB, Stockholm / Sweden	100.00
OSRAM Lighting AG, Winterthur / Switzerland	100.00
Siteco Switzerland AG, Winterthur / Switzerland	100.00
OSRAM, a.s., Nové Zámky / Slovakia	100.00
OSRAM Lighting S.L., Madrid / Spain	100.00
Siteco Lighting Spain, S.L., Madrid / Spain	100.00
OSRAM Lighting (Pty) Ltd., Midrand / South Africa	100.00
OSRAM Ceská republika s.r.o., Bruntál / Czech Republic	100.00
OSRAM Teknolojileri Ticaret Anonim Sirketi, Istanbul / Turkey	100.00
OSRAM Lighting Middle East FZE, Dubai / United Arab Emirates	100.00
Americas (as of September 30, 2019: 19 companies)	
OSRAM S.A., Buenos Aires / Argentina	100.00
OSRAM Comercio de Solucoes de Iluminacao Ltda., Barueri / Brazil	100.00
OSRAM Chile Ltda., Santiago de Chile / Chile	100.00
OSRAM Ltd., Vancouver / Canada	100.00
OSRAM de Colombia Iluminaciones S.A.S., Bogotá / Colombia	100.00
OSRAM de México S.A. de C.V., Naucalpan / Mexico	100.00
OSRAM S.A. de C.V., Naucalpan / Mexico	100.00
OSRAM Servicios Administrativos, S.A. de C.V., Naucalpan / Mexico	100.00
OSRAM Continental Guadalajara Intelligent Lighting S de RL de CV, Tlajomulco de Zuniga, Jalisco / Mexico	50.00 [2)]
OSRAM Continental Mexico Services S de RL de CV, Tlajomulco de Zuniga, Jalisco / Mexico	50.00 [2)]
LedEngin, Inc., San Jose, California / U.S.A.	100.00
Digital Lumens Inc., Wilmington, Delaware / U.S.A.	100.00
Fluence Bioengineering, Inc., Wilmington, Delaware / U.S.A.	100.00
OSRAM Opto Semiconductors, Inc., Wilmington, Delaware / U.S.A.	100.00
OSRAM SYLVANIA INC., Wilmington, Delaware / U.S.A.	100.00
Sylvania Lighting Services Corp., Wilmington, Delaware / U.S.A.	100.00
Traxon Technologies LLC, Wilmington, Delaware / U.S.A.	100.00
Vixar, Inc., Wilmington, Delaware / U.S.A.	100.00
OSRAM CONTINENTAL U.S.A. Inc., Wilmington, Delaware / U.S.A.	50.00 [2)]
APAC (as of September 30, 2019: 27 companies)	
OSRAM Pty. Ltd., Sydney / Australia	100.00
OSRAM China Lighting Ltd., Foshan / China	90.00
OSRAM Asia Pacific Management Company Ltd., Foshan / China	100.00
OSRAM Guangzhou Lighting Technology Limited, Guangzhou / China	100.00
OSRAM Kunshan Display Optic Co., Ltd., Kunshan / China	100.00
OSRAM CONTINENTAL Kunshan Intelligent Lighting Co., Ltd., Kunshan / China	50.00 [2)]
OSRAM Continental (Shanghai) Intelligent Lighting Co., Ltd., Shanghai / China	50.00 [2)]
OSRAM Opto Semiconductors (China) Co., Ltd., Wuxi / China	100.00
OSRAM Opto Semiconductors Trading (Wuxi) Co., Ltd., Wuxi / China	100.00
Traxon Technologies Ltd., Shatin / Hong Kong	100.00
OSRAM Asia Pacific Ltd., Causeway Bay / Hong Kong	100.00
OSRAM Opto Semiconductors Asia Ltd., Wanchai / Hong Kong	100.00
OSRAM CONTINENTAL INDIA Private Limited, Bangalore / India	50.00 [2)]
OSRAM Lighting Private Limited, Gurgaon / India	100.00
P.T. OSRAM Indonesia, Jakarta / Indonesia	100.00
OSRAM Ltd., Yokohama / Japan	100.00
OSRAM Opto Semiconductors (Japan) Ltd., Yokohama / Japan	100.00
OSRAM (Malaysia) Sdn. Bhd., Kuala Lumpur / Malaysia	100.00
Osram Opto Semiconductors (Malaysia) Sdn Bhd, Penang / Malaysia	100.00
BAG electronics, Inc., Binan, Laguna / Philippines	0.00 [2)]
TRILUX Lighting Inc., Binan, Laguna / Philippines	0.00 [2)]
OSRAM Lighting Pte. Ltd., Singapore / Singapore	100.00
OSRAM Co., Ltd., Seoul / South Korea	100.00
OSRAM Opto Semiconductors Korea Ltd., Seoul / South Korea	100.00

OSRAM Taiwan Company Ltd., Taipei / Taiwan	100.00
OSRAM Opto Semiconductors (Taiwan) Ltd., Taipei / Taiwan	100.00
OSRAM (Thailand) Co., Ltd., Bangkok / Thailand	100.00
Associates and joint ventures of OSRAM GmbH, Munich / Germany	
Germany (as of September 30, 2019: 5 companies)	
agrilution GmbH, Munich	18.74 [3]
Blickfeld GmbH, Munich	12.55 [3]
GoodIP GmbH, Munich	10.00 [3]
iThera Medical GmbH, Munich	9.26 [3]
Square Metrics GmbH, Berlin	49.00 [3]
EMEA (excluding Germany) (as of September 30, 2019: 4 companies)	
EMGO N.V., Lommel / Belgium	50.00
LAMP NOOR (P.J.S.) Co., Tehran / Iran	20.00 [1]
Tvilight B.V., Groningen / Netherlands	47.50
beaconsmind AG, Zurich / Switzerland	14.48 [3]
Americas (as of September 30, 2019: 2 companies)	
LeddarTech Inc., Québec / Canada	29.05
Motorleaf Inc., Montreal / Canada	12.94 [3]
APAC (as of September 30, 2019: 1 company)	
Siteco Prosperity Lighting (Lang Fang) Co., Ltd., Lang Fang / China	50.00
Other equity investments of OSRAM GmbH, Munich / Germany	
Germany (as of September 30, 2019: 3 companies)	
Caruso GmbH, Ismaning	1.00 [4]
GSB - Sonderabfall-Entsorgung Bayern GmbH, Baar-Ebenhausen	0.07 [4]
Unternehmertum VC Fonds II GmbH & Co. KG, Garching b. München	6.06
EMEA (excluding Germany) (as of September 30, 2019: 4 companies)	
KNX Association cvba, Brussels-Diegem / Belgium	2.96 [4]
Partech Partners S.A.S., Paris / France	8.50
Design LED Products Limited, Edinburgh / Great Britain	6.03 [4]
Voltimum S.A., Vernier / Switzerland	13.71 [4]
Americas (as of September 30, 2019: 3 companies)	
Luminaerospace LLC, Denver, Colorado / U.S.A.	2.00 [4]
Recogni, Inc., Cupertino, California / U.S.A.	6.38 [4]
TetraVue, Inc., Wilmington, Delaware / U.S.A.	6.36 [4]

1) Not accounted for using the equity method due to immateriality.
2) Control on the basis of contractual agreements that enable material activities to be directed.
3) Significant influence on the basis of contractual provisions or legal arrangements.
4) These equity investments are measured in accordance with IFRS 9 *Financial Instruments* and are assigned to the FVOCI measurement category (financial assets measured at fair value through other comprehensive income without recycling to profit or loss).

Annex 2 List of all subsidiaries and affiliates of ams AG

Group Enterprises

	Accounting method	Country of incorporation	Functional currency	Ownership interest	
				2019	2018
ams France S.à.r.l.	fully consolidated	France	EUR	100%	100%
ams Italy S.r.l.	fully consolidated	Italy	EUR	100%	100%
ams International AG	fully consolidated	Switzerland	CHF	100%	100%
ams R&D Spain, S,L.	fully consolidated	Spain	EUR	100%	100%
ams R&D UK Ltd.	fully consolidated	U, K,	GBP	100%	100%
ams Japan Co, Ltd.	fully consolidated	Japan	JPY	100%	100%
ams Semiconductors India Pvt Ltd.	fully consolidated	India	INR	100%	100%
ams China Co Ltd	fully consolidated	China	RMB	100%	100%
ams Asia Inc,	fully consolidated	Philippines	PHP	100%	100%
Aspern Investment Inc.	fully consolidated	USA	USD	100%	100%
ams Sensors USA Inc.	fully consolidated	USA	USD	100%	100%
ams Korea Co, Ltd.	fully consolidated	Korea	KRW	100%	100%
ams R&D doo	fully consolidated	Slovenia	EUR	100%	100%
AppliedSensor Holding AB	fully consolidated	Sweden	SEK	100%	100%
ams Sensors Netherlands BV	fully consolidated	Netherlands	EUR	100%	100%
ams sensors Hong Kong Ltd.	at amortized costs	Hong Kong	HKD	100%	100%
ams Finland Oy	fully consolidated	Finland	EUR	100%	100%
ams Sensors Belgium BVBA	fully consolidated	Belgium	EUR	100%	100%
CMOSIS International NV	fully consolidated	Belgium	EUR	100%	100%
AWAIBA Holding SA	fully consolidated	Switzerland	CHF	100%	100%
ams Sensors Portugal Unipessoal Lda	fully consolidated	Portugal	EUR	100%	100%
ams Sensors Germany GmbH	fully consolidated	Germany	EUR	100%	100%
ams Sensors UK Ltd.	fully consolidated	UK	GBP	100%	100%
Incus Laboratories Ltd.	fully consolidated	UK	GBP	100%	100%
ams Cayman Inc.	fully consolidated	Cayman Island	USD	100%	100%
Heptagon Advanced Micro-Optics Pte Ltd.	fully consolidated	Singapore	USD	100%	100%
ams Sensors Singapore Pte. Ltd.	fully consolidated	Singapore	USD	100%	100%
Heptagon Oy	fully consolidated	Finland	EUR	100%	100%
Heptagon Holding Switzerland AG	fully consolidated	Switzerland	CHF	100%	100%
Heptagon Micro Optics Technologies Sdn Bhd	fully consolidated	Malaysia	MYR	100%	100%
AMK Inv Systems Pte. Ltd.	fully consolidated	Singapore	USD	100%	100%
Heptagon Holding CA Inc.	fully consolidated	USA	USD	100%	100%
RF Digital Corp.	fully consolidated	USA	USD	100%	100%
Simblee Corp.	fully consolidated	USA	USD	100%	100%
RFDuino Inc.	fully consolidated	USA	USD	100%	100%
Princeton Optronics Inc.	fully consolidated	USA	USD	100%	100%
ams Holding USA Inc.	fully consolidated	USA	USD	100%	100%
ams Sensors Asia Pte. Ltd.	fully consolidated	Singapore	USD	100%	100%
KeyLemon SA	fully consolidated	Switzerland	CHF	100%	100%
Ams Sensors Taiwan Pte. Ltd.	fully consolidated	Taiwan	TWD	100%	0%
Sciosense BV	fully consolidated	Netherlands	EUR	100%	0%
Sciosense Germany GmbH	fully consolidated	Germany	EUR	100%	0%
Sciosense Italy S.r.l.	fully consolidated	Italy	EUR	100%	0%
Opal Bidco GmbH	fully consolidated	Germany	EUR	100%	0%
ams Offer GmbH	fully consolidated	Germany	EUR	100%	0%

Associated Companies and Investments

	Accounting method	Establishing State	Functional currency	Ownership share	
				2019	2018
7Sensing Software NV.	At equity method	Belgium	EUR	30%	35%
NewScale Technologies Inc.	At equity method	USA	USD	29%	34%
Circadian Zirclight LLC	At equity method	USA	USD	6.13%	7.8%
RF Micron Inc. d/b/a Axzon	At equity method	USA	USD	9.21%	9.83%
Jinan Smart Sensing Sensor Co. Ltd.	At equity method	China	CNY	49%	0%
Greentropsim	FVOCI	France	EUR	10.06%	9.31%
Personify Inc.	FVOCI	USA	USD	13.06%	13.10%
Leman Micro Devies	FVOCI	Switzerland	CHF	15.43%	17.30%
HLJ Technologies Co. Ltd.	FVTPL	Taiwan	TWD	12.50%	15.20%
Osram Licht AG	FVOCI	Germany	EUR	19.99%	0%
Silicon Alps Cluster GmbH	FVOCI	Austria	EUR	4%	0%
Bellus 3D	FVOCI	USA	USD	3.26%	3.26%

Annex 3 **Domination and Profit and Loss Transfer Agreement between OSRAM Licht AG and ams Offer GmbH, and the letter of comfort of ams AG**

Convenience translation of the German original

Domination and
Profit and Loss Transfer Agreement

between

OSRAM Licht AG,
Marcel-Breuer-Str. 6, 80807 Munich,
registered in the commercial register (*Handelsregister*) at the Local Court (*Amtsgericht*) Munich (HRB 199675)
("**OSRAM**")

and

ams Offer GmbH,
Marcel-Breuer-Str. 6, 80807 Munich,
registered in the commercial register (*Handelsregister*) at the Local Court (*Amtsgericht*) Munich (HRB 252979)
("**ams Offer**")

1 Management Control

1.1 OSRAM submits the management control (*Leitung*) of its company to ams Offer. ams Offer is accordingly entitled to issue instructions (*Weisungen*) to the management board of OSRAM with regard to the management control of the company.

1.2 The management board of OSRAM is required to comply with the instructions of ams Offer. ams Offer is not entitled to issue the instruction to the management board of OSRAM to amend, maintain or terminate this Agreement.

1.3 Any instructions require text form (*Textform*) or, if the instructions are issued orally, they shall be confirmed in text form without undue delay.

2 Transfer of Profit

2.1 OSRAM undertakes to transfer its entire annual profit (*Gewinnabführung*) to ams Offer. Subject to establishing or dissolving reserves in accordance with Clause 2.2 of this Agreement below, the maximum amount permissible under section 301 German Stock Corporations Act (*Aktiengesetz* – "**AktG**"), as amended from time to time, shall be transferred.

2.2 OSRAM may, with the written consent of ams Offer, allocate parts of its annual profit to other profit reserves if and to the extent permissible under commercial law and as economically justified by reasonable commercial judgement. Upon written request of ams Offer, OSRAM shall dissolve other profit reserves established during the course of this Agreement and use the proceeds to compensate for any annual loss or transfer the proceeds as profit. Other reserves or profits carried forward from the period prior to the effectiveness of this Agreement may neither be transferred as profit nor be used to compensate for any annual loss.

2.3 The obligation to transfer the annual profit applies for the first time to the entire fiscal year of OSRAM in which this Agreement becomes effective according to Clause 6.2 of this Agreement. The obligation according to sentence 1 becomes due upon the end of the fiscal year of OSRAM and shall bear interest from this point on at an interest rate of 5% p.a.

3 Assumption of Losses

3.1 ams Offer is obliged towards OSRAM to assume any losses (*Verlustübernahme*) according to the provisions of section 302 AktG in its entirety as amended from time to time.

3.2 The obligation to assume any losses applies for the first time to the entire fiscal year of OSRAM in which this Agreement becomes effective according to Clause 6.2 of this Agreement. Clause 2.3 sentence 2 applies accordingly to the obligation to assume any losses.

4 Recurring Compensation Payment

4.1 ams Offer undertakes to pay to the outside shareholders of OSRAM a recurring annual cash compensation ("**Recurring Compensation Payment**") (*Ausgleichszahlung*) from and including the fiscal year of OSRAM in relation to which the claim of ams Offer for the transfer of the annual profit under Clause 2 takes effect, and for the further duration of this Agreement.

4.2 The Recurring Compensation Payment amounts for each full fiscal year of OSRAM for each no-par value registered ordinary voting shares (*Aktien ohne Nennbetrag*) in OSRAM, representing a mathematical portion of EUR 1.00 in the share capital (each "**OSRAM Share**" and all "**OSRAM Shares**") to a gross sum (*Bruttobetrag*) of EUR 2.57 minus the amount of any corporate income tax and the solidarity surcharge in accordance with the respective tax rate applicable for these taxes for the relevant fiscal year, whereby this deduction is to be calculated only on the basis of the pro rata gross sum of EUR 2.08 per OSRAM Share resulting from profits which are subject to German corporate income tax. Based on the situation at the time of conclusion of this Agreement, the pro rata gross sum of EUR 2.08 for each OSRAM share, which relates to profits made by OSRAM being subject to the German corporate income tax, is subject to a deduction of 15% corporate income tax plus 5.5% solidarity surcharge, that is EUR 0.33. Together with the remaining pro rata gross sum of EUR 0.49 for each OSRAM Share, relating to profits not being subject to the German corporate income tax, the Recurring Compensation Payment amounts to EUR 2.24 for each OSRAM Share for each full fiscal year, based on the situation at the time of conclusion of this Agreement. For the avoidance of doubt, it is agreed that any withholding tax (such as capital gains tax plus solidarity surcharge thereon) shall be withheld from the Recurring Compensation Payment to the extent required by statutory law. The Recurring Compensation Payment is due on the first banking day following the ordinary general shareholders' meeting of OSRAM for any respective preceding fiscal year but in any event within eight months following expiration of the relevant fiscal year.

4.3 The Recurring Compensation Payment is granted for the first time for the full fiscal year of OSRAM for which the claim of ams Offer to transfer of profit under Clause 2 becomes effective. If this Agreement ends during a fiscal year of OSRAM or if OSRAM establishes an abbreviated fiscal year (*Rumpfgeschäftsjahr*) while the obligation according to Clause 2 is existing, the Recurring Compensation Payment is reduced *pro rata temporis*.

4.4 If the share capital of OSRAM is increased from the reserves in exchange for the issuance of new shares, the Recurring Compensation Payment for each OSRAM Share is reduced to such an extent that the total amount of the Recurring Compensation Payment remains unchanged. If the share capital of OSRAM is increased by cash contributions and/or contributions in kind, the rights under this Clause 4 also apply for the shares subscribed to by outside shareholders in such capital increase. The beginning of each entitlement of the new shares pursuant to this Clause 4 corresponds to the dividend entitlement set by OSRAM when issuing the new shares.

4.5 If an appraisal proceeding (*Spruchverfahren*) according to the German Act on Appraisal Proceedings (*Spruchverfahrensgesetz*) is initiated and the court adjudicates a legally binding higher Recurring Compensation Payment, the outside shareholders, even if they have already been compensated according to Clause 5, are entitled to demand a corresponding additional payment to the Recurring Compensation Payment. Likewise all other outside shareholders will be treated in the same way if ams Offer undertakes to pay a higher Recurring Compensation Payment to an outside shareholder of OSRAM in a court settlement (*gerichtlicher Vergleich*) for the purpose of avoiding or settling judicial appraisal proceedings (*Spruchverfahren*).

5 Compensation

5.1 ams Offer undertakes upon demand of each outside shareholder of OSRAM to purchase such shareholder's OSRAM Shares in exchange for a cash compensation ("**Compensation**") (*Abfindung*) in the amount of EUR 44.65 for each OSRAM Share.

5.2 The obligation of ams Offer to purchase OSRAM Shares is for a limited period of time. The time limitation period ends two months after the date on which the registration of this Agreement in the commercial register at the registered seat of OSRAM has been announced pursuant to section 10 of the German Commercial Code (*Handelsgesetzbuch* – HGB). An extension of the time limitation period pursuant to section 305 para. 4 sentence 3 AktG as a result of a motion for determining the Recurring Compensation Payment or Compensation by the court determined according to section 2 of the German Act on Appraisal Proceedings remains unaffected. In this case, the time limitation period ends two months after the date on which the decision on the last motion ruled on has been announced in the Federal Gazette (*Bundesanzeiger*).

5.3 If the share capital of OSRAM is increased using corporate funds in exchange for the issuance of new shares prior to the expiration of the time limitation period set forth in Clause 5.2, the Compensation for each share is reduced to such an extent that the total amount of the Compensation remains unchanged. If the share capital of OSRAM is increased prior to the expiration of the time limitation period set forth in Clause 5.2 by means of cash contributions and/or contributions in kind, the rights under this Clause 5 also apply for the shares subscribed to by the outside shareholders in such capital increase.

5.4 The transfer of the OSRAM Shares for Compensation is free of costs for the outside shareholders of OSRAM.

5.5 If an appraisal proceeding (*Spruchverfahren*) pursuant to the German Act on Appraisal Proceedings is initiated and the court adjudicates a legally binding higher compensation, the outside shareholders, even if they have already been compensated, are entitled to demand a corresponding additional payment to the Compensation. Likewise all other outside shareholders will be treated in the same way if ams Offer undertakes in a court settlement (*gerichtlicher Vergleich*) to pay a higher compensation to an outside shareholder of OSRAM for the purpose of avoiding or settling judicial appraisal proceedings (*Spruchverfahren*).

6 Effectiveness and Term of this Agreement

6.1 This Agreement requires for its effectiveness each the consent of the general shareholders' meeting of OSRAM as well as the consent of the shareholders' meeting of ams Offer.

6.2 This Agreement becomes effective upon registration of its existence in the commercial register at the registered seat of OSRAM, however, at the earliest, upon the beginning of the financial year of OSRAM beginning on 1 October 2020.

6.3 This Agreement is concluded for an indefinite period of time. It can be terminated in writing with a notice period of six month to the end of the fiscal year of OSRAM. This Agreement can be terminated for the first time as of the end of the fiscal year that ends at least five years (*Zeitjahre*) (60 months) after the beginning of the fiscal year of OSRAM, in which this Agreement has become effective according to Clause 6.2 of this Agreement.

6.4 Each party can terminate this Agreement for good cause (*wichtiger Grund*) without compliance with any notice period. Good cause exists in particular if good cause for

purposes of German tax law for the termination of this Agreement exists including those pursuant to R 14.5 (6) Corporation Tax Guidelines (*Körperschaftsteuer-Richtlinien – KStR*) (or a corresponding successor provision).

6.5 Any notice of termination must be in writing.

7 Comfort Letter

ams AG with seat in Premstätten, Austria, ("**ams AG**") holds 100% of the shares in ams Offer and in this capacity as direct shareholder, has without joining the Agreement as a party provided the comfort letter attached for information purposes to this Agreement as an Annex. In this comfort letter ams AG undertakes without limitation and irrevocably to ensure, that ams Offer will be financially equipped in a way that ams Offer is at all times able to fulfil all its obligations arising from or in connection with this Agreement completely when they become due. This applies in particular to the obligation to compensate losses pursuant to section 302 AktG. ams AG undertakes towards the outside shareholders of OSRAM irrevocably and in principle without limitation that ams Offer fulfils all its obligations towards them arising from or in connection with this Agreement completely when they become due, in particular with respect to the Recurring Compensation Payment and the Compensation. To that extent the outside shareholders of OSRAM have an own claim according to section 328 para. 1 German Civil Code (*Bürgerliches Gesetzbuch* – BGB) directed at payment to ams Offer. This claim and the corresponding liability of ams AG towards the outside shareholders however only apply if ams Offer does not fulfil its obligations towards the outside shareholders of OSRAM arising from or in connection with this Agreement completely when they become due and ams AG does not comply with its obligation to equip ams Offer.

8 Miscellaneous

To the extent a provision of this Agreement is or becomes invalid or impracticable in full or in part, or if this Agreement does not contain a necessary provision, the validity of the remaining provisions of this Agreement shall not be affected. In place of the invalid or impracticable provision, or in order to remedy an omission in this Agreement, an appropriate provision shall apply which corresponds as far as legally permissible to what the parties of this Agreement intended or would have intended in accordance with the intent and purpose of this Agreement if they had been aware of the provision.

Munich, 22 September 2020

OSRAM Licht AG

Dr. Olaf Berlien	Kathrin Dahnke
Chairman of the management board, CEO	Member of the management board, CFO

Munich, 22 September 2020

ams Offer GmbH

Alexander Everke	Ingo Bank
Managing Director	Managing Director

ams AG
Tobelbader Strasse 30
8141 Premstaetten
Austria

T +43 3136 500-0
sensors@ams.com
www.ams.com

OSRAM Licht AG
Marcel-Breuer-Str. 6
80807 München
Germany

Premstaetten, 22. September 2020

Comfort Letter (*Patronatserklärung*)

ams Offer GmbH, Marcel-Breuer-Str. 6, 80807 Munich, Germany, registered in the commercial register (*Handelsregister*) at the Local Court (*Amtsgericht*) Munich under company number HRB 252979 ("**ams Offer**"), intends to enter into a domination and profit and loss transfer agreement (*Beherrschungs- und Gewinnabführungsvertrag*) with OSRAM Licht AG, Marcel-Breuer-Str. 6, 80807 Munich, Germany, registered in the commercial register at the Local Court Munich under company number HRB 199675 ("**OSRAM**"), with OSRAM as the controlled and profit transferring company ("**Agreement**"). ams AG, a stock corporation incorporated and operating under the laws of Austria, with registered office in Premstätten ("**ams AG**"), directly holds 100% of the shares in ams Offer. ams AG hereby makes the following declarations without joining the Agreement as a party:

1. ams AG undertakes without limitation and irrevocably to ensure, that ams Offer will be financially equipped in such a way that ams Offer is at all times able to fulfil all its liabilities arising from or in connection with the Agreement completely when they become due. This applies in particular to the obligation to compensate losses pursuant to section 302 German Stock Corporations Act (*Aktiengesetz – AktG*).

2. ams AG undertakes without limitation and irrevocably vis-à-vis the outside shareholders of OSRAM that ams Offer fulfils all its obligations towards them arising from or in connection with the Agreement completely when they become due, in particular with respect to the recurring compensation payment (*Ausgleichszahlung*) and the cash compensation (*Abfindung*). To that extent the outside shareholders of OSRAM have an own claim according to section 328 para. 1 German Civil Code (*Bürgerliches Gesetzbuch – BGB*) directed at payment to ams Offer. ams AG's liability pursuant to the two preceding sentences does, however, only apply if ams Offer does not fulfil its obligations towards the outside shareholders of OSRAM arising from or in connection with the Agreement completely when they become due and ams AG does not comply with its obligation to equip ams Offer pursuant to Section 1 of this Comfort Letter.

3. This Comfort Letter is subject to the law of the Federal Republic of Germany. Exclusive place of jurisdiction for all disputes arising between the parties from or in connection with this Comfort Letter is Munich, Germany, to the extent permitted by law.

ams AG

Alexander Everke	Ingo Bank
CEO	CFO

Annex 4: **Expert opinion by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Friedrich-Ebert-Anlage 35-37, 60327 Frankfurt am Main, Germany, of 21 September 2020 on the determination of the business value of OSRAM Licht AG as per the valuation date of 3 November 2020**

Expert Opinion

on the business value of

OSRAM Licht AG,
Munich,

and on determining the appropriate cash compensation as well as the appropriate recurring compensation payment as of the date of the resolving general shareholders' meeting on the occasion of the planned conclusion of a Domination and Profit and Loss Transfer Agreement pursuant to § 291(1) German Stock Corporation Act between ams Offer GmbH, Ismaning, und OSRAM Licht AG, Munich

as per valuation date of 3 November 2020

This English version serves only as an explanatory note and shall not be signed by us. In case of any inconsistencies between the German and English version of our expert opinion, the German version shall prevail.

Assignment: 0.0939417.001

pwc

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Appendix

General engagement terms dated 1 January 2017

This English version serves only as an explanatory note and shall not be signed by us.

In case of any inconsistencies between the German and English version of our expert opinion, the German version shall prevail.

Rounding differences may occur in the amount of one unit (€, % etc.).

Abbreviations

ADAS	Advanced Driver Assistance Systems
Acuity Brands	Acuity Brands, Inc., Atlanta/USA
AG	Stock corporation (also: joint-stock company)/Aktiengesellschaft
AI	Artificial intelligence
AktG	German Stock Corporation Act/Aktiengesetz
AM	Business Unit Automotive
Americas	North, Central and South America
ams AG	ams AG, Premstaetten/Austria
ams Group	ams Offer GmbH, Ismaning, together with its sole shareholder ams AG, Premstätten, and its affiliated companies
ams Offer	ams Offer GmbH, Ismaning
APAC	Asia, Australia and Oceania
approx.	approximately
BaFin	Federal Financial Supervisory Authority, Bonn
BGH	Federal Court of Justice/Bundesgerichtshof
BGHZ	Decisions of the Federal Court of Justice in Civilian Matters/Entscheidungen des Bundesgerichtshofes in Zivilsachen
BIS	BIS Research Inc., Fremont/USA
Bloomberg	Bloomberg L.P., New York/USA
BU	Business Unit
Business plan	Consolidated corporate planning of the OSRAM Group for the fiscal years 2021 to 2025, dated September 7, 2020 and projection for the fiscal year 2020, dated September 16, 2020
BVerfG	Federal Constitutional Court/Bundesverfassungsgericht
CAGR	Compound Annual Growth Rate, calculated geometrically
cf.	confer
cvba	Coöperatieve vennootschap met beperkte aansprakelijkheid, belgian form of a cooperative
DACH Region	Germany, Austria, Switzerland and Liechtenstein
DCF	Discounted Cash Flow
Deutsche Bundesbank	German Federal Bank
DI	Business Unit Digital

e.g.	Exempli gratia, for example
EBIT	Earnings before Interest and Tax
EBITDA	Earnings before Interest, Tax, Depreciation and Amortization
EBT	Earnings before Tax
ECB	European Central Bank
EMEA	Europe, Middle East and Africa
Epistar	EPISTAR Corporation, Hsinchu/Taiwan
EStG	Income Tax Act/Einkommensteuergesetz
et seq.	and the following
EU	European Union
EUR	Euro
EV	Enterprise Value
e.V.	eingetragener Verein, german form of a registered society
Everlight Electronics	Everlight Electronics, New Taipei City/Taiwan
EY	Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart
FAUB	Committee for Enterprise Assessment and Management/Fachausschuss für Unternehmensbewertung und Betriebswirtschaft des IDW
Fluence	Fluence Bioengineering, Austin, USA
Fluxunit	Fluxunit GmbH, München
FY	Financial year
GDP	Gross Domestic Product
GmbH	Company with limited liability/Gesellschaft mit beschränkter Haftung
GmbH & Co. KG	Company with limited liability and limited partnership/ Gesellschaft mit beschränkter Haftung und Compagnie Kommanditgesellschaft
Hella	HELLA GmbH & Co. KGaA, Lippstadt/Germany
HGB	German commercial code/Handelsgesetzbuch
HRB	Commercial register Department B/Handelsregister Abteilung B
i.e.	Id est, that is
Ichikoh	Ichikoh Industries, LTD., Isehara/Japan
IDW	Institute of Public Auditors in Germany, e.V., Duesseldorf/ Institut der Wirtschaftsprüfer in Deutschland e.V., Duesseldorf
IDW S 1 as amended in 2008	Principles for the performance of business valuation of the Institute of Public Auditors in Germany, e.V. as amended in 2008

IEC	International Electrotechnical Commission
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund, Washington, D.C./USA
Inc.	Incorporated
IoT	Internet of Things
ISIN	International Securities Identification Number
IT	Information Technology
Koito Manufacturing	Koito Manufacturing Co., Ltd., Tokyo/Japan
KStG	German Corporate Tax Code/Körperschaftsteuergesetz
LCD	Liquid Crystal Display
Leddar Tech	Leddar Tech Inc., Quebec/Canada
LiDAR	Light Detection and Ranging
LLC	Limited Liability Company
LSS	Business Unit Lighting Solutions & Systems
Ltd.	Limited company
Majority Shareholder	ams Offer GmbH, Ismaning
n.a.	not available
n.a.	not meaningful
No.	Number
NTE	near-to-eye
N.V.	Naamloze Vennootschap; Dutch legal form of a stock corporation
NV	Belgian legal form of a stock corporation
OECD	Organisation for Economic Co-operation and Development
OEM	Original Equipment Manufacturing
OLED	Organic Light Emitting Diodes
OLG	Oberlandesgericht / higher regional court
Opal offer	publicly announced takeover bid made by Opal Bidco GmbH, Frankfurt / Germany
Opal Bidco	Opal BidCo GmbH, Frankfurt am Main
OS	Business Unit Opto Semiconductors
OSRAM	OSRAM Licht AG, Munich
OSRAM Continental	OSRAM Continental GmbH, Munich
OSRAM GmbH	OSRAM GmbH, Munich

OSRAM Group	OSRAM Licht AG, Munich, together with all its affiliated companies
p.a.	per annum
para.	paragraph
plc	public limited company
PwC	PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main
ref.	Reference
Recogni	Recogni, Inc., Cupertino/USA
S.A.	Société anonyme
S.A.S.	Société par Actions Simplifiée; French legal form of a stock corporation
S&P Global Market Intelligence	S&P Global Market Intelligence LLC (previously S&P Capital IQ), a division of S&P Global Inc., New York/USA
Signify	Signify N.V., Eindhoven/Niederlande
Siteco	Siteco Beleuchtungstechnik GmbH, Traunreut/Germany
Seoul Semiconductor	Seoul Semiconductor Co., Ltd., Ansan/Südkorea
Stanley Electric	Stanley Electric Co., Ltd., Tokio/Japan
SUV	Sports Utility Vehicles
Tax-CAPM	Tax-Capital Asset Pricing Model
The company	OSRAM Licht AG, Munich/Germany
us	PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main
USA	United States of America
USD	US Dollar
Ushio	Ushio Inc., Tokio/Japan
we	PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main
WKN	Security Identification Number/Wertpapierkennnummer
WpÜG	German Securities Acquisition and Takeover Act/ Wertpapierübernahmegesetz
WpÜG-AngVO	German Securities Acquisition and Takeover Act – Offer Ordinance/ Wertpapierübernahmegesetz-Angebotsverordnung

A. Engagement and scope of work

1. ams Offer GmbH, Ismaning ("ams Offer" or "majority shareholder", ams Offer together with its sole shareholder ams AG, Premstätten, and its affiliated companies "ams Group"), and OSRAM Licht AG, Munich ("OSRAM" or "the Company"; together with its direct and indirect subsidiaries also „OSRAM Group"), jointly mandated us, PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft ("PwC", "us" or "we"), to prepare an expert opinion on the objectified business value of OSRAM as well as to determine an adequate cash compensation pursuant to § 305 German Stock Corporation Act ("AktG") and an adequate recurring compensation payment pursuant to § 304 AktG.

2. The reason for this valuation is the intended conclusion of a domination and profit and loss transfer agreement in accordance with § 291 (1) AktG between ams Offer and OSRAM. The expert opinion regarding the business value of OSRAM Group serves as a basis to determine the adequate cash compensation pursuant to § 305 AktG and the adequate recurring compensation payment pursuant to § 304 AktG for the minority shareholders of OSRAM.

3. In accordance with § 293 (1) AktG, the domination and profit and loss transfer agreement is subject to approval by the general shareholders' meeting of OSRAM. The valuation date is the date of the extraordinary general shareholders' meeting of OSRAM at which the resolution will be proposed and which is scheduled for 3 November 2020.

4. We conducted our work from May until September 2020 in our offices in Frankfurt am Main and Munich as well as on the business premises of OSRAM in Munich. Our valuation is primarily based on the following documents that were made available to us:

   - Consolidated financial statements of OSRAM in accordance with International Financial Reporting Standards ("IFRS") for the financial years 2017, 2018 and 2019 as well as the audit reports on the audited IFRS consolidated financial statements and management reports of OSRAM for the financial years 2017, 2018 and 2019 with an unqualified opinion provided by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart ("EY"),

   - Quarterly and half year reports of OSRAM for the financial years 2019 and 2020, for which EY performed a review of the most relevant subjects,

   - Audited financial statements of major subsidiaries of OSRAM for the financial years 2017, 2018 and 2019,

   - Audit reports of other OSRAM material subsidiaries for the financial years 2017, 2018 and 2019,

   - Consolidated business plan of the OSRAM Group for the financial years 2021 to 2025, dated 7 September 2020, as well as a projection for the financial year 2020, dated 16 September 2020 ("business plan"),

- Company planning of key profit and loss account figures for the Business Units ("BU") Automotive ("AM"), Opto Semiconductors ("OS") and Digital ("DI") of OSRAM for the financial years 2020 to 2025,
- Documents regarding the identification and quantification of synergy potentials provided by OSRAM and ams AG, Premstätten/Austria („ams AG"),
- Other documents and information relevant to the valuation procedure as well as the inspection of minutes of supervisory board meetings and management board meetings of OSRAM for the previous three financial years.

5. Further information was provided to us by the Management Board of OSRAM and employees nominated by the board. The management of ams Offer as well as the Management Board of OSRAM provided us with a written statement on 21 September 2020 that all material information and explanations given to us in connection with the preparation of our expert opinion are both complete and correct.

6. A major focus of our analysis was to verify the plausibility of the financial planning figures. We have not conducted individual audits in accordance with §§ 316 et. seq. German commercial code ("HGB"). These were not part of our engagement.

7. We have followed the principles for the performance of business valuations approved by the Institut der Wirtschaftsprüfer in Deutschland e.V., Duesseldorf (Institute of Public Auditors in Germany, e.V., Duesseldorf; hereinafter "IDW") on 2 April 2008 which set out in the "Principles for the Performance of Business Valuations (IDW S 1 as amended in 2008)" (hereinafter: "IDW S 1 as amended in 2008") in its current version. We have determined the objectified business value of OSRAM in the capacity of a neutral expert in accordance with these principles.

8. The expert opinion was prepared exclusively for the internal use by the engaging parties as well as for the purposes of usage for the contractual report to be issued by the contractual parties. Internal use also includes information of the contract parties and publication in connection with the upcoming extraordinary general shareholders' meeting of OSRAM. In addition, the expert opinion can be used in connection with a possible subsequent legal procedure as well as for the reference required by the court appointed auditor within the scope of the verification of appropriateness of the cash compensation and recurring compensation payment in accordance with § 293b (1) AktG. The expert opinion must not be published, duplicated or used for any purposes other than the abovementioned. Without our prior written consent, the expert opinion may not be forwarded to third parties for any purposes other than the abovementioned. Consent will not be denied for undue reasons.

