Audit report

Audit of the domination and profit and loss transfer agreement

between

First Sensor AG
Berlin

and

TE Connectivity Sensors Germany Holding AG
Bensheim

Convenience translation – only the German version is legally binding

ADKL AG
Wirtschaftsprüfungsgesellschaft
Düsseldorf

Management summary	Section	Page
Audit of the Agreement		
▪ The Agreement complies with legal requirements, contains prescribed components completely and correctly (§§ 291 ff. AktG)	C	8 ff.
Valuation date and valuation method		
▪ Valuation date 26 March 2020 (date of the general shareholders' meeting)	D.IV.2	42 f.
▪ Determination of enterprise value according to the earnings value method	D.IV.3	43 f.
Company forecast		
▪ Updated forecast of First Sensor suitable for business valuation purposes	D.IV.4.b)	46 f.
▪ Company forecast plausibly and appropriately assumed by the Valuation Expert	D.IV.4.c)	48 ff.
▪ Company forecast properly supplemented by earnings contributions from relevant synergies	D.IV.4.e)	56 ff.
Net cash flows to be capitalised		
▪ Appropriate translation into perpetual earnings	D.IV.4.f)	60 ff.
▪ Net cash flows professionally derived by the Valuation Expert	D.IV.4.g)	63 ff.
Parameters of the discount rate in the perpetual annuity		
(see parameter table below)	D.IV.5	67 ff.
Enterprise value		
▪ Enterprise value (as of 26 March 2020) € 241.8 million	D.IV.6	90
▪ Enterprise value not too low compared to a valuation based on multiples and other benchmarks	D.IV.8	93 f.

Parameter	Value
Risk-free rate (after personal taxes)	0.00%
Unlevered beta factor	1.2
Market risk premium (after personal taxes)	5.75%
Levered cost of capital (after personal taxes, perpetual annuity)	8.09%
Perpetual growth rate (after personal taxes)	0.87%

Adequacy of exit compensation and recurring compensation		
▪ Enterprise value of € 23.55 per share ▪ Stock market price as possible lower limit of the exit compensation of € 33.27 per share ▪ Adequate exit compensation of € 33.27 per share	D.IV.9.a)	96 ff.
▪ Adequate (net) Guaranteed Dividend and annual Recurring Compensation Payment per share of € 0.47	D.IV.9.b)D.IV.9.a)	98 ff.

Table of contents and annexes

Annex 1	Order of the District Court of Berlin, Commercial Division 102, appointing the joint auditor of the Agreement
Annex 2	Domination and profit and loss transfer agreement between First Sensor AG and TE Connectivity Sensors Germany Holding AG together with the letter of comfort of TE Connectivity Ltd.
Annex 3	General Terms and Conditions of Engagement

For computational reasons, rounding differences of +/- one unit (€, %, etc.) may occur in the tables.

List of abbreviations

%	Percent
§	Section
€	EUR
$	US dollar
AB	Aktiebolag (Swedish legal form; comparable to a joint stock corporation)
AG	*Die Aktiengesellschaft* (magazine)
Agreement	Domination and profit and loss transfer agreement between First Sensor AG and TE Connectivity Sensors Germany Holding AG together with the letter of comfort of TE Connectivity Ltd.
AktG	*Aktiengesetz,* the German Stock Corporation Act
AKU	Enterprise Valuation Working Group of the IDW (forerunner of FAUB)
Americas	America (North, Central and South America; economic area with approximately the same stock exchange hours)
APAC	Asia-Pacific (East Asia, Southeast Asia, Australia and Oceania; economic area with roughly the same stock exchange hours)
Asia	Segment of First Sensor according to supplementary regional segment information
AVT	Electronic packaging
BaFin	German Federal Financial Supervisory Authority, Bonn and Frankfurt
BB	*BetriebsBerater* (Journal)
BeckRS	Electronic decision database in beck-online (for journalistic use, Verlag C.H.BECK)
Beta factor	Systematic risk (market risk) according to CAPM
BGB	Civil Code
BGH	Federal Supreme Court, Karlsruhe
BGHZ	Collection of decisions of the Federal Supreme Court in civil cases (Journal)
BREXIT	The exit of Great Britain from the European Union
BV	*Besloten vennootschap met beperkte aansprakelijkheid* (Dutch corporate form, comparable to a limited-liability company)
BVerfG	Federal Constitutional Court, Karlsruhe
BVerfGE	Collection of decisions of the Federal Constitutional Court (Journal)
BvR	File number of a constitutional complaint to the Federal Constitutional Court
CAGR	Compound annual growth rate (geometric average of the annual growth rate)
CAPM	Capital asset pricing model (capital market model based on portfolio theory)
CDAX	Composite DAX (Germany's broadest share index)
cf.	conferatur (compare)
CF	*Corporate Finance* (magazine)
CFB	*Corporate Finance Biz* (magazine)