9. This valuation and our responsibilities, including responsibilities towards third parties, are governed by the "General Engagement Terms" as of 1 January 2017, which are attached to this expert opinion.

B. Principles and methods of valuation

I. Basics of the valuation

10. According to IDW S 1 as amended in 2008, the value of a business is determined by future benefits that a business will generate based on the key success factors inherent to the business at the time of the valuation. These key success factors comprise e.g. products, market position, internal organisation, management, employees as well as the innovative capacity of the business. Under the assumption that merely financial objectives are being pursued, the value of a business is determined by its capacity to generate financial surpluses for the shareholders through the combination of all factors that influence the earnings potential.

11. The value of a business may be determined by either the discounted earnings method or the discounted cash flow method. Both methods are basically equivalent since they share the same theoretical foundation (net present value calculation) and will lead to identical results, given the same financing assumptions (and, therefore, the same net earnings accruing to shareholders). In the present case we relied on the discounted earnings method to determine the business value of OSRAM.

12. Both methods firstly determine the present value of the financial surpluses generated by the assets essential for the business (operating assets). Assets (including liabilities) that could be separated from the business and sold without affecting the actual purpose of the business are classified as non-operating assets and valued separately. Therefore, the value of a business generally equals the sum of the present values of financial surpluses that can be derived from the operating and non-operating assets.

13. Predicting future cash flows is the core challenge of every business valuation process. Usually, historic profitability is used as a plausibility check. During the valuation process, only such financial surpluses should be considered that result from specific measures that have already been initiated, or that originate from a documented and sufficiently substantiated business concept as of the valuation date. If the earnings prospects are different in the future for reasons inherent to the company or due to changed market or competitive conditions, all identifiable differences must be considered.

14. The principles in the standard IDW S 1 as amended in 2008 differentiate between real synergies and pseudo synergies. Real synergies include the change in the financial surpluses that may arise after implementation of the measure on which the valuation is based; pseudo synergies are those that may be realised without implementation of the measure on which the valuation is based. Only pseudo synergies, as far as they can be allocated to the valuation object and as far as the particular measure already has been initiated or documented in the corporate concept, are to be considered in the valuation.

15. In determining the value of a business, it is generally assumed that all available financial surpluses resulting from a documented business concept as of the valuation date will be distributed, considering any applicable legal restrictions. When determining the net earnings to shareholders, retained earnings as well as their use must be considered.

16. In order to value a business, the projected future financial surpluses need to be discounted to the valuation date using an appropriate interest rate (discount rate). This discount rate serves to measure the series of expected financial surpluses against a potential alternative investment.

17. Due to the relevance of personal income taxes to the business value, it is necessary to characterise the tax situation of shareholders in the framework of objectified business valuations. In case of legally and contractually motivated valuations in the sense of IDW S 1 as amended in 2008, the characterisation is based on the tax situation of a domestic taxpayer that is subject to full taxation, in accordance with long-standing valuation practice and German jurisdiction. To this end, appropriate assumptions regarding personal tax charge on net earnings generated by the company being valued as well as regarding alternative investment return must be made.

18. If it is more advantageous to sell all operating and non-operating assets separately rather than continue business operations, the valuation must be based on the liquidation value of the business unless this is not possible due to legal or factual limitations. In order to verify whether the liquidation value exceeds the business value, the liquidation value of OSRAM Group was roughly determined as of the valuation date and compared with the business value calculated by us using the discounted earnings method.

19. In the context of business valuations, the net asset value is principally not considered.

20. The valuation procedures and frameworks explained above are accepted in both theory and practice and are acknowledged in the jurisdiction.

II. Appropriate cash compensation pursuant to § 305 AktG

21. Among other things, a domination and profit and loss transfer agreement must include the obligation of the majority shareholder to acquire the shares of a minority shareholders upon request in return for an appropriate cash compensation defined in the agreement (§ 305 (1) AktG). In the present case, the draft of the domination and profit and loss transfer agreement proposes a cash compensation (§ 305 (2) no. 3 AktG).

22. According to the knowledge of business administration, jurisdiction (cf. 'Bundesverfassungsgericht' (German Federal Constitutional Court; hereinafter "BVerfG") decision dated 27 April 1999 1BvR 1613/94; DB 1999, page 1695) and the valuation practice, the business value is the correct basis for determining the cash compensation as in § 305 AktG. Accordingly, the relevant business value is the value derived with a total valuation technique (and not by calculating the sum of the individual assets forming the business). This is in line with the postulate of a cash compensation at the full value of the investments as developed by the jurisdiction. Therefore, the business value of OSRAM is to be determined including all its subsidiaries.

23. When determining the cash compensation for shares of a listed company, share price as fair value of a share must be considered. Whether the share price reflects the fair value of the share must be examined on a case-by-case basis. In particular, if only a few shares are in free float and/ or only a small number of shares is traded, it is not necessarily possible to infer a generally applicable fair value from the prices of individual trades.

III. Appropriate recurring compensation payment pursuant to § 304 AktG

24. Pursuant to § 304 (1) sentence 1 AktG, a domination and profit and loss transfer agreement must provide a reasonable compensation for the minority shareholders by means of a recurring cash payment related to their shares in the share capital (recurring compensation payment). According to § 304 (2) sentence 1 AktG, at least the annual payment per share, which could probably be distributed as an average profit per share according to the previous earnings situation of the company and its future earnings prospects under consideration of appropriate depreciations and fair value adjustments, however without a retention of other profits, should be assured as recurring compensation payment.

25. The forecast-oriented discounted earnings value portrays the payments between the company and its shareholders under consideration of interest effects. For companies with positive annual results, these are the expected dividend payments to shareholders. In order to stabilise the annual recurring compensation payment, the legislative body does not relate the payment obligation to the expected

income that varies year by year, but rather refers to an average amount per share that could potentially be distributed. This average amount should therefore include performance fluctuations in the calculations but smooth these fluctuations over a uniform average amount.

C. Description of the valuation object

I. Legal characteristics

1. Legal situation

26. OSRAM is a listed German stock corporation ("Aktiengesellschaft") and is recorded in the commercial register at the Munich district court under HRB 199675.

27. According to the current articles of association of OSRAM, the firm's purpose is the management of a group of companies, which are active in the subsequently listed areas:

    - The development, design, production and distribution of electronic components and electronic systems and software and lighting, illumination and photonic, in particular light-converting, products, systems and solutions, including illuminants, luminaires, operating and manufacturing devices and machines, control systems, preliminary products, parts and accessories of such products, systems and solutions as well as products, systems and solutions of adjacent or related areas.

    - The development, design, production and distribution of components and systems for all types of vehicles.

    - The provision of consulting, services and support in the above-mentioned lines of work.

28. OSRAM is entitled to take all appropriate actions and measures to serve the purpose of the company. Further, the company is entitled to establish, acquire, manage or administer companies nationally and internationally, in particular with similar company purposes. OSRAM is entitled to set up branch offices and permanent establishments nationally and internationally as well as to conclude company agreements.

29. The financial year ends on the 30 September of each year.

30. As of 21 September 2020, the share capital of OSRAM amounts to EUR 96,848,074.00 and is divided into 96,848,074 registered no-par value shares with each share representing a nominal value of EUR 1.00 of the share capital.

31. By resolution of the general meeting on 20 February 2018, the Management Board of OSRAM is authorised, to increase the share capital until 19 February 2023 with approval of the Supervisory Board on one or more occasions by up to a total of EUR 24,078,562.00 through the issuance of up to 24,078,562 new no-par value bearer shares with a proportionate amount of the share capital of EUR 1.00 against a consideration in cash or in kind (Authorised Capital 2018). The shareholders are generally to be granted a subscription right. However, the Management Board is authorised, given

the approval of the Supervisory Board, to exclude the subscription right of shareholders in specific cases, either in whole or in part.

32. By resolution of the general meeting on 20 February 2018, the Management Board of OSRAM is authorised to issue bearer or registered subordinated or non-subordinated convertible bonds or option bonds, profit participation rights or profit participating bonds with a total nominal value of up to EUR 1,000,000,000.00 on one or more occasions, also simultaneously in different series, until 19 February 2023. The bearers or creditors of the debt securities may be granted conversion and option rights to a total of up to 10,468,940 registered no-par value shares of the company with a proportionate amount of the share capital of up to EUR 10,468,940.00. The share capital of OSRAM was therefore conditionally increased by up to EUR 10,468,940.00 by issuing up to 10,468,940 new registered no-par value shares (Conditional Capital 2018).

33. The Management Board is authorised to buy back own shares and to resell repurchased shares in accordance with the cases set out in § 71 AktG. As described in the Annual Report for financial year 2019, the Management Board was authorised by the General Meeting on 14 February 2017 to acquire own shares in accordance with § 71 (1) no. 8 AktG in the period up to 13 February 2022 totaling up to 10% of the share capital existing at the time this authorisation becomes effective of EUR 104,689,400.00 or - if this amount is lower - of the share capital existing at the time the authorisation is exercised.

34. In addition and by resolution of the general meeting on 14 February 2017, the Management Board is authorised to acquire OSRAM shares within the scope of the abovementioned authorisation also by using certain equity derivatives (put options, call options and forward purchases as well as combinations of these derivatives), with the approval of the Supervisory Board. All share acquisitions using such equity derivatives are limited to a maximum of 5 % of the share capital in existence at the time of the resolution by the General Meeting or - if this amount is lower - at the time the authorisation is exercised. The term of an equity derivative may not exceed 18 months in each case and must be selected so that the acquisition of the OSRAM shares by exercising the equity derivative does not take place after 13 February 2022.

35. By resolution of the general shareholders' meeting on 14 February 2017, the Management Board is authorised to purchase own shares within the scope of the described authorisations using certain equity derivatives, given the approval of the Supervisory Board.

36. At the end of the valuation work, OSRAM owns 2,664,388 own shares.

37. OSRAM shares are currently traded on the Frankfurt and the Munich Stock Exchange in the regulated market under the International Securities Identification Number ("ISIN") DE000LED4000 and under the German Securities Identification Number ("WKN") LED400 in the electronic trading system Xetra of the Frankfurt Stock Exchange, among others. In addition, OSRAM shares are included

in the outside markets of the stock exchanges in Berlin, Duesseldorf, Hannover, Hamburg, Stuttgart und Vienna, and are also traded via Tradegate Exchange.

38. Luz (C-BC) BidCo GmbH, a holding company of funds advised by or affiliated with Bain Capital Private Equity and The Carlyle Group, submitted a public takeover bid on 4 July 2019 to all shareholders of OSRAM, published on July 22, 2019. Opal Bidco GmbH, a 100% subsidiary of ams AG, submitted a competing public takeover bid to the shareholders of OSRAM on September 3rd, 2019 ("Opal offer"). The Opal offer was made to all OSRAM shareholders and related to the acquisition of all no-par value registered shares held by them with a proportionate arithmetical amount of the share capital of EUR 1.00 against a cash payment of EUR 38.50 per share. The offer was conditional to a minimum acceptance threshold of 71% of the shareholders (not including own shares held by OSRAM), other standard market conditions and an acceptance period until 1 October 2019. The original offer was amended on 16 September 2019 by adjusting the minimum acceptance threshold to 62.5%. Since ams AG had concluded an agreement on 27 September 2019 regarding the acquisition of 100 OSRAM shares at a purchase price of EUR 41.00 per share outside the tender offer, the offer consideration of the tender offer increased from EUR 38.50 to EUR 41.00 per OSRAM share in accordance with § 31 (4) WpÜG. The Opal offer was accepted for a total of 29,153,101 OSRAM shares, representing about 30.10% of the outstanding OSRAM shares. Considering the OSRAM shares which the ams AG had acquired in parallel with the Opal offer, the number of OSRAM shares to be considered for the minimum acceptance threshold was 48,513,030 OSRAM shares, corresponding to approx. 51.58% of the outstanding OSRAM shares. On 4 October 2019, ams AG therefore announced that the minimum acceptance threshold of 62.5% of the tender offer of Opal Bidco to the shareholders of OSRAM had not been reached. In the same manner, the public takeover bid by Luz (C-BC) BidCo GmbH was not successful because the minimum acceptance threshold set in that bid was not reached.

39. ams Offer, a 100% subsidiary of ams AG, announced on 7 November 2019 a further takeover offer addressed to all shareholder of OSRAM. The offer period for this takeover offer ended on 5 December 2019. The offer price was EUR 41.00 per share with a minimum acceptance level of 55%. The total number of OSRAM-shares to be taken into account for this minimum acceptance level at the end of the acceptance period on 5 December 2019, amounted to 55,746,752 OSRAM shares, corresponding to a shareholding of approx. 59.27%. Consequently, this offer was successful and has been executed on July 9, 2020.

40. The shareholder structure of OSRAM as at 21 September 2020 is shown below:

Shareholder structure

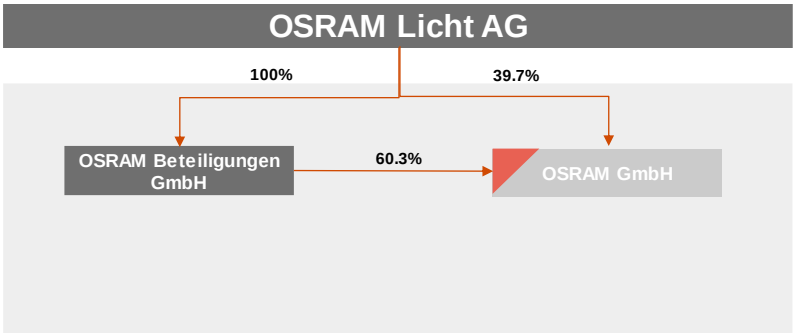
Shareholder	Number of shares	Shares in %
ams Offer*	66,605,912	68.77%
Bank of America Corporation	4,735,871	4.89%
Barclays plc	4,639,023	4.79%
BlackRock Inc.	3,844,869	3.97%
Citigroup Inc.	3,777,075	3.90%
Credit Suisse Group AG	3,593,064	3.71%
DNCA Finance	2,953,866	3.05%
Own shares held by OSRAM	2,664,388	2.75%
Free float	4,034,007	4.17%

* excluding the 2,664,388 shares held by OSRAM, the total amount of shares held by the ams Offer corresponds to 70.72%.

2. Corporate structure

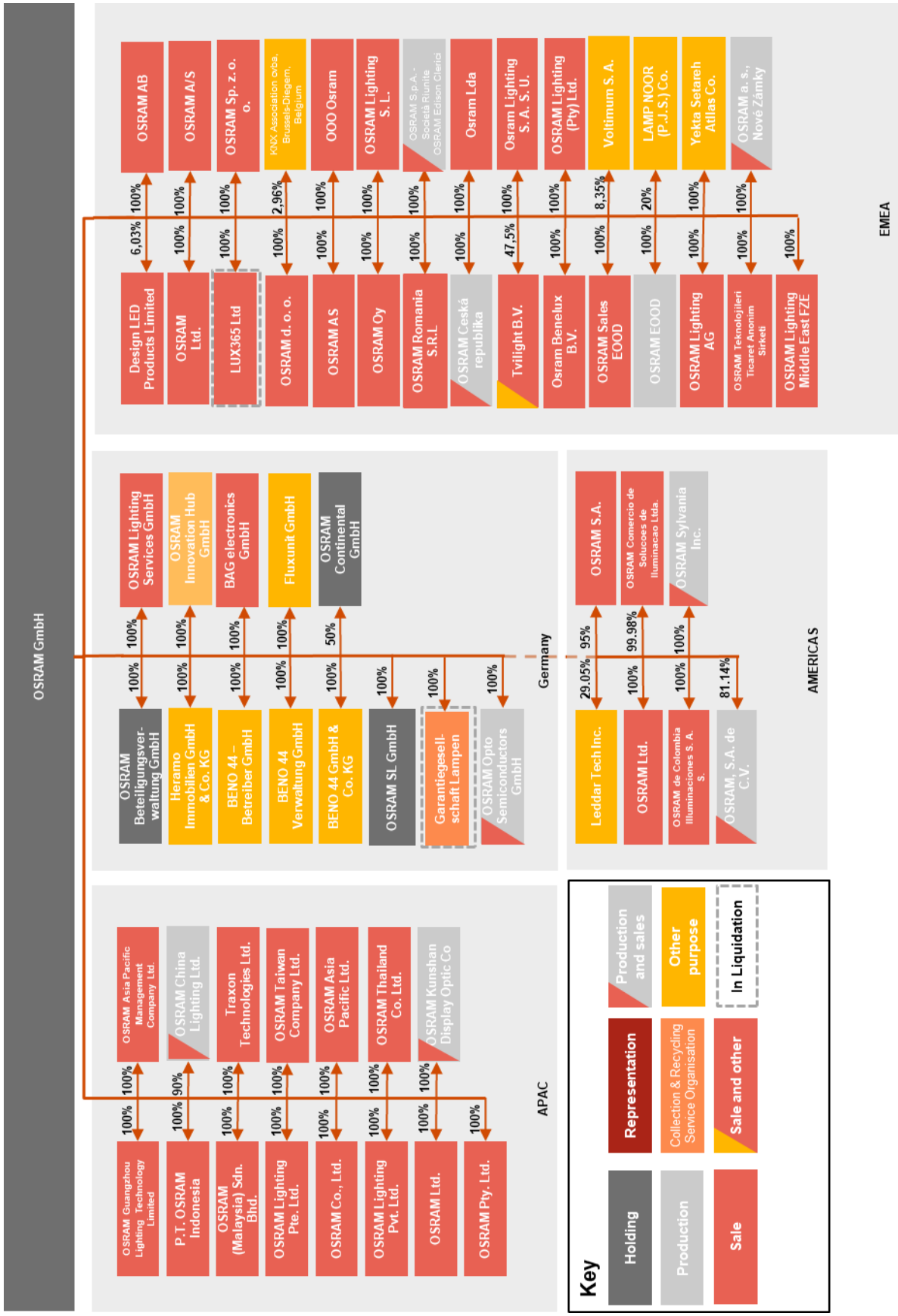
41. The consolidated financial statements include OSRAM and its direct and indirect subsidiaries over which it exercises a controlling influence.

42. OSRAM itself holds direct interests in two companies:



Source: OSRAM, PwC-illustration.

All other companies are directly or indirectly held by OSRAM GmbH, Munich ("OSRAM GmbH"). The following illustration shows OSRAM GmbH's individual shareholdings and their function within the Group:



Source: OSRAM, PwC illustration, as of 31 August 2020.

43. The disposal of the lighting business in Europe as of 1 October 2019 was a major corporate transaction that changed the structure of the OSRAM Group. The Business Unit Lighting Solutions, which was part of the business unit Lighting Solutions & Systems ("LSS") in the past, was thus almost completely dissolved. This mainly relates to the Siteco Beleuchtungstechnik GmbH, Traunreut ("Siteco"). The assets and liabilities of LSS and of Siteco and the rest of the European lighting business were henceforth reported in the consolidated balance sheet as "assets held for sale" and "liabilities associated with assets held for sale" in accordance with IFRS 5 and classified as "discontinued operations" in the consolidated income statement and in the consolidated cash flow statement in accordance with IFRS 5, as described in the annual report.

3. Tax situation

44. With regard to the German Group companies, there are two tax groups within the OSRAM Group with OSRAM and OSRAM GmbH as tax group parents, which are to be merged with retroactive effect as of 1 October 2019. Furthermore, it is intended that other German Group companies (Fluxunit GmbH, Munich ("Fluxunit"), Osram Beteiligungsverwaltungs GmbH, Grünwald, und BAG electronics GmbH, Arnsberg), which are not yet part of the tax group, will be included in the tax group as at 1 October 2020. Due to missing prerequisites, only the German subsidiaries Beno 44 Betreiber GmbH, Beno 44 Verwaltung GmbH and Beno 44 GmbH & Co. KG, all Grünwald, will not be part of the German tax group. Other Group taxation regimes comparable with tax groups exist in Italy and the USA.

45. The past fiscal years up to and including 2015 have been covered by tax audits. The tax audit for the fiscal years 2016 to 2018 has not yet been completed. Findings of about EUR 10 million additional tax payments (plus interest) have been identified until today. The findings relate almost exclusively to temporary matters. Further findings resulting in a similar amount are expected in the course of the further progress of the tax audit.

46. As of 30 September 2019, OSRAM showed corporate income tax and trade tax loss carryforwards of about EUR 167 million and EUR 174 million in Germany, about EUR 108 million each at the level of OSRAM Continental GmbH, Munich ("OSRAM Continental") as well as about EUR 21 million and EUR 13 million at the level of OSRAM GmbH. In Hong Kong, tax loss carryforwards of approx. EUR 63 million respectively EUR 47 million have been identified at the level of OSRAM Asia Pacific Ltd., Hongkong and Traxon Tech Ltd., Hongkong as of 30 September 2019. In the USA, tax loss carryforwards of about EUR 43 million have been calculated at the level of Digital Lumens Inc., Wilmington as of 30 September 2019

47. Tax loss carryforwards also exist to a lesser extent at other Group companies in Argentina, Brazil, Bulgaria, China, Germany, France, Italy, Iran, Canada, the Philippines and the USA.

48. In order to prevent a forfeiture of the tax loss carryforwards of the German Group companies due to the transfer of the majority of voting rights to the ams Offer GmbH OSRAM has taken appropriate fiscal measures before the transfer of the voting rights to ensure the continued existence of respective tax advantages (except for tax loss carry forwards existing before the prior formation of fiscal-unity schemes).

49. There were no interest carryforwards according to § 4h German income tax act ("EStG") in conjunction with § 8a German corporate tax act ("KStG") or comparable circumstances in jurisdictions outside Germany as of 30 September 2019. In connection with investment incentive programs, the Malaysian Group companies enjoy tax benefits in the form of temporary tax exemptions and tax credits depending on the volume of the funded investments made.

50. With regard to the consideration of tax loss carryforwards and tax advantages in the valuation, please refer to the explanations on the valuation procedure in section D.I.1.

51. As of 30 September 2019, there was a distributable profit in accordance with § 27 (1) sentence 5 KStG to such an extent, that tax-free distributions from the tax contribution account (repayment of contributions) cannot be made and are not foreseeable.

II. Economic fundamentals

1. Business operations

52. OSRAM Group develops, produces and sells products in the fields of lighting, sensor technology, visualisation and treatment with light. The products are predominantly semiconductor-based and are used in particular in the competence fields of mobility, safety, networking and health plus well-being. The company itself says that they are undergoing a transformation from a lighting manufacturer to a high-tech photonics company. Since financial year 2018, OSRAM Group's business has been divided into the three business units OS, AM and DI.

53. A large part of Group revenues is generated in the automotive, general lighting and mobile devices markets. OSRAM sells its products in over 120 countries worldwide and has 26 production sites. The reporting is also divided into the regions EMEA (Europe, Russia, Middle East and Africa), APAC (Asia, Australia and the Pacific region) and Americas (USA, Canada, Mexico and South America). Within the regions EMEA, APAC and Americas, Germany, China and the USA represent the countries with the largest regional share of revenues.

54. The product portfolio of the **BU OS** contains a wide selection of light-emitting diodes (LEDs) in the visible and infrared area with the power classes low power, mod power, high power and ultra-high power for general lighting, automotive, consumer and industrial applications as well as laser and optical sensors. The most important markets for these products include the automotive industry,

mobile devices, wearables, general lighting, plant lighting and industrial lighting. Wearables are products such as smart watches or fitness trackers. As of 30 September 2019, about 11,400 people were employed at the division of the business unit OS

55. The **BU AM** develops, produces and sells lamps, light modules and sensor technology in the original equipment manufacturers business to vehicle manufacturers and their suppliers as well as in the spare parts business ("aftermarket"). The product portfolio includes both traditional lighting technologies and LED-based solutions. As of today, the BU AM also includes the fully consolidated subsidiary OSRAM Continental, which focuses on digitisation in the automotive sector. OSRAM Continental operates the business of LED and laser technology based automotive systems or modules for original equipment manufacturers and develops, for example, customer-specific system solutions combining new lighting and electronic technologies. This joint venture is planned to be terminated by end of financial year 2021. Both joint venture partners shall get back the contributed assets, projects and related employees.

56. Until end of financial year 2018, the BU AM together with other business units of the special lighting business formed the former BU Specialty Lighting. Following the organisational change implemented at the beginning of financial year 2019, the special lighting business is now part of the segment DI. The BU AM employed about 5,500 employees as at 30 September 2019.

57. The **BU DI** was reorganised at the beginning of financial year 2019. DI bundles OSRAM's business activities that could benefit most from the ongoing digitisation, as briefly described below:

    - The business of the former Digital Systems business unit with traditional electronic ballasts and LED drivers, LED modules, light engines and lighting management systems including sensor- and software-based value-added services, which are used, for example, for interior localisation. Light engines refer to the combination of an LED module and the associated electronic control unit.

    - The special lighting division of the former Specialty Lighting business unit offers special lamps and lighting systems for the entertainment sector, such as stage, cinema and studio lighting, but also for smart LED-based plant growth systems, also known as "smart farming", and also for medical and industrial applications such as high-intensity UV lamps and textile lighting.

    - The business of the former Lighting Solutions business unit will remain with OSRAM. It offers complete lighting solutions for networked, intelligent interior and exterior lighting (Traxon), focusing on solutions for architectural lighting and professional interior lighting.

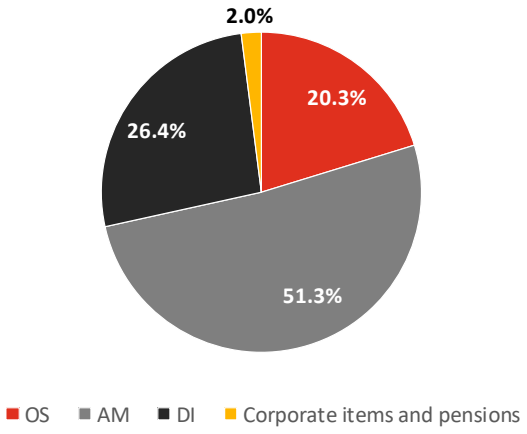
    The BU DI employed around 4,475 employees as of 30 September 2019.

58. Organizationally, in addition to the three business units, the much smaller Fluxunit business unit is operated at Group level, which executes venture capital investments. Fluxunit makes specific investments in start-ups with innovative business models and technologies that are a useful addition to the future business activities of the OSRAM Group in the long term. In fiscal year 2019, the portfolio of the venture capital unit consisted of eight companies and two venture capital funds. One of the most recent additions to the portfolio is the start-up Recogni, Inc. of Cupertino/USA ("Recogni"), which is active in the field of artificial intelligence systems for autonomous driving. An investment in 29.05% of the share of Leddar Tech Inc., Quebec/Canada („Leddar Tech“) is not held by Fluxunit.

59. OSRAM Group's external revenues in financial year 2019, both by business unit and by region, are presented below. Accordingly, OSRAM Group generated about 51.3% (2018: 50.7%) of its revenues in the segment AM, 26.4% (2018: 24.1%) in the segment DI, 20.3% (2018: 22.7%) in the segment OS and 2.0% (2018: 2.5%) through “Corporate items and pensions”, which covers certain business activities that are not directly attributable to the business units.

60. In absolute terms, the external revenues of EUR 3,464 million (2018: EUR 3,789 million) are correspondingly divided between the business unit AM with EUR 1,776 million (2018: EUR 1,920 million), the DI segment with EUR 916 million (2018: EUR 914 million), the BU OS with EUR 701 million (2018: EUR 861 million) as well as the “reconciliation consolidated financial statements“ with EUR 70 million (2018: EUR 93 million). The BU OS, however, generated additional EUR 752 million (2018: EUR 864 million) of internal revenues in financial year 2019, which are for the most part included in the external revenues of the BU AM. Other business units did not generate any further internal revenues worth mentioning.

External revenues of OSRAM Group by business units
Financial year 2019

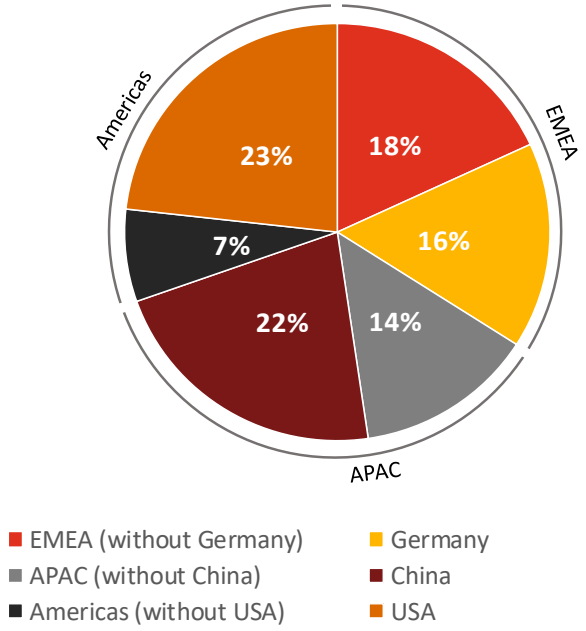


Source: OSRAM annual report 2019, PwC-illustration.

61. Broken down by regions, about 34% of OSRAM Group's revenues in financial year 2019 were generated in EMEA (2018: 34%), 36% (2018: 39%) in APAC and 30% (2018: 28%) in the Americas

region. The countries with the highest share of total revenues are the People's Republic of China with 22% (2018: 25%), the USA with 23% (2018: 23%) and Germany with 16% (2018: 18%). Thus, in absolute terms, EUR 1,180 million (2018: EUR 1,284 million) were generated in EMEA, of which EUR 553 million (2018: EUR 692 million) were generated in Germany, EUR 1,232 million in APAC (2018: EUR 1,462 million), of which EUR 760 million (2018: EUR 953 million) were generated in China and EUR 1,053 million (2018: EUR 1,044 million) in the Americas region, of which EUR 805 million (2018: EUR 871 million) were generated in the USA.

Revenues of OSRAM Group by region in financial year 2019
Financial year 2019



Source: OSRAM annual report 2019, PwC-illustration.

62. In the following, the sales of the OSRAM Group are described according to the main market segments, i.e. those that are relevant for sales. In 2019, around 55% of sales were generated in Automotive Lighting, 20% in General Lighting, 5% in Horticulture, in Mobile & Electronics and in Entertainment respectively. The remaining 10% were generated in other market segments.

2. Market and competitive environment

a) Preliminary remarks and economic indicators

63. The operating business of OSRAM Group is impacted especially by the overall economic situation, the trend of the sales markets and the competitive environment. The following analysis first presents

the general economic indicators of OSRAM Group's main geographical sales markets which is followed by a detailed analysis of the main market segments based on the organisational structure with regard to the business units.

64. In the following, the expected macroeconomic trends of OSRAM Group's key regional sales markets is presented applying appropriate economic indicators. Due to the high importance of the automotive industry for OSRAM Group as a major sales market and the dependence of the automotive industry on overall economic development, changes in real gross domestic product ("GDP") and inflation rates in the sales regions are important economic indicators for the future development of OSRAM Group's operating business. The following section therefore first presents the projected change of GDP (real) between 2019 and 2024. All forecasts reflect effects from the Covid-19 pandemic for the years 2020 and 2021. The forecast data of the European Central Bank ("ECB") include the year 2022 in addition. The forecasts of IHS Markit cover furthermore the years 2022 to 2024 and were published in September 2020 and reflect medium to long-term effects of the pandemic on economic growth. It should be noted that the real GDP growth figures presented below refer to the calendar year, whereas the fiscal year of OSRAM Group starts and ends on September 30 of each year, resulting in a time lag of one quarter.

Real gross domestic product
Change in % to previous year

		Forecast period				
	2019	2020	2021	2022	2023	2024
Germany						
IHS Markit	0.6%	-6.0%	3.9%	3.6%	2.0%	1.4%
ECB, Macroeconomic Projections	0.6%	-7.1%	3.2%	3.8%	n.a.	n.a.
IMF, World Economic Outlook	0.6%	-7.8%	5.4%	n.a.	n.a.	n.a.
OECD, Economic Outlook	0.6%	-6.6%	5.8%	n.a.	n.a.	n.a.
Expert Council	0.6%	-6.9%	4.9%	n.a.	n.a.	n.a.
Kiel Institute for the World Economy	0.6%	-7.2%	6.3%	n.a.	n.a.	n.a.
Average	**0.6%**	**-6.9%**	**4.9%**	**3.7%**	**2.0%**	**1.4%**
Euro area						
IHS Markit	1.3%	-8.7%	4.3%	3.4%	2.1%	1.6%
ECB, Macroeconomic Projections	1.2%	-8.7%	5.2%	3.3%	n.a.	n.a.
IMF, World Economic Outlook	1.3%	-10.2%	6.0%	n.a.	n.a.	n.a.
Worldbank, Global Economic Prospects	1.2%	-9.1%	4.5%	n.a.	n.a.	n.a.
OECD, Economic Outlook	1.3%	-9.1%	6.5%	n.a.	n.a.	n.a.
Expert Council	1.3%	-8.5%	6.2%	n.a.	n.a.	n.a.
Kiel Institute for the World Economy	1.3%	-8.6%	6.9%	n.a.	n.a.	n.a.
Average	**1.3%**	**-9.0%**	**5.7%**	**3.4%**	**2.1%**	**1.6%**

Source as mentioned; PwC analysis.

Real gross domestic product
Change in % to previous year

		Forecast period				
	2019	2020	2021	2022	2023	2024
USA						
IHS Markit	2.2%	-4.8%	3.1%	4.1%	3.3%	2.5%
IMF, World Economic Outlook	2.3%	-8.0%	4.5%	n.a.	n.a.	n.a.
Worldbank, Global Economic Prospects	2.3%	-6.1%	4.0%	n.a.	n.a.	n.a.
OECD, Economic Outlook	2.3%	-7.3%	4.1%	n.a.	n.a.	n.a.
Expert Council	2.3%	-6.1%	4.7%	n.a.	n.a.	n.a.
Kiel Institute for the World Economy	2.3%	-5.8%	4.2%	n.a.	n.a.	n.a.
Average	**2.3%**	**-6.4%**	**4.1%**	**4.1%**	**3.3%**	**2.5%**
China						
IHS Markit	6.1%	1.5%	7.1%	5.8%	5.6%	5.4%
IMF, World Economic Outlook	6.1%	1.0%	8.2%	n.a.	n.a.	n.a.
Worldbank, Global Economic Prospects	6.1%	1.0%	6.9%	n.a.	n.a.	n.a.
OECD, Economic Outlook	6.1%	-2.6%	6.8%	n.a.	n.a.	n.a.
Expert Council	6.1%	0.3%	8.8%	n.a.	n.a.	n.a.
Kiel Institute for the World Economy	6.1%	0.3%	9.0%	n.a.	n.a.	n.a.
Average	**6.1%**	**0.2%**	**7.8%**	**5.8%**	**5.6%**	**5.4%**
World						
IHS Markit	2.6%	-5.1%	4.2%	4.0%	3.4%	3.1%
ECB, Macroeconomic Projections	3.0%	-4.0%	6.0%	3.9%	n.a.	n.a.
IMF, World Economic Outlook	2.9%	-4.9%	5.4%	n.a.	n.a.	n.a.
Worldbank, Global Economic Prospects	2.4%	-5.2%	4.2%	n.a.	n.a.	n.a.
OECD, Economic Outlook	2.7%	-6.0%	5.2%	n.a.	n.a.	n.a.
Average	**2.7%**	**-5.0%**	**5.0%**	**3.9%**	**3.4%**	**3.1%**

Source as mentioned; PwC analysis.

65. Real economic growth in **Germany** is expected to decline by an average of 6.9% in 2020. This decline is due to the economic impact of the global pandemic caused by the Covid-19 virus. However, a significant recovery in economic activity is forecasted already for 2021, resulting in an expected average real economic growth of 4.9% for the year. A second wave of infection in the context of the Covid-19 pandemic is not expected in the forecast period. Currently it is still difficult to forecast the economic impact of company insolvencies as a result of the Covid-19 pandemic. The expected decline in growth for the years 2022 to 2024 is moderate and amounts to 3.7% (2022), 2.0% (2023) and 1.4% (2024).

66. In the **euro area**, the effects of the global slowdown in trade and industrial production are becoming even more apparent. Both a sharp drop in exports and to the European domestic market, as well as the consistent lockdown policy of most European governments are reflected in the overall economic result. Most of the stimulating effects of the expansive fiscal policy of many member states of the European Union as well as the effects of the expansive monetary policy of the European Central Bank are expected to unfold their effects with a time lag. On average, the economic research institutes forecast a decline in real economic output of 9.0% in 2020. The following year, economic output is expected to increase by an average of 5.7%. In the years thereafter, annual growth rates are expected to decline to 3.4% (2022), 2.1% (2023) and 1.6% (2024).

67. For the **USA**, an average decline in real GDP of 6.4% is expected for 2020 and a subsequent increase of 4.1% for 2021. Afterwards, declining growth rates of 4.1% (2022), 3.3% (2023) and 2.5% (2024) are expected. The medium-term trend in trade relations with China and the continuing tendency towards national isolation represent a remaining risk factor.

68. For **China** an average growth rate of real GDP of 0.2% is expected for 2020. Only the OECD forecast is significantly lower at -2.6%. Regarding medium-term economic growth, after a recovery effect of 7.8% in 2021, growth rates are expected to range between 5.4% and 5.8%. As such growth rates are expected to range below growth rates observed in the past for China's GDP.

69. For the **global economy**, real GDP is expected to decline by an average of 5.0% until 2020. Prior to the Covid-19 pandemic, there were signs of a recovery in the manufacturing sector and in world trade, as well as a positive progress in the trade dispute between the USA and China, which had an overall positive effect on global economic growth. However, these positive signs were compensated by the Covid-19 pandemic and the associated global lockdown measures. Estimates of the impact of the Covid-19 pandemic on the global economy's GDP development range between -4.0% and -6.0% for 2020 and between 4.2% and 6.0% for the recovery of real GDP in 2021.

70. In addition to the change of real GDP, the expected **inflation rates** are another macroeconomic indicator for the economic development of the regional markets relevant for OSRAM Group.

71. The projected inflation rates in the period of 2019 to 2024 is shown in the following table according to IHS Markit. The IHS Markit forecasts were published in September 2020 and reflect possible medium to long-term effects of the pandemic on inflation rates. Like the GDP figures, the inflation rates shown below also refer to the calendar year, whereas the fiscal year of the OSRAM Group starts and ends on September 30 of each year. This results in a time lag of one quarter.

Inflation

Change in consumer price index in % to previous year

		Forecast period				
	2019	2020	2021	2022	2023	2024
Germany	1.4%	0.6%	1.6%	1.8%	1.7%	1.9%
Euro zone	1.2%	0.5%	1.1%	1.3%	1.4%	1.7%
USA	1.8%	1.0%	2.3%	1.9%	1.6%	1.8%
China	2.9%	3.0%	1.6%	2.3%	2.5%	2.5%
World	**2.6%**	**2.2%**	**2.4%**	**2.4%**	**2.4%**	**2.5%**

Source: IHS Markit

72. Overall, inflation is expected to decline in 2020, mainly due to lower aggregate demand and the significant decline in energy prices. These effects outweigh the food price increases already observed as of today.

73. The inflation rate for the entire **euro area** is about 1.2% in 2019. According to the forecast by IHS Markit, the expected sharp decline to 0.5% in 2020 is only temporary. According to expectations, the inflation rate should be slightly below the European Central Bank's inflation target of 2% in the forecast period until 2024.The projected inflation trend in **Germany** is slightly higher than in the euro zone.

74. For the **USA**, a temporary decline in the inflation rate from 1.8% in 2019 to 1.0% in 2020 is expected. However, in the medium term the inflation rate is expected to settle at about 1,9% from 2022 onwards. In **China**, the inflation rate is expected to rise slightly to 3.0% in 2020. In the following year, 2021, the inflation rate is expected to be 1.6%. Starting in 2023, inflation rates of around 2.5% are forecasted. **Worldwide**, the inflation rate in 2024 is expected to reach a similar level as in 2019.

b) Market segments

75. In addition to general economic circumstances, the prospects of the business units of OSRAM Group rely on the specific economic expectations for the relevant market segments. The specific market segment expectations with regard to growth and risks based on market studies are described below, although any impact of the Covid-19 pandemic is not reflected yet in most of the market studies. The forecasts presented below refer to the calendar year and are therefore differing by one quarter compared to the financial year of the OSRAM Group.

(1) Business Unit "Opto Semiconductors"

76. Optoelectronic components are components that act as an interface between electrical and optical components and in the broadest sense include all products that enable the conversion of electronically generated data and energy into light emission and vice versa. The products can be divided into the following categories: "LEDs with frequencies in the visible range", "Optocouplers", "Infrared components", "Optical switches" and "LED displays":

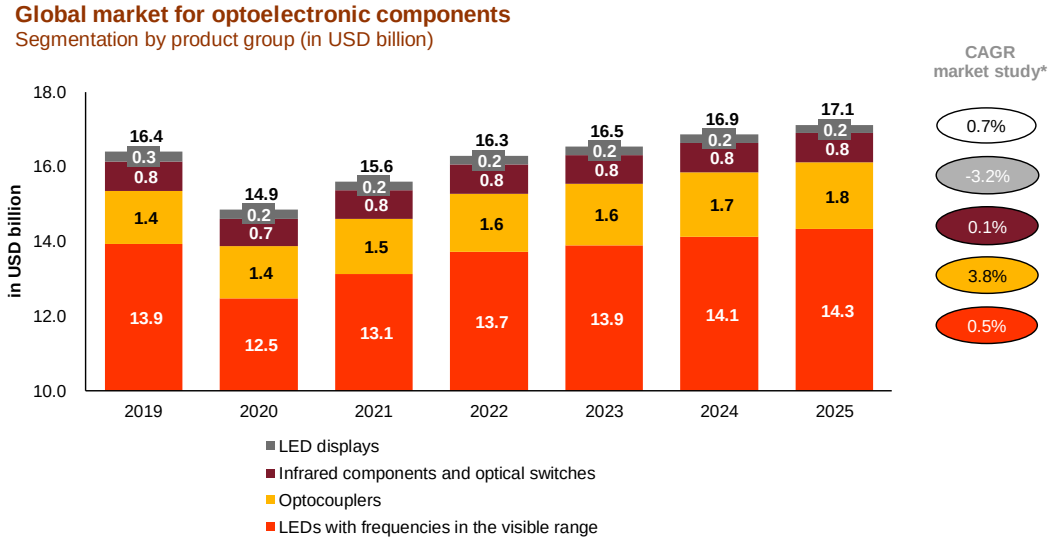
- **LEDs with frequencies in the visible range** are semiconductor components that emit visible light when electric power flows in the direction of transmission. They represent by far the largest product group within optoelectronic components in terms of estimated sales volume and contain classic LED lighting products for residential, commercial, outdoor and industrial applications as well as LED backlighting for televisions and monitors, LED lighting systems for cars, traffic guidance systems and illuminated advertising applications.

- **Optocouplers** are used for the transmission of a signal between two separate electric circuits and are used in industry, medical technology, automotive and consumer electronics.

- **Infrared components** and **optical switches** are used for 3D recognition, motion and distance detection, video surveillance and remote control.

- **LED displays** can be found predominantly in inexpensive consumer products and have largely been replaced by LCD displays in the high-end sector.

77. The following figure shows the estimated market for optoelectronic components of the information service provider Omdia as of June 2020. Covid-19 effects are reflected in the study.



*The CAGR was calculated based on the indicated forecast period.
Source: Omdia, Optoelectronic Components - Annual Report June 2020, illustration by PwC.

78. The forecast market volume in 2020 amounts to USD 14.9 billion, which is a decline of 9.2% compared to the previous year. A strong recovery is expected in 2021 with a growth rate of about 4.7%. Due to the forecast adjustment, the expected average annual growth rate for the years 2019 to 2025 is approx. 0.7%, which is mainly due to the expected growth of LEDs with frequencies in the visible range as the largest product group. A differentiated picture emerges considering the individual product groups. The annual market growth for optocouplers is estimated at 3.8% p.a. (2019 – 2025), while the forecast market growth for the product groups "infrared components and optical switches" and "LED displays" is below the average of 0.7% showing growth rate of 0.1% p.a. and -3.2% p.a., respectively. It should be noted that the global market for optoelectronic components is extensive and that the market served by OSRAM is only one part of it.

79. The operating business of the "Opto Semiconductors" business unit within the OSRAM Group is largely dependent on the market segments "Automotive Lighting" and "Consumer Electronics" which are described as follows.

Automotive Lighting

80. The products of the business unit "Opto Semiconductors" are mainly part in the market segment “automotive lighting”. As the products of the business unit “Automotive” are sold exclusively in this

market segment, we refer for a description of the "Automotive Lighting" market segment to the section "Business unit Automotive" (see paragraph 87). It should be noted that within the OS business unit, OSRAM focuses mainly on the sub-markets for LED and laser products in the automotive sector. These sub-markets are growing faster than the market for automotive lighting, given that the sub-market for traditional technologies is declining.

Consumer Electronics

81. The market segment consumer electronics ("Mobile & Electronics") comprises the market for sensors in wearables and smartphones. The sensors are used both in mobile phones and in devices that pick-up signals from the environment and process them into useful information, such as smart watches, fitness bracelets or smart glasses. The increasing popularity and acceptance of "smart" devices, e.g. for health monitoring, supports the strong demand for sensors in wearables. Furthermore, the growing health awareness of the general public is increasing the demand for "smart" devices in the areas of health and sports.

82. The sensor market for smartphones also shows increasing growth potential. By combining augmented reality applications with smartphones, companies can offer potential customers an enhanced marketing, service and product experience.

83. The average expected growth for the consumer electronics market segment is 7.3% p.a. (2019 to 2022), not yet taking into account the economic impact of the Covid-19 pandemic.[1] So far there are no market studies available that estimate market growth for this market segment considering the impact of the Covid-19 pandemic. In order to estimate the possible impact of the pandemic, the growth rates of the market segment in the years 2020 and 2021 were replaced by the average expected worldwide GDP growth of -5.0% in 2020 and 5.0% in 2021 (see paragraph 64). By this approach the impact of the Covid-19 pandemic is roughly reflected in the projection of the market growth of this segment. With these approximations, the average growth rate for the years 2019 to 2022 is reduced by 1.4% p.a. However, it should be noted that the effect at the level of individual market segments cannot be estimated yet. Since the OSRAM Group is active in several market segments, it cannot be ruled out that the effects of the Covid-19 crisis on the individual market segments may partially offset each other.

84. Significant risks in the consumer electronics market segment include the optical changes of smartphones, which are causing the screen to become larger, thus reducing the space where sensors can be attached. As a result, smartphones are increasingly dependent on suitable software, which could slow down the demand for sensors. Since the global sensor market for smartphones consists

[1] Source: Technavio, Global_Sensors_Market_for_Smartphones_2019-2023 (published in June 2019), and Technavio, Global_Wearable_Sensors_Market_2018-2022_Technavio (published in March 2018).

of numerous suppliers, the intensity of competition is very high. Individual suppliers are concentrating on constantly increasing their market share and further strengthen their dominance in the market. Factors such as the brand and reputation of the suppliers are of decisive importance in this context, as customers prefer established brands of large companies to the rather unknown brands of smaller companies. Mergers and acquisitions help suppliers to strengthen their market presence, achieve higher production figures and thus benefit from economies of scale. However, this tendency leads to intense price competition resulting in material price erosion and further intensifies the focus on materialising economies of scale. Individual competitors can escape this price pressure, at least temporarily, through differentiation possibilities or their innovative strength.

85. Similar risks also exist in the market of sensors for wearables as well as specifically in the area of cybersecurity and data protection. If there is a reduction in sales of "smart" devices due to government regulations or greater caution among users, demand for respective sensor technology could also fall.

86. A major competitor in this market segment is ams AG, the main shareholder of OSRAM. ams AG is specialised in the development and manufacturing of sensors. Besides sensors for the industrial, medical and the automotive sector, ams Group offers a wide range of sensors for the consumer sector. For OSRAM the production and sale of sensors in the consumer electronics market segment represents a rather small part of its operational business.

(2) Business Unit “Automotive“

87. Automotive lighting systems are crucial components for the safety, comfort and design of a vehicle. A distinction is made between exterior and interior lighting systems. Exterior lighting systems include headlamps, tail lamps, fog lamps, daytime running lights, stop lamps, indicators and license plate lights. Interior lighting systems include roof consoles, reading lights as well as ambient lighting.

88. The global market trend for automotive lighting systems is closely linked to the dynamics of the automotive industry. Demand for automotive lighting systems is expected to increase over the next few years, largely due to the trends towards low- to zero-emission intelligent mobility. The development of energy-efficient lighting systems plays a decisive role in expanding the battery capacities of electric vehicles. As a result of their low energy consumption, LED lights are being more often installed in cars. Currently, the use of LED lights is rather focussed on the premium and luxury segment, but it is expected that this LED lights will be available in all vehicle segments at affordable prices in the future. Forecasts therefore indicate that the increasing spread of electric vehicles will have a positive effect on the market for automotive lighting systems. The increasing acceptance of driver assistance systems (ADAS) enables rapid development of autonomous vehicle platforms. Both exterior and in-

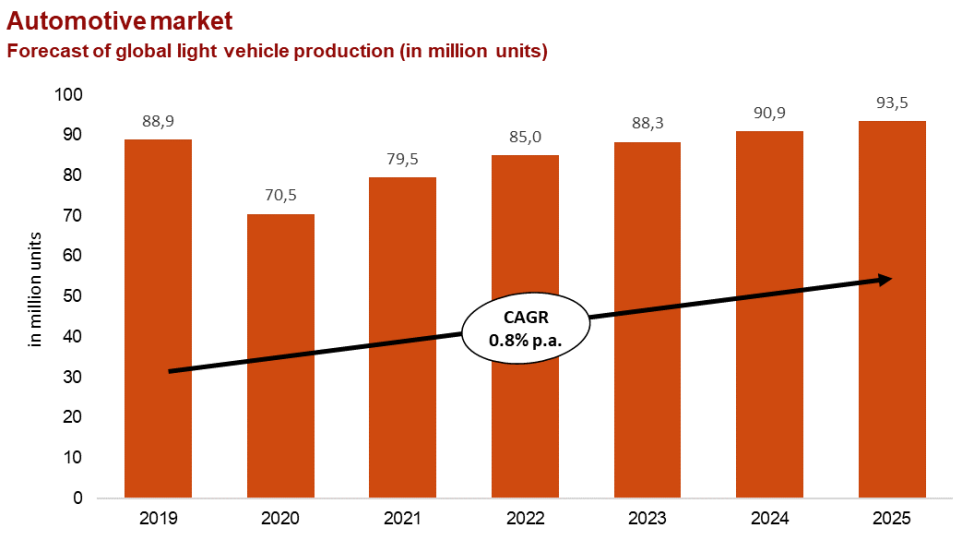
terior lighting systems will benefit from this trend. To meet the high safety requirements of autonomous driving, developers are focusing on intelligent exterior lighting systems based on LED and laser technologies. A higher degree of vehicle automation also results in higher customer demands for visual comfort inside the vehicle, which in turn has a positive effect on sales of ambient lighting systems. Other factors positively influencing the growth of the market for automotive lighting systems are the growing demand for premium vehicles in the APAC region and the increasing pressure from governments and customers to develop better safety systems for vehicles.

89. Major risks for the automotive lighting market include, on the one hand, the potential stagnation of production and sales of new vehicles and the associated decline in demand for lighting systems in vehicles. A further risk is the postponement of the introduction of ADAS systems and the resulting slowdown in the trend of autonomous vehicle platforms. This would have a negative impact on intelligent exterior lighting systems based on LED and laser technologies.

90. Global automobile production is volatile and cyclical. Among other things, it depends on general economic conditions, disposable income, consumer spending and preferences. These conditions can in turn be affected by factors such as fuel costs.

91. Partly driven by the Covid-19 pandemic and the associated negative effects on the automotive industry, market research institutes have significantly adjusted their forecasts for the global light vehicle production.

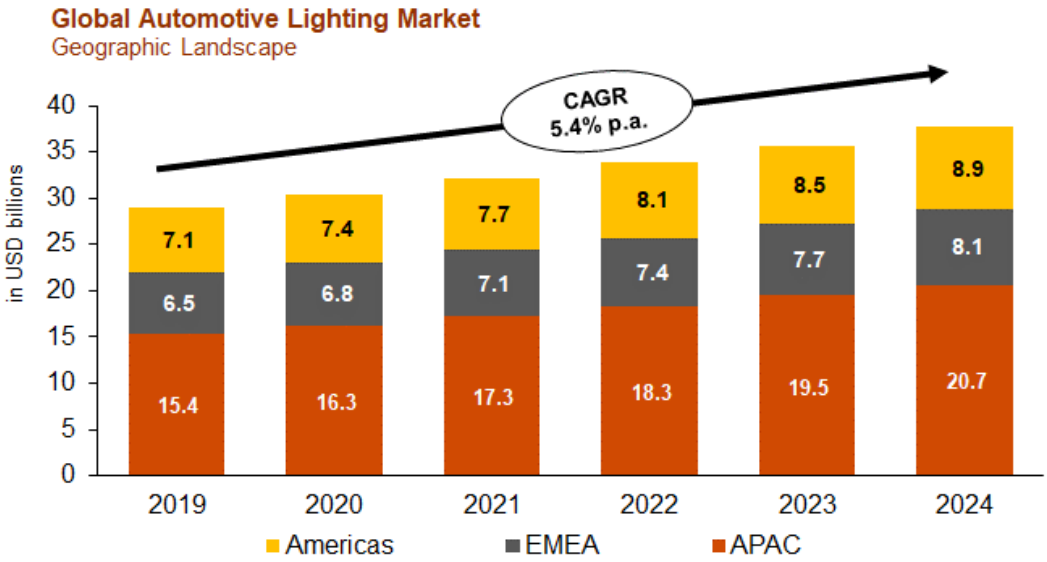
92. The following figure shows the forecasts for the global light vehicle production of the information service provider IHS Markit as of August 2020:



Source: IHS Markit, Light Vehicle Production Forecast, Forecast Release August 2020, illustration by PwC.

93. According to the forecast, production in 2020 will only amount to approx. 70.5 million light vehicles, which corresponds to a drop of about 20.8% compared to the previous year. A strong recovery is expected in 2021, with a growth rate of approx. 12.8%, corresponding to 79.5 million vehicles. As a result, the expected average annual rate only amounts to 0.8% for the years 2019 to 2025. Consequently, the production level of 2019 is projected to almost be reached again only in 2023.

94. The expected future market trend for automotive lighting systems is presented below. As no studies regarding the automotive lighting systems market are yet available that reflect the impact of the Covid-19 pandemic, the following forecasts do not include any impact from the Covid-19 pandemic:



Source: Technavio, Global Automotive Lighting Market 2020-2024 (June 2020).

95. From 2019 to 2024 the worldwide average market growth rate is projected to be 5.4% p.a. The APAC and EMEA regions are expected to grow at an average rate of 6.1% and 4.4% p.a. respectively in the corresponding period. An average growth rate of 4.7% p.a. is expected for the American region.

96. **Asia/Pacific (APAC)**: The main driver for the future market trend for automotive lighting systems is the increasing demand for vehicles driven by population growth and increasing industrialisation. An important growth factor for the automotive industry in the region is the increasing demand in the premium and luxury segment, especially for SUVs. However, the generally positive market outlook in the region is facing increasingly protectionist trade policies and geopolitical tensions. China is by far the leading country in the APAC region, followed by Japan and India.

97. **EMEA**: Europe is regarded as a centre of modern and technologically innovative cars. This means that modern lighting systems are becoming increasingly relevant for the automotive industry. In addition, the European market is positively influenced by strict government regulations on safety and

carbon dioxide emissions. The automotive market in the Middle East is characterised by the increasing promotion of sustainable technologies in the field of electric mobility. High growth rates are forecast for the African automotive market due to rising prosperity and extensive investments in infrastructure and energy. The leading countries in the EMEA region are Germany, Spain, France and Great Britain.

98. **Americas:** With Silicon Valley at the centre of technological innovation in electric mobility and autonomous driving, an "early adopter" mentality has developed among consumers in North America. Forecasts predict that sales of modern lighting technology will gain additional momentum as a result of advances in autonomous driving. Rising sales of electric cars are one of the drivers for LED lighting systems for vehicles. However, developments in Latin America are influenced by the unstable political environment in this region.

99. The global market for automotive lighting systems is diversified and characterised by regional differences in terms of competitive intensity and dynamics. Next to the described drivers, such as increased demand due to autonomous driving, increased considerations of sustainability factors or technology improvements, a general increase of interior or ambient lighting leads to an overall demand-led growth. The APAC region is deemed to be the most competitive region due to the large number of competitors and the resulting pressure on sales prices and market share. In addition to OSRAM Group, the worldwide competitive environment is characterised by globally operating manufacturers such as Koito Manufacturing Co., Ltd., Tokyo/Japan ("Koito Manufacturing"), and HELLA GmbH & Co. KGaA, Lippstadt, Germany ("HELLA"), as well as regional companies.

(3) Business Unit “Digital“

100. In the business unit "Digital" OSRAM Group bundles products and solutions from the field of digital lighting technology. Digital lighting technology enables efficient and intelligent control of lighting in a wide range of applications. These include exterior lighting for buildings, systems for street lighting, smart home applications, lighting for agricultural applications (so-called horticulture) and lighting systems for the entertainment sector.

101. The global focus on energy-efficient technologies to meet climate targets also increases the demand for smart, energy-saving lighting solutions from this business unit. This trend is closely linked to the increasing market penetration of LED lighting, which offers advantages over traditional light sources in terms of power consumption and product durability and is becoming attractive for a growing number of applications due to falling manufacturing costs. Another growth factor for smart lighting technology is global technological progress through the introduction of the Internet of Things ("IoT") and artificial intelligence ("AI") technologies. The integration of IoT and AI technologies instead of conventional infrastructures in the lighting segment promotes investment in digital lighting prod-

ucts. The market also benefits from rising population, especially in the APAC region, and from advanced urbanisation. These trends promote the development of digitally connected and smart cities worldwide. In this context, many countries are already providing subsidies for investments the area of smart lighting technologies.

102. A major risk to the success of digital lighting systems is the high acquisition and installation costs for the necessary infrastructure. In addition, the complex installation can reduce the acceptance of the products. Cost-intensive maintenance services and control software are also required to ensure the smooth operation of the systems. Another obstacle to the market penetration of digital lighting systems is the availability of broadband internet connections in rural areas. In addition to these general cost-related and infrastructural risks for digital lighting systems, there are also market segment-specific risks in the sales market that could have adverse effects on the growth trend.

103. The business unit "Digital" of OSRAM Group is largely affected by the risks and expected growth in the market segments "General Lighting", "Entertainment Lighting" and "Horticulture Lighting".

General Lighting

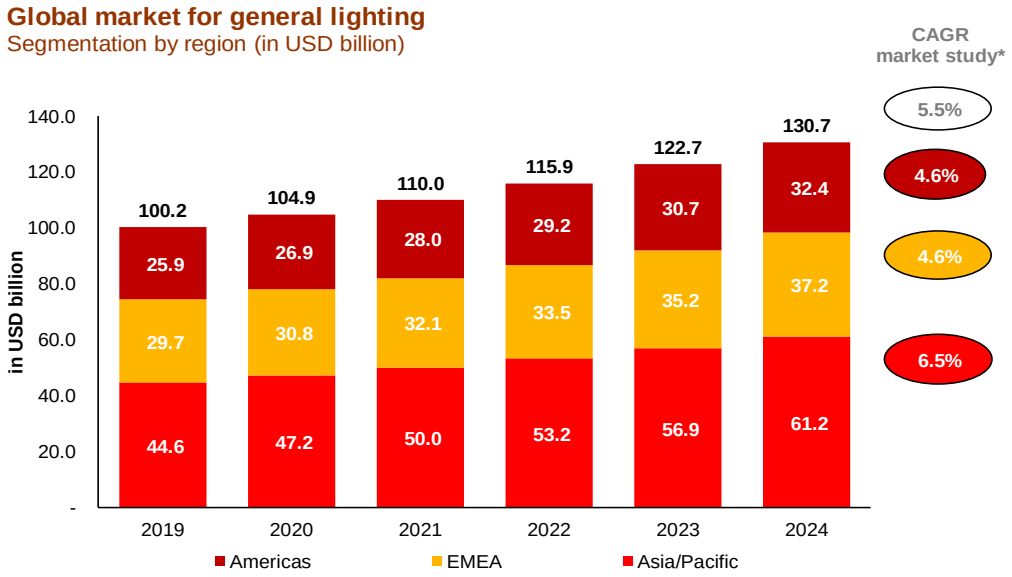
104. The market segment “General Lighting” comprises permanently installed light sources that produce a practical or aesthetic lighting effect. The products can be divided into traditional lighting products such as incandescent bulbs, halogen lamps, energy-saving lamps and fluorescent tubes as well as LED lighting. The areas of application for permanently installed light sources include residential, commercial, outdoor, industrial and other areas such as airport lighting or architecture. Compared to the definition of the overall market for general lighting, OSRAM operates exclusively in the submarket for LED lighting.

105. Rising population figures and the accelerating urbanisation are increasing the demand for residential and commercial buildings and, thus, reinforce the sale of general lighting products. In addition, many infrastructure projects such as the construction of railways, airports and large retail complexes are having a positive impact on the development of this market segment. The increasing prevalence of smart home applications and the rising demand for aesthetic lighting for home decoration, hospitality and office spaces are also having a positive impact on market growth.

106. Within the market, a significant shift from traditional lighting to LED lighting is expected. While the LED share was 60% in 2019, it is estimated to reach about 80% in 2024. Compared to traditional light sources, LED lighting solutions offer many advantages, including low voltage requirements, high reliability, low heat radiation, negligible emission of UV rays and a longer product usability. As the cost of chips and components decreases, manufacturing cost of LEDs will continue to decrease, further reducing the initial cost of LED lamps and lights. The trend towards LED lighting is also reinforced by the global focus on energy-efficient technologies and the related support programs

launched by various countries for the lighting industry in order to reduce energy consumption and thus achieve defined climate targets.

107. The global market trend for the segment "general lighting" is shown below. However, the impact of the Covid-19 pandemic on the market forecasts are not yet reflected in the market studies:



*The CAGR was calculated based on the indicated forecast period.
Source: Technavio, Global General Lighting Market 2020-2024 (February 2020), illustration by PwC.

108. A worldwide average market growth of 5.5% p.a. is projected for the period 2019 to 2024. The APAC and EMEA sales regions are expected to grow at an average annual rate of 6.5% and 4.6% respectively in the corresponding period. For the Americas region, an average growth rate of 4.6% p.a. is expected.

109. **Asia/Pacific (APAC)**: The market for general lighting is expected to grow driven by increased demand for lighting solutions in the residential and commercial sectors. The APAC region shows a positive and dynamic trend for industries such as retail, hospitality and healthcare. Increasing urbanisation and the growth of IT infrastructure are leading to the development of an intelligent infrastructure, which is accelerating the demand for efficient lighting solutions. In addition, various major international events are organised in China and India, which are further increasing the demand for general lighting solutions. Individual countries offer LED lighting manufacturers tax incentives to increase LED production capacity. Furthermore, they occasionally grant subsidies for the installation of energy-efficient lighting products in new buildings. In the APAC region, China and Japan are the leading countries in this market segment.

110. **EMEA**: The European market is characterised by regulatory requirements of the European Union, which set the target of improving the energy efficiency of products and removing inefficient lamps by its Eco-Design Directive of 2009. The popularity of energy-efficient lighting technologies has a

positive impact on the demand for LED lighting in Europe. Demand for lighting solutions in the Middle East is mainly driven by further investment in residential and commercial real estate. Due to the poorly developed infrastructure in Africa, large parts of the population will continue to rely on traditional lighting methods. In the EMEA region, Germany and the UK are the leading countries.

111. **Americas**: The demand in North America for energy-efficient lighting solutions will increase due to the implementation of strict government regulations and standards relating to energy consumption. Further cost reductions and improvements in energy efficiency will continue to drive the introduction of LEDs in the USA. Lower wages and operating costs encourage international companies to locate in South America and thereby positively impact the demand for lighting solutions in offices, production plants and other buildings.

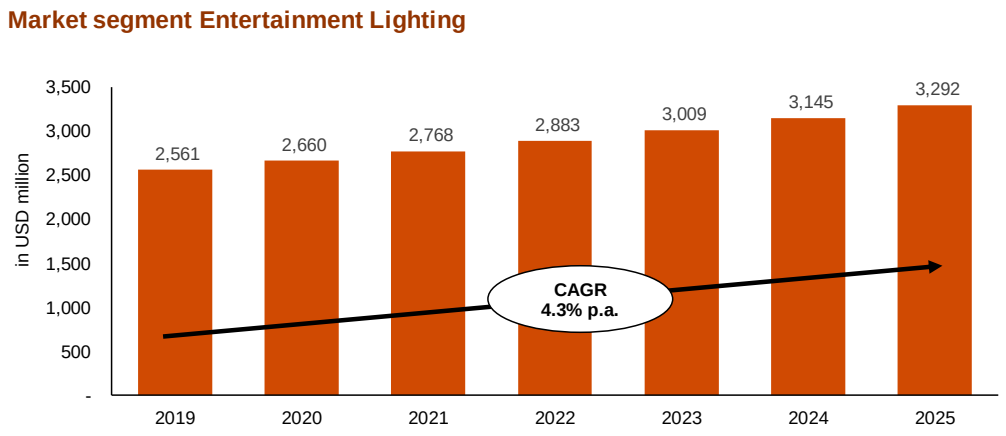
112. The main risks for the sales of LED lighting relate to the higher acquisition costs compared to traditional light bulbs and halogen lamps. Although LED lighting systems have advantages considering the total costs, high initial installation costs can have an adverse effect on sales. In addition, intelligent lighting solutions for smart home applications involves high investments in the required infrastructure for the Internet of Things. Risks also exist in the prohibition of conventional light bulbs imposed by many governments. This not only leads to declining sales of traditional lighting products but may also cause customers to hesitate to switch to LEDs due to the high initial costs, thereby slowing down market growth. In addition, the longer lifecycle of LED products leads to longer intervals until they are replaced, which can have a negative impact on sales in the long-term. Additional risks comprise the trend to protectionist trade policies and the resulting import duties on lighting fixtures, including LED products and components. Furthermore, market development is characterised by cyclical fluctuations in the construction industry. The market for lighting products is fundamentally subject to the significant and cyclical risks of the construction industry as a major buyer of LED products.

113. The market for general lighting solutions is characterised by intense competition from companies that are competing strongly for market share, intensifying the demand for innovations and technological progress. Global players include widely diversified companies from Panasonic Corporation, Osaka/Japan, and Schneider Electric SE, Ile-de-France/France, to specialised suppliers such as OSRAM Group, Acuity Brands, Inc., Atlanta/USA ("Acuity Brands") and Signify N.V., Eindhoven/Netherlands ("Signify").

Entertainment Lighting

114. The entertainment lighting market covers lighting solutions for cinemas, theatres and concert stages. The technology focuses on a synchronised system of several lighting objects in order to realise a dynamically changing stage design.

115. The expected global market trend for entertainment lighting is shown below prior to the consideration of any impacts of the Covid-19 pandemic:



Source: Stage Lighting Market, Arizton February 2020, PwC illustration.

116. Without consideration of the potential impact of the Covid-19 pandemic, the average expected growth for the entertainment lighting market segment is 4.3% p.a. (2019 to 2025).

117. Until today we are not aware about any market studies that factor in the Covid-19 impact on the Entertainment Lighting market segment. According to the management of OSRAM the market for Entertainment Lighting slowed down significantly during the Covid-19 pandemic. Since cinema and theatre performances and concerts have been cancelled or are subject to significant restrictions, spending in corresponding lighting systems have been significantly reduced in 2020. It is currently not foreseeable when the investment volume in lighting systems in the entertainment industry will increase again and whether the previously forecast growth path will be valid for the time after the Covid-19 pandemic.

118. A key growth factor is live music, which is one of the largest sources of revenue in the entertainment industry. In recent years (before the outbreak of the Covid-19 pandemic), concerts became increasingly popular and as a result of this trend the demand for sophisticated solutions for stage lighting and lighting control increased. In addition, the e-sports sector provided an additional growth impulse, which was characterised by rising visitor numbers in so-called e-sports arenas. This supports the increasing demand for sophisticated lighting systems and lighting control systems in the entertainment industry. Before the Covid-19 pandemic it was expected that the number of such events

would continuously increase worldwide. However, due to the current restrictions on major events in the wake of the Covid-19 pandemic, this expectation is associated with considerable risks, as the entertainment market will be significantly negatively affected. Numerous concerts and theatre performances have been cancelled and cinemas are only open - if at all - under strict conditions. For how long these strict regulations will continue is not foreseeable.

119. The following two main risks further limit the growth of this market segment:

- Volatile and rising raw material costs: The most important raw materials required for the production of stage lighting are steel, aluminium, plastic and rubber. Especially for these materials, prices have gradually risen in recent years. Moreover, these materials account for approximately 40% to 60% of total production costs for stage lighting systems. This has a negative effect on the profitability of market participants and increases the risk of market entry for companies, such as those from China, which can produce stage lighting systems at lower prices through lower raw material and personnel costs and are thus able to build up market share.

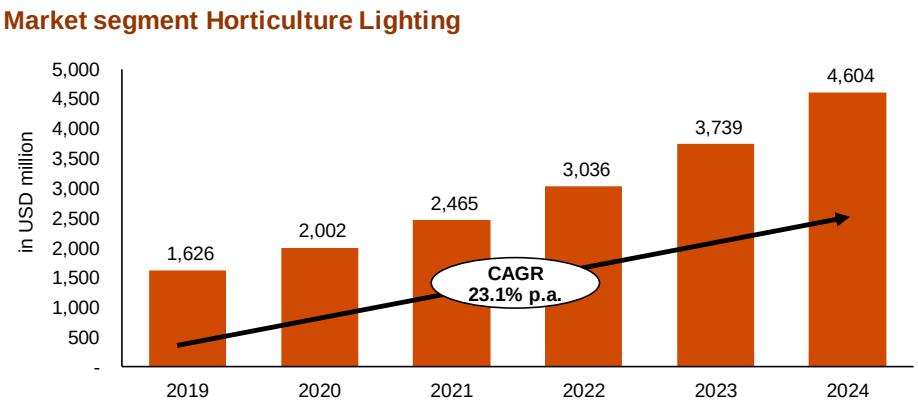
- Competition: The intensity of competition among the market participants is high. This is mainly because of low to moderate switching costs for customers and that the suppliers, especially in the high-end segment, are hardly able to gain market share through product differentiation. The suppliers compete on price, quality, brand and the variety of products offered. Nevertheless, price is increasingly becoming the most important factor in gaining market share.

120. Major competitors in the market segment Entertainment Lighting besides OSRAM are Absen Inc., Orlanda/USA, and Harman International Industries, Incorporated, Stamford/USA (a subsidiary of Samsung Electronics America, Inc., Ridgefield Park/USA).

Horticulture Lighting

121. The products in the market segment horticulture lighting are applied in agriculture, horticulture and cannabis cultivation in greenhouses. The use of LED lamps in agriculture enables farmers to illuminate plants in a precise manner. The precisely fitting lighting supports the control of pests and pathogens and thus leads to a higher crop yield. The increasing use of LED light leads to higher energy efficiency compared to conventional lighting systems.

122. The expected worldwide market development for horticulture lighting is shown below, not considering the potential impact of the Covid-19 pandemic:



Source: Global LED Grow Lights Market, BIS Research, September 2019; PwC illustration.

123. In the horticulture lighting segment, a global average annual market growth rate of 23.1% p.a. was expected between 2019 and 2024 without considering the potential impact of the Covid-19 pandemic.

124. Until today we are not aware about any market studies that factor in the Covid-19 impact on the Horticulture Lighting market segment. Considering the increasing importance of securing the food supply for the growing world population, it can be assumed that the growth path of the market segment Horticulture Lighting will still feasible in the medium to long term

125. The Asia-Pacific sales market shows the highest market growth of 26.6% p.a. (prior to Covid-19 impact). The three largest sales markets in terms of market share are Japan (2019: 26.7%), China (2019: 23.3%) and South Korea (2019: 17.2%). The basis for the high expected growth includes increasing indoor agriculture to secure the global food supply, the rising demand for energy-efficient lighting methods for plant growth and the worldwide increase in meat consumption. One of the reasons for the growing acceptance of indoor agriculture, which is often more efficient, lies in the existing food shortage combined with famine in individual countries throughout Africa and Asia. In addition to food shortages, climate and natural disasters are major reasons for increasing uncertainty about the future global food supply. In addition, the increasing market of the medical cannabis industry represents a growth impulse for the horticulture lighting market segment.

126. The largest regional market in the horticulture lighting market segment is North America with a projected growth rate of 23.0% p.a. from 2019 to 2024. With roughly 75% of the total market in North America, the USA is the largest sales market. This is also due to the legalisation of cannabis in some states of the USA. The second and third largest markets in North America are Canada with about 15% and Mexico with about 10%. The average projected growth in respective countries is

18.4% p.a. (Canada) and 27.7% p.a. (Mexico). The main reason for this is the rising demand for food, which is accompanied by a growing population.

127. The horticulture lighting market segment is characterised by initially high investment costs for the customers. Due to higher prices of LED growth lamps compared to conventional lamps in the garden area, the attractiveness of innovative growth lamps could slow down. The high investment costs are a significant risk factor for the demand in this market segment. However, in the long-term, the level of energy efficiency could more than compensate for the high initial investment costs. Furthermore, the risk of disruptive innovations by start-ups is expected to increase during the forecast period, meaning that existing suppliers could possibly lose market share to new innovative suppliers.

128. Besides OSRAM, main competitors in this market segment are Signify and Everlight Electronics, New Taipei City/Taiwan ("Everlight Electronics"). Competition in this market segment is stiff. It can be observed that companies are gaining market share by pursuing concrete strategies to continuously launch new products on the basis of intensive research and development. Market participants and market leaders also tend to enter into partnerships with other market participants in order to expand their customer base and penetrate new market regions. The target is to maintain the market position and raise barriers to enter the market for other potential suppliers.

c) Summary

129. Due to the extensive product portfolio in the area of lighting and optoelectronics/lighting control systems, the operating business of OSRAM Group is mainly impacted by the trend of the market segments for general lighting, automotive lighting systems, entertainment lighting, horticulture lighting and consumer electronics. The growth forecast for the next few years in these market segments, particularly in the key sales regions of Europe, North America and Asia, reflects – subject to the further trend of the Covid-19 pandemic – the future growth potential of OSRAM Group. In this context, it is highlighted that the market-specific growth expectations described above reflect rough estimates of the impact of the Covid-19 pandemic for some market segments only.

130. The growth path of the broad market for LED lighting is supported by the global focus on energy-efficient technologies and the related subsidy programs for the lighting industry launched by various countries. Political objectives, such as reducing energy consumption and thereby achieving prescribed climate targets, are supported by the implementation of such measures. In addition, LED lighting is increasingly used in indoor agriculture that prevents pest infestation and is therefore used to counteract food shortages and to ensure a better supply of food. Furthermore, digitalisation is a major growth impulse. For example, global technological progress through the introduction of the Internet of Things and AI technologies is a major growth factor for intelligent lighting technology. The integration of IoT and AI technologies instead of conventional infrastructures in the lighting

segment increases the willingness to invest in digital lighting products. As a result, there are extensive areas of application for the products of the OSRAM Group with a variety of growth trends in respective sales markets. This is likely to result in increasing demand for high-quality lighting systems and sensors.

131. Significant risks for the sales of LED lighting solutions result from the acquisition costs, which are still high compared to traditional incandescent and halogen lamps. There are also risks in the prohibition of traditional incandescent lamps imposed by many governments. This leads to declining sales of traditional lighting products. In other jurisdictions this may also cause customers to hesitate to switch to LEDs due to the high acquisition costs. Furthermore, lighting elements for smart lighting applications such as professional lighting management systems are associated with high investments in the infrastructure of the Internet of Things. Another major risk for the automotive lighting market is that potential reliability and safety issues with lighting systems installed in autonomous vehicle platforms could affect consumer acceptance and slow down sales. The significant dependence on the automotive market entails, in addition to the inherent economic risks, the risk that political disputes such as the trade dispute between the U.S. and China and between the U.S. and Europe have negative economic consequences.