Co.	Compagnie (reference to several shareholders)
Company	First Sensor
Contracting Parties	First Sensor and TE Connectivity
Contract Report	Contract Report - Joint Report of the Management Board of First Sensor AG and the Management Board of TE Connectivity Sensors Germany Holding AG pursuant to § 293a AktG on the domination and profit and loss transfer agreement between First Sensor AG and TE Connectivity Sensors Germany Holding AG - 14 April 2020
Controlling company	TE Connectivity
Corp.	Corporation (US or Canadian legal form; comparable to an AG)
c.p.	Ceteris paribus (under otherwise equal conditions)
DACH (region)	Germany, Austria, Switzerland and Liechtenstein (segment of First Sensor according to supplementary regional segment information)
DAX	German stock index
D.C.	District of Columbia
Detailed Forecast Period	Financial years 2020 to 2022
Distribution Business	Distribution of standard sensors
DPLTA	Domination and profit and loss transfer agreement
EBIT	Earnings before interest and taxes, also known as the "operating result"
EBITA	Earnings before interest, taxes and amortisation of goodwill
EBITDA	Earnings before interest, taxes, depreciation and amortisation of goodwill
EBT	Earnings before taxes
Ed.	Editor
e.g.	exempli gratia
EMEA	Europe, Middle East and Africa (Europe, Arabia (Middle East) and Africa; economic area with roughly the same stock exchange opening hours)
EU	European Union
e.V.	Registered association
f.	Next (page)
FAUB	Expert Committee for Enterprise Valuation and Business Administration of the IDW
ff.	And the following (Pages)
First Sensor	First Sensor AG, Berlin
First Sensor Group	First Sensor together with the companies dependent on it in the terms of § 17 AktG
First Sensor share	No-par-value bearer share of First Sensor with a notional value of € 5.00 each in the share capital
Forecast	The forecast prepared in the course of the regular forecasting process, which does not yet reflect First Sensor management's expectations as to the impact of the coronavirus pandemic
FSC	First Sensor Corp., Montreal, Canada (First Sensor location)
FSD	First Sensor Mobility GmbH, Dresden-Albertstadt (First Sensor location)

FSI	First Sensor Inc., Westlake Village, USA (First Sensor location)
FSK	Klay Instruments BV, Dwingeloo, Netherlands
FSL	First Sensor Lewicki GmbH, Oberdischingen bei Ulm (First Sensor location)
FSM	First Sensor AG, Munich (First Sensor location)
FSO	First Sensor AG, Berlin-Oberschöneweide (First Sensor location)
FSP	First Sensor Microelectronic Packaging GmbH, Dresden-Klotsche (First Sensor location)
FSW	First Sensor AG, Berlin-Weißensee (First Sensor location)
FTE	Full time equivalent
GCEE	German Council of Economic Experts
GDP	Gross Domestic Product
GmbH	*Gesellschaft mit beschränkter Haftung* (German limited liability company)
HFA	Main Expert Committee of the IDW
HGB	Commercial Code
IDW	German Independent Auditors' Institute, Düsseldorf
IDW S 1	IDW Standard: Principles for the performance of enterprise valuations (IDW S 1, 2008 version) of 2 April 2008
IDW-FN	*IDW Fachnachrichten* (journal; today, *IDW Life*)
IDW Life	Member Magazine of the German Independent Auditors' Institute
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund, Washington D.C., USA
Inc.	Incorporated (Anglo-Saxon corporate form, comparable to a German joint stock corporation or AG)
Industrial	Segment of First Sensor
Inter alia	Among other things
ISIN	International Securities Identification Number
IT	Information technology
KESt	Capital gains tax
KFS/BW 1	Expert opinion on enterprise valuation (Austria)
KSt	Corporate income tax
LG	District Court
LiDAR	Light detection and ranging
LLC	Limited Liability Company (US legal form in which the characteristics of a corporation are combined with those of a partnership)
Ltd.	Limited company (Anglo-Saxon corporate form, comparable to a German joint stock corporation or AG)
loc. cit.	loco citato, meaning "in the place cited"
M&A	Mergers and acquisitions (corporate transactions)
Majority shareholder	TE Connectivity
Medical	Segment of First Sensor