132. Besides the cyclical and market-specific risks in the respective market segments, OSRAM Group is exposed to broad economic risks and negative effects of the Covid-19 pandemic. Interruptions in supply chains and a significant drop in demand as occurred in fiscal year 2019/20 due to the Covid-19 pandemic, show that material risks exist that can lead to disruptions in the operating activities of OSRAM Group in the future.

3. Assets, financial position and operating income

133. We performed the analysis of assets, financial position and operating income based on OSRAM Group's audited consolidated financial statements in accordance with IFRS for the financial years 2017 to 2019, which have been certified with an unqualified audit opinion. In addition, we have analysed the period from 1 October 2019 to 30 June 2020 (1st to 3rd quarter 2020) based on unaudited figures.

a) Assets and financial position

134. As of the respective balance sheet date, assets and financial position of OSRAM Group are as follows:

OSRAM Group
Consolidated balance sheet

FY as of 30 September, in EUR millions	FY17 Act	In % BS	FY18 Act	In % BS	FY19 Act	In % BS	Q3 20 Act	*In % BS*
Goodwill	148	*3%*	369	*8%*	186	*4%*	182	*4%*
Other intangible assets	142	*3%*	296	*6%*	273	*6%*	191	*4%*
Property, plant and equipment	1,396	*33%*	1,621	*34%*	1,493	*34%*	1,325	*30%*
Rights of use	n.a.	*n.a.*	n.a.	*n.a.*	n.a.	*n.a.*	199	*5%*
Investments accounted for using the equity method	66	*2%*	66	*1%*	56	*1%*	52	*1%*
Other financial assets	13	*0%*	19	*0%*	25	*1%*	35	*1%*
Deferred tax assets	314	*7%*	309	*7%*	410	*9%*	487	*11%*
Other assets	59	*1%*	65	*1%*	70	*2%*	54	*1%*
Non-current assets	**2,137**	***50%***	**2,746**	***58%***	**2,511**	***58%***	**2,525**	***58%***
Cash and cash equivalents	609	*14%*	333	*7%*	310	*7%*	614	*14%*
Available-for-sale financial assets	2	*0%*	0	*0%*	-	*n.a.*	-	*0%*
Trade receivables	634	*15%*	614	*13%*	558	*13%*	360	*8%*
Other current financial assets	44	*1%*	45	*1%*	29	*1%*	32	*1%*
Contract assets	n.a.	*n.a.*	n.a.	*n.a.*	9	*0%*	9	*0%*
Inventories	662	*16%*	743	*16%*	692	*16%*	735	*17%*
Income tax receivables	35	*1%*	49	*1%*	21	*0%*	19	*0%*
Other current assets	112	*3%*	151	*3%*	113	*3%*	96	*2%*
Assets held for sale	2	*0%*	49	*1%*	93	*2%*	-	*0%*
Current assets	**2,100**	***50%***	**1,984**	***42%***	**1,824**	***42%***	**1,865**	***42%***
Assets	**4,238**	***100%***	**4,730**	***100%***	**4,335**	***100%***	**4,390**	***100%***
Common stock, no-par-value	105	*2%*	105	*2%*	97	*2%*	97	*2%*
Additional paid-in-capital	2,035	*48%*	2,034	*43%*	1,672	*39%*	1,671	*38%*
Retained earnings	699	*16%*	780	*16%*	255	*6%*	150	*3%*
Other components of equity	5	*0%*	3	*0%*	79	*2%*	29	*1%*
Treasury shares, at cost	(392)	*(9%)*	(386)	*(8%)*	(99)	*(2%)*	(94)	*(2%)*
Non-controlling interests	8	*0%*	140	*3%*	79	*2%*	19	*0%*
Equity	**2,460**	***58%***	**2,676**	***57%***	**2,083**	***48%***	**1,872**	***43%***
Long-term debt	184	*4%*	152	*3%*	120	*3%*	254	*6%*
Pension plans and similar commitments	150	*4%*	162	*3%*	167	*4%*	159	*4%*
Deferred tax liabilities	10	*0%*	14	*0%*	17	*0%*	14	*0%*
Provisions	32	*1%*	26	*1%*	33	*1%*	33	*1%*
Other financial liabilities	10	*0%*	24	*1%*	27	*1%*	15	*0%*
Contract liabilities	n.a.	*n.a.*	n.a.	*n.a.*	1	*0%*	1	*0%*
Other liabilities	111	*3%*	121	*3%*	102	*2%*	91	*2%*
Non-current liabilities	**498**	***12%***	**498**	***11%***	**466**	***11%***	**567**	***13%***
Short-term debt and current maturities of long-term debt	16	*0%*	233	*5%*	539	*12%*	903	*21%*
Trade payables	752	*18%*	714	*15%*	548	*13%*	442	*10%*
Other current financial liabilities	29	*1%*	40	*1%*	113	*3%*	86	*2%*
Current contract liabilities	n.a.	*n.a.*	n.a.	*n.a.*	14	*0%*	18	*0%*
Current provisions	75	*2%*	74	*2%*	69	*2%*	52	*1%*
Income tax payables	99	*2%*	110	*2%*	65	*2%*	108	*2%*
Other current liabilities	309	*7%*	373	*8%*	347	*8%*	342	*8%*
Liabilities associated with assets held for sale	0	*0%*	12	*0%*	90	*2%*	n.a.	*n.a.*
Current liabilities	**1,280**	***30%***	**1,555**	***33%***	**1,786**	***41%***	**1,951**	***44%***
Liabilities and equity	**4,238**	***100%***	**4,730**	***100%***	**4,335**	***100%***	**4,390**	***100%***

Source: OSRAM Group.

Overview

135. The balance sheet total increased from EUR 4,238 million at the end of financial year 2017 to EUR 4,730 million at the end of financial year 2018, representing growth of 12%. At the end of financial year 2019, the balance sheet total decreased to EUR 4,335 million (- 8%).

136. On the assets side, the balance sheet extension in financial year 2018 resulted primarily from the increase in intangible assets and property, plant and equipment. Goodwill increased from EUR 148

million to EUR 369 million and other intangible assets from EUR 142 million to EUR 296 million. This increase is due to acquisitions made. Property, plant and equipment increased by EUR 225 million, which corresponds to an increase of 16%. On the liabilities side, the increase in total liabilities and equity in financial year 2018 is due to the increase in short-term debt and current maturities of long-term debt and equity: Short-term debt and current maturities of long-term debt increased from EUR 16 million to EUR 233 million. Retained earnings increased from EUR 699 million to EUR 780 million and non-controlling interests from EUR 8 million to EUR 140 million.

137. On the assets side, the reduced total assets at the end of the financial year 2019 is primarily attributable to lower goodwill, which decreased by 50% due to impairments. In addition, property, plant and equipment decreased from EUR 1,621 million to EUR 1,493 million. On the liabilities side, equity decreased from EUR 2,676 million to EUR 2,083 million, mainly due to lower retained earnings and lower additional paid-in-capital.

138. In accordance with the structure of the consolidated balance sheet, the following paragraphs depict the composition of the individual balance sheet items and their material changes in the business years 2017, 2018 and 2019. Since the balance sheet as of 30 June 2020 (3rd quarter of fiscal year 2020) is based on unaudited figures, which have changed only slightly, only key developments are described at the end of this chapter.

Non-current assets

139. Non-current assets increased by 28% at financial year-end 2018 and decreased by 9% at financial year-end 2019. Non-current assets accounted for between 50% and 58% of total assets in the period from 2017 to 2019.

140. Goodwill increased from EUR 148 million at financial year-end 2017 to EUR 369 million at financial year-end. This increase is mainly caused by acquisitions of companies for the business units AM (lighting control business of Continental), OS (Vixar, Plymouth/USA) and DI (Fluence Bioengineering, Austin/USA ("Fluence")). Moreover, OSRAM Continental was included in the consolidated financial statements (business unit AM) at the end of the financial year 2018. At the end of financial year 2019, goodwill decreased by 50% to EUR 186 million. This decline was due to unscheduled write-offs of EUR 210 million. In the business unit DI, an impairment of EUR 39 million was required for the Digital Systems unit. In addition, the goodwill of the subsidiary OSRAM Continental in the business unit AM was fully impaired in the amount of EUR 171 million.

141. Other intangible assets increased from EUR 142 million at the end of financial year 2017 to EUR 296 million at the end of financial year 2018. This increase is also due to the acquisitions described above. At the end of financial year 2019, the amount of other intangible assets remained almost unchanged. This item consists mainly of patents, licenses and similar rights.

142. Property, plant and equipment represent the largest item of OSRAM Group's non-current assets. At financial year-end 2017 to 2019, they accounted for 33% to 34% of the total assets. At the end of financial year 2019, the majority of property, plant and equipment consisted of technical equipment and machinery. Property, plant and equipment increased from EUR 1,396 million at financial year-end 2017 to EUR 1,621 million at financial year-end 2018. This increase is attributable to the business unit OS. In financial year 2018, a new LED chip factory has been completed in Kulim, Malaysia and equipped with appropriate machinery. Further, additional production capacities for chip manufacturing were established in Regensburg. In financial year 2019, further capex was spent in the production capacities of the business unit OS.

143. Deferred tax assets remained largely unchanged at the financial year-end 2017 and 2018. In financial year 2019, they increased from EUR 309 million to EUR 410 million. This increase is mainly driven by differences in the determination of taxable income for other intangible assets, property, plant and equipment and liabilities and was mainly the result of internal measures within the Group.

144. The other non-current assets items account for 0% to 2% of total assets in the period under review and remained largely unchanged.

Current assets

145. Current assets decreased from EUR 2,100 million at the end of financial year 2017 to EUR 1,984 million at the end of financial year 2018. In financial year 2019, current assets decreased further by EUR 160 million. At financial year-end 2019, current assets accounted for 42% of total assets.

146. Cash and cash equivalents decreased from EUR 609 million to EUR 333 million in financial year 2018. At financial year-end 2019, they remained largely unchanged at EUR 310 million. The lower level of cash and cash equivalents at the end of financial year 2018 compared with the previous year is caused, among other things, to the development of earnings, cash outflows for company and investment acquisitions, and a longer bound capital period for the operating net working capital. In contrast, high proceeds and payments from the sale of business units were generated in financial year 2017.

147. Trade receivables amounted to a relatively stable level of EUR 634 million and EUR 614 million at the financial year-end 2017 and 2018, respectively. At the end of financial year 2019, they decreased by 9% to EUR 558 million. This decline is mainly due to the measures taken to optimise net working capital in connection with the decline in business activity and the reclassification to the balance sheet item assets held for sale. In both financial year 2018 and financial year 2019, trade receivables account for 16% of OSRAM Group's revenues.

148. In the financial year 2018, inventories increased by EUR 81 million to EUR 743 million at the end of the financial year. At the end of fiscal year 2019, inventories decreased again to EUR 692 million. This increase in the financial year 2018 resulted from the initial consolidation of several acquired companies (BAG electronics, OSRAM Continental, Fluence and Vixar) and from the commissioning of a new plant of the DI business unit in Bulgaria. Furthermore, the higher raw materials and supplies are attributable to certain existing plants, such as the plant of the AM business unit in Kunshan, China, and the plant of the OS business unit in Kulim, Malaysia. The decline in the 2019 financial year is mainly due to the measures taken in connection with the decline in business activity to optimise net working capital and to the reclassification to the balance sheet item assets held for sale.

149. In addition, assets held for sale are reported at fair value under current assets. This item increased from EUR 2 million at financial year-end 2017 to EUR 49 million at financial year-end 2018 and EUR 93 million at financial year-end 2019. At financial year-end 2018, this amount included the assets of the luminaire service business in North America and at financial year-end 2019 the assets related to the Siteco business. Both previously were allocated to the former Lighting Solutions & Systems business unit. These assets were for sale as consequence of the strategic realignment of OSRAM and the related dissolution of the Lighting Solutions business unit.

150. The other current assets items account for only 0% to 3% of total assets in the period under review and remained largely unchanged.

Equity

151. OSRAM's equity increased from EUR 2,460 million at financial year-end 2017 to EUR 2,676 million at financial year-end 2018 and decreased to EUR 2,083 million at the end of financial year 2019. The equity ratio remained mostly unchanged in the financial year 2017 and 2018 at 58% and 57% respectively and decreased to 48% in financial year 2019.

152. The common stock of OSRAM amounted to EUR 105 million at the end of the financial years 2017 and 2018. In financial year 2019, the common stock decreased by EUR 8 million to EUR 97 million. The capital reduction took place in order to be able to implement the resolution on a share buyback scheme from January 2019, as the planned volume would otherwise have exceeded the maximum number of treasury shares permitted under section 71 (1) no. 8 sentence 1 AktG.

153. The additional paid-in-capital remained largely unchanged on the balance sheet dates 2017 and 2018 at EUR 2,035 million and EUR 2,034 million respectively. At the end of financial year 2019, the additional paid-in-capital decreased by 18% to EUR 1,672 million. This change resulted from the capital reduction as described above in connection with a share buyback scheme.

154. Retained earnings increased from EUR 699 million at the end of financial year 2017 to EUR 780 million at the end of financial year 2018. At the end of financial year 2019 retained earnings decreased significantly to EUR 255 million as a result of the development of profit after tax, which corresponds to a decline of 67%.

Non-current liabilities

155. Non-current liabilities remained constant on the balance sheet dates 2017 and 2018 at EUR 498 million. At the end of financial year 2019, the item decreased by 6% to EUR 466 million.

156. This trend is almost exclusively attributable to long-term debt, which decreased from EUR 152 million at the end of financial year 2018 to EUR 120 million at the end of financial year 2019. In this financial year, OSRAM repaid parts of a loan from the European Investment Bank as scheduled.

157. In addition to long-term debt, pension plans and similar commitments as well as other liabilities are significant items of the non-current liabilities. These items changed only slightly in the period under review: Pension plans and similar commitments increased at an average growth rate of 5% p.a. Other liabilities amounted to between EUR 102 million and EUR 121 million in the period under review

158. The other non-current liabilities items account for only 0% to 1% of the total liabilities and equity in the period under review and remained largely unchanged.

Current liabilities

159. Current liabilities increased continuously during the period under review from 2017 to 2019 with an average growth rate of around 18% p.a. At the end of financial year 2019, current liabilities accounted for 41% of total liabilities and equity.

160. The continuous increase in current liabilities is mainly due to short-term debt and current maturities of long-term debt. These increased from EUR 16 million at financial year-end 2017 to EUR 233 million at financial year-end 2018 and finally to EUR 539 million at financial year-end 2019. Credit lines of EUR 179 million and EUR 281 million respectively were drawn down in the end of financial year 2018, respectively financial year 2019, with the intention to make investments in intangible assets and property, plant and equipment and to finance the share buyback program in fiscal year 2019.

161. Trade payables decreased in the period under review from EUR 752 million at the end of financial year 2017 to EUR 548 million at the end of financial year 2019, which corresponds to an average decline of around 15% p.a. This development is in particular caused by the reduced business activity of the OSRAM Group.

162. The item other current financial liabilities increased from EUR 29 million to EUR 40 million at financial year-end 2018. At the end of financial year 2019, other current financial liabilities increased further to EUR 113 million. This increase is almost exclusively due to a different disclosure of refund liabilities to customers in a first adaption of IFRS 15, which result primarily from discount and bonus agreements.

163. Other current liabilities mainly comprise wage and salary obligations, payroll taxes and social security contributions as well as other personnel obligations (holiday pay, overtime, anniversary bonuses and obligations for severance payments). This item increased from EUR 309 million at the end of financial year 2017 to EUR 373 million at the end of financial year 2018. At the end of financial year 2019, other current liabilities decreased to EUR 347 million. The increase in financial year 2018 is mainly due to the first-time conclusion of precious metal lending transactions, which amounted to EUR 58 million on balance sheet date 2018.

164. Corresponding to the assets held for sale on the assets side, there is an item for liabilities associated with assets held for sale on the liabilities side. These increased from EUR 12 million at the end of financial year 2018 to EUR 90 million at the end of financial year 2019 and are related to the dissolution of the Lighting Solutions business unit.

165. The other current liabilities items account for only 0% to 2% of the total liabilities and equity in the period under review and remained largely unchanged.

Business performance in the current financial year 2020

166. Total assets increased only slightly from the end of fiscal year 2019 to the end of the third quarter of 2020, from EUR 4,335 million to EUR 4,390 million, representing growth of 1%. On the assets side, the relative shares of non-current and current assets in total assets remained almost unchanged (58% of non-current assets and 42% of current assets). In the current fiscal year 2020, IFRS 16 is applied for the first time, which led to the capitalisation of rights of use in the amount of EUR 236 million under non-current assets, which were depreciated to EUR 199 million by the end of the third quarter 2020. Regarding current assets, it should be noted that cash and cash equivalents increased from EUR 310 million at the end of the 2019 financial year to EUR 614 million at the end of the third quarter of 2020. These holdings were built up as liquidity buffers considering the Covid-19 pandemic by drawing on credit lines. At EUR 360 million at the end of the third quarter of 2020, trade receivables are considerably lower than they have been at the end of the 2019 financial year (EUR 558 million).

167. On the liabilities side, the equity ratio was further reduced to 43% at the end of the third quarter of 2020. This was still 48% at the 2019 balance sheet date. The decline in the equity ratio is primarily due to the decrease in retained earnings as a result of the development of earnings after taxes. Due to the first-time application of IFRS 16 (EUR 236 million as of 1 October 2019, which were allocated

to non-current as well as current liabilities), non-current liabilities increased from EUR 466 million at the end of the 2019 financial year to EUR 567 million at the end of the third quarter of 2020. Short-term debt and current maturities of long-term debt rose from EUR 539 million at the end of the 2019 financial year to EUR 903 million at the end of the third quarter of 2020. Next to the application of IFRS 16, this development is the result of the additional utilisation of credit lines to create an additional liquidity reserve. In addition, the decline in trade payables has continued in financial year 2020. This item fell by 19% from the balance sheet date of the 2019 financial year to the end of the third quarter of 2020.

b) Operating income

168. The operating income of OSRAM Group for the financial years 2017 to 2019 as well as at the end of the third quarter of the financial year 2020 is as follows:[1]

OSRAM Group
Consolidated income statement

FY as of 30 September, in EUR millions	FY17 Act	FY18 Act	FY19 Act	Q1-Q3 20 Act
Revenue	4,128	3,789	3,464	2,300
Cost of goods sold and services rendered	(2,692)	(2,555)	(2,578)	(1,734)
Gross profit	**1,436**	**1,234**	**886**	**566**
Research and development expenses	(364)	(400)	(418)	(300)
Marketing, selling and general and administrative expenses	(697)	(584)	(612)	(480)
Other operating income	30	37	33	40
Other operating expenses	(7)	(16)	(234)	(3)
EBIT	**397**	**271**	**(345)**	**(176)**
Depreciation and amortisation	*224*	*251*	*521*	*308*
EBITDA	***621***	***522***	***176***	***132***
Financial result	(8)	(9)	(32)	(27)
EBT	**389**	**263**	**(377)**	**(203)**
Income taxes	(114)	(74)	33	25
Income (loss) OSRAM (continuing operations)	**275**	**188**	**(343)**	**(178)**
Income (loss) from discontinued operations, net of tax	(51)	(48)	(123)	(7)
Net income (loss)	**224**	**141**	**(467)**	**(185)**
Capital expenditure	**537**	**455**	**208**	**67**
Capital expenditure in % of sales	*13%*	*12%*	*6%*	*3%*
Yearly sales growth	*n.a.*	*n.a.*	*(9%)*	*(9%)*
In % of sales				
Gross profit	*35%*	*33%*	*26%*	*25%*
Research and development expenses	*9%*	*11%*	*12%*	*13%*
Marketing, selling and general and administrative expenses	*17%*	*15%*	*18%*	*21%*
Other operating income	*1%*	*1%*	*1%*	*2%*
Other operating expenses	*0%*	*0%*	*7%*	*0%*
EBIT margin	*10%*	*7%*	*(10%)*	*(8%)*
EBITDA margin	*15%*	*14%*	*5%*	*6%*

Source: OSRAM Group, PwC Analysis.

169. In the OSRAM Group, the business units were reorganised at the beginning of financial year 2019. Previously, business activities had been conducted primarily by the business units OS, Specialty Lighting and Lighting Solutions & Systems. The business unit OS remained in place as part of the reorganisation. The Specialty Lighting business unit was allocated to the new AM and DI business units in the course of the organisational change. The former Lighting Solutions & Systems business unit was dissolved in the course of the reorganisation and partly reported as a discontinued division.[2]

[1] The reported revenues for the financial years 2017 and 2018 are only comparable to a limited extent due to the sale of the Siteco business in the financial year 2018.

[2] With exception of business units Digital Systems, Digital Lumens und Traxon, which were allocated to the business unit DI.

170. As a result of these organisational changes, OSRAM published the business figures for financial year 2018 in the Annual Report 2019 in the new business unit structure. Since no income statement in line with the new business unit structure was prepared for financial year 2017, the financial year 2017 still includes income and expenses of the Lighting Solutions business unit and the Lighting Solutions & Systems reporting segment has not yet been partially reported as a discontinued operation, the comparability of financial year 2017 with the two financial years 2018 and 2019 is limited. For this reason, the following section focuses on developments in the financial years 2018, 2019 and the first to third quarters of 2020.

Business performance in the financial years 2018 to 2019

171. Starting from revenues of EUR 3,789 million in financial year 2018, revenues in financial year 2019 decreased by 9% to EUR 3,464 million. The following table shows revenues and their growth rates for the individual business units.

OSRAM Group
Revenues of business units

FY as of 30 September, in EUR millions	FY18 Act	FY19 Act	FY18 Change in %	FY19 Change in %
Opto Semiconductors	1,725	1,453	*2%*	*(16%)*
Automotive	1,920	1,776	*n.a.*	*(8%)*
Digital	914	916	*n.a.*	*0%*
Reconciliation to cons. financial statements	(770)	(681)	*n.a.*	*(12%)*
Revenues	**3,789**	**3,464**	***n.a.***	***(9%)***

Source: OSRAM Group, PwC Analysis.

172. The business unit OS realised a revenue growth of 2% in financial year 2018 with EUR 1,725 million. In financial year 2019, however, revenues declined by 16% to EUR 1,453 million. This decline is due to a reduced volume in line with the market trend. In particular, the decline in automobile production led to reduced demand. In addition, the automotive sector of the OS business unit lost market share to a competitor from Asia due to allocation issues. The business with mobile devices and in general lighting also realised a lower volume, which was caused not only by the general economic trend but also from increased inventories of distributors. In addition to the volume trend, a price decline in the high single-digit percentage range had a negative impact on the revenues of the business unit OS in financial year 2019. Of the total revenues of the business unit OS, EUR 752 million in financial year 2019 were attributable to internal revenues, which corresponds to a share of 52%. In particular, LED products of the business unit OS are delivered to the business unit AM, which is responsible for sales to customers.

173. The business unit AM recorded an 8% decline in revenues in financial year 2019. This development is due to the declining automobile production in Europe and China. In addition, sales in the retrofit

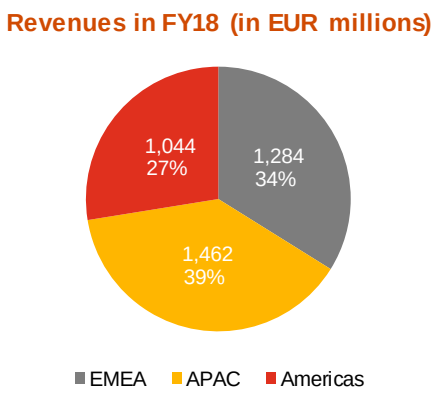
and spare parts market in Russia, the strongest growth market in Europe, remained nearly unchanged in fiscal 2019 due to the intensity of local competition.

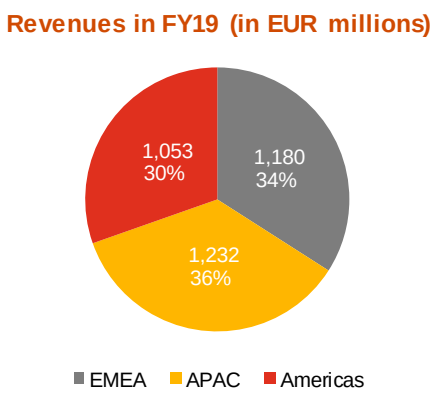
174. From a solely organic growth perspective, the intensified competitive situation also led to declining business volumes in the business unit DI in financial year 2019. Regarding the Traxon business unit, the intensity of competition increased due to Chinese competitors exerting pressure with their pricing strategy. The Digital Systems business unit was also confronted with increased price pressure from Asian competitors for its core products.

175. The slight revenue growth from EUR 914 million in financial year 2018 to EUR 916 million in financial year 2019 could only be achieved non-organically due to the acquisitions made in financial year 2018 (Fluence and BAG electronics).

176. Within the item "Reconciliation to consolidated financial statements", common functions are reported. This item includes costs for Group management, central research and innovation functions, expenses and income not allocated to the business units in connection with pensions, treasury activities and consolidation. The latter relates primarily to the elimination of internal sales of the OS business unit for the transfer of LED products to the AM business unit.

177. The following figures show the revenues and their shares for the individual regions in the financial years 2018 and 2019:





Source: OSRAM Group.

178. In financial year 2019, OSRAM Group generated about 34% of its revenues in the EMEA region. Almost half of these revenues were generated in Germany (EUR 553 million). The APAC region generated the largest share of revenues of the OSRAM Group with around 36%. China (including Hong Kong) and Taiwan account for more than half of APAC revenues (EUR 760 million). The remaining share of revenues of around 30% in financial year 2019 was generated in the Americas region. The USA is the most important submarket in this region with revenues of EUR 805 million in financial year 2019.

179. In the EMEA region, revenues in financial year 2019 decreased by 8%. This decline is primarily attributable to the BUs OS and AM, as automobile production declined in the EMEA region and the OS business unit lost customers to competitors due to allocation challenges. In addition, customers in the automotive industry had built up a high level of inventories in fiscal year 2018, which was reduced in 2019.

180. In financial year 2018, OSRAM benefited in the APAC region from a subsidy program of the Chinese state, which aimed to promote the automotive industry in China. In financial year 2019, however, revenues in the region decreased by around 16%. This decline was mainly due to the business development in China. The Chinese state set stricter emission standards and repealed the subsidy programme, which led to a decline in business volume. In addition to the automotive market, the "city beautification" projects, which are part of BU DI's business, declined as the Chinese government invested comparable high volumes in the expansion of appealing lighting in cities in financial year 2018.

181. In financial year 2019, the Americas region realised a revenue growth of 1%. This increase is primarily related to the acquisition of Fluence by the business unit DI. In financial year 2019, OSRAM Group recorded a significant decline in revenues in its existing business in the Americas region, which is mainly attributable to the business unit OS and the declining business volume in the business unit DI. The Americas region was characterised by declining automobile production and the business scope of the business unit DI faced price pressure due to increasingly stiff competition in the region.

182. The cost of goods sold and services rendered increased from EUR 2,555 million in financial year 2018 to EUR 2,578 million in financial year 2019. The cost of goods sold and services rendered of OSRAM Group primarily comprises material and personnel expenses. The largest items of the cost of materials are purchases and energy consumption caused by production, as well as the maintenance of machinery. The purchasing volume of OSRAM Group is mainly composed of LED-related materials and primary products. The increase in financial year 2019 was mainly due to acquisition-related costs. The declining business volume in financial year 2019 led to a significant decline in the gross margin from 33% (financial year 2018) to 26% (financial year 2019), as underutilisation of production sites resulted in negative fixed cost degression effects. Particularly at the production sites in Germany, it was not possible to quickly adjust production capacities to the declining business volume.

183. Research and development expenses increased from EUR 400 million in financial year 2018 to EUR 418 million in financial year 2019, which corresponds to a growth of approximately 4%. In financial year 2019, research and development expenses related to OSRAM Continental increased by EUR 26 million. In addition, the Global Innovation & Innoventures program with a volume of EUR 6 million was introduced in financial year 2019. This included projects on various topics including

data analytics, chemical-physical analytics and standardisation. However, this program was not continued in financial year 2020, as a new focus for research and development projects was defined as part of the operational orientation.

184. Marketing, selling and general administrative expenses amounted to EUR 584 million in financial year 2018 and increased by 5% to EUR 612 million in financial year 2019. This increase is mainly attributable to the subsidiaries OSRAM Continental, BAG Electronics and Fluence, which are part of the OSRAM Group since financial year 2018.

185. Other operating income amounted to EUR 37 million in financial year 2018 and decreased to EUR 33 million in financial year 2019. In financial year 2018, this income includes primarily capital gains of EUR 20 million as OSRAM sold its electrical hot air devices business and real estate assets in South Korea. In financial year 2019, however, compensation payments of EUR 24 million accounted for most of the other operating income. These are compensation payments for business activities with customers that were planned to be contributed to the joint venture by Continental soon. The revenues are currently realised for at the level of Continental.

186. Other operating expenses increased from EUR 16 million in financial year 2018 to EUR 234 million in financial year 2019. This increase resulted almost exclusively from the goodwill impairment of OSRAM Continental and Digital Systems, totalling to EUR 210 million. Further, additional expenses of EUR 16 million incurred in connection with a conditional purchase price payment for the acquisition of Fluence.

187. Earnings before interest, taxes, depreciation and amortisation (EBITDA) in financial year 2018 amounted to EUR 522 million, which corresponds to an EBITDA margin of 14%. In financial year 2019, the EBITDA decreased to EUR 176 million, which corresponds to an EBITDA margin of 5%. Individual key factors influencing the development of the EBITDA are already reflected in the gross profit: Declining business volume and almost unchanged high cost of goods sold due to acquisition-related costs and services rendered led to a lower EBITDA margin in financial year 2019.

188. Depreciation of tangible assets and amortisation of intangible assets increased in financial year 2019 from EUR 251 million to EUR 521 million. Especially amortisation of intangible assets increased from EUR 29 million to EUR 264 million. This is particularly due to goodwill impairment of EUR 210 million as well as scheduled amortisation of IT licenses. Depreciation of tangible assets increased in financial year 2019 by 16% from EUR 222 million in financial year 2018 to EUR 257 million in financial year 2019, mainly due to investments in the business unit OS.

189. The financial result trended from EUR -9 million in financial year 2018 to EUR -32 million in financial year 2019. This trend was primarily caused by the development of the other financial result and impairments of to two German start-up investments of EUR 4 million in total.

190. Income taxes amounted to EUR -74 million in financial year 2018 and EUR 33 million in financial year 2019. The tax income of EUR 33 million in the 2019 financial year results from the recognition of deferred tax assets on the negative result reduced by non-deductible goodwill amortisation and non-recoverable deferred tax assets (especially OSRAM Continental).

191. Considering depreciation and amortisation, the financial result and income taxes, the net income for the continuing operations amounted to EUR 188 million in financial year 2018. In financial year 2019, a net loss of EUR 343 million was realised for the continuing operations.

192. In accordance with IFRS 5, the business of Siteco and the luminaire service business in North America were reported as discontinued operations in financial year 2018 and 2019. The luminaire service business in North America was sold in March 2019 and the European luminaire service of Siteco on 1 October 2019. This resulted in a net loss from discontinued operations of EUR 48 million in financial year 2018 and EUR 123 million in financial year 2019. The trend in financial year 2019 is mainly due to the result of the fair value valuation of Siteco, which decreased due to impairment losses of EUR 83 million.

193. Including the result after taxes of the discontinued operations, the consolidated net income for financial year 2018 amounted to EUR 141 million. A consolidated net loss of EUR 467 million was generated in financial year 2019.

194. Capital expenditures ("capex") by the OSRAM Group in the 2017 and 2018 fiscal years amounted to 13% and 12% of sales respectively. In the 2019 fiscal year, investments fell from EUR 455 million to EUR 208 million, which corresponds to 6% of sales. The capex that decreased over time are primarily attributable to the OS business unit. In fiscal years 2017 and 2018, the OS business unit made investments in capacity expansions of EUR 341 million and EUR 278 million, respectively, in order to be able to produce a higher volume. In fiscal year 2017, the plant in Kulim, Malaysia, was built and in fiscal year 2018, a new production and warehouse building was opened in Regensburg. The expansion of plant capacity was completed in fiscal year 2019.

Business performance in the current financial year 2020

195. The income statement for the first three quarters of 2020 and the corresponding prior-year period, i.e. the first three quarters of 2019, is presented below.

OSRAM Group
Consolidated income statement

as of 30 June, in EUR millions	Q1-Q3 19 Act	Q1-Q3 20 Act
Opto Semiconductors	1,079	1,018
Automotive	1,324	1,193
Digital	666	576
Reconciliation to cons. financial statements	(529)	(487)
Revenue	2,540	2,300
Cost of goods sold and services rendered	(1,909)	(1,734)
Gross profit	**630**	**566**
Research and development expenses	(307)	(300)
Marketing, selling and general and administrative expenses	(443)	(480)
Other operating income	26	40
Other operating expenses	(45)	(3)
EBIT	**(139)**	**(176)**
Depreciation and amortisation	*261*	*308*
EBITDA	***122***	***132***
Capital expenditure	**195**	**67**
Capital expenditure in % of sales	*8%*	*3%*
Yearly sales growth	*n.a.*	*(9%)*
In % of sales		
Gross profit	*25%*	*25%*
Research and development expenses	*12%*	*13%*
Marketing, selling and general and administrative expenses	*17%*	*21%*
Other operating income	*1%*	*2%*
Other operating expenses	*2%*	*0%*
EBIT margin	*(5%)*	*(8%)*
EBITDA margin	*5%*	*6%*

Source: OSRAM Group, PwC Analysis.

196. At the end of the third quarter of 2020, the OSRAM Group's total sales amounted to EUR 2,300 million, a decrease of 9% from the comparable figures for the previous year (1st to 3rd quarter of financial year 2019). This development stems in particular from the DI and AM business units with a decline of 13% and 10% respectively. Sales in the OS business unit were also lower at the end of the third quarter of 2020 compared to the previous year's figures, albeit to a lesser extent (6%). The decline in sales in the current 2020 financial year is mainly attributable to the Covid-19 pandemic, which is affecting all business units. While the respective prior-year figures for all business units were exceeded or remained almost unchanged in the first quarter of 2020, the first effects of the Covid-19 pandemic on revenues became visible at the end of the second quarter of the 2020 financial year.

197. OSRAM is affected by the Covid-19 pandemic both on the production side due to plant closures and on the demand side. The worldwide decline in automobile production due to the Covid-19 pandemic is having a negative impact on the OS business unit, as more than half of its sales are generated with products for the automotive industry. In the AM business unit, sales of both traditional products and

LED components declined because of the automobile production, that has been halted worldwide for a time. In the DI business unit, sales in the entertainment sector in particular were affected by a sharp drop in demand.

198. The cost of sales was EUR 1,734 million in the third quarter of 2020 and the gross profit was amounted to EUR 566 million. The gross margin was 25% in the 3rd quarter of 2020, unchanged compared to the 3rd quarter of 2019.

199. OSRAM's research and development costs fell from EUR 307 million in the third quarter of 2019 to EUR 300 million in the third quarter of 2020, a decrease of 2%. However, research and development costs as a percentage of sales were 13% at the end of the third quarter of 2020 (comparable previous period 12%). The level of research and development expenses is lower in the current financial year 2020, which is the result of restructuring measures.

200. Selling, general and administrative expenses will increase by EUR 37 million from Q3 2019 to EUR 480 million in Q3 2020. In relation to sales, this development corresponds to an increase from 17% to 21%. The increase is due to impairment charges related to OSRAM Continental and additional transformation costs.

201. The resulting EBITDA at the end of the third quarter of 2020 is EUR 132 million, which corresponds to an EBITDA margin of 6%. This development represents a (slight) improvement over the comparable period of the 2019 financial year, in which the EBITDA margin was 5%. It should be noted that in the third quarter of the 2020 financial year, viewed in isolation, an EBITDA margin of -2.7% was generated due to the Covid-19 pandemic.

202. Due to the Covid-19 pandemic, the planned investments for the short and medium-term planning period were adjusted. This adjustment became already manifest in a capex level of only EUR 67 million at the end of the third quarter of 2020. This amount of capex represents 3% of sales, which is a significantly lower level than the reinvestment rate of 8% in the comparable period of the previous year.

4. Earnings adjustments

203. In order to achieve comparability of the past results with OSRAM Group's forecast, extraordinary and one-off effects on earnings must be adjusted (so-called normalisations) and structural changes need to be taken into account (so-called pro-forma adjustments). Earnings were adjusted at the EBIT level of OSRAM Group for the financial years 2018 and 2019 as well as for the first three quarters of 2020.

OSRAM Group
Consolidated income statement adjustment

FY as of 30 September, in EUR millions	FY18 Act	FY19 Act	Q1-Q3 20 Act
Revenues	3,789	3,464	2,300
Normalisations EBITDA			-
EBITDA before adjustment	**522**	**176**	132
Transformation costs	79	87	48
Acquisition-related costs	18	41	2
Other	2	3	0
Special items	**100**	**131**	**50**
Adjusted EBITDA I	**622**	**307**	**182**
EBITDA margin	*14%*	*5%*	*6%*
Adjusted EBITDA margin	*16%*	*9%*	*8%*
Further normalisations EBITDA			
Legal dispute Lighting Science Group Corporation	n.a.	7	n.a.
Receivable write-off Fluence Bioengineering	n.a.	n.a.	5
Inventory write-off Business Unit DI	n.a.	n.a.	5
Income from sale of property assets	(5)	n.a.	n.a.
Income from sale of business with electric hot air devices	(15)	n.a.	n.a.
Pro-forma adjustments EBITDA			
Leasing adjustment according to IFRS 16	57	58	n.a.
Adjusted EBITDA II	**659**	**372**	**192**
Depreciation and amortisation before adjustment	**251**	**521**	**308**
Normalisations EBIT			-
EBIT before adjustment	**271**	**(345)**	**(176)**
EBITDA adjustments	137	196	60
Adjusted EBIT I	**408**	**(149)**	**(116)**
Further normalisations EBIT			
Goodwill write-off Digital Systems	n.a.	39	n.a.
Goodwill write-off OSRAM CONTINENTAL	n.a.	171	48
Extraordinary write-off OLED	5	n.a.	n.a.
Extraordinary write-off FEP	n.a.	5	n.a.
Pro-forma adjustments EBIT			
Leasing adjustment according to IFRS 16	(49)	(50)	n.a.
Adjusted EBIT II	**364**	**16**	**(68)**
EBIT margin	*7%*	*(10%)*	*(8%)*
Adjusted EBIT margin	*10%*	*0%*	*(3%)*

Source: OSRAM Group, PwC analysis.

204. The starting point for the adjustment of earnings was the adjusted EBITDA published by OSRAM Group for the financial years 2018 and 2019 as well as for the first three quarters of 2020. OSRAM Group divides the special items above the EBITDA into three categories, transformation costs, acquisition-related costs and other.

205. Transformation costs relate to measures used to adjust operating structures from the ongoing performance programs, such as personnel-related severance payments due to necessary capacity adjustments to cope with reduced sales volumes. These costs are categorised by OSRAM as special items and are being adjusted for accordingly. We followed this procedure but would like to point out that the business plan on which the valuation is based also includes significant transformation costs of the OSRAM Group.

206. Acquisition-related costs correspond to the acquisition and sale of companies, investments as well as business operations and largely comprise of consultancy costs, integration costs and certain conditional expenditures from purchase price payments.

207. For the financial year 2018, OSRAM identified special items classified as one-off or extraordinary involving expenses with an effect of EUR 100 million on the EBITDA. By normalising these expenses, an adjusted EBITDA of EUR 622 million was calculated, corresponding to an adjusted EBITDA margin of 16%. In the financial year 2019, expenses for special items of EUR 131 million were incurred, resulting in an adjusted EBITDA of EUR 307 million, corresponding to an adjusted EBITDA margin of 9%. At the end of the third quarter of 2020 they amounted to EUR 50 million, resulting in an adjusted EBITDA of EUR 182 million and an adjusted EBITDA margin of 8%.

208. In addition to the normalisations of special items carried out by OSRAM, we have adjusted further expenses and two issues with effect on income in the period under review due to their one-off or extraordinary nature. In the financial year 2018, one business unit and property assets with a total income of EUR 20 million were sold. In the financial year 2019, expenses of EUR 7 million for the recognition of provisions in connection with a legal dispute between the business unit OS and Lighting Science Group Corporation Inc., West Warwick/USA were adjusted. For the first three quarters of the financial year 2020, we have adjusted an extraordinary write-off on a trade receivable of the subsidiary Fluence in the amount of EUR 5 million and a write-down of inventories in the amount of EUR 5 million within the DI business unit.

209. In addition to the normalisations described above, we have also analysed the income statement regarding necessary pro-forma adjustments. In the financial year 2020, OSRAM is applying IFRS 16 for the first time for the accounting of leases. Due to the income statement effects of the first-time application of this standard, we have applied high-level pro forma adjustments for the financial years 2018 and 2019 to ensure comparability between the financial years 2018, 2019 and 2020. As part of these adjustments, the book values of the rights of use and the leasing liabilities were derived

and the associated depreciation and amortisation at EBIT level were integrated into the income statement. In addition, the operating lease expenses incurred in the past were removed from the income statement at EBITDA level.

210. The dissolution of the former Lighting Solutions business unit during the 2018 financial year represents a major structural change during the reporting period. However, since this strategic realignment has already been reflected by OSRAM in the income statements for the 2018 and 2019 fiscal years, no further pro-forma adjustments are necessary.

211. In addition to the adjustment of EBITDA, depreciation and amortisation was also analysed in order to derive an adjusted EBIT for the period under review. Five extraordinary write-offs were identified which were classified as non-recurring and therefore adjusted. Three of the adjusted write-offs relate to the impairment of goodwill of OSRAM Continental and Digital Systems totalling EUR 210 million in the financial year 2019. OSRAM Continental was subject to another impairment of EUR 48 million in the current fiscal year 2020. In addition, two extraordinary write-offs on property, plant and equipment of EUR 5 million each in the financial year 2018 and 2019 were identified and classified as non-recurring. Furthermore, we have made a rough estimate of depreciation and amortisation resulting from the application of IFRS 16 for the financial years 2018 and 2019 and recognised it as pro-forma adjustments.

212. Considering the adjustments carried out by OSRAM, the further normalisations and pro forma adjustments at EBITDA level and the normalisation of depreciation and amortisation, the adjusted EBIT for the financial year 2018 amounts to EUR 364 million. An adjusted EBIT of EUR 16 million was reported for the financial year 2019. For the first three quarters in 2020 an EBIT of EUR - 68 million has been determined. In comparison to the unadjusted EBIT margin (2018: 7%, 2019: - 10%, Q1-Q3 2020: - 8%), the adjusted EBIT margin is at 10% in the financial year 2018, at 0% in the financial year 2019 and at - 3% for quarter 1 to 3 in the year 2020.

213. In the overall picture, despite the adjustments made, EBIT has decreased significantly from the financial year 2018 to the financial year 2019. This clearly shows the difficult economic environment and the operational challenges OSRAM Group is facing.

5. Success factors and risks of the strategic business model

214. OSRAM Group has multiple **strengths and opportunities** in the aforementioned market and competitive environment section:

215. The Chinese market offers great growth opportunities for OSRAM Group. Over the past years, OSRAM built up a strong presence in the Chinese market and is currently strengthening its position as a partner to Chinese companies in order to gain additional market shares. In the growing Chinese market, OSRAM intends to generate further profitable business by adjusting product specifications to local standards and optimising its cost position in the low-price segment. In the US, on the other hand, continuing protectionist trade policies and the resulting import duties would increase the competitiveness of the local production site of OSRAM Group, which would enable OSRAM to consolidate and expand its market share in North America accordingly.

216. Besides the geographical-specific opportunities, OSRAM shows further growth potential, particularly in market areas where the company can expand its traditional value chain. Levering its strong focus on research activities and development of innovative products, OSRAM actively shapes trends such as "intelligent light" and technical developments in the areas of sensor technology, biometrics, entertainment and smart farming. Continuous investments in innovative technologies will support to strengthen the current market position in the long-term.

217. Additionally, OSRAM has significant potential to improve the efficiency of its production processes. The increasing focus on high-margin product groups and the associated streamlining of the product portfolio are key measures to increase the profitability of OSRAM Group. The reduced complexity of the product portfolio aims to harmonise production processes and thus significantly reduce the costs of manufacturing processes and portfolio management.

218. Besides optimising the product portfolio and manufacturing processes, OSRAM is also planning to optimise its business processes, for example by accelerating the time to market of new products. Additional opportunities comprise the standardisation and scaling of processes by transforming the decentralised organisation that is currently focused on business units to a centralised bundling of process-related activities, thereby leveraging from economies of scale.

219. In addition to its efficiency potential, OSRAM has good chances of obtaining state-based subsidies for planned investments in new technologies, the development of production capacities and for measures to increase employment. Most of the funding will be available from various public bodies such as the Federal Republic of Germany, the European Union and the People's Republic of China.

220. The operational and strategic strengths and opportunities are partially compensated by the following significant **weaknesses and risks** of OSRAM Group's business model:

221. Given reduced market growth and strong competition, there is increased pressure for consolidation, especially in the lighting industry at the beginning and middle of the value chain. In addition, opportunities for differentiation through technological competence or brand value will diminish. The price erosion that has already been observed in the past could continue in the future and thus increasingly affect the operating result of the Group. Products from all business units have been affected by the sharp price decline for years. OSRAM consistently strives to compensate for the price erosion effect by scaling the business and implementing targeted productivity and efficiency measures, which was largely successful in the past. However, there is a considerable risk that this will not be possible in the future, particularly as competition on the supply side increases.

222. Due to technological changes in the lighting industry, there are market changes that could have a significant impact on the competitive position of OSRAM. Although a continuous decline in the traditional lighting market has already been observed, it is difficult to foresee how quickly it will continue in the future. Apart from declining sales of conventional headlight lamps in the automotive sector such as halogen or xenon, the risk of an increasing decline in sales of conventional light control products also exists. Furthermore, OSRAM's established market channels in the past could be partially altered or replaced in the future, which would weaken the Group's competitive position.

223. The technological change also results in shorter product life cycles. In particular, the risk that processes for product planning and development may not be able to be adapt to higher requirements in a timely manner is a risk. This can affect the competitiveness of products in terms of cost position and technical performance and lead to gaps in the product portfolio if discontinued products cannot be replaced by new innovative product launches at the required time.

224. The development of smart and connected products with specific software applications becomes increasingly important both in the lighting market and in the product portfolio of OSRAM. In order to respond to the expected shift in demand, the development of technical expertise in this area is necessary. Although the joint venture OSRAM Continental plays a key role in field, its high level of organisational complexity and high fixed costs prevent it from achieving its profitability targets (see paragraph 227).

225. Regarding the adaptation of the business model to technological change, there is an overall risk that it may not be possible for the organisation and the processes to keep the pace of these changes and, hence, not to meet the requirements of future market conditions. Ongoing transformation activities entail the risk of a temporary restriction of operating performance and the risk of a delay in strategic realignment of the business. Insufficient or delayed implementation of transformation measures could also have a negative impact on the competitiveness of OSRAM Group. This includes, for example, measures involving extensive process relocation and organisational changes.

226. Finally, OSRAM Group is confronted by the risk of changing economic framework conditions and the risks relating to the yet unknown impact of the Covid-19 pandemic on mid- and long-term business operations. Interrupted supply chains, a crisis-related decline in demand and a temporarily increased risk of customer insolvency are the main risks that could lead to further disruptions in operations of OSRAM Group resulting in further negative financial effects.

227. A further financial risk arises from the decision to repatriate the joint venture with Continental (e.g. high restructuring costs). It is not clear whether services already won and commenced can be provided without friction in the future or whether difficulties in connection with the repatriation will result in reputational risks.

D. Determination of business value

I. Valuation basis

1. Approach

228. In the following, we provide an overview of the methods used to derive the enterprise value of the OSRAM Group. The enterprise value is generally made up of the net present value of the assets required for operations and the value of the non-operating assets.

229. During the valuation process, a leased building in Traunreut (Germany) and a real estate object in Berlin were identified as non-operating asset. Additionally, non-consolidated investments (including associated enterprises) and fonds investments of OSRAM Group were considered separately as special values. For investments, which will be liquidated or sold, the liquidation proceeds or selling price was recognised.

230. In order to determine the net present value of the operative business, a forecast is required for the detailed planning period (Phase I) and the period thereafter (Phase II; so-called terminal value). For phase I, we have considered a period of six financial years (2020 to 2025). The financial surpluses are based on the OSRAM Group's IFRS planning calculation, which we have checked for plausibility based on historical analysis for the financial years 2017 to 2019. For this purpose, extraordinary and non-recurring items of the past were identified and reclassified to derive the adjusted earnings. Further plausibility checks of the plans and the assumptions behind were carried out on the basis of the planning documentation provided by OSRAM, their clarification of the documentation, external industry and market data.

231. The first step of determining the net present value is to derive the future operating profit (EBIT). We have made separate assumptions for the long-term average operating profit starting as of financial year 2026 (phase II), particularly taking into account an extended planning period for the business unit segments, Digital Systems and Entertainment & Industries in the first years of the terminal value phase. In addition, reinvestment rates had to be applied in phase II. Complementary considerations were made in this regard.

232. The expected synergies between OSRAM Group and ams Group, which arise at OSRAM Group level and can be realised without the domination and profit transfer agreement, were included in the valuation. Synergies that were identified beforehand by ams turned out to be realisable by OSRAM on a stand-alone basis and are, hence, reflected already in the business plan.

233. The net operating income of the OSRAM Group for the planning period was derived from a financial need calculation based on the updated balance sheet items for the planning years 2020 to 2025 and for the terminal value phase. The interest rates were based on contractually agreed and market

standard interest rates. The contractual interest rates include in particular the conditions of a credit line granted by ams AG at arm's length terms.

234. Considering the tax situation of the OSRAM Group, the projected earnings before income taxes were reduced by corporate taxes and personal income taxes of the shareholders. The corporate taxes taken into account are trade tax, corporate income tax and the solidarity tax contribution for the German companies as well as foreign taxes. The deductible tax loss carry-forwards and tax benefits from investment subsidies in the OSRAM Group were implemented in the valuation calculation by a lower effective tax rate.

235. No dividends were assumed for the first two plan years 2020 and 2021. This assumption corresponds to the planning of the OSRAM Group and is due to the expected earnings situation. A pay-out ratio of 40.0% is assumed for the years thereafter in the detailed planning period, based on OSRAM's planned medium-term pay-out policy. For phase II we have assumed a normal market pay-out ratio of 50.0%.

236. According to the recommendations of the IDW, we have based the assessment of personal income tax on the circumstances of a German natural person with unlimited tax liability as a shareholder.

237. Furthermore, it was assumed that shares are held as private assets and that the shareholding does not meet the requirements of Section 17 sentence 1 of the German Income Tax Act (EStG). Given the withholding tax on dividends (Abgeltungssteuer) which has been introduced in 2009, the personal tax on distributions was set at 25.0% plus solidarity contribution. The taxation of an increase in value over time in the form of capital gains was reflected by an annual effective capital gains tax of 12.5% (corresponding to half of the final withholding tax rate) plus the solidarity contribution.

238. The 3 November 2020 is taken as the valuation date for determining the enterprise value. On that date, the extraordinary general shareholder meeting of OSRAM will take place and a decision concerning the domination and profit transfer agreement with the ams Offer is expected to be made.

239. Accordingly, the valuation is to be based on all financial surpluses of the OSRAM Group occurring after 3 November 2020. For this purpose, we have discounted the value contribution of net distributions and the value contribution of hypothetical retained earnings to the valuation date. 30 September 2019 was set as the technical valuation date. All forecast surpluses were discounted to this date. In a next step, the resulting enterprise value as of September 30, 2019 was compounded to 3 November 2020 together with the cost of equity and used to determine the cash compensation and recurring compensation payment.

240. The basic methodologies and approaches to derive the discount rate are described in detail in section D. III.

2. Planning process

241. The planning process at OSRAM follows a detailed planning schedule. The planning process of the planning calculation used for the business valuation began in April 2020 and was completed in June 2020.

242. Beginning of September 2020, the business plan was updated in order to reflect the newly formulated strategy for OSRAM Continental (so-called “Retransfer”), according to which the assets that were contributed by OSRAM and Continental to the subsidiary OSRAM Continental will be transferred back to the shareholders by the end of the financial year 2021. Furthermore, we have used the updated projections as of 16 September 2020 for the forecast of the financial year 2020.

243. The financial years 2020 and 2021 were planned at quarterly level, whereas the planning for the subsequent financial years was carried out at annual level. The planning is based on the mixed planning method (Gegenstromverfahren), which includes both top-down and bottom-up elements.

244. At the beginning, the Group Executive Board defines central planning premises "top-down" and makes them available to the planning managers of the respective business units (so-called "planning letters"). The document contains, among others, guidelines on the development of personnel costs and fixed exchange rates for all relevant currencies for the planning period. In addition to the planning letter, the strategy department also provided macroeconomic guidelines due to the Covid-19 pandemic. These contain information on the expected development of GDP at quarterly level from 2020 to 2021 at annual level from 2022 to 2025 as well as information on the expected development of production of automobiles.

245. In addition to the central planning assumptions and the macroeconomic guidelines, the OSRAM and business unit strategy departments also provide details concerning the size for markets relevant for the group to persons responsible for the planning, which is determined by employing a market model. In the example of the automotive lighting market, which accounted for about 55% of sales in financial year 2019, the market size for the planning period is derived in four steps. Firstly, car production is forecasted at the series level of the car manufacturers (e.g. the A3 for Audi) using data from IHS Markit. Secondly, the penetration rates of the individual technologies in the vehicles are derived. For this purpose, both information from the car manufacturers and data from IHS Markit are considered. The number of light sources per vehicle is then forecasted with the help of the business units and their sales departments. Finally, the industry average sales prices for the light sources and the market size for the planning period are estimated. For the other smaller customer markets in which the OSRAM Group operates, the procedure for deriving the market size and sales may differ slightly from the process described above but follows a similar logic.

246. Based on the "top-down" specifications of the Group (central planning assumptions, macroeconomic guidelines and market size), the planning calculations are prepared at business unit segment level.

Business unit segments represent the next organisational level below the business units. Those responsible for planning use both plant and sales planning from the respective business unit segments. The market shares and the sales for the planning period are derived based on the market figures provided. The business unit OS derives the expected revenues by applying a “bottom-up” approach on application level. The resulting market share is then reviewed in order to ensure that it meets the requirements of the people responsible for the planning. The business unit AM bases its planning on the market model explained above and supplements this with an internal analysis of market trends by region and specific sales targets as well as an estimate of the competitive situation in order to derive its own expected market share. The business unit DI prepares a SWOT analysis per business unit segment, considering the strengths and weaknesses of the products as well as market developments and competitive situation for the derivation of the market share. Subsequently, the revenues of the business units AM and DI are derived on the level of business unit segments by considering portfolio changes as well as price and volume developments on a yearly basis.

247. The forecast of expenses in the planning period is also made at business unit level and in most cases also at business unit segment level. In deriving the cost of sales, productivity enhancements required to compensate for the expected price erosion are planned. Lastly, the forecast sales and expenses are aggregated at the level of the three business units OS, AM and DI and approved by the respective BU management.

248. The forecasts prepared by the business units for the development of market shares and sales growth are checked and validated by the Group's strategy department with the help of external sources. The forecasts of the business units are aggregated and extended to include central functions at Group level, such as general administration costs. In addition, inter-company relationships, such as internally generated sales of the business unit OS, are eliminated when consolidating the planning accounts at group level. Occasionally, the Executive Board makes adjustments or returns planning to the BU.

249. The resulting planning accounts at Group level are approved by the Management Board and acknowledged by the Supervisory Board.

3. Forecast accuracy

250. The forecast accuracy analysis was based on a comparison between planned and actual revenue, EBITDA and adjusted EBITDA by OSRAM (adjusted EBITDA I; see paragraph 203 et seq.) for the financial years 2017 to 2019.

251. In order to be able to analyse the forecast accuracy in the financial year 2018, the unadjusted figures are used as follows, i.e. the new business unit structure from the financial year 2019 onwards is not reflected (see paragraph 170). The figures presented here for the financial year 2018 therefore differ

from the income statement illustrated in this report (see paragraph 168). The following table provides an overview of the comparison of planned and actual data:

OSRAM Group
Forecast accuracy

in EUR millions	FY17 Act	FY17 Bud	Delta	Delta in %	FY18* Act	FY18* Bud	Delta	Delta in %	FY19 Act	FY19 Bud	Delta	Delta in %
Revenues	4,128	4,058	69	2%	4,115	4,338	(223)	(5%)	3,464	4,051	(587)	(14%)
Adjusted EBITDA I	695	670	25	4%	605	700	(95)	(14%)	307	591	(284)	(48%)
EBITDA	621	584	37	6%	477	625	(149)	(24%)	176	522	(346)	(66%)

* Not adjusted figures in order to ensure comparability of actuals and budget.

Source: OSRAM Group, PwC Analysis.

252. In financial year 2017, sales of the OSRAM Group were 2% above the planned figures due to sales in the OS and Specialty Lighting business units (now Business Units AM and DI). In financial years 2018 and 2019, however, sales fell short of the planned figures by 5% and 14% respectively. This development in the financial years 2018 and 2019 is mainly due to the declining trend in demand for passenger cars as a result of the so-called emission scandal, the weak dollar against the euro, the trade conflict between China and the USA as well as China's generally weaker economic growth.

253. The deviation from the planned revenues for the financial year 2018 is primarily caused by the business units OS and former business unit Specialty Lighting. In financial year 2018, the business unit OS faced delivery difficulties, increasing competition and high inventories held by distributors.

254. In contrast, the planned/actual deviation in sales in financial year 2019 was mainly due to developments in the business units OS and AM, which were both confronted with lower automobile production. With regards to the business unit AM it should be noted that the transfer of customer relationships into the subsidiary OSRAM Continental did not take place to the extent that was originally planned (see paragraph 185). As a result, revenues were lower than anticipated in financial year 2021. The business unit DI, on the other hand, was able to realise a result closer to the planned figures; nevertheless, this business unit could not reach the planned figures, too. In the financial years 2018 and 2019, the business unit DI was confronted with a shortage of components combined with a delayed opening of a new plant. Furthermore, customers in the project business were more reluctant than expected regarding investments in financial year 2019 due to the general economic situation. In addition, the decline in sales from "city beautification" projects in China was stronger than anticipated. The adjusted EBITDA I of the OSRAM Group for the financial year 2017 was exceeded by 4%. As with sales, this development is linked to the business unit OS and Specialty Lighting. Economies of scale also played an important role, which were realised due to higher sales. The exceeding of the adjusted EBITDA I (in accordance with the presentation on the adjustment of the operating income; see paragraph 203 et seq.) was already reflected in the income statement at gross profit level. In the financial years 2018 and 2019, adjusted EBITDA I was below the planned figures

by 14% and 48%, respectively. The development of adjusted EBITDA I is mainly due to the development of revenues and negative economies of scale. Adjusted general and administrative and selling expenses were lower than forecasted at the Group level in both years.

255. The EBITDA of the OSRAM Group, which is not adjusted for special items such as restructuring costs and acquisition-related costs, was 6% higher than planned for the financial year 2017. In the financial year 2018, however, there was a negative deviation of 24% between planned and actual figures, and in the financial year 2019 there was a negative deviation of 66%. In addition to the factors already described in Adjusted EBITDA I, research and development expenses and general and administrative expenses were higher than forecasted at Group level in financial year 2018. However, the differences were low in percentage terms (3% for research and development expenses and 2% for general and administrative expenses). In financial year 2019, all central expense items below gross profit were lower than anticipated.

256. The analysis of forecast accuracy shows that revenues and EBITDA in the economically stable financial year 2017 tended to be projected with high degree of planning quality. In contrast, the deviations in revenue in the financial years 2018 and 2019 indicate an optimistic nature of the planning process in economically challenging times, which is also reflected in the gross profit due to the business model of OSRAM. Some differences between projected and realised gross margin result from external events like the mid- and long-term impact of the diesel scandal or the trade conflict between China and the USA, which were not predictable to some extent. In terms of expenses below the gross profit the economically challenging financial years 2018 and 2019 show a sound level of accuracy with the forecasts. Regarding the planning of the special items, i.e. transformation costs and acquisition-related costs, a slight underestimation is evident due to the nature of these special items. Taking into account our analysis of the forecast accuracy, the detailed planning process, which is based on the estimates of the responsible planning staff, we consider the budget accounting to be a suitable, albeit ambitious basis for determining the net present value, even though it is challenging in view of the business environment caused by the ongoing Covid-19 pandemic.

4. Key assumptions

257. We have determined the enterprise value of OSRAM as of 3 November 2020 based on the following specific procedures and assumptions:

- For the purpose of the valuation, we have assumed that the company will continue to operate (going concern premise). In line with this and in accordance with the company's business concept, it is assumed that all business activities existing on the valuation date will be continued. The exception to this is OSRAM Continental which is expected to be retransferred as of October 1, 2021. The business plan reflects that individual business activities of the joint venture will be transferred back to OSRAM Group.

- Our analyses were based on OSRAM Group's planning accounts and the underlying planning assumptions were examined for plausibility.
- The OSRAM Group's planning calculation is based on an average exchange rate of USD 1.17 per euro for fiscal year 2021 and an average exchange rate of USD 1.15 per euro for fiscal year 2022. For fiscal years 2023-2025, an exchange rate of USD 1.12 per euro was applied. OSRAM generates more income than expenditure in US dollars and US dollar-related currencies. As a result, all other things being equal, the operating result of the OSRAM Group increases if the US dollar appreciates against the euro and decrease if the US dollar depreciates against the euro.
- Operating cash and cash equivalents at a level of 8% of sales were considered in accordance with the OSRAM Group's management.
- Corporate income taxes for the contributions to earnings generated in Germany were calculated based on nominal tax rates planned by OSRAM, considering tax loss carryforwards and tax benefits. For the contributions to earnings accruing abroad, the respective foreign tax conditions and the resulting effective tax rates were used.
- For the business unit segments Digital Systems and Entertainment & Industries, an extended planning period is reflected by applying a present value equivalent in the first years of the terminal value phase.
- The planning calculation assumes increasing capacities. In the terminal value, alternative investments are planned taking inflation effects into account, which are reflected in the terminal growth rate.
- The cost of debt of the OSRAM Group has been calculated based on the continuing holdings in the projected balance sheet, considering existing terms and conditions in the forecast period, with individual interest-bearing assets and liabilities being netted out for valuation purposes. The interest expenses from pensions were updated consistently. These were recognised in the financial result based on average interest rates between 2.3% and 2.6%.
- In the detailed planning period, no dividends were assumed for OSRAM in the first two years due to the expected loss situation. In accordance with the previously planned dividend policy, a 40% pay-out ratio for the financial surpluses is projected for the subsequent years of phase I (2022-2025), the remaining surpluses are retained.
- From 2026 onwards, a long-term average pay-out ratio of 50.0% was assumed. This pay-out ratio is based on the pay-out ratios observable in the market. The value contributions from reinvestments in the terminal value are fictitiously allocated directly to the shareholder and the retained earnings are reinvested.

- The 3 November 2020 is taken as the valuation date for determining the company value. On that date, the extraordinary general shareholder meeting of OSRAM takes place and a decision concerning the domination and profit transfer agreement with the ams Offer is expected to be made.

258. A leased building in Traunreut (Germany) and a real estate in Berlin were identified as non-operating assets of the OSRAM Group. The affiliated companies of the OSRAM Group, mainly investments in emerging companies that are currently not profitable, were recognised as special values. In addition, the shares in two venture capital funds were considered separately.

II. Expected net distributions from operating assets

1. Earnings before interest and taxes (EBIT) in the detailed planning period

259. The following table shows the consolidated planning of revenues and earnings of OSRAM Group for the planning years 2020 to 2025 and the last financial year 2019. For the financial year 2019, it is worth noting that it was not possible to allocate the overall normalisations to the corresponding expense items, as OSRAM Group determines normalisations by cost type, not by function. Furthermore, it should be noted that the stated expenses in financial year 2019 differ from the ones illustrated in the previously shown historicals (see paragraph 168). In this chapter, the financial year 2019 already contains the adjusted organisational structure that was implemented in the current financial year 2020 in order to allow comparability with the detailed planning period from 2020 to 2025.[1]

[1] The adjusted organisational structure includes the following changes: development costs related to application engineering in the business unit OS were transferred from research and development expenses to marketing and selling expenses and product line management costs were assigned from general administration expenses to marketing and selling expenses.

OSRAM Group
Business plan

FY as of 30 September, in EUR millions	FY19 Act	FY20 Plan	FY21 Plan	FY22 Plan	FY23 Plan	FY24 Plan	FY25 Plan	CAGR GJ19-25
Revenue	3,464	3,020	3,198	3,526	3,857	4,209	4,559	5%
Cost of goods sold and services rendered	(2,578)	(2,330)	(2,313)	(2,465)	(2,609)	(2,821)	(2,982)	2%
Gross profit	**886**	**690**	**885**	**1,061**	**1,248**	**1,389**	**1,577**	**10%**
Research and development expenses	(403)	(385)	(354)	(311)	(326)	(341)	(363)	-2%
Marketing, selling and general and adm. exp.	(626)	(622)	(618)	(585)	(586)	(600)	(622)	0%
Other operating income	33	66	27	-	-	-	-	-100%
Other operating expenses	(234)	(3)	(20)	-	-	-	-	-100%
EBIT	**(345)**	**(254)**	**(80)**	**165**	**336**	**448**	**591**	**n.a.**
For information purposes:								
EBIT	***(345)***	***(254)***	***(80)***	***165***	***336***	***448***	***591***	
Depreciation and amortisation	*521*	*397*	*331*	*315*	*310*	*305*	*312*	
EBITDA	***176***	***143***	***250***	***480***	***646***	***753***	***903***	
Capital expenditure	**208**	**100**	**219**	**238**	**271**	**304**	**307**	
Capital expenditure in % of sales	*6%*	*3%*	*7%*	*7%*	*7%*	*7%*	*7%*	
Yearly sales growth	*n.a.*	*(13%)*	*6%*	*10%*	*9%*	*9%*	*8%*	
In % of sales								
Gross profit	*26%*	*23%*	*28%*	*30%*	*32%*	*33%*	*35%*	
Research and development expenses	*12%*	*13%*	*11%*	*9%*	*8%*	*8%*	*8%*	
Marketing, selling and general and adm. exp.	*18%*	*21%*	*19%*	*17%*	*15%*	*14%*	*14%*	
Other operating income	*1%*	*2%*	*1%*	*0%*	*0%*	*0%*	*0%*	
Other operating expenses	*7%*	*0%*	*1%*	*0%*	*0%*	*0%*	*0%*	
EBIT margin	*(10%)*	*(8%)*	*(3%)*	*5%*	*9%*	*11%*	*13%*	
Depreciation and amortisation	*15%*	*13%*	*10%*	*9%*	*8%*	*7%*	*7%*	
EBITDA margin	*5%*	*5%*	*8%*	*14%*	*17%*	*18%*	*20%*	

Source: OSRAM Group, PwC analysis.

260. In the period under review revenues are expected to increase from EUR 3,464 million in financial year 2019 to EUR 4,559 million in the last planning year 2025. This corresponds to an average annual growth rate of 5% (CAGR 2019 to 2025).

261. According to OSRAM's Board of Management, the effects of the Covid-19 pandemic are expected to peak in the third quarter of financial year 2020. The planning calculation for the financial year 2020 therefore includes a decrease in revenue of 13% as a result of the anticipated consequences of the Covid-19 pandemic. However, the planning calculation by OSRAM assumes that the economic level that existed before the Covid-19 pandemic will be reached again in the third quarter of planning year 2021. Consequently, a positive revenue development of 6% is projected for the financial year 2021; nevertheless, total revenue in 2021 will be lower than in 2019 due to the development in the previous quarters.

262. The following table shows the expected revenues of the individual business units from 2020 to 2025. It should be noted that the illustrated revenues for the financial year 2019 also reflect the newly implemented organisational structure in order to ensure comparability with the detailed planning period. With regards to revenues, the organisational restructuring included the reallocation of LedEngin, Inc., California/USA, from the business unit DI to the business unit OS, the transfer of LUM APAC to the business unit DI and the shift of the unit Machinery (spare parts manufacturing and construction of production equipment) from common functions to the business unit AM.

OSRAM Group
Revenues business units

FY as of 30 September, in EUR millions	FY19 Act	FY20 Plan	FY21 Plan	FY22 Plan	FY23 Plan	FY24 Plan	FY25 Plan	CAGR GJ19-25
Opto Semiconductors	1,464	1,336	1,425	1,604	1,841	2,102	2,375	*8%*
yearly sales growth	*(16%)*	*(9%)*	*7%*	*13%*	*15%*	*14%*	*13%*	
Automotive	1,781	1,573	1,717	1,787	1,897	1,971	2,021	*2%*
yearly sales growth	*(7%)*	*(12%)*	*9%*	*4%*	*6%*	*4%*	*3%*	
Digital	934	741	811	874	930	992	1,059	*2%*
yearly sales growth	*(1%)*	*(21%)*	*10%*	*8%*	*6%*	*7%*	*7%*	
Reconciliation cons. fin. statements	(715)	(630)	(755)	(739)	(811)	(855)	(897)	*4%*
Revenue	**3,464**	**3,020**	**3,198**	**3,526**	**3,857**	**4,209**	**4,559**	***5%***

Source: OSRAM Group, PwC Analysis.

263. The revenue projection of the business unit OS for financial years 2020 and 2021 is based on a "bottom-up" approach in which orders with existing customers, further potential orders and the current competitive situation are considered in close coordination with the sales department and the business unit segments. The revenue projection is derived at the level of the business unit segments, i.e. Sensors, Visualisation and Laser, Illumination and Automotive. In general, the business unit OS expects an annual price erosion in the high single-digit percentage range for the planning period, which, however, should be more than compensated by volume increases in the mid- and long-term planning period. Overall, the business unit OS forecasted an average annual growth rate of 8% (CAGR 2019 to 2025) resulting in a revenue level of EUR 2,375 million in the financial year 2025. The projected revenue growth is above the expected market growth rate for optoelectronic components of 0.7% p.a. for the period 2019 to 2025 (see paragraph 77). It should be noted that the global market for optoelectronic components is very extensive and that the market served by OSRAM is only one part of it.

264. The expected revenue growth of the business unit OS from EUR 1,464 million in financial year 2019 to EUR 2,375 million in financial year 2025 is mainly based on the areas of sensor technology, visualisation and laser as well as illumination. The planning period shows a double-digit average annual revenue growth rate for these three divisions (13% CAGR 2019 to 2025 for the Sensors division, 16% for the Visualisation and Laser division and 12% for the Illumination division). In the sensor division, 3D sensor technology for smartphones, which are part of the consumer electronics market (see paragraph 82), is expected to generate strong revenue growth. In the Visualisation and Laser segment, revenue growth is expected to be generated from LED projectors with a high degree of brightness as well as the LiDAR technology and Near-to-Eye ("NTE") projection. LiDAR technology enables the measurement of distances to objects using light pulses and is expected to be applied in the field of autonomous driving, whereas NDE projection will be used in the field of "augmented reality", for example for data glasses. The sales trend in the Illumination division over the course of the planning period exceeds the projected market trend. This planning is based on initiatives for customer-specific developments in the LED sector, horticulture lighting and UV-C light.

265. For the automotive sector, however, the business unit OS expects much slower revenue growth over the planning period with a CAGR of 4%, with revenues not exceeding the level prior to the Covid-19 pandemic (financial year 2019) until financial year 2022. This projected revenue trend is slightly lower than the expected growth of 5.4% p.a. in the automotive lighting market segment (during 2019 to 2024; see paragraph 94), as the business unit OS, in contrast to the market study, has already taken the effects of the Covid-19 pandemic into account in its revenue planning. Based on data from IHS Markit, a decline in global vehicle production of 21% is projected for financial year 2020. Long-term growth in the automotive sector is primarily based on the expectation of a steadily increase in "content per car" resulting from a growing penetration rate in forward lighting and an increasing demand for pixeled light sources as well as the growing demand for "ambient lighting" for vehicle interiors.

266. The revenue planning of business unit AM from EUR 1,781 million in the financial year 2019 to EUR 2,021 million in the financial year 2025 is based mainly on market share forecasts resulting from detailed market research (see paragraph 246), since the contracts with existing customers do not include a minimum order quantity. Revenue growth for the business unit AM is expected to show an average of 2% p.a. (CAGR 2019 to 2025), with annual revenue growth declining from double-digit to single-digit percentages starting in financial year 2022 due to the declining business with traditional light sources. Similar to the business unit OS, a general assumption for the revenue projection of business unit AM is that the Covid-19 pandemic will have a significant impact. The automobile production is expected to decline by 21% in the financial year 2020, resulting in a revenue decrease of 12%. For the business unit AM an annual price erosion in the single-digit percentage range is expected for the planning period. The price erosion for LED technologies is higher than for the longer-established technologies such as halogen products due to the higher potential for productivity increases and as a result the higher degree of competition.

267. The expected revenue growth in the planning period of business unit AM is primarily based on retrofit LED products for the retrofit and spare parts market (i.e. LED light sources can be used in old bulb sockets of conventional lighting products). Regarding the growth in the retrofit LED products segment, it is assumed that the necessary regulatory approvals will be gradually granted, country by country, from financial year 2021 on, enabling OSRAM Group to maintain its leading position in the retrofit and spare parts market. In the traditional automotive sector, which includes both the OEM and the retrofit and spare parts business, revenues are expected to decline in the long-term due to the rising LED penetration rate. However, the business unit AM plans to keep its position against its main competitors in the traditional market by superior know-how pertaining the product applications and to the market and thus to gain a significant market share in the generally declining market during the planning period. The overall forecasted revenue growth of 2% p.a. from financial year 2019 to financial year 2025 is below the expected market growth in the automotive lighting segment of 5.4% p.a. in the period 2019 to 2024, on which the business unit Automotive has a strong focus

(see paragraph 94). The lower growth expectations can be explained by the Business Unit AM's focus on the traditional lighting and the LED component business.

268. In case of the business unit DI, an increase in turnover from EUR 934 million in financial year 2019 to EUR 1,059 million in the financial year 2025 is projected, which corresponds to a CAGR of 2%. It is expected that the Covid-19 pandemic will result, among others, in an interruption of supply chains and restrictions in the entertainment industry, which in turn will have an impact on revenues. As a result, a decline in sales of 21% is expected for the financial year 2020. In contrast, normalisation effects are forecasted for the financial year 2021, resulting in revenue growth of 10%. The business unit DI anticipates for the planning period an annual price erosion in the low single-digit percentage range.

269. The revenue growth of the business unit DI in the planning period results primarily from the strategic focus on lighting management systems for networked buildings and industrial IoT applications as well as LED luminaires for the horticulture market, which show an average annual revenue growth rate of 13% (CAGR 2019 to 2025). Sales of lighting management systems and industrial IoT applications are expected to grow faster than the market during the planning period. For horticultural lighting, on the other hand, intense competition is expected, especially in the cannabis cultivation sector, due to the lower barriers of market entry. For the market segment "Horticulture Lighting" an average growth rate of 23% p.a. was expected for the period 2019 to 2024 prior to the occurrence of the Covid-19 pandemic (see paragraph 122). However, the business unit DI expects that the Covid-19 pandemic will only have a limited impact on the Horticulture Lighting market (see paragraph 121).