MEMS	Micro-electromechanical system(s)
Mobility	Segment of First Sensor
MSCI World	Global stock index
MüKoAktG	Munich Commentary on the German Stock Corporation Act, Volume 5 (§§ 278-328, SpruchG), 5th Edition, Munich 2020
n.a.	Not available or not applicable
No.	Number
North America	Segment of First Sensor according to the supplementary regional segment information
NV	Naamloze vennootschap (Belgian/Dutch company form; comparable to a joint stock corporation)
NZG	*Neue Zeitschrift für Gesellschaftsrecht* (journal)
OEM	Original Equipment Manufacturer
OLG	Higher Regional Court
p.	page
p.a.	Per annum (per year)
Peer	comparable enterprises
Peer group	Group of comparable (listed) companies
plc	Public limited Company (Anglo-Saxon legal form; comparable to a listed joint stock corporation)
Projection	Result of a deviation analysis whose purpose is to provide an outlook for Financial Year 2020 by representing the expectations of First Sensor's management as to the impact of the coronavirus pandemic, which could not be included in the Forecast
PwC	PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, Munich Branch
R&D	Research and development
Raw beta	Beta factor computed based on historical data
Recurring Compensation	Guaranteed Dividend and Recurring Compensation Payment
Rest of Europe	Segment of First Sensor according to the supplementary regional segment information (Europe without DACH)
REXP	REX Performance Index (German Bond Index in its performance index form)
Rest of World	Segment of First Sensor according to the supplementary regional segment information
Marginal No.	Marginal number
S&P Global	S&P Global Market Intelligence LLC, New York City, USA
p.	Page
SA	Société Anonyme (French corporate form; comparable to a joint stock corporation)
SE	Societas Europaea (European company)
Solution Business	Development and sales of customer-specific solutions

SpruchG	Act on the judicial review proceedings about the exclusion of minority share-holders in corporate law (*Spruchverfahrensgesetz*)
SWOT	Strengths, weaknesses, opportunities and threats; a strategic planning tool developed by Harvard Business School.
TE Connectivity	TE Connectivity Sensors Germany Holding AG, Bensheim
TE Group	TE Ltd. together with the companies dependent on it in the terms of § 17 AktG
TE Ltd.	TE Connectivity Ltd, Schaffhausen, Switzerland
t test	Statistical hypothesis test
TV	Terminal value (phase of the perpetual annuity)
Unlevered beta	Beta factor for an unlevered enterprise
US	United States of America
US GAAP	United States Generally Accepted Accounting Principles
USA	United States of America
Valuation Opinion	Expert opinion on the valuation of First Sensor AG and on the determination of adequate exit compensation and adequate recurring compensation as of the date of the general meeting at which the resolution is adopted, in view of the planned conclusion of a domination and profit and loss transfer agreement pursuant to § 291(1) AktG between TE Connectivity Sensors Germany Holding AG and First Sensor AG as of the valuation date 26 May 2020
Valuation Expert	PwC
Valuation Object	First Sensor
WM	*Wertpapier Mitteilungen* (Journal)
WPg	Die Wirtschaftsprüfung (journal)
WPH	Independent Auditor's Manual
WpÜG	German Securities Acquisition and Takeover Act
WpÜG-AngVO	German Securities Acquisition and Takeover Act Offer Ordinance
XETRA	Exchange electronic trading segment of the Frankfurt Stock Exchange
Ytong Decision	Ruling of the Federal Surpreme Court of 21 July 2003 (Case II ZB 17/01)
ZIP	Journal for commercial law and insolvency practice