270. The business unit segment Digital Systems, which provides components for LED luminaires and accounted for 48% of revenues of the business unit DI in financial year 2019, is expected to show a lower average annual growth rate of 2% over the planning period (CAGR 2019 to 2025). It is assumed that from the financial year 2023 onwards, the business unit segment Digital Systems will grow slightly above average in relation to the specific sales market defined by OSRAM. The lamp business for the Entertainment Lighting division, on the other hand, is expected to be characterised by declining revenues in the long term, as the competition is expected to be stiff. Compared to the entertainment lighting market (see paragraph 114), this negative trend is attributable to the large revenue share from the traditional lamp business that is expected to decline in the detailed planning period.

271. In addition to the revenues of the business units, the forecast includes the reconciliation to the consolidated financial statements, which can be split in the two categories "corporate items and pensions" and "eliminations, corporate treasury, and other reconciling items". Corporate items primarily include costs relating to governance functions, contractual manufacturing for Ledvance, and income and expenses related to pensions. The category "eliminations, corporate treasury, and other

reconciling items" comprise plans for treasury activities and the elimination of internal revenues of the business unit OS for the intercompany sale of LED products, which account for around half of revenues of the business unit OS in financial year 2020 and 38% in financial year 2025.

272. Because of the Covid-19 pandemic, the gross margin of OSRAM Group declines from 26% in 2019 to 23% in financial year 2020. In the remaining detailed planning period, the gross profit improves continuously and is expected to reach a level of 35% in financial year 2025, with the strongest improvement in financial year 2021 to an expected level of 28%.

273. This expected improvement in gross margin from financial year 2021 onwards is primarily driven by the business unit OS due to the implementation of productivity measures which are expected to have a positive effect of EUR 120 million on gross profit in financial year 2021. In the following years, these positive effects are expected to increase up to an amount of EUR 150 million per year. This positive impact is however partly offset by other factors, such as price erosion. The productivity measures relate to savings in procurement and value creation measures in the plants of the business unit OS. During the detailed planning period, economies of scale, the profitable automotive business in the business unit segment "sensors" and the focus on cost reduction in 3D sensor technology are expected to materialise positive effects on the gross margin. In addition, new product launches in the automotive sector, portfolio optimisation measures, improvements in laser production costs and higher production volumes also contribute to a higher gross margin.

274. The gross margins of the business units AM and DI are also improving during the planning period, although to a lower extent. The gross margin of the business unit AM is expected to increase from 15% in financial year 2020 to 19% in the financial year 2025. In case of the business unit DI, the gross margin is expected to increase from 22% in the financial year 2020 to 32% in financial year 2025. In the financial year 2021, the improvement in gross margin in the business units is mainly due to volume effects, product launches and productivity increases.

275. Considering the individual expense items in the cost of sales accounting, the personnel planning is of major importance. The personnel planning reflected in the group business plan is the objective of the various productivity measures. For example, due to the Covid-19 pandemic, OSRAM Group is projecting only minor increases in personnel expenses in financial year 2021. From financial year 2022 onwards, usual region-specific increases in salary expenses are planned and integrated into the expense planning of the business plan (for example a 3% increase in personnel costs p.a. for Germany). At Group level, significant staff reductions are planned for financial years 2020 and 2021, affecting all business units and central functions. In financial year 2020, the number of employees worldwide is expected to decrease from 23,486 to 21,714 and a further reduction to 20,450 is considered for 2021. Starting in financial year 2024, the number of employees is expected to increase again, resulting in a headcount of 20,748 in financial year 2025. These assumptions are reflected both in the cost of sales and in the operating expenses.

276. The research and development expenses of OSRAM Group are expected to decrease in the detailed planning period from EUR 403 million in financial year 2019 to EUR 363 million in financial year 2025. This corresponds to an average annual decline of 2% (CAGR 2019 to 2025). The planned research and development expenses are expected to decline from financial year 2020 to financial year 2022 and to increase continuously from financial year 2023 onwards. The decline of the research and development expenses at the beginning of the planning period generally affects all three business units, as the focus in financial years 2020 and 2021 will be on profitability improvement programs. It should be noted, however, that research and development expenses in the business unit AM will increase by 27% in financial year 2020 the LiDAR technology division is intensifying the development of innovative products to enhance their product portfolio among others. The increase in research and development expenses is also related to impairment charges concerning OSRAM Continental. The research and development expenses of the business unit AM are expected to decline by 53% in financial year 2022 due to the "retransfer" strategy for OSRAM Continental.

277. Selling, marketing and general and administrative expenses are expected to decrease from EUR 626 million to EUR 622 million in the detailed planning period, representing an average annual decline of 0.1% (CAGR 2019 to 2025). The marketing, selling and general and administrative expenses show a decline until financial year 2022 and experience a one-digit growth from financial 2023 onwards. The decrease at the beginning of the planning period results from planned savings due to performance programs for common functions and the business units.

278. Other operating income is expected to increase from EUR 33 million in financial year 2019 to EUR 66 million in financial year 2020. The increase in financial year 2020 primarily results from earn-out reversals in relation with the acquisitions of Fluence and Vixar as well as the disposal of OLED patents. Beyond that, other operating income contains a contractual contribution of EUR 17 million in financial year 2020 for sales generated by the subsidiary OSRAM Continental. These are compensation payments for business activities with customers that have not been contributed to the subsidiary by Continental. The revenues are realised at the level of Continental. In financial year 2021, the contribution of contracts will amount to EUR 27 million. During the remaining detailed planning period from financial year 2022 onwards, the amount of other operating income is projected to be at EUR 0 million, as the joint activities of OSRAM and Continental (subsidiary OSRAM Continental) will be split in the context of the so-called "retransfer" strategy as of 1. October 2021 and no further other operating income is planned.

279. Other operating expenses amount to EUR 0 million in the planning period except for the financial years 2020 and 2021. Other operating expenses in financial year 2021 are mostly related to costs connected to OSRAM Continental.

280. In the business plan OSRAM Group accounted for transformation costs which serve to improve the competitiveness of the company. These were allocated to both cost of sales and operating expenses

including research and development costs and selling and general administrative expenses. Transformation costs are particularly high in financial year 2020 with EUR 97 million and EUR 83 million in financial year 2021. In financial year 2020, the transformation costs are related to the performance programs. In financial year 2021 the transformation costs are partly allocatable to the cost of sales of the business unit AM, as the traditional business is expected to be scaled back in the long-term due to the general development of technology penetration rates. Furthermore, additional expenses are incurred in financial year 2021 due the "retransfer" strategy for OSRAM Continental leading to restructuring expenses in OSRAM's factories. From the planning years 2022 to 2025, transformation costs range between EUR 13 million and EUR 19 million, except for financial year 2024, in which transformation costs of EUR 31 million are expected. For financial year 2024, it is planned to optimise the location concept of the back-end plant in Malaysia, a project which is allocated to the business unit OS. Next to transformation costs, the business plan of OSRAM also contains integration costs in 2022, as the company intends to acquire a share in a target that is active in the high-intensity UV lighting market.

281. The EBIT margin in financial year 2019 was - 10% and is expected to remain almost unchanged in the first planning year 2020 with - 8%. Over the detailed planning period, the EBIT margin will gradually improve, reaching an EBIT margin of 13% in financial year 2025.

282. The planned depreciation in the cost centres amounts to EUR 397 million in financial year 2020, which corresponds to 13% of revenues, decreases over the planning period and reaches a ratio of 7% of revenues in the financial year 2025. The depreciation and amortisation of EUR 521 million in financial year 2019 cannot be compared with the planning period, as extraordinary goodwill amortisation of EUR 210 million was recorded in this financial year (see paragraph 188). Excluding this extraordinary amortisation, amortisation in financial year 2019 amounts to EUR 311 million, which corresponds to 9% of revenues. The increase of the depreciation and amortisation to revenues ratio to 13% in financial year 2020 is mainly due to the introduction of IFRS 16, as the rights of use recognised in the balance sheet result in additional annual amortisation in the range of EUR 40 million and EUR 47 million p.a. in the detailed planning period. Adjusted for the amortisation of rights of use assets, amortisation in financial year 2020, for example, amounts to only EUR 350 million; this corresponds to 12% of revenues. Depreciation of property, plant and equipment is expected to amount to EUR 259 million in financial year 2020 and is expected to remain almost unchanged in the detailed planning period. Amortisation of intangible assets (excluding rights of use assets) is expected to amount to EUR 91 million in financial year 2020, which includes an impairment of OSRAM Continental in the amount of EUR 48 million (see paragraph 211). The amortisation of intangible assetsin financial year 2021 is therefore considerably lower and decreases continuously over the planning period to EUR 20 million in financial year 2025.

283. As a result, EBITDA is expected to increase from EUR 176 million in financial year 2019 to EUR 903 million in financial year 2025. However, a significant decline to EUR 143 million is planned for financial year 2020, particularly as a result of the Covid-19 pandemic. The EBITDA margin remains unchanged at 5% in financial year 2019 and 2020. From financial year 2021 onwards, the EBITDA margin increases continuously over the planning period and reaches 20% in financial year 2025. The improvement in EBITDA margin is due to a higher gross margin and lower operating expenses in relation to the revenue.

284. Regarding the capex planning, after a decline in capex due to the Covid-19 pandemic in the financial year 2020, the OSRAM Group plans to increase capex in the planning years 2021 to 2025. In the financial year 2021, capex in relation to revenues are expected to increase from 3% to 7% and the investment ratio will remain nearly unchanged for the rest of the planning period. In case of the business unit OS, increasing capex are projected in the business plan. The capex rate of the business unit OS increases from 4% in 2020 to 11% in financial year 2021 and is expected to be at an annual level of 11% or 12% from financial year 2022 onwards. Capex increase in financial year 2021 is due to capacity expansions and new product launches. Moreover, due to the capacity expansion in the backend plant in Malaysia investments increase in financial year 2022. In contrast, capex in the business units AM and DI are expected to remain at a rather constant level of 1% to 3% and 1% to 2% of sales, respectively. Capex of the business unit AM during the detailed planning period consist mainly of modernisation capex and maintenance measures. Structural capacity expansions are only expected to make up a small portion of capex. From 2020 to 2025, depreciation and amortisation are higher than the projected amount of capex. In 2020, depreciation and amortisation (incl. right of use assets) exceed capex by EUR 297 million and in financial year 2025 by EUR 6 million. As a result, fixed assets are expected to decline during the detailed planning period. It should be noted that development activities within the OSRAM Group are not capitalised on a regular basis.

285. Overall, OSRAM Group's financial planning is considered very ambitious. This assessment results from the following points:

- A significant share of projected revenue growth is based on upcoming product launches which are subject to a high degree of uncertainty such as the regulatory approval of retrofit LED products in Europe or the launch of NTE applications.

- According to the business plan, price erosion - which in the past was mainly compensated by operational efficiency programs - will no longer be compensated by respective efficiency programs from financial year 2022 onwards. However, starting from 2022, price erosion will be compensated by volume growth and resulting economies of scale.

- For various products and business units, revenue growth is expected to be above projected market growth.

- Over the planning period, the EBIT margin increases from - 8% in financial year 2020 to 13% in financial year 2025. In the same period, revenues grow by 51%, while research and development as well as marketing, selling and general and administration expenses decrease by 2%.
- Throughout the entire planning period, there is a depreciation surplus, even though each business unit of the OSRAM Group launches numerous new products. In addition, significant volume-related growth is planned.
- The OSRAM business plan for 2023-2025 is based on a USD to Euro exchange rate of 1.12, while the current rate is almost at 1.20. The higher exchange rate is affecting OSRAMs performance aversively, since, as illustrated in paragraph 257, a significant portion of revenues are generated in the US and are thus billed in USD. The business plan is based on the assumption that from January 2022 onwards, the EUR/USD exchange rate is assumed at 1.12 again.

2. Valuation-related modifications to the planning calculation

286. In the course of our planning analysis we were not able to identify any mathematical discrepancies in the business plan provided by OSRAM.

287. An office property in Traunreut (Germany) was identified as non-operating asset, which was accounted for separately as part of our valuation. This office property is used as the headquarter of the former group division Siteco and is rented to this former group division (see paragraph 352 et seq.). As the rental income from the property was not considered in the business plan, no adjustment of the business plan with regard to rental income from the office property was required.

288. Within Fluxunit, administrative expenses of EUR 1.3 million per year were planned. However, these expenses are not accompanied by income in the business plan. Therefore, investments of Fluxunit were implemented in the valuation as a special value and the administrative expenses were eliminated in the business plan accordingly.

289. Besides the consideration of synergies and respective implementation costs as well as the elimination of the administrative expenses of the Fluxunit, no further modification of the business plan has been implemented for valuation purposes.

3. Determination of the profit contributions of the valuation-relevant synergies

290. In deriving the expected net distributions, we have considered potential synergy effects from the planned cooperation with ams Group. So-called pseudo synergies considered in the valuation include potential synergies from measures that can be realised without the envisaged domination and profit and loss transfer agreement if they are attributable to the OSRAM Group.

291. As of the valuation date, a business combination between OSRAM and ams Offer exist, so that some synergy effects can be realised without a domination and profit and loss transfer agreement being effective, however limited by usual legal restrictions. Pseudo synergies (that is, also those synergies that the Board of Directors of the OSRAM can legally realise even if there is no domination and profit and loss transfer agreement) are to be considered in the valuation as set out in IDW S 1, if the synergy measures are sufficiently concrete as of the valuation date (i.e. have already been initiated or are documented in the business plan). In contrast, real synergies (that is, synergies that cannot be legally realised by the Board of Directors of OSRAM without a domination agreement) must not be considered. They can only be obtained after the domination and profit and loss transfer agreement is concluded and shall not reflected in an objectified business value (BGHZ 138, 136, 140; BayObLG AG 1996, 127, 128; OLG Stuttgart AG 2000, 428, 429; Topic Volume "Valuation and Transaction Advice", 2018, F 61 et seqq.).

292. According to this differentiation, we have considered pseudo synergies, that have been identified and that could be allocated to the OSRAM Group, resulting in an increase in the business value.

293. Considering the existing legal restrictions and effects already reflected in the business plan, concrete synergy potentials were identified as part of the integration project of OSRAM and ams Group. The contractual partners expect synergies on the revenue and cost side beyond the approved business plan in the detailed planning period. The expected revenue synergies, i.e. sales growth less the corresponding production costs plus sales and administrative expenses, result mainly from the compatibility and complementarity of the respective market accesses and sales channels of the product portfolios of OSRAM and ams Group. The cost synergies stem mainly from improvements in manufacturing efficiency. Cost synergies are also expected in procurement, sales and administration.

294. The earnings potential of these measures and the costs necessary to realise the respective synergies were quantified. In order to separate the valuation-relevant pseudo synergies for OSRAM from those arising from ams Group, the synergies were also allocated to the OSRAM Group and ams Group.

295. This process identified long-term synergy potential in the amount of EUR 54 million, which need to be reflected for the purposes of company valuation in accordance with the definition described above. Corresponding implementation costs must also be considered.

296. Considering the forecasted synergies and the modification explained above regarding the administrative expenses in connection with the Fluxunit business activity, the business plan is as follows:

OSRAM Group
Modified business plan incl. pseudo synergies

FY as of 30 September each year, in EUR million	FY 19 Act	FY 20 Plan	FY 21 Plan	FY 22 Plan	FY 23 Plan	FY 24 Plan	FY 25 Plan	CAGR FY19-25
Revenues	3,464	3,020	3,198	3,526	3,857	4,209	4,559	5%
Cost of goods sold	(2,578)	(2,330)	(2,313)	(2,465)	(2,609)	(2,821)	(2,982)	2%
Gross profit	**886**	**690**	**885**	**1,061**	**1,248**	**1,389**	**1,577**	***10%***
Research and development costs	(403)	(385)	(354)	(311)	(326)	(341)	(363)	-2%
Selling, general and administrative expenses	(626)	(622)	(618)	(585)	(586)	(600)	(622)	0%
Elimination administration expenses Fluxunit	-	1	1	1	1	1	1	
Other operating income	33	66	27	-	-	-	-	n.a.
Other operating expenses	(234)	(3)	(20)	-	-	-	-	n.a.
EBIT	**(345)**	**(253)**	**(79)**	**166**	**338**	**449**	**592**	***n.a.***
Revenue and cost synergies	-	-	18	50	54	54	54	
Expenses of revenue and cost synergies	-	-	(4)	(6)	(1)	-	-	
EBIT incl. pseudo synergies	**(345)**	**(253)**	**(65)**	**210**	**392**	**504**	**647**	***n.a.***
In addition:								
EBIT incl. pseudo synergies	***(345)***	***(253)***	***(65)***	***210***	***392***	***504***	***647***	
Depreciation and amortisation	*521*	*397*	*331*	*315*	*310*	*305*	*312*	
EBITDA incl. pseudo synergies	***176***	***144***	***266***	***525***	***701***	***809***	***959***	
Annual change of revenues in %	*n.a.*	*(13%)*	*6%*	*10%*	*9%*	*9%*	*8%*	
In % of revenues								
Gross profit	*26%*	*23%*	*28%*	*30%*	*32%*	*33%*	*35%*	
Research and development costs	*12%*	*13%*	*11%*	*9%*	*8%*	*8%*	*8%*	
Selling, general and administrative expenses	*18%*	*21%*	*19%*	*17%*	*15%*	*14%*	*14%*	
Other operating income	*1%*	*2%*	*1%*	*0%*	*0%*	*0%*	*0%*	
Other operating expenses	*7%*	*0%*	*1%*	*0%*	*0%*	*0%*	*0%*	
EBIT margin	*(10%)*	*(8%)*	*(2%)*	*6%*	*10%*	*12%*	*14%*	
Depreciation and amortisation	*15%*	*13%*	*10%*	*9%*	*8%*	*7%*	*7%*	
EBITDA margin	*5%*	*5%*	*8%*	*15%*	*18%*	*19%*	*21%*	

Source: ams Group, OSRAM, PwC Analysis.

4. Earnings before interest and taxes (EBIT) in terminal value

297. To derive the earnings before interest and taxes (EBIT) for the perpetual annuity period, the future earning power of the OSRAM Group was estimated - based on the detailed planning period - assuming that the company would continue to exist indefinitely.

298. In a first step, the sales revenues of the OSRAM Group were converted into a sustainable sales figure. Given the ongoing transformation to a high-tech photonics company, which was depicted in the detailed planning phase, the sales level of the last planning year of EUR 4,559 million is assessed as an appropriate starting point for a sustainable sales level. This sales level was increased by the growth discount of 1.0% to a total of EUR 4,605 million for the perpetual annuity period. Using an annuity equivalent to the present value, we have also considered extended planning periods for the perpetual annuity in the BU segments Entertainment and Industry as well as Digital Systems, resulting in sales revenues of EUR 4,707 million, which we applied as a basis for a sustainable sales level.

299. In a second step, the EBITDA forecast for the perpetual annuity was derived. For the perpetual annuity period, the sustainable average EBITDA margin expected for the OSRAM Group was measured based on the average planned EBITDA margins without synergies of the last three planning years. This amounts to 18.2%. In addition, the corresponding EBITDA effects, mainly because of the prolonged planning period for the BU segments Entertainment Industries and Digital Systems, were considered by applying an annuity equivalent to the present value. This results in an additional EBITDA margin contribution of 0.7%. In total, the perpetuity results in a sustainable EBITDA margin of 18.9% before synergies.

300. Finally, the EBITDA effect from synergies (considering the associated additional expenses) of the last planning year was increased by the growth discount of 1.0% and added to the sustainable EBITDA margin. In relation to the sustainable sales revenues, the additional margin contribution from synergies is around 1.2%.

301. Based on the above-mentioned factors, we have estimated an EBITDA margin of around 20.1%, considering the synergies that can be achieved on a sustainable basis for the period of perpetuity on a long-term basis. It should be noted that the EBITDA margin of the OSRAM Group has historically been significantly below the median EBITDA margin of the peer group. In addition to the group of comparable companies (so-called peer group) presented in paragraph 338 to derive the beta factor, the company Nichia Corp. of Anan/Japan ("Nichia"), a major competitor of the OSRAM Group in the OS business unit, was also taken into account as part of the peer group in the profitability analysis (not listed on the stock exchange). Only in the period from 2015 to 2017 the EBITDA margin of the OSRAM Group was slightly above the median of the peer group of around 12.8% to 14.8%. At the beginning of the detailed planning period, planning years 2020 and 2021, it is expected that the profitability of the OSRAM Group before taking into account synergies will approach the peer group profitability of around 15.5% in 2023 and exceed it from year 2023 on. With a further increase in the EBITDA margin from 2023 to 2025 before synergies, the profitability of the OSRAM Group is moving away from peer group profitability.

302. In the terminal value, used assets must be replaced. In the past, over the financial years 2010 to 2019, the average capex amount was EUR 335 million and the average capex ratio to sales revenues was 8.0%. Excluding the financial years 2017 and 2018, which are characterised by one-off expansion investments, the average capex amount for the period is EUR 246 million and the average capex ratio is 5.6%. Over the detailed planning phase 2021 to 2025, the capex amount amounts to EUR 266 million and the capex rate is 6.9% (excluding investments in rights of use and thus comparable with the investments observed in the past). Because of the significantly lower capex in the current financial year 2020 due to Covid-19, this year is not included in the average of the detailed planning period. A rounded sustainable investment ratio of 7.0% (equivalent to EUR 329 million) was used for the valuation. This includes investments for the perpetual annuity of the rights of use considered as an annuity of EUR 44 million. After deducting this annuity of the investment in rights

of use in the height of EUR 44 million, the investment amount is EUR 285 million, which is around EUR 22 million below the comparable investment of EUR 307 million in the last planning year.

303. In total, an operating earnings contribution (EBIT) of EUR 617 million (including synergies) and an EBIT margin of 13.1% (including synergies) were recognised in perpetuity.

5. Net distributions after personal income taxes

304. We have transferred the projected earnings before interest and taxes (EBIT) into expected net distributions to the shareholders while taking the financial result, income taxes of the OSRAM Group, minority interests and the personal income taxes paid by the shareholders into account. Based on the approach described below and the applied assumptions, the expected net distributions to the shareholders were derived as follows:

Net payout to be discounted

in EUR million	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	from 2026 Terminal value
EBITDA	144	266	525	701	809	959	946
Depreciation and amortization	(397)	(331)	(315)	(310)	(305)	(312)	(329)
EBIT	**(253)**	**(65)**	**210**	**392**	**504**	**647**	**617**
Financial result	(18)	(30)	(21)	(17)	(13)	(9)	(8)
EBT	**(271)**	**(95)**	**189**	**375**	**491**	**637**	**609**
Corporate tax	(32)	(76)	(37)	(63)	(112)	(162)	(166)
Earnings after Corporate Tax (before minority interest)	**(303)**	**(171)**	**152**	**312**	**379**	**475**	**443**
Minority interest	61	44	-	-	-	-	-
Earnings after Corporate Tax (after minority interest)	**(242)**	**(127)**	**152**	**312**	**379**	**475**	**443**
Cashflow relevant adjustments	-	-	-	-	-	-	(4)
Distributable result	**(242)**	**(127)**	**152**	**312**	**379**	**475**	**438**
Retained earnings	242	127	(91)	(187)	(227)	(285)	(219)
Dividends	**-**	**-**	**61**	**125**	**152**	**190**	**219**
Personal income taxes	-	-	(16)	(33)	(40)	(50)	(58)
Dividends after personal income taxes	**-**	**-**	**45**	**92**	**112**	**140**	**161**
Fictitious attribution from retained earnings	-	-	-	-	-	-	219
Personal income tax on fictitious attribution	-	-	-	-	-	-	(29)
Net payout to be discounted	**-**	**-**	**45**	**92**	**112**	**140**	**352**

305. The financial result was derived from the OSRAM Group's asset position as at 30 September 2019 and an integrated balance sheet and financial plan for the individual financial years. The plan includes planned investments and depreciation as well as the development of net working capital.

306. In the detailed planning period, we have assumed the credit and debit interest rates on the basis of standard market interest rates and the contractual agreements at around 0.0% (credit interest rate) and period-specific and credit type-specific debit interest rates of around 1.0% to 3.0%. In relation the planned lease liabilities we have selected an interest rate of 3.1%. In the terminal value phase, these interest rates were set at around 0.0% (credit interest), around 2% (debit interest), 3.1% (lease liabilities). The planned period-specific pension provisions are based on an interest rate of around 2.3% to 2.7%, which was derived from the current pensions overview for the pension commitments.

307. Furthermore, the financial result includes factoring expenses of around EUR 1 million each in the respective planning years.

308. We have recognised operating income taxes based on the effective tax rates planned by the OSRAM Group, considering loss carryforwards and tax benefits. The respective foreign tax regimes were reflected as the basis for the taxation of the earnings generated overseas.

309. Trade tax, corporate income tax and the solidarity surcharge were considered for calculating the corporate taxes incurred in Germany. Trade tax was calculated at an average trade tax factor of 407.9%, resulting in a trade tax rate of 14.3%. Corporate income tax was calculated at 15%. The solidarity surcharge was calculated at 5.5% of corporate income tax.

310. We have calculated the operating income taxes considering existing tax loss carryforwards and restrictions on interest deduction pursuant to Section 4h of the German Income Tax Act (EStG) and Section 8a of the German Corporation Tax Act (KStG) ("Zinsschranke"). This also reflects the situation pursuant to Section 8b (5) KStG, according to which 5% of the distributions received from foreign subsidiaries are considered in the tax base of the German fiscal unity.

311. In the detailed planning period, there is a negative EBT for the financial years 2020 and 2021 at the level of the OSRAM Group. It should be noted that some Group companies generate a positive tax result in this period, and therefore a positive tax expense is still planned. For the financial years 2022 to 2025, the effective tax rates for the Group are between approximately 16.9% and 25.4%. The perpetual annuity results in an effective tax rate of around 27.3%, in which the tax benefits (see Note 47 et seq.), which are in place, have been reflected in the tax rate. At the beginning of the terminal value, the remaining tax benefits, which are reduced over time, were converted into an average tax relief on an annuity basis.

312. The minority interests in the financial years 2020 and 2021 result from the, in these years still existing, 50% share of the joint venture partner Continental in OSRAM Continental, which was deducted from the consolidated profit available for distribution to the shareholders of OSRAM based on business plan. Due to the expected losses, the deduction of minority interests leads to an increase in the financial surpluses to be discounted.

313. The cashflow relevant adjustments in the terminal value period result from the growth-related change in net debt in order to maintain the sustainable debt ratio and from the sustainable growth-related investment requirements in current assets. These adjustments were considered in deriving the net distributions to be discounted.

314. For the detailed planning period, we have not assumed any net distributions in the first two fiscal years 2020 and 2021. This is in line with the planning of the OSRAM Group and is due to the expected losses in these years. For the following periods from 2022 on we have assumed a pay-out

ratio of 40.0% in line with the dividend policy of the OSRAM Group. For the terminal value phase, we have assumed a pay-out ratio of 50.0%. This distribution rate, which is customary in the market in the long term, is based on the distribution rates of German companies that have been observed historically. Based on this assumption, the value contributions from retained earnings are notionally allocated directly to the shareholders in the terminal value and therefore do not lead to any changes in the interest result of the OSRAM Group in terms of valuation.

315. Since the business value is determined from the company shareholders' point of view, the shareholders' tax burden on the distributions to shareholders as well as on the price gains (fictitiously attributed retention amounts) must be considered. Different effective tax charges result from the different inflow and realisation dates. The effective tax burden on interest and dividends generally corresponds to the nominal tax burden. In contrast, the effective tax burden on increases in value resulting from retained earnings depends on the date of realisation of the increase in value. It decreases the longer the shareholder retains the security. Shareholders will therefore be incentivised to keep the effective tax burden on price gains as low as possible through long holding periods.

316. In accordance with the recommendations of the IDW, we applied a typical personal tax rate of 25.0 % plus a solidarity surcharge of 5.5 %. On the valuation date a distributable profit (pursuant to section 27 (1) KStG; ausschüttungsfähiger Gewinn) was available in an amount that virtually preempts future distributions from the tax contribution account (steuerliches Einlagenkonto), no such distribution was assumed.

317. Earnings retention lead to increases in value which are subject to an effective capital gains taxation which was considered when determining personal income taxes at 13.2 % (including the solidarity surcharge).

III. Determination of the discount rate

318. In order to value a company, the projected future financial surpluses need to be discounted to the valuation date using an appropriate interest rate. This discount rate is reflecting the (expected) returns on an appropriate alternative capital investment compared with the valuation subject. It consequently indicates the minimum return on capital that must be generated from the valuation subject in order to ensure that shareholders are not worse off than they would have been, if they had invested in the next best alternative investment. When determining objectified business values, the alternative investment and the corresponding return are generally characterised by an investment in a bundle of publicly listed corporate shares (stock portfolio), adjusted to incorporate the risk structure of the business valuation subject. In the case personal income taxes are being considered, the future earnings to be discounted are reduced for personal income taxes. In addition, the discount rate needs to be deducted by personal income taxes.

319. When assessing returns on investments in shares, a differentiation is generally made between the risk-free rate and the risk premium.

320. In addition, the prospects for growth in financial surpluses after the end of the planning period must be assessed and deducted from the discount rate as a terminal growth rate.

1. Risk-free rate

321. We based the determination of the appropriate risk-free rate on a yield curve of the German government bonds. The calculated yield curve establishes the connection between interest rates and terms to maturity as would be applicable for zero-coupon bonds with no credit default risk. The application of zero-bond factors that are appropriate to the term to maturity and that are derived from the yield curve ensures the necessary adherence to matching maturities.

322. The derivation of the relevant yield curve is based on the Svensson method recommended by the German Federal Bank ("Deutsche Bundesbank") as well as published interest structure date published by the German Federal Bank. The applied structural interest rate data are estimated values calculated on the basis of observed current yields on coupon bonds, i.e. federal bonds, federal notes and federal treasury obligations.

323. For the given structure of the financial surpluses, we have derived a present value equivalent risk-free rate from the yield curve for the three-month period preceding the signature date of this expert opinion (source: Deutsche Bundesbank). Relying on this present value equivalent risk-free rate, the rounded risk-free rate is therefore 0.0% p.a. before personal taxes and after personal taxes.

324. For information regarding the possible valuation-related effects of changes in interest conditions occurring between the conclusion of our valuation work and the date of the extraordinary general shareholders' meeting of OSRAM that will adopt the resolution (valuation date), please refer to paragraph 408 and paragraph 421.

2. Risk premium

325. Entrepreneurial activities always involve risks and opportunities. Therefore, the future earnings cannot be forecasted with certainty. In order to consider these entrepreneurial uncertainties (entrepreneurial risks), market participants require a risk premium in addition to the risk-free rate.

326. As investors face specific risk when investing in companies (investment risk), they require a premium over and above the (quasi) risk-free capital market interest rate (risk premium). In order to achieve risk equivalence with the discounted payment stream, the calculation of the risk premium must be oriented towards the risk structure of the company being valued.

327. To measure the risk premium when valuing a company, asset pricing models can be used in line with the definition of alternative investments, whereby these models enable each company's individual risk premium to be estimated based on the market risk premium pertaining to a market portfolio. In line with official professional pronouncements, we have applied the capital asset pricing model (Tax CAPM) to measure the risk premium.

328. Based on the Tax CAPM, we arrive at the company-specific risk premium by multiplying the company's beta factor by the market risk premium. The beta factor is a measure of the entrepreneurial risk in relation to the market risk. A beta factor greater than one means that the market value of the equity of the company in question responds more strongly than average to fluctuations in the overall market, whereas a beta factor of less than one indicates a sub-proportionate response.

329. The expected market risk premium can be estimated from the historical difference between the returns on risk-bearing securities, based, for example, on an equities index, and the returns on (quasi) risk-free capital market investments. Empirical examinations of the German capital market show that – depending on the underlying study period – investments in stocks generated returns in the past that were on average four to seven per cent higher than investments in (quasi) risk-free capital market investments.

330. The committee for business valuations and commerce ("FAUB") regularly convenes to discuss the influencing factors for the measurement of the discount rate, and it updates its recommendations in accordance with any sustained changes. Due to current market observations and implicitly determined market risk premia based on forecasts by financial analysts and rating agencies, the FAUB came to the conclusion that it is appropriate to be guided by a market risk premium range after personal income taxes of 5.00% to 6.50% when calculating the market risk premium from October 2019 onwards.

331. The current capital market conditions also support the approach to assess the market risk premium in this magnitude. Considering the uncertain economic effects of the Covid-19 pandemic (see paragraph 64) and the resulting expansionary monetary policy measures, clearly negative date-specific yields on risk-free Bunds can currently be observed. In addition, the yield on 30-year German government bonds is historically low at around 0.0%. Thus, the capital market situation does not correspond to the constellation as it was observable in the long-term average for the past, but rather points to an increased risk aversion of capital market participants.

332. Individual empirical observations also show a relatively constant total return demand of capital market participants. The result of such a relatively constant overall demand is that, in uncertain times, increased market risk premiums can be observed, which are computationally accompanied by reduced risk-free rates, and vice versa. In the past, in the case of relatively moderate fluctuations in the risk-free rate, the approach of a constant market risk premium derived from historical averages

was fundamentally appropriate, since this simplified approach resulted in relatively stable overall return demands which could be used as alternative returns and which were also empirically observable. In the recent past, however, the high volatilities of the risk-free rate, which was caused by the financial crisis, have been increasingly reflected in the calculated total return demands, given a constant market risk premium. However, the empirically observable implicit total return demands of the market participants are moving in a narrow corridor, which empirically supports the assumption of a long-term stable total return demand. As a result, it should be noted that due to the particular capital market situation as of the valuation date, it is no longer appropriate to use the previously commen simplified procedures for the derivation of the valuation-relevant total return demands as a sought-for alternative return on the basis of a constant market risk premium based on historical averages. It would result in a calculated total return demand that would be significantly different from empirical observations.

333. In line with this view, the implicit risk premiums for equities are currently above the pre-crisis level of the banking and sovereign debt crisis. Thus, market observations and capital market studies, as well as ex-ante analyses based on forecasts from financial analysts on implicit risk premiums, suggest an orientation at the upper end of the range of the historically measured stock returns and the resulting risk premiums. In the last couple of months, based on capital market data relating to German listed companies, in some cases even significantly higher market risk premiums can be derived.

334. Accordingly, we consider a market risk premium after personal taxes of 5.75 % for the valuation of OSRAM Group at the lower end of the range of empirically justifiable market risk premiums, but still appropriate. The derived market risk premium also corresponds to the mean value of the range of market risk premiums after personal taxes recommended by the FAUB of the Institute of Public Auditors in Germany.

335. The following procedure was used to determine the beta factor: Since OSRAM is listed on the stock exchange, it is basically possible to estimate OSRAM's beta factor using suitable econometric methods. We determined and analysed the beta factor of OSRAM on the basis of data from the database service provider S&P Global Market Intelligence LLC (formerly S&P Capital IQ), a business of S&P Global Inc., New York City/USA ("S&P Global Market Intelligence"). As a result of the completion of the takeover bid through the ams Offer and further share purchases, the ams Offer holds around 71% of the shares in OSRAM (after deducting the treasury shares) as of today, 21 September 2020. The above-mentioned takeover offers, the share purchases of the ams Offer and the associated decoupling from market events and capital market speculation, which cannot be excluded, lead to a distortion of the historical share price of OSRAM. As a result, the coefficient of determination R^2 assumes a value of less than 0.2, irrespective of the regression method, so that no meaningful and undistorted empirical beta factor can be derived from the trading data of the OSRAM share. For this

reason, the beta factor for the valuation of the OSRAM Group was determined using a group of comparable companies. To derive the beta factors of the comparable companies, we also drew on capital market data from S&P Global Market Intelligence.

336. With regard to the selection of the group of comparable companies, a comparison with companies in the same industry or with the same product and market structure is generally advisable. In individual cases, companies can also be characterised as comparable companies if they do not have directly comparable product and market segments, provided that the main value-relevant characteristics are the same. An absolute congruence of the companies is neither possible nor necessary. Nevertheless, the future net cash flows of the companies selected as comparable and the company to be valued should be subject to a largely identical operating risk.

337. As a secondary condition for the comparable companies, only listed companies with sufficiently liquid trading were considered.

338. Based on the screening described above we identified the following peer companies for the operating activities of OSRAM Group:

- **Koito Manufacturing** manufactures and markets automotive lighting, electrical equipment and other products. The company primarily offers LED, discharge and halogen headlights, fog lights, signal lights and other lighting products such as LED rear combinations, side indicators and high mounted stop lights. The product portfolio also includes aircraft lighting, interior and exterior lighting, advance warning signs, electrical, hydraulic and mechanical equipment as well as marine lighting. Koito Manufacturing also manufactures and markets electronic components, electrical appliances, telecommunications equipment, precision machinery and miniature incandescent lamps. The company is a major competitor for OSRAM's AM business unit. In financial year 2019 Koito Manufacturing achieved revenues of EUR 6,643.8 million (financial year 2018: EUR 6,487.7 million) and an EBITDA of EUR 1,074.2 million (financial year 2018: EUR 1,040.0 million). This corresponds to an EBITDA margin of 16.2% (financial year 2018: 16.0%). Koito Manufacturing generated EBIT of EUR 816.4 million in 2019 (financial year 2018: EUR 793.2 million) and an EBIT margin of 12.3% (financial year 2018: 12.2%).

- **HELLA** is a listed, internationally operating German automotive supplier with headquarters in Lippstadt, North Rhine-Westphalia. Together with its subsidiaries, the company develops, manufactures and sells lighting technology and electronic components and systems for the automotive industry worldwide. It operates in three segments: automotive, aftermarket and special applications. The segment automotive offers headlamps, rear lamps, body and interior lighting products. It also offers body electronics, energy management, lighting electronics, steering solutions, driver assistance systems and components, including sensors and engine compartment

actuators. Overall, more than 80% of sales are generated in the segment automotive. The segment aftermarket produces and sells automotive parts and accessories, primarily in the areas of lighting, electrics and electronics, and offers workshop solutions in the areas of diagnostics and calibration as well as various services for wholesalers and workshops. The segment special applications develops, manufactures and sells lighting technology and electronic products for special vehicles such as construction and agricultural machinery, buses and recreational vehicles as well as for the marine sector. The company currently has a strategic cooperation with AEye, Inc. for the development of LiDAR sensor systems. HELLA is considered the main competitor for OSRAM's business unit AM. In the financial year 2019 HELLA recorded revenues of EUR 6,990.0 million (financial year 2018: EUR 7,060.3 million) and EBITDA of EUR 823.0 million (financial year 2018: EUR 922.0 million). This corresponds to an EBITDA margin of 11.8% (financial year 2018: 13.1%). HELLA recorded EBIT of EUR 474.3 million in 2019 (financial year 2018: EUR 512.9 million) and an EBIT margin of 6.8% (financial year 2018: 7.3%).

- **Stanley Electric Co., Ltd.,** Tokyo/Japan ("Stanley Electric"), together with its subsidiaries, designs, manufactures and sells lighting equipment and electronic components. The company operates in the business segments of automotive equipment, electronic components and applied electronic products. The automotive equipment segment offers LED, HID and halogen headlamps, rear lamps, turn signals and front lights, as well as LED and halogen lamps for motor vehicles. The segment electronic components comprises ultraviolet, visible light and infrared LEDs, optical sensors, liquid crystal display devices (LCD) and ultraviolet cold cathode lamps as well as subminiature lamps. The segment for applied electronic products offers LED lights for landscapes, shows, control panels, backlighting units for LCDs, flash units for cameras and sensors for automobiles. The company sells its products primarily to automotive, electrical and electronics companies and automotive suppliers in Japan, North and South America, Asia Pacific, China and internationally. The main customers for its core business (automotive lighting) are Honda and Nissan. Other customers using Stanley Electric's products are Toyota, Mazda, Suzuki, Mitsubishi, Ford and Chrysler. Stanley Electric is a major competitor for OSRAM's AM business unit. In the 2019 financial year Stanley Electric reported revenues of EUR 3,490.7 million (2018 financial year: EUR 3,379.4 million) and EBITDA of EUR 702.7 million (2018 financial year: EUR 666.1 million). This corresponds to an EBITDA margin of 20.1% (financial year 2018: 19.7%). In 2019, Stanley Electric achieved an EBIT of EUR 433.6 million (financial year 2018: EUR 406.4 million) and an EBIT margin of 12.4% (financial year 2018: 12.0%).

- **Ichikoh Industries, LTD.**, Isehara/Japan ("Ichikoh"), is a Japan-based company engaged primarily in the manufacture and sale of automotive components. The company is active in two segments. The automotive parts segment is primarily engaged in the manufacture and sale of automotive lighting products and mirror products to automobile manufacturers. The segment sup-

plies is active in the manufacture and sale of automotive valves and wipers, mainly for the aftermarket. Ichikoh is a subsidiary of Valeo S.A., Paris, listed on the Tokyo Stock Exchange. In financial year 2019, Ichikoh generated revenues of EUR 1,091.0 million (financial year 2018: EUR 1,119.3 million) and EBITDA of EUR 120.8 million (financial year 2018: EUR 147.8 million). This corresponds to an EBITDA margin of 11.1% (financial year 2018: 13.2%). Ichikoh recorded EBIT of EUR 52.8 million in 2019 (financial year 2018: EUR 71.7 million) and an EBIT margin of 4.8% (financial year 2018: 6.4%).

- **Seoul Semiconductor Co., Ltd.**, Ansan/South Korea ("Seoul Semiconductor"), manufactures and sells LED products worldwide. The company offers high and medium power products, energy-saving chip LEDs and through-hole, chip-on-boards, modules, nano and micro drivers, backlight units for televisions, monitors, notebooks, tablets and smartphones, as well as display products for the automotive industry. The company is a major competitor for OSRAM's OS business unit. In financial year 2019 Seoul Semiconductor recorded revenues of EUR 872.1 million (financial year 2018: EUR 936.9 million) and EBITDA of EUR 98.3 million (financial year 2018: EUR 158.0 million). This corresponds to an EBITDA margin of 11.3% (financial year 2018: 16.9%). Seoul Semiconductor recorded EBIT of EUR 37.9 million in 2019 (financial year 2018: EUR 74.0 million) and an EBIT margin of 4.3% (financial year 2018: 7.9%).

- **Everlight Electronics** is a Taiwanese based company mainly engaged in the research, development, production and distribution of optoelectronic components. The company's main products include light emitting diode (LED) lamps, LED backlighting products, surface mounted device (SMD) LEDs, infrared LEDs, LED modules, photosensor modules, phototransistors, photo couplers, optoelectronic integrated circuits (ICs) and optical sensor modules. It also offers liquid crystal displays (LCDs) and related components. Everlight Electronics sells its products worldwide and for a wide range of applications. Everlight Electronics is a major competitor for OSRAM's OS business unit. In the financial year 2019 Everlight Electronics had revenues of EUR 624.5 million (financial year 2018: EUR 687.3 million) and an EBITDA of EUR 85.4 million (financial year 2018: EUR 85.3 million). This corresponds to an EBITDA margin of 13.7% (financial year 2018: 12.4%). Everlight Electronics achieved an EBIT of EUR 24.9 million in 2019 (financial year 2018: EUR 25.4 million) and an EBIT margin of 4.0% (financial year 2018: 3.7%).

- **EPISTAR Corporation**, Hsinchu/Taiwan ("Epistar"), is engaged in the research and development, design, manufacture and sale of LED epitaxial wafers and chips in Taiwan as well as internationally. The company provides LED lighting, LED backlighting, LED display, flash LED, automotive LED, LED for plant lighting, and LED for monitoring and sensor products. The LED products are used for mobile phone screens, laptops, televisions, automobiles and other applications. In financial year 2019, Epistar recorded revenues of EUR 475.4 million (financial year 2018: EUR 579.4 million) and EBITDA of EUR 37.5 million (financial year 2018: EUR 122.4 million). This corresponds to an EBITDA margin of 7.9% (financial year 2018: 21.1%). Epistar recorded

EBIT of EUR -110.0 million in 2019 (financial year 2018: EUR -19.4 million) and an EBIT margin of -23.1% (financial year 2018: -3.3%).

- **Signify** together with its subsidiaries, develops, manufactures and distributes lighting products worldwide. The company was formerly known as Philips Lighting N.V. and changed its name to Signify in May 2018. The Group operates in four segments: Lamps, LED, professional and home lighting. The company offers a variety of light emitting diode (LED) lamps, including spotlights, bulbs and tubes for the professional and consumer channel and for original equipment manufacturers (OEMs). Signify also offers electronic LED components, such as LED drivers and LED modules for lighting OEMs and for professional lighting applications in retail, office and outdoor environments. The company also provides LED and conventional lighting, systems and services to various market segments, including offices, commercial buildings, shops, hospitality, industrial and outdoor environments, as well as smart cities. Signify also develops and sells associated lighting systems, functional and decorative lighting for homes and premium lighting. The company also manufactures and sells lamps, including high intensity discharge lamps, TL lamps, fluorescent and halogen lamps, as well as electronic components, including electronic ballasts and drivers, specialty lighting products and digital projection lighting for the OEM and replacement markets. It is considered a major competitor of OSRAM's Business Unit DI. In financial year 2019, Signify recorded revenues of EUR 6,247.0 million (financial year 2018: EUR 6,358.0 million) and EBITDA of EUR 725.0 million (financial year 2018: EUR 724.0 million). This corresponds to an EBITDA margin of 11.6% (financial year 2018: 11.4%). Signify reported an EBIT of EUR 535.0 million in 2019 (financial 2018: EUR 525.0 million) and an EBIT margin of 8.6% (financial 2018: 8.3%).

- **Acuity Brands** offers a portfolio of indoor and outdoor lighting and building management solutions for commercial, institutional, industrial, infrastructure and residential applications. The portfolio of lighting solutions includes lighting products using light-emitting diodes (LEDs), fluorescent tubes, organic LEDs (OLEDs), high intensity discharge, metal halide and incandescent light sources to illuminate various applications, embedded lighting control solutions of wired and wireless devices, and a variety of building management solutions. In addition, the company offers cross-application services, primarily related to monitoring and control of lighting and building management systems through networking technologies and commissioning of control systems. The company's total portfolio of solutions also includes recurring services that provide a range of functions, such as indoor positioning, asset tracking, space utilization, space analysis and energy management. The company is a major competitor of OSRAM's DI business unit. In financial year 2019 Acuity Brands recorded revenues of EUR 3,339.2 million (financial year 2018: EUR 3,170.4 million) and EBITDA of EUR 501.7 million (financial year 2018: EUR 471.7 million). This corresponds to an EBITDA margin of 15.0% (financial year 2018: 14.9%). Acuity

Brands generated EBIT of EUR 421.4 million in 2019 (financial year 2018: EUR 402.5 million) and an EBIT margin of 12.6% (financial year 2018: 12.7%).

- **Ushio Inc.**, Tokyo/Japan ("Ushio"), manufactures and sells light application products, industrial equipment and other products in Asia, Europe and North America. The company offers UV and xenon lamps, laser diodes and devices, laser units, LED lamps and modules, halide and halogen lamps, infrared emitting diodes, as well as lamp and halogen heaters, lamps for data projectors and lighting. The products are used in the fields of general lighting, architecture and landscape as well as marine and plant growth. In addition, the company offers light source units, excimer lamps and irradiation units, exposure units, illumination light sources, laser modules, fishing lamps and warning lights, as well as lighting for security applications. The company is a major competitor of OSRAM's DI business unit. In financial year 2019 Ushio achieved revenues of EUR 1,327.8 million (financial year 2018: EUR 1,326.0 million) and EBITDA of EUR 132.1 million (financial year 2018: EUR 139.6 million). This corresponds to an EBITDA margin of 10.0% (financial year 2018: 10.5%). In 2019, Ushio generated EBIT of EUR 68.5 million (financial year 2018: EUR 77.6 million) and an EBIT margin of 5.2% (financial year 2018: 5.9%).

339. Considering the capital structure, we have converted the leveraged beta factors of the comparable companies determined on the basis of the share price performance over the last five and two years into beta factors assuming full equity financing ("unlevered beta factor").

340. A "beta debt" was applied in the determination of the unlevered beta factor.

341. The following overview shows the derivation of the beta factors of the comparable companies (based on monthly returns over the period from September 2015 to August 2020 and on weekly returns over a period from September 2018 to September 2020:

Beta factors of the peer group companies - local indices
Weekly, 2 years / Monthly, 5 years

		Weekly, 2 years			Monthly, 5 years		
Company	Index	Levered beta factor	E/(E+D)	Unlevered beta factor	Levered beta factor	E/(E+D)	Unlevered beta factor
Koito Manufacturing Co., Ltd.	Nikkei 225 Index	1.4	127%	1.7	1.3	135%	1.7
HELLA GmbH & Co. KGaA	CDAX Index (Total Return)	1.5	82%	1.2	1.7	80%	1.4
Stanley Electric Co., Ltd.	Nikkei 225 Index	1.1	126%	1.4	1.1	131%	1.3
Ichikoh Industries, Ltd.	Nikkei 225 Index	1.4	74%	1.1	1.8	78%	1.4
Seoul Semiconductor Co., Ltd.	South Korea Kospi Comp.	1.2	82%	1.0	1.2	81%	1.0
Everlight Electronics Co., Ltd.	Taiwan TAIEX Index	1.2	117%	1.4	1.3	123%	1.6
EPISTAR Corporation	Taiwan TAIEX Index	1.2	103%	1.2	1.8	102%	1.8
Signify N.V.*	AEX All Share Index	1.0	64%	0.7	n.a.	n.a.	n.a.
Acuity Brands, Inc.	S&P 500	1.4	93%	1.3	1.4	93%	1.3
Ushio Inc.	Nikkei 225 Index	1.2	133%	1.5	1.1	129%	1.4
Average		**1.3**		**1.3**	**1.4**		**1.4**
Median		**1.2**		**1.3**	**1.3**		**1.4**

Beta factors of the peer group companies - global index
Weekly, 2 years / Monthly, 5 years

		Weekly, 2 years			Monthly, 5 years		
Company	Index	Levered beta factor	E/(E+D)	Unlevered beta factor	Levered beta factor	E/(E+D)	Unlevered beta factor
Koito Manufacturing Co., Ltd.	MSCI World Index	1.3	127%	1.6	1.4	135%	1.8
HELLA GmbH & Co. KGaA	MSCI World Index	1.5	82%	1.3	1.7	80%	1.4
Stanley Electric Co., Ltd.	MSCI World Index	1.1	126%	1.3	1.0	131%	1.3
Ichikoh Industries, Ltd.	MSCI World Index	1.4	74%	1.1	1.8	78%	1.4
Seoul Semiconductor Co., Ltd.	MSCI World Index	1.1	82%	0.9	1.3	81%	1.1
Everlight Electronics Co., Ltd.	MSCI World Index	0.8	117%	1.0	0.8	123%	0.9
EPISTAR Corporation	MSCI World Index	0.8	103%	0.8	1.5	102%	1.5
Signify N.V.*	MSCI World Index	0.9	64%	0.6	n.a.	n.a.	n.a.
Acuity Brands, Inc.	MSCI World Index	1.4	93%	1.3	1.5	93%	1.4
Ushio Inc.	MSCI World Index	1.1	133%	1.3	1.2	129%	1.5
Average		**1.1**		**1.1**	**1.4**		**1.4**
Median		**1.1**		**1.2**	**1.4**		**1.4**
Average - local index				1.3			1.4
Average - global index				1.1			1.4
Median - local index				1.3			1.4
Median - global index				1.2			1.4
Average beta factor				**1.2**			**1.4**

* For Signify N.V. only 51 data points are available for the regression of monthly returns over the 5-year period. 60 data points are required.

Source: S&P Global Market Intelligence, PwC Analysis.

342. The average of the median and average unlevered beta factors, considering local and global indices, results in a range of 1.2 to 1.4. Based on this range, we consider an unlevered beta of 1.25, which is slightly below the average value of 1.3, to be appropriate for the valuation of the OSRAM Group.

343. Considering beta debt, the unlevered beta factor derived in this way was adjusted in the valuation calculation to the expected future capital structure of the OSRAM Group (so-called "relevering"). The adjustment of the beta factor to the period-specific capital structure was carried out for the individual planning periods and for the phase II.

3. Terminal growth rate

344. Future growth of the financial surpluses results from the retained earnings and their reinvestment, as well as the organic growth of pricing, quantity and structural effects. This growth potential for the detailed planning phase is reflected in the company's business plan and is consequently included in the financial surpluses. For the terminal value phase, the growth related to retained earnings is

likewise included in the financial surpluses in the form of value added from retained earnings. Further inflation-induced growth potential is considered through including the terminal growth rate in the discount rate for the terminal value phase.

345. The compensation of the annual price decline through productivity measures have been largely successful in the past. It is foreseeable, however, that from 2022 onwards continuous volume and cost degression effects will have to be realised in order to sustainably compensate the expected future price erosion. In view of the considerable historical price decline, we consider this to be ambitious.

346. It should also be noted that the last planning year, which shows the highest sales revenues in the entire planning period, was already used to measure the sustainable level of sales revenues. For this, we assume that the sustainable growth rate, based on the price-related development of the OSRAM Group, the ambitious nature of the planning calculation, the derivation of the sustainable sales revenue based on the last planning year and the significant dependency of the automotive industry on the economy, will be 1.0% (before personal taxes) and thus below the inflation rate expected in the medium term in Germany and Europe. After personal taxes, the growth discount amounts to 0.87%.

4. Derivation of the discount rate

347. The following table contains a summary of the discount rates relevant for the period under review. The changes to the risk premium are the result of changes in the financing structure during the detailed planning phase and in the terminal value phase:

Cost of Equity

	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	from 2026 Terminal value
Risk-free rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MRP (after personal income tax)	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%
Beta (unlevered)	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Leverage ratio	26%	22%	20%	16%	12%	7%	2%
Beta (levered)	1.52	1.45	1.45	1.40	1.37	1.32	1.26
Cost of equity (after personal income tax)	**8.76%**	**8.31%**	**8.31%**	**8.06%**	**7.86%**	**7.60%**	**7.26%**
Terminal growth rate (terminal value)							-0.87%
Cost of equity (after personal income tax and terminal growth rate)	**8.76%**	**8.31%**	**8.31%**	**8.06%**	**7.86%**	**7.60%**	**6.39%**

Source: PwC analysis

IV. Value of the business operations

348. Unless a company is established for a limited period or for other reasons its limited lifetime must be assumed, for the purposes of determining the business value it is appropriate to assume that the company will exist for an unlimited period. This remains the case if the buyer in question does not want to retain its shareholding indefinitely, because the theoretical price he would achieve with the sale is identical to the present value of the expected net distributions.

349. The net present value of the business operations of the OSRAM Group is calculated as the total present value of the capitalised dividends and the future contributions to value from the retention of earnings in the terminal value period. In order to determine the present value of the net distributions, it is necessary to individually discount the forecast results for the financial years 2020 to 2025. In each case, the discounting is performed to the day the general shareholders meeting is convened to adopt the resolution, 3 November 2020. With respect to the average net distributions that can be withdrawn from financial year 2026 onwards, the present value is calculated using the terminal value formula. The present value of the terminal value must be discounted to the valuation date as well:

Determination of capitalised earnings value

in EUR million	2020 Plan	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2025 Plan	from 2026 Terminal value
Net payout to be discounted	-	-	45	92	112	140	352
Cost of capital	8.76%	8.31%	8.31%	8.06%	7.86%	7.60%	6.39%
Period	1.00	2.00	3.00	4.00	5.00	6.00	
Discount factor	0.92	0.85	0.78	0.73	0.67	0.62	9.78
Present value	**-**	**-**	**35**	**67**	**75**	**88**	**3,438**
Capitalised earnings at 30 September 2019	**3,703**						
Compounding factor	1.09						
Capitalised earnings at 30 September 2020	**4,027**						
Compounding factor	1.01						
Capitalised earnings value at 3 November 2020	**4,058**						

Source: PwC Analysis

350. The net present value of the operating business of the OSRAM Group amounts to a total of EUR 4,058 million as of the valuation date of 3 November 2020.

V. Value of non-operating assets

351. In accordance with IDW Standard S 1 as amended in 2008, assets that can be freely sold without affecting the actual business function must be valued separately as non-operating assets (functional differentiation criterion).

352. In accordance with the management of the OSRAM Group, a leased-out building in Traunreut (Germany) and a property in Berlin was classified as not essential for operations and valued separately.

353. The property in Traunreut is used as the headquarters of the former group division Siteco and is rented to the latter. The property is located in Georg-Ohm-Straße in Traunreut. It includes space for production and storage as well as office and exhibition space. The total rental space amounts to approximately 87 thousand square meters.

354. The property in Berlin comprises production and administration buildings of the OSRAM Group and is located at Nonnendammallee 44-61. According to the land register, the total area is about 116,000 square metres.

355. On the basis of external expert opinions on the value of each of these properties, we have estimated a value after corporate taxes of EUR 17.5 million for the property in Traunreut and 33.3 million for the property in Berlin.

356. In addition, the following investments of the OSRAM Group were also included as special values. These companies are not fully consolidated. Investments are recognised at the maximum of the proportional equity, the book value (e.g. at equity) or the market value, if known (e.g. in the case of the investments of Fluxunit). Investments that have been fully written off are not included. The following companies are included as special value investments:

Investments OSRAM Group (Not fully consolidated)

	Presentation in the consolidated financial statements	Stake	Value in EUR million
LeddarTech Inc.	at-equity	29.1%	58.7
Blickfeld GmbH*	at-equity	12.6%	8.0
GoodIP GmbH*	at-equity	10.0%	0.2
beaconsmind AG*	at-equity	14.5%	6.2
Motorleaf Inc.*	at-equity	12.9%	0.6
iThera Medical GmbH*	at cost	9.3%	2.5
GSB - Sonderabfall-Entsorgung Bayern GmbH	at cost	0.1%	0.0
Design LED Products Limited	at cost	6.0%	0.8
KNX Association cvba	at cost	3.0%	0.1
Recogni*	at cost	6.4%	2.7
VividQ*	at cost	10.7%	1.2
Caruso GmbH	at cost	1.0%	0.1
Total			**81.0**

* investments of Fluxunit

Source: OSRAM.

357. LeddarTech has the largest book value of EUR 58.7 million. LeddarTech is active in the field of LiDAR technology. LeddarTech's operating activities mainly focus on the development, production and sale of scalable LiDAR platforms, primarily for the automotive industry.

358. In total, this results in a special value of EUR 81.0 million for the affiliated companies.

359. In addition, the shares in the two venture capital funds Unternehmertum VC Fonds II GmbH & Co. KG, Garching ("UVC Fonds II"), and Partech Partners S.A.S., Paris/France ("Partech Entrepreneur III"), with a total value of EUR 5.1 million, were also included as special values.

360. The generated or expected proceeds from the sale and liquidation of investments of EUR 10.2 million in financial year 2020, including proceeds of EUR 8.0 million from the sale of Siteco GmbH, are considered as additional special values

Disinvestments and liquidation proceeds

	Stake	Value in EUR million
Siteco	100.0%	8.0
Voltimum S.A.	13.7%	0.1
EMGO N.V.	50.0%	0.2
Siteco Prosperity Lighting (Lang Fang) Co., Ltd., China	50.0%	0.2
TRILUX Lighting Inc., Binan, Philippines	100.0%	0.7
LUX365 Ltd., Manchester, UK	100.0%	1.0
Total		**10.2**

Source: OSRAM, PwC Analysis.

361. As a result, separately valued assets amount to a total of EUR 147.2 million.

Non-operating Assets

	in EUR million
Siteco Building Traunreut	17.5
Building Nonnendammalle 44-61, Berlin	33.3
Associated companies	81.0
Fund investments	5.1
Proceeds of the sale or liquidation of investments	10.2
Total	**147.2**

Source: OSRAM, PwC Analysis.

VI. Business value

362. Considering the net present value of operating assets and the value of the special valued assets, the enterprise value of OSRAM as of 3 November 2020 is calculated as follows:

OSRAM Licht AG
Equity Value as of 3 November 2020

in EUR million	
Capitalized earnings value as of 3 November 2020	4,058
Non-operating assets	147
Equity value as of 3 November 2020	**4,205**
Number of outstanding shares (in million)	94.2
Value per share in EUR	**44.65**

Source: PwC Analysis

363. As of the valuation date 3 November 2020, the enterprise value of OSRAM was EUR 4,205 million. With a total number of shares of 96,848,074 and 2,664,388 treasury shares held, the number of outstanding shares of OSRAM corresponds to 94,183,686. This results in a value per share of 44.65 EUR.

VII. Liquidation value

364. Should it prove more beneficial to dispose separately of all operating and non-operating assets rather than continue the company in a going concern scenario, the valuation should be based on the liquidation value if this is not prevented by constraints in law or in fact. To verify whether the liquidation value is greater than the business value, the liquidation value for the OSRAM Group was determined on the basis of the most recent information concerning the consolidated financial position of OSRAM taken from the third quarter report of the financial year 2020 and compared with the business value determined by us using a discounted earnings valuation.

365. The value of the assets is determined by the sales market of the assets to be liquidated. In performing our calculations, we assumed that property, plant and equipment can be disposed of at book value after the application of minor discounts. Existing goodwill was recognised as not recoverable. In the event of liquidation, the carrying amounts of the other assets as of June 30, 2020 were used as the basis for simplification, taking into account the lower proceeds usually expected from trade receivables in the event of liquidation and sales deductions for inventories.

366. Liabilities are to be deducted from the assets determined on this basis. It was assumed that other non-current and current provisions would only partially be paid out in the event of liquidation. For reasons of simplification, the remaining liabilities were recognised at their carrying amount as of June 30, 2020. In addition, the costs arising from a liquidation, e.g. processing costs and social plan expenses, are to be deducted.

367. Furthermore, the value of the trademark rights of OSRAM Group must be recognised in the liquidation valuation, as the trademark rights are generally transferable for a fee. To calculate the liquidation value, we have therefore determined the value of the trademark rights based on fictitious license payments.

368. The liquidation value derived by us in this manner was significantly less than the earnings value, meaning that it is of no relevance for the valuation of the OSRAM Group and for determining the value per share.

E. Plausibility assessment of the business value using the market approach

I. General approach

369. The valuation practice commonly applies simplified valuation procedures based on market multiples to assess the plausibility of the valuation results derived with the discounted earnings method or a DCF method. Here, the business value is estimated based on multiple success indicators for the subject of the valuation. This method is referred to as the market approach.

370. While the discounted earnings method or DCF method are based on expected future cash inflows in the calculation of the business value, multiples are generally based on expected sales or earnings figures of a base year in the near future. The longer-term earnings expectations, the characteristic yield curve and the risk are reflected in the multiple. Under certain assumptions, the multiple methods and the capitalisation of future benefits can be transferred to each other.

371. Suitable multiples can be derived from capital market data of listed comparable companies or from comparable transactions and can be transferred to the company to be valued. It should basically be pointed out that, as a rule, no company is fully comparable with another. The result of the multiple valuation can therefore generally only represent a range of possible values within which the result of the valuation should be found. With multiples derived based on transaction prices, it should be borne in mind that purchase prices actually paid are to a large extent, determined by the subjective interests of the transaction partners. For example, they reflect synergy effects and subjective expectations. To this extent, this method is regularly found to be less useful, compared to multiples derived from share prices for verifying an objectified business value. Hence, in the analysis set out below, we have only used comparable stock-exchange-listed companies.

372. Within the framework of a comparative market valuation, multiples can be applied based on different performance indicators:

- P/E (Price-earnings multiple): Equity value multiple, which relies on the earnings power of the company after all expenses (particularly after debt servicing and after taxes) as reference for the value of the equity. The use of this multiple requires a comparable debt-equity ratio.

- EV/EBIT (Total enterprise value to earnings before interest and taxes): Entity multiple, to some extent neutralises different capital structures. The total enterprise value includes the market value of debt, and, as such, needs to be distinguished from the calculable business value (known as the market value of equity).

- EV/EBITDA (Total enterprise value to earnings before depreciation, amortisation, interest and taxes): Entity multiple, to some extent neutralises different capital structures, and requires comparable outgoings for depreciable non-current assets.
- EV/Revenues (Total enterprise value to revenues): Entity multiple, neutralises different capital structures and assumes a comparable sales margin.

II. Derivation of multiples

373. Crucial factors for any comparative market valuation are the forecasted success factors and the selection of peer companies in order to generate multiples.

374. For the purposes of the comparative multiple valuation, comparable peer group companies were used, which were also used in the derivation of the beta factor. With regard to the selection criteria, we refer to section D. III. 2.

375. The meaningfulness of the P/E multiple is influenced by the gearing ratio and by various tax-related aspects. This issue can be avoided by applying entity multiples. We have therefore decided not to apply the P/E multiple.

376. The EV/revenues multiple ignores differences in the profitability of the companies. We therefore refrained from the application of the EV/revenues multiple.

377. Our analysis is based on EBITDA-multiples and EBIT-multiples. In light of the aforesaid conditions, we deem these multiples as most meaningful. Furthermore, we noted that these multiples are most frequently used in valuation practice.

378. We have used the respective average EBITDA estimates and EBIT estimates for the financial years 2022 to 2023 for the comparable companies as the basis for deriving the multiples, based on analyst data from S&P Global Market Intelligence, if this data is available in the individual years. Due to the distorting, non-sustainable effects of the Covid-19 pandemic on both the comparable companies and OSRAM, we have not conducted an analysis for fiscal years 2020 and 2021. In addition, the business plan for the OSRAM Group shows a negative EBIT in the financial years 2020 and 2021, so that no meaningful multiples can be calculated on this basis.

379. We determined the total enterprise value based on market capitalisation plus interest-bearing liabilities, net pension obligations and minority interests of the comparable companies and less non-operative liquidity.

380. Since the comparable companies apply different accounting standards to prepare their financial statements, we have formed two groups. The first group includes the peers reporting under IFRS

and US GAAP and the second group includes the peers reporting under Japanese accounting standards. The reason for this split is the application of IFRS 16 ("Leases"). This leads to a lack of comparability of the income statements and balance sheets of the two groups. IFRS and US GAAP require that virtually all leases formally classified as operating leases are recognised as assets on the asset side and liabilities on the liabilities side of the balance sheet reflecting future lease payments. Japanese accounting standards however do not require such recognition for many leases. There is also a difference between IFRS and U.S. GAAP. Under U.S. GAAP lease expenses are always fully recognised in the income statement above EBITDA. Thus, in order to establish comparability, the effects of the new rules in IFRS 16, which increase EBITDA, must be deducted from the EBITDA and EBIT figures of OSRAM. These adjustments comprise the reduction of depreciation and amortisation from the rights of use at the EBITDA level and of interest expense from lease liabilities at the EBITDA and EBIT level.

381. The following multiples result for comparable companies that prepare their accounts in accordance with IFRS:

Peer Group

EBITDA-Multiples (Peer companies IFRS)		EV/EBITDA	
Companies	**Accounting standards**	**2022**	**2023**
HELLA GmbH & Co. KGaA	IFRS	7.3x	6.0x
Seoul Semiconductor Co., Ltd.	IFRS	8.6x	8.6x
Everlight Electronics Co., Ltd.	IFRS	2.9x	n/a
EPISTAR Corporation	IFRS	10.4x	n/a
Signify N.V.	IFRS	7.1x	7.5x
Median		**7.3x**	**7.5x**
Mean		**7.3x**	**7.4x**

EBITDA-Multiples (Peer companies US GAAP)		EV/EBITDA	
Companies	**Accounting standards**	**2022**	**2023**
Acuity Brands, Inc.	US GAAP	7.5x	n/a

Source: S&P Global Market Intelligence, PwC Analysis.

Peer Group

EBIT-Multiples (Peer companies IFRS)		EV/EBIT	
Companies	**Accounting standards**	**2022**	**2023**
HELLA GmbH & Co. KGaA	IFRS	11.3x	9.5x
Seoul Semiconductor Co., Ltd.	IFRS	17.3x	17.3x
Everlight Electronics Co., Ltd.	IFRS	8.7x	n/a
EPISTAR Corporation	IFRS	n/m	n/m
Signify N.V.	IFRS	8.2x	8.3x
Median		**10.0x**	**9.5x**
Mean		**11.4x**	**11.7x**

EBIT-Multiples (US GAAP)		EV/EBIT	
Companies	**Accounting standards**	**2022**	**2023**
Acuity Brands, Inc.	US GAAP	9.6x	n/a

Source: S&P Global Market Intelligence, PwC Analysis

382. For comparable companies reporting under Japanese GAAP, the following multiples result:

Peer Group

EBITDA multiples (Peer Group companies Japan GAAP)

Companies	Accounting standards	EV/EBITDA 2022	2023
Koito Manufacturing Co., Ltd.	Japan GAAP	6.6x	5.8x
Stanley Electric Co., Ltd.	Japan GAAP	6.1x	5.6x
Ichikoh Industries, Ltd.	Japan GAAP	3.6x	n/a
Ushio Inc.	Japan GAAP	9.1x	7.0x
Median		**6.4x**	**5.8x**
Mean		**6.4x**	**6.1x**

Source: S&P Global Market Intelligence, PwC Analysis.

Peer Group

EBIT multiples (Peer Group companies Japan GAAP)

Companies	Accounting standards	EV/EBIT 2022	2023
Koito Manufacturing Co., Ltd.	Japan GAAP	9.8x	8.6x
Stanley Electric Co., Ltd.	Japan GAAP	10.7x	9.7x
Ichikoh Industries, Ltd.	Japan GAAP	6.5x	n/a
Ushio Inc.	Japan GAAP	15.6x	11.4x
Median		**10.2x**	**9.7x**
Mean		**10.6x**	**9.9x**

Source: S&P Global Market Intelligence, PwC Analysis.

III. Valuation with multiples

383. The OSRAM Group prepares its financial statements in accordance with IFRS. enterprise values for the OSRAM Group can be determined by applying the multiples of the comparable companies preparing their financial statements in accordance with IFRS accordingly to the EBITDA or EBIT planned for OSRAM Group for the plan years 2022 to 2023 including unrealised synergies. In order to ensure comparability of EBITDA and EBIT with the key figures of the comparable company preparing its financial statements in accordance with U.S. GAAP, we have adjusted EBITDA and EBIT of OSRAM Group as described above for the derivation of the enterprise value based on multiples:

OSRAM Group
EBITDA multiple valuation (Peer Group companies IFRS)

Comparative market valuation in EUR millions	2022	2023
Multiple (Median)	7.3x	7.5x
Multiple (Mean)	7.3x	7.4x
EBITDA OSRAM (under consideration of IFRS 16)	**525**	**701**
Enterprise Value (Median)	**3,813**	**5,282**
Enterprise Value (Mean)	**3,811**	**5,167**

EBITDA multiple valuation (Peer Group companies US GAAP)

Comparative market valuation in EUR millions	2022	2023
Acuity Brands, Inc.	7.5x	n/a
EBITDA OSRAM (excluding the effects of IFRS 16)	**481**	**658**
Enterprise Value	**3,622**	**n/a**

Source: S&P Global Market Intelligence, PwC Analysis.

OSRAM Group
EBIT multiple valuation (Peer Group companies IFRS)

Comparative market valuation in EUR millions	2022	2023
Multiple (Median)	10.0x	9.5x
Multiple (Mean)	11.4x	11.7x
EBIT OSRAM (under consideration of IFRS 16)	**210**	**392**
Enterprise Value (Median)	**2,104**	**3,718**
Enterprise Value (Mean)	**2,393**	**4,580**

EBIT multiple valuation (Peer Group companies US GAAP)

Comparative market valuation in EUR millions	2022	2023
Acuity Brands, Inc.	9.6x	n/a
EBIT OSRAM (excluding the effects of IFRS 16)	**206**	**388**
Enterprise Value	**1,972**	**n/a**

Source: S&P Global Market Intelligence, PwC Analysis.

384. If we apply the multiples of the comparable companies reporting under Japanese GAAP to the EBITDA and EBIT including synergies for the financial years 2022 to 2023 planned for the OSRAM Group and adjusted by us as analogous to the comparable company reporting under US GAAP, we arrive at the following results:

OSRAM Group
EBITDA multiple valuation (Peer Group companies Japan GAAP)

Comparative market valuation in EUR millions	2022	2023
Multiples (Median)	6.4x	5.8x
Multiples (Mean)	6.4x	6.1x
EBITDA OSRAM (excluding the effects of IFRS 16)	**481**	**658**
Enterprise Value (Median)	**3,056**	**3,833**
Enterprise Value (Mean)	**3,058**	**4,040**

Source: S&P Global Market Intelligence, PwC Analysis.

OSRAM Group
EBIT multiple valuation (Peer Group companies Japan GAAP)

Comparative market valuation in EUR millions	2022	2023
Multiples (Median)	10.2x	9.7x
Multiples (Mean)	10.6x	9.9x
EBITDA OSRAM (excluding the effects of IFRS 16)	**206**	**388**
Enterprise Value (Median)	**2,109**	**3,772**
Enterprise Value (Mean)	**2,192**	**3,849**

Source: S&P Global Market Intelligence, PwC Analysis.

385. The range of enterprise values spread over the EBITDA multiples of both groups is shown in the following overview.

OSRAM Group
EBITDA multiple valuation

	IFRS and US-GAAP		Japan GAAP	
Comparative market valuation in EUR millionss	2022	2023	2022	2023
Enterprise Value (IFRS, Median; under consideration of IFRS 16)	3,813	5,282		
Enterprise Value (IFRS, Mean; under consideration of IFRS 16)	3,811	5,167		
Enterprise Value (US GAAP; excluding the effects of IFRS 16)	3,622	n/a		
Enterprise value (Japan GAAP, Median; excluding the effects of IFRS 16)			3,056	3,833
Enterprise value (Japan GAAP, Mean; excluding the effects of IFRS 16)			3,058	4,040
Median	**3,811**	**5,224**	**3,057**	**3,937**
Mean	**3,749**	**5,224**	**3,057**	**3,937**
Cash and interesting assets and other interest bearing assets	47		47	
Non-current post-employment benefit obligation	-167		-167	
Non-interest bearing liabilities	-617		-617	
Lease Liability	-236			
Net Debt	**-973**		**-737**	
Minorities	109		109	
Non-operating assets	147		147	
Equity Value (Median)	**3,094**	**4,507**	**2,576**	**3,456**
Equity Value (Mean)	**3,032**	**4,507**	**2,576**	**3,456**

Source: PwC Analysis.

386. This results in an equity value range based on EBITDA multiples of around EUR 2,576 million to around EUR 4,507 million. The equity value of the OSRAM Group calculated according to the equity value method is at the upper end of the range at around EUR 4,205 million.

387. The range of enterprise values based on the EBIT multiples of both groups is shown in the following overview:

OSRAM Group
EBIT multiple valuation

Comparative market valuation in EUR millionss	IFRS and US-GAAP 2022	IFRS and US-GAAP 2023	Japan GAAP 2022	Japan GAAP 2023
Enterprise Value (Median; under consideration of IFRS 16)	2,104	3,718		
Enterprise Value (Mean; under consideration of IFRS 16)	2,393	4,580		
Enterprise Value (US GAAP;excluding the effects of IFRS 16)	1,972	n/a		
Enterprise value (Median; excluding the effects of IFRS 16)			2,109	3,772
Enterprise value (Mean; excluding the effects of IFRS 16)			2,192	3,849
Median	**2,104**	**4,149**	**2,151**	**3,811**
Mittelwert	**2,156**	**4,149**	**2,151**	**3,811**
Cash and Cash equivalents	47		47	
Non-current post-employment benefit obligation	-167		-167	
Interest bearing liabilities	-617		-617	
Lease Liability	-236			
Net Debt	**-973**		**-737**	
Minorities	109		109	
Non-operating assets	147		147	
Equity Value (Median)	**1,387**	**3,432**	**1,670**	**3,330**
Equity Value (Mean)	**1,439**	**3,432**	**1,670**	**3,330**

Source: PwC Analysis.

388. The equity value based on EBIT multiples ranges from around EUR 1,387 million to around EUR 3,432 million. The equity value of the OSRAM Group of around EUR 4,205 million, calculated according to the capitalised earnings value method and including the value of non-operating assets, lies above this range.

389. One explanation for this finding could be that the capital market has priced in certain risk factors in the market approach, which were not considered to the same extent in the determination of the capitalised earnings value of OSRAM. These risk factors may, for example, be expressed in a higher market risk premium than the market risk premium of 5.75% after personal taxes applied under the capitalised earnings value method or in the recognition of country risk premiums. Furthermore, less optimistic growth expectations may be reflected in a lower market valuation.

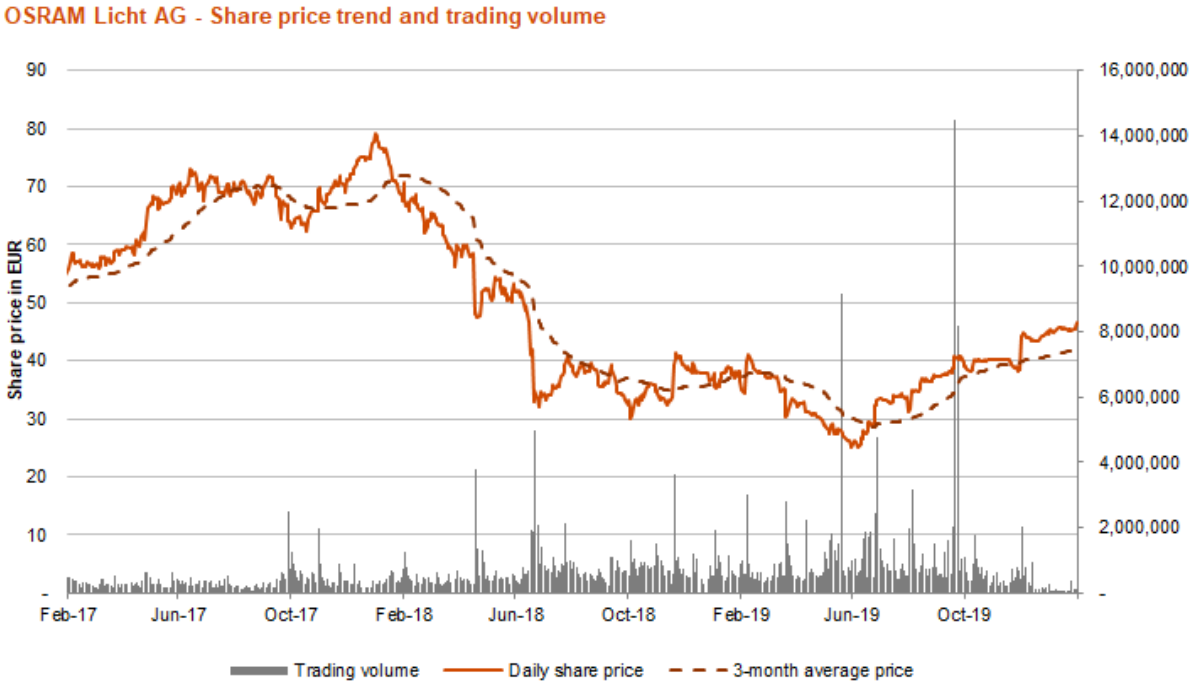
390. A consideration of risk factors and growth expectations analogous to the market valuations of comparable companies in the capital market would result in a lower capitalised earnings value for OSRAM. Despite these market indicators of a lower enterprise value, we have - on the basis of the assumptions presented and in compliance with the principles for the performance of enterprise valuations of the standard IDW S 1 as amended in 2008 - based the measurement of the cash settlement on the objectified enterprise value of OSRAM derived by using the capitalised earnings value method.

F. Determination of an adequate cash-compensation in accordance with § 305 German Stock Corporation Act and adequate recurring compensation payment in accordance with § 304 German Stock Corporation Act

I. Share price

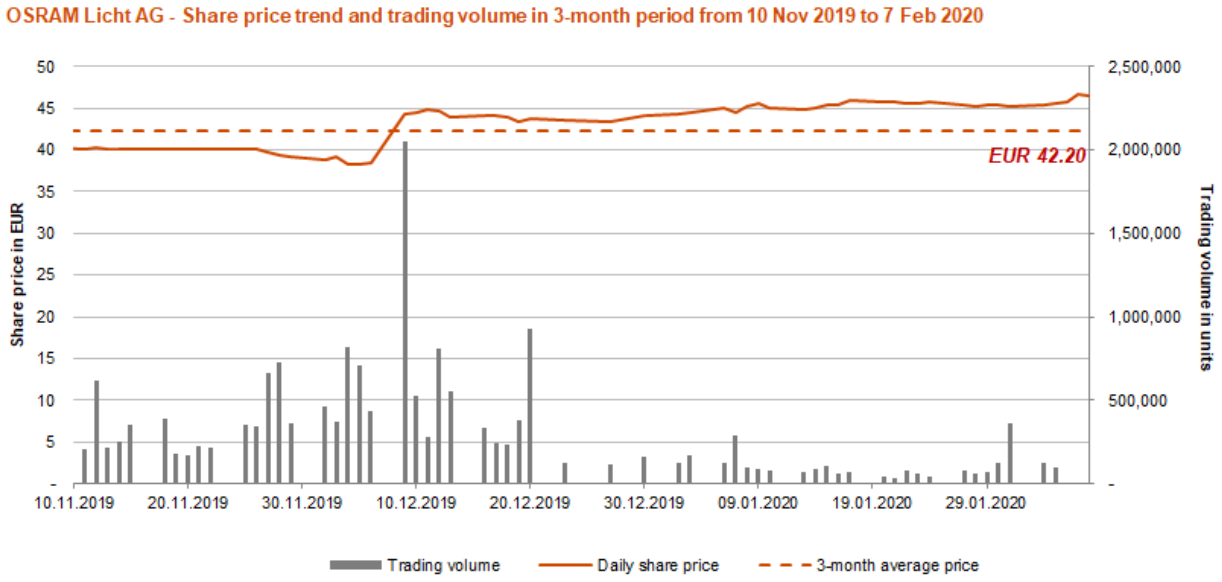
391. The shares of OSRAM are traded on the regulated market of the Frankfurt and the Munich Stock Exchange under the International Securities Identification Number ISIN DE000LED4000. The shares are also traded on the Xetra electronic trading platform of the Frankfurt stock exchange and are included in the outside markets of the Berlin, Düsseldorf, Hamburg, Hannover, Stuttgart and Munich stock exchanges and the Berlin-based Tradegate Exchange.

392. The following chart shows the trend of the stock market price of OSRAM shares, the underlying trading volumes and the three-month turnover-weighted average prices over a three-year period until 7th of February 2020, the last trading day before the announcement of the intention to conclude a domination and profit and loss transfer agreement with ams Offer.



Source: Bloomberg, PwC analysis; consideration of daily share prices and daily trading volumes for the shares of OSRAM on the electronic trading platform Xetra.

393. The following chart shows the trend of the stock market price of OSRAM shares, the underlying trading volumes over the three-month period from 10th of November 2019 to 7th of February 2020, the last day of trading before the announcement of the intention to conclude a domination and profit and loss transfer agreement, and the three-month turnover-weighted average price on 9th of February 2020 (9th of February 2020 was a Sunday and therefore not a trading day):



Source: Bloomberg, PwC analysis.

394. According to the Federal Financial Supervisory Authority, Bonn ("BaFin"), the three-month turnover-weighted average price for the three-month period up to and including 9th of February 2020 (the last calendar day before the announcement of the intention to conclude a domination and profit transfer agreement; a Sunday, therefore not a trading day) is EUR 42.20.

395. With regard to the decision of the Federal Constitutional Court ("BVerfG") and the Federal Court of Justice ("BGH") on joint stock companies, the share price has to be considered as lower limit when determine a cash compensation for minority shareholders of companies if the share price reflects the market value of the shares (compensation and recurring compensation payment in the context of company agreements and integration measures: Decision of the Federal Constitutional Court 27 April 1999 - 1 BvR 1613/94, BVerfGE 100, 289 et. seq.; Decision of the BGH 12 March 2001 - II ZB 15/00, BGHZ 147, 108 et. seq.).

396. Identifying the relevant period under consideration, the Federal Constitutional Court has decided on 19 July 2010 - II ZB 18/09 (e.g. printed in NZG 2010, 939)– deviating from their decision from 12 March 12 2001 – II ZB 15/00 (according to this, the three-month average price over a period of three months immediately before the extraordinary general shareholder meeting is relevant), that the cash compensation lower bound should be based on the volume weighted average share price for the three months leading up to the announcement of the companies' structural change. The BGH

is basing this conclusion on the normative judgement of § 5 (1) German takeover act offer regulation ("WpÜG-AngVO"), whereby the minimum offer price during a takeover bid is deduced, utilising the volume-weighted average share price for the three months prior to the bid or prior to reaching a certain control threshold. Similarly, according to the BGH, the share price should be used to calculate the market price of a share, excluding the effect of an upcoming structural change. Following the announcement of the restructuring measure, the measure is reflected in the share price, meaning that the share price no longer reflects the market value without the impact of the measure. Furthermore, the BGH emphasises that using the average price in a three-month-period prior to the general shareholder meeting is not technically practical since the amount of the compensation has to be announced in a required period of notice, whereas no stock price data exists for the period from the announcement (§ 123 (1) AktG) to the date of the general shareholder meeting. Only if there is a longer period between the announcement of the structural change and the resolving general shareholder meeting, under certain circumstances it could be necessary to adjust the average price.

397. In our opinion such a longer period is not given in this case. Since the period of time between the date of the announcement of the intention to conclude a Domination and Profit and Loss Transfer Agreement and 3 November 2020, being the date on which a resolution is to be passed on this company agreement, could be considered as a longer period, it cannot be ruled out that the extrapolation of the stock market price in line with the general or industry-specific performance is required, taking into account the development of the respective indices. For this reason, we have extrapolated the three-month average price based using different methods. On the basis of the various extrapolation mechanisms, the stock market price of EUR 42.20 remains the appropriate lower limit.

398. Accordingly, the average share price of OSRAM over the three-month period from 10th of November 2019 to 9th of February 2020 amounts to EUR 42.20.

399. If there had been a lack of active trade for the relevant stocks for a longer period of time and the stock holder had not been able to sell his stocks due to the narrowness of the market, or the stock price had been manipulated, the German court rules that it cannot be assumed that the stock price reflects the fair value of the stocks. The BVerfG has stated in a resolution from 27 April 1999 that a distorting narrow market might be, but is not necessarily, present if 95% of the stocks are not freely tradeable.

400. Further clarification on this topic is only given by § 5 WpÜg-AngVO, which the BGH refers to in its jurisdiction from 19 July 2010 – II ZB 18/09. Pursuant to § 5 (4) WpÜG-AngVO the share price is not essential when determining the reward to an acquisition if during the aforementioned three-month period, less than a third of all trading days provide a share price for the corresponding share and if there are consecutive stock price jumps of over than 5%.

401. During the three-month reference period from 10 November 2019 to 9 February 2020, revenue has been recorded on all 60 trading days there was only one trading day with a share price jump in excess of 5% during the three-month period. This indicates liquidity of the share pursuant to the WpÜG-AngVO.[1] Hence, according to WpÜG-AngVO, no narrowness of the market is detectable based on the indications mentioned above and thus, the average share price gives a valid indication for the market value of the share according to WpÜG-AngVO.

402. Taking all aforementioned factors into account, we deem the average share price of OSRAM of EUR 42.20 to be relevant for determining the compensation.

[1] Even if there is no demonstrable narrowness of the market within the meaning of the WpÜG-AngVO and the stock market price of OSRAM can be regarded as an indicator of the fair value of the share, no meaningful and undistorted empirical beta factor can be derived from the trading data of the OSRAM share (see paragraph 335).

II. Determination of the appropriate cash compensation

403. In order to determine the amount of the appropriate severance payment, the enterprise value of OSRAM as of 3 November 2020 of approximately EUR 4,205 million was related to the total number of shares of OSRAM of 94,184,046 (96,848,074 less 2,664,388 treasury shares held). This results in a value per share of 44.65 EUR.

404. The volume-weighted three-month average price of OSRAM in the relevant reference period was EUR 42.20. This average price is below the value per share determined based on the earnings value method. The appropriate compensation per share of OSRAM is therefore 44.65 EUR.

405. The information provided to us up to the end of the valuation work forms the basis for determining the value per share in accordance with the capitalised earnings value method. Should events occur between the completion of our valuation work and the date of the Extraordinary General Meeting on 3 November 2020 which have an influence on the amount of the compensation, the values are to be adjusted accordingly.

406. Due to the current dynamic trend in the general economic conditions and their associated impact on the interest conditions, by the end of our valuation work we are unable to rule out the possibility that the use of a different risk-free rate will be necessary according to the applicable valuation principles in the period between the end of the valuation work and the date of the extraordinary general meeting convened to adopt the resolution, which is the applicable date for the valuation.

407. As a result of these uncertainties, in addition to the results of our valuation work, we present below a scenario analysis which alternatively considers the effect of base interest rates of -0.2% to +0.2%. For the sake of simplicity, it has been assumed that all other valuation parameters and procedures remain unchanged. This applies especially to possible compensating effects of a change in the base interest rate, which have not been considered.

408. The following table provides an overview of the company values per share determined on this basis:

Risk-free rate:	Value per share
0.2%	43.38 EUR
0.1%	44.01 EUR
0.0%	**44.65 EUR**
-0.1%	45.54 EUR
-0.2%	46.47 EUR

Source: PwC analysis.

III. Determination of the appropriate recurring compensation payment

409. According to § 304 (2) AktG, the annual amount to be provided as recurring compensation shall not be less than the amount which could be expected to be distributed as the average dividend for each share in view of the past profitability of the company and its prospective profits, taking into account adequate depreciation and reserves for declines in value but exclusive of other profit reserves (§ 304 (2), first sentence AktG).

410. The profitability of a company usually varies over the course of time. It is adequately represented by the earnings value predicted by forecasts. This depicts the payments made between companies and company owners, having taken the effects of interest and taxes into account. In the case of companies with positive annual results, these payments are the expected dividends payable to the shareholders. In order to derive a constant annual recurring compensation, the legislator does not base the payment obligation on the varying expected annual profit, but instead favours that amount to be distributed as the average profit share payable on the individual shares. The average amount should consequently include profit fluctuations into the calculations but should smooth these fluctuations by way of a consistent average amount.

411. The recurring compensation was determined by calculating the interest on the business value of OSRAM (so-called discounting of business value).

412. In its ruling dated July 21, 2003, the German Federal Court of Justice (BGH) (Case No. II ZB 17/01, "Ytong") decided that the outside shareholders are to be assured of the expected distributable average gross profit share per share as (fixed) compensation, less the (distributional) corporation tax to be paid by the company in the amount of the respective tax rate. In detail, the resolution states that the profit before corporation tax is to be regarded as the profit generated, from which the corporation tax burden is to be deducted as prescribed by tax law.

413. Accordingly, the compensation was calculated based on the current corporate income tax rate plus the solidarity surcharge.

414. The deduction of the tax-free earnings means that not the entire future profit of OSRAM will be subject to German corporation tax. In the light of this, and in accordance with the ruling of the Federal Supreme Court, the anticipated distributable average gross profit must be split into two components, one of which is subject to German corporation tax, whereas the other is not. This division was performed on the basis of the alternative method of deriving the business value of OSRAM, respectively taking into account and omitting the corporation tax plus the resulting solidarity surcharge, together with the ensuing division of the business value of OSRAM into one component subject to corporation tax and solidarity surcharge, and one not.

415. With regard to the risk-adjusted capitalisation interest rate to be applied to derive the amount of the recurring compensation payment, it has to be taken into account that the compensation payments - at least during the term of the contract - are quasi-secure, so that an annuity with the full risk-adjusted capitalisation interest rate (before personal income taxes) is not appropriate. In the case of a domination and profit transfer agreement, there is regularly the risk of the agreement being terminated by the controlling company and of the controlling company becoming illiquid; in this respect, the future compensation payments are not completely free of risk. There is also the risk that the company's profitability will be reduced during the term of the agreement and that the shareholder will hold an interest in a company whose value has been reduced after termination of the agreement.

416. Our starting point here was not the risk-exposed discount rate, because, during the contractual term, the recurring compensation payment is subject to a lower risk compared to net profits and resulting dividend payments. Because the dividend risk is revived for minority shareholders following the end of the enterprise agreement, the return on a low-risk federal bond is also not a suitable benchmark. For this reason, with regard to the return on the business value for the calculation of the amount of the fixed annual recurring compensation, we took as our basis the average of the risk-adjusted present value discount rate, in keeping with the interest rate upon which the calculation of the discounted earnings value was based, and the risk-free rate. Therefore, based on our valuation, we took the mean between the risk-adjusted present value discount rate of approx. 7.447% and the risk-free rate after personal income tax of 0.0% to calculate the recurring compensation.

Derivation of the interest rate for the recurring compensation
50% of risk premium equivalent to net present value

Risk free rate equivalent to net present value (before personal income tax)	*0.000%*
Relevant income tax on risk free rate	*26.375%*
Risk free rate equivalent to net present value (after personal income tax)	***0.000%***
Risk premium equivalent to net present value	*7.447%*
50% of risk premium equivalent to net present value	***3.724%***
Relevant interest rate (before personal income tax)	*5.058%*
Income tax on recurring compensation	*26.375%*
Relevant interest rate (after personal income tax)	***3.724%***

Source: PwC Analysis.

417. Deviating from the outlined judgement of the German Federal Supreme Court we have considered non-operating assets in the calculation of the recurring compensation. In our opinion it is not appropriate – deviating from the outlined approach by the German Federal Supreme Court – to exclude non-operating assets and hence, to deprive the shareholders of assets. In order to determine the recurring compensation required by law, the recurring compensation was calculated by applying an appropriate interest rate on the business value of OSRAM as of 30 September 2020. This approach ensures that the non-operating assets and the special values are also recorded when determining the compensation.

418. The determination of the adequate annual recurring compensation is outlined below:

Recurring compensation (before corporate tax and solidarity surcharge)

	Burdened with corporate tax and solidarity surcharge	Not burdened with corporate tax and solidarity surcharge	Total
Business value at 30 September 2020 in EUR million	3,264	910	4,174
Number of shares	94,183,686	94,183,686	94,183,686
Business value per share in EUR	34.66	9.66	44.32
Yearly recurring compensation per share in EUR (after personal income tax, corporate tax and solidarity surcharge), annuity 3.724%	**1.29**	**0.36**	**1.65**
Plus personal income tax 26.375%	0.46	0.13	0.59
Yearly net recurring compensation per share in EUR (after personal income tax, corporate tax and solidarity surcharge)	**1.75**	**0.49**	**2.24**
plus corporation tax and solidarity surcharge 15.825%	0.33	-	0.33
Yearly gross recurring compensation per share in EUR (after personal income tax, corporate tax and solidarity surcharge)	**2.08**	**0.49**	**2.57**

Source: PwC Analysis.

419. Therefore, the adequate recurring compensation in accordance with § 304 AktG amounts to EUR 2.57 per share (gross profit contribution per share), less corporation tax plus the solidarity surcharge. The rate of corporation tax, plus solidarity surcharge, applicable at the time of the conclusion of the agreement, is 15.825%; this results in a deduction of EUR 0.33 per share for corporation tax. With the rate of the corporation tax and the solidarity surcharge unchanged at 15.0% and 5.5% respectively, the recurring compensation payment amounts to EUR 2.24 per share (net recurring compensation per share).

420. The recurring compensation calculated according to the discounted earnings valuation is based on the information provided to us up to the end of our valuation work. The values would have to be adjusted appropriately if event between the completion of our valuation work and the day of the extraordinary general meeting on 3 November 2020 occur, if these events have a significant effect on the amount of the recurring compensation.

421. As such, we have considered a scenario analysis, which alternatively takes the impact of the risk-free rates of -0.2% to +0.2% into account. For simplification purposes it was assumed that all other valuation parameters and procedures remain unchanged. This applies particularly to possible opposing effects to a change in the risk-free rate, which have not been considered here. The following table shows the effect of this sensitivity on the net recurring compensation per share:

Risk-free rate:	Net recurring compensation payment per share
0.2%	2.27 EUR
0.1%	2.26 EUR
0.0%	**2.24 EUR**
-0.1%	2.23 EUR
-0.2%	2.21 EUR

Quelle: PwC Analysis.

G. Summary of results

422. ams Offer as well as OSRAM jointly engaged us to prepare an expert opinion on the objectified business value of OSRAM and to provide our opinion on an appropriate cash compensation in accordance with § 305 AktG and on an appropriate recurring compensation in accordance with § 304 AktG on the date on which the resolution has to be adopted by the general shareholders meeting, the 3 November 2020. The reason is the intended conclusion of a domination and profit and loss transfer agreement in accordance with § 291(1) AktG.

423. The forecast-oriented discounted earnings method explained in our expert opinion underlies our valuation. Our calculations were based on the forecast calculations of the OSRAM for the financial years 2020 through 2025. We calculated the anticipated net distributions from the forecast data presented to us.

424. The net distributions are to be discounted to the valuation date, 3 November 2020, by a discount rate. To determine the discount rate, we applied a risk-free rate before personal tax of 0.0%, a post-tax market risk premium of 5.75% and the period-specific beta factor ranging from 1.26 to 1.52 which changes in line with the capital structure.

425. Based on the assumptions described above, the period-specific discount rates between 8.8% and 7.6% for the planning years 2020 to 2025. For the time following the explicit forecast phase, for which we assumed long-term achievable growth of net distributions of 0.87 % p.a., the expected net distributions as of fiscal year 2026 were discounted at a discount rate of 6.4 %.

426. On the basis of the assumptions described above and in compliance with the principles for carrying out company valuations, we have determined an equity value of OSRAM as of 3 November 2020 of around EUR 4.205 million. Based on the current number of OSRAM shares, this results in a value per share of EUR 44.65. The liquidation value is below the capitalised earnings value and is therefore not relevant for the valuation of OSRAM. The market valuation does not lead to a higher result than the calculation of the capitalised earnings value

427. We also analysed the performance of the share price. According to rulings of the German supreme court, this represents the lower threshold of the appropriate compensation if it reflects the market value of the shares. The three months average price of the OSRAM for the period until 9 February 2020 – the last day of trading prior to the announcement of the intended conclusion of a domination and profit and loss transfer agreement – amounts to EUR 42.20 and is therefore below the value per share calculated on the basis of the discounted earnings valuation. Even based on various extrapolation mechanisms for the period from 9 February 2020 to the end of our valuation work, the stock market price of EUR 42.20 remains appropriate as the lower limit. The appropriate compensation is therefore EUR 44.65 per OSRAM share.

428. A domination and profit and loss transfer agreement must provide for appropriate compensation for outside shareholders by way of a recurring cash payment related to the shares in the share capital (compensation payment).

429. Determining the appropriate recurring compensation is based on applying an interest rate on the equity value on 30 September 2020. This pertains to projected future distributions, which are reflected in the calculation of the capitalised earnings value. The mean interest rate comprised of the risk-free rate and the risk-adjusted cost of capital before the deduction of personal income tax is used, since, on the one hand, making a recurring compensation during the term of the Agreement is virtually risk-free, and, on the other hand, a possible termination of the domination agreement could impact the future success of the company and entail inherent risks for minority shareholders. A domination agreement must provide for adequate recurring compensation to minority shareholders in the form of recurring cash payments corresponding to their share of the equity capital (recurring compensation). This results in a recurring compensation in accordance with § 304 (1) sentence 1, 304 (2) sentence 1 AktG of EUR 2.24 per share and gross recurring compensation – mathematically calculated in accordance with ruling of the German Federal Court of Justice – for a full fiscal year in the amount of EUR 2.57 per share.

430. The reasonable cash compensation and the adequate recurring compensation payment calculated according to the discounted earnings valuation is based on the information provided to us by the end of the valuation work. If events occur between the completion of our valuation work and the day of the extraordinary general meeting which impact the amount of the cash compensation or the recurring compensation, the values have to be adjusted correspondingly.

431. Our expert opinion is based on the documents provided to us as well as the information provided to us and results of our own analyses.

432. We submit this expert opinion to the best of our knowledge and belief with reference to the Code of Professional Conduct and Ethics laid down in §§ 2 and 43 of the German Auditors' Ordinance (Wirtschaftsprüferordnung).

Munich, 21 September 2020

PricewaterhouseCoopers
GmbH
Wirtschaftsprüfungsgesellschaft

[Translator's notes are in square brackets]

General Engagement Terms
for
Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften
[German Public Auditors and Public Audit Firms]
as of January 1, 2017

1. Scope of application

(1) These engagement terms apply to contracts between German Public Auditors (*Wirtschaftsprüfer*) or German Public Audit Firms (*Wirtschaftsprüfungsgesellschaften*) – hereinafter collectively referred to as "German Public Auditors" – and their engaging parties for assurance services, tax advisory services, advice on business matters and other engagements except as otherwise agreed in writing or prescribed by a mandatory rule.

(2) Third parties may derive claims from contracts between German Public Auditors and engaging parties only when this is expressly agreed or results from mandatory rules prescribed by law. In relation to such claims, these engagement terms also apply to these third parties.

2. Scope and execution of the engagement

(1) Object of the engagement is the agreed service – not a particular economic result. The engagement will be performed in accordance with the German Principles of Proper Professional Conduct (*Grundsätze ordnungsmäßiger Berufsausübung*). The German Public Auditor does not assume any management functions in connection with his services. The German Public Auditor is not responsible for the use or implementation of the results of his services. The German Public Auditor is entitled to make use of competent persons to conduct the engagement.

(2) Except for assurance engagements (*betriebswirtschaftliche Prüfungen*), the consideration of foreign law requires an express written agreement.

(3) If circumstances or the legal situation change subsequent to the release of the final professional statement, the German Public Auditor is not obligated to refer the engaging party to changes or any consequences resulting therefrom.

3. The obligations of the engaging party to cooperate

(1) The engaging party shall ensure that all documents and further information necessary for the performance of the engagement are provided to the German Public Auditor on a timely basis, and that he is informed of all events and circumstances that may be of significance to the performance of the engagement. This also applies to those documents and further information, events and circumstances that first become known during the German Public Auditor's work. The engaging party will also designate suitable persons to provide information.

(2) Upon the request of the German Public Auditor, the engaging party shall confirm the completeness of the documents and further information provided as well as the explanations and statements, in a written statement drafted by the German Public Auditor.

4. Ensuring independence

(1) The engaging party shall refrain from anything that endangers the independence of the German Public Auditor's staff. This applies throughout the term of the engagement, and in particular to offers of employment or to assume an executive or non-executive role, and to offers to accept engagements on their own behalf.

(2) Were the performance of the engagement to impair the independence of the German Public Auditor, of related firms, firms within his network, or such firms associated with him, to which the independence requirements apply in the same way as to the German Public Auditor in other engagement relationships, the German Public Auditor is entitled to terminate the engagement for good cause.

5. Reporting and oral information

To the extent that the German Public Auditor is required to present results in writing as part of the work in executing the engagement, only that written work is authoritative. Drafts are non-binding. Except as otherwise agreed, oral statements and explanations by the German Public Auditor are binding only when they are confirmed in writing. Statements and information of the German Public Auditor outside of the engagement are always non-binding.

6. Distribution of a German Public Auditor's professional statement

(1) The distribution to a third party of professional statements of the German Public Auditor (results of work or extracts of the results of work whether in draft or in a final version) or information about the German Public Auditor acting for the engaging party requires the German Public Auditor's written consent, unless the engaging party is obligated to distribute or inform due to law or a regulatory requirement.

(2) The use by the engaging party for promotional purposes of the German Public Auditor's professional statements and of information about the German Public Auditor acting for the engaging party is prohibited.

7. Deficiency rectification

(1) In case there are any deficiencies, the engaging party is entitled to specific subsequent performance by the German Public Auditor. The engaging party may reduce the fees or cancel the contract for failure of such subsequent performance, for subsequent non-performance or unjustified refusal to perform subsequently, or for unconscionability or impossibility of subsequent performance. If the engagement was not commissioned by a consumer, the engaging party may only cancel the contract due to a deficiency if the service rendered is not relevant to him due to failure of subsequent performance, to subsequent non-performance, to unconscionability or impossibility of subsequent performance. No. 9 applies to the extent that further claims for damages exist.

(2) The engaging party must assert a claim for the rectification of deficiencies in writing (*Textform*) [*Translators Note: The German term "Textform" means in written form, but without requiring a signature*] without delay. Claims pursuant to paragraph 1 not arising from an intentional act expire after one year subsequent to the commencement of the time limit under the statute of limitations.

(3) Apparent deficiencies, such as clerical errors, arithmetical errors and deficiencies associated with technicalities contained in a German Public Auditor's professional statement (long-form reports, expert opinions etc.) may be corrected – also versus third parties – by the German Public Auditor at any time. Misstatements which may call into question the results contained in a German Public Auditor's professional statement entitle the German Public Auditor to withdraw such statement – also versus third parties. In such cases the German Public Auditor should first hear the engaging party, if practicable.

8. Confidentiality towards third parties, and data protection

(1) Pursuant to the law (§ [Article] 323 Abs 1 [paragraph 1] HGB [German Commercial Code: *Handelsgesetzbuch*], § 43 WPO [German Law regulating the Profession of Wirtschaftsprüfer: *Wirtschaftsprüferordnung*], § 203 StGB [German Criminal Code: *Strafgesetzbuch*]) the German Public Auditor is obligated to maintain confidentiality regarding facts and circumstances confided to him or of which he becomes aware in the course of his professional work, unless the engaging party releases him from this confidentiality obligation.

(2) When processing personal data, the German Public Auditor will observe national and European legal provisions on data protection.

9. Liability

(1) For legally required services by German Public Auditors, in particular audits, the respective legal limitations of liability, in particular the limitation of liability pursuant to § 323 Abs. 2 HGB, apply.

(2) Insofar neither a statutory limitation of liability is applicable, nor an individual contractual limitation of liability exists, the liability of the German Public Auditor for claims for damages of any other kind, except for damages resulting from injury to life, body or health as well as for damages that constitute a duty of replacement by a producer pursuant to § 1 ProdHaftG [German Product Liability Act: *Produkthaftungsgesetz*], for an individual case of damages caused by negligence is limited to € 4 million pursuant to § 54 a Abs. 1 Nr. 2 WPO.

(3) The German Public Auditor is entitled to invoke demurs and defenses based on the contractual relationship with the engaging party also towards third parties.

(4) When multiple claimants assert a claim for damages arising from an existing contractual relationship with the German Public Auditor due to the German Public Auditor's negligent breach of duty, the maximum amount stipulated in paragraph 2 applies to the respective claims of all claimants collectively.

(5) An individual case of damages within the meaning of paragraph 2 also exists in relation to a uniform damage arising from a number of breaches of duty. The individual case of damages encompasses all consequences from a breach of duty regardless of whether the damages occurred in one year or in a number of successive years. In this case, multiple acts or omissions based on the same source of error or on a source of error of an equivalent nature are deemed to be a single breach of duty if the matters in question are legally or economically connected to one another. In this event the claim against the German Public Auditor is limited to € 5 million. The limitation to the fivefold of the minimum amount insured does not apply to compulsory audits required by law.

(6) A claim for damages expires if a suit is not filed within six months subsequent to the written refusal of acceptance of the indemnity and the engaging party has been informed of this consequence. This does not apply to claims for damages resulting from scienter, a culpable injury to life, body or health as well as for damages that constitute a liability for replacement by a producer pursuant to § 1 ProdHaftG. The right to invoke a plea of the statute of limitations remains unaffected.

10. Supplementary provisions for audit engagements

(1) If the engaging party subsequently amends the financial statements or management report audited by a German Public Auditor and accompanied by an auditor's report, he may no longer use this auditor's report.

If the German Public Auditor has not issued an auditor's report, a reference to the audit conducted by the German Public Auditor in the management report or any other public reference is permitted only with the German Public Auditor's written consent and with a wording authorized by him.

(2) If the German Public Auditor revokes the auditor's report, it may no longer be used. If the engaging party has already made use of the auditor's report, then upon the request of the German Public Auditor he must give notification of the revocation.

(3) The engaging party has a right to five official copies of the report. Additional official copies will be charged separately.

11. Supplementary provisions for assistance in tax matters

(1) When advising on an individual tax issue as well as when providing ongoing tax advice, the German Public Auditor is entitled to use as a correct and complete basis the facts provided by the engaging party – especially numerical disclosures; this also applies to bookkeeping engagements. Nevertheless, he is obligated to indicate to the engaging party any errors he has identified.

(2) The tax advisory engagement does not encompass procedures required to observe deadlines, unless the German Public Auditor has explicitly accepted a corresponding engagement. In this case the engaging party must provide the German Public Auditor with all documents required to observe deadlines – in particular tax assessments – on such a timely basis that the German Public Auditor has an appropriate lead time.

(3) Except as agreed otherwise in writing, ongoing tax advice encompasses the following work during the contract period:

a) preparation of annual tax returns for income tax, corporate tax and business tax, as well as wealth tax returns, namely on the basis of the annual financial statements, and on other schedules and evidence documents required for the taxation, to be provided by the engaging party

b) examination of tax assessments in relation to the taxes referred to in (a)

c) negotiations with tax authorities in connection with the returns and assessments mentioned in (a) and (b)

d) support in tax audits and evaluation of the results of tax audits with respect to the taxes referred to in (a)

e) participation in petition or protest and appeal procedures with respect to the taxes mentioned in (a).

In the aforementioned tasks the German Public Auditor takes into account material published legal decisions and administrative interpretations.

(4) If the German Public auditor receives a fixed fee for ongoing tax advice, the work mentioned under paragraph 3 (d) and (e) is to be remunerated separately, except as agreed otherwise in writing.

(5) Insofar the German Public Auditor is also a German Tax Advisor and the German Tax Advice Remuneration Regulation (*Steuerberatungsvergütungsverordnung*) is to be applied to calculate the remuneration, a greater or lesser remuneration than the legal default remuneration can be agreed in writing (*Textform*).

(6) Work relating to special individual issues for income tax, corporate tax, business tax, valuation assessments for property units, wealth tax, as well as all issues in relation to sales tax, payroll tax, other taxes and dues requires a separate engagement. This also applies to:

a) work on non-recurring tax matters, e.g. in the field of estate tax, capital transactions tax, and real estate sales tax;

b) support and representation in proceedings before tax and administrative courts and in criminal tax matters;

c) advisory work and work related to expert opinions in connection with changes in legal form and other re-organizations, capital increases and reductions, insolvency related business reorganizations, admission and retirement of owners, sale of a business, liquidations and the like, and

d) support in complying with disclosure and documentation obligations.

(7) To the extent that the preparation of the annual sales tax return is undertaken as additional work, this includes neither the review of any special accounting prerequisites nor the issue as to whether all potential sales tax allowances have been identified. No guarantee is given for the complete compilation of documents to claim the input tax credit.

12. Electronic communication

Communication between the German Public Auditor and the engaging party may be via e-mail. In the event that the engaging party does not wish to communicate via e-mail or sets special security requirements, such as the encryption of e-mails, the engaging party will inform the German Public Auditor in writing (*Textform*) accordingly.

13. Remuneration

(1) In addition to his claims for fees, the German Public Auditor is entitled to claim reimbursement of his expenses; sales tax will be billed additionally. He may claim appropriate advances on remuneration and reimbursement of expenses and may make the delivery of his services dependent upon the complete satisfaction of his claims. Multiple engaging parties are jointly and severally liable.

(2) If the engaging party is not a consumer, then a set-off against the German Public Auditor's claims for remuneration and reimbursement of expenses is admissible only for undisputed claims or claims determined to be legally binding.

14. Dispute Settlement

The German Public Auditor is not prepared to participate in dispute settlement procedures before a consumer arbitration board (*Verbraucherschlichtungsstelle*) within the meaning of § 2 of the German Act on Consumer Dispute Settlements (*Verbraucherstreitbeilegungsgesetz*).

15. Applicable law

The contract, the performance of the services and all claims resulting therefrom are exclusively governed by German law.

Annex 5: **Decision of the Munich Regional Court (*Landgericht*) of 19 May 2020 on the appointment of Ebner Stolz GmbH & Co. KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Kronenstraße 30, 70174 Stuttgart, Germany, as expert auditor (contract auditor) for the purposes of section 293b(1) AktG**

Beglaubigte Abschrift

Landgericht München I
Justizgebäude Lenbachplatz 7
80316 München

5 HK O 6184/20

Beschluss

vom 19.5.2020:

1. Auf gemeinsamen Antrag der

OSRAM LICHT AG
vertreten durch den Vorstand
Marcel-Breuer-Straße 6, 80807, München
AG – Registergericht – München, HRB 199675

und der

ams Offer GmbH
vertreten durch die Geschäftsführer
Amelia-Mary-Earhart-Straße 8
60549 Frankfurt am Main
AG – Registergericht – München, HRB 252979

bestellt der Vorsitzende der 5. Kammer für Handelssachen beim LG München I gem. § 293 c AktG

Ebner Stolz GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft
Kronenstraße 30
70174 Stuttgart

zum gemeinsamen Vertragsprüfer zur Prüfung eines Beherrschungs- und Gewinnabführungsvertrages zwischen der **OSRAM LICHT AG** als beherrschter Gesellschaft und der **ams Offer GmbH** als herrschender Gesellschaft.

2. Der Geschäftswert wird auf **€ 5.000,--** festgesetzt, § 36 Abs. 3 GNotKG.

Gründe:

Ein Hinderungsgrund für die Bestellung der als Vertragsprüfer genannten Wirtschaftsprüfungsgesellschaft ist nicht erkennbar, so dass diese vom Gericht entsprechend der Anregung der Antragstellerinnen aus den drei vorgeschlagenen Wirtschaftsprüfungsgesellschaften ausgewählt werden konnte.

Dr. Krenek
Vorsitzender Richter
am Landgericht

Für die Richtigkeit der Abschrift-Ablichtung
München, den 19. Mai 2020
Der Urkundsbeamte der
Geschäftsstelle des Landgerichts München I

Spensberger
Justizangestellte