A. Engagement and performance of audit

TE Connectivity Sensors Germany Holding AG, Bensheim,[1] as controlling company and

First Sensor AG, Berlin,[2]

as the controlled company, entered into a domination and profit and loss transfer agreement on 14 April 2020 in the terms of § 291 (1), Sentence 1 AktG.[3] [4] Pursuant to § 293 (1) AktG, the validity of the Agreement is subject to the approval of the shareholders of First Sensor in annual general meeting[5] and pursuant to § 293 (2) AktG subject to the approval of the shareholders of TE Connectivity in annual general meeting. The approval resolution of the shareholders of First Sensor in general meeting is to be adopted at the annual general meeting on 26 May 2020. The approval resolution from the shareholders of TE Connectivity is to be adopted today (16 April 2020).

The outside shareholders of a controlled AG are to be granted, at their choice, either appropriate recurring compensation pursuant to § 304 AktG or an appropriate exit compensation pursuant to § 305 AktG. The Agreement is to be audited by one or more expert auditors, particularly with regard to the adequacy of the recurring compensation and exit compensation.[6]

By decision of 22 January 2020[7], the Berlin District Court,[8] Commercial Division 102, independently selected and appointed us as joint contract auditor for the audit of the intended agreement.[9] We had previously confirmed to the Court that there were no legal grounds for exclusion. We can therefore confirm that we have complied with the regulations on independence.[10] First Sensor and TE Connectivity then commissioned us to audit the agreement.

The appointment order does not contain any requirements for the performance of the audit or report on the audit. Insofar as certain issues are typically discussed in corporate law judicial review proceedings, we will take up these issues at an appropriate point.

The recurring compensation and exit compensation are in principle to be derived from the enterprise value of First Sensor. The Contracting Parties have commissioned PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, Munich Branch,[11] to determine the amount of the objective enterprise value of First Sensor as well as the adequate recurring compensation pursuant to § 304 AktG and the adequate exit compensation pursuant to § 305 AktG per no-par-value share of First Sensor.[12]

---

1 "TE Connectivity," '"Controlling Company" or "Majority Shareholder."
2 "First Sensor", "Company" or "Evaluation Object"; together with the companies dependent on it in the terms of § 17 AktG "First Sensor Group"; together with TE Connectivity "Contracting Parties"
3 "CPLAA" (in general)
4 "Agreement" (in particular); see Annex 2.
5 AGM
6 §§ 293b (1) and 293e (1), Sentence 2 AktG.
7 File No. 18 O 1/18 [AktE]; cf. Annex 1.
8 "DC"
9 § 293c (1), Sentences 3 to 5 and § 293d AktG.
10 Analogous application of § 321 (4a) of the Commercial Code.
11 "PwC" or "Valuation Expert"
12 "First Sensor share."

On 9 April 2020, PwC submitted an "Expert opinion on the valuation of First Sensor AG and on the determination of adequate exit compensation and adequate recurring compensation as of the date of the general meeting at which the resolution is adopted, in view of the planned conclusion of a domination and profit and loss transfer agreement pursuant to § 291 (1) AktG between TE Connectivity Sensors Germany Holding AG and First Sensor AG as of the valuation date 26 May 2020."[13] The Contracting Parties adopt PwC's comments in their entirety.

The "Contract Report - Joint Report of the Management Board of First Sensor AG and the Management Board of TE Connectivity Sensors Germany Holding AG pursuant to § 293a AktG on the domination and profit and loss transfer agreement between First Sensor AG and TE Connectivity Sensors Germany Holding AG - 14 April 2020"[14] presented on 14 April 2020 contains the complete version of the Valuation Opinion as Annex 4.

We initiated our audit on 23 January 2020 in accordance with §§ 293d and 293e AktG, after first verifying our independence and impartiality and the subsequent acknowledgement of our judicial appointment, and conducted the audit until this date (16 April 2020), primarily at our Düsseldorf offices. Drafts of the Contract Report and the Agreement were available to us over the course of our audit, even before their conclusion and signing.

On 25 February 2020, we had the opportunity to discuss the Company's forecast on site at the Company's offices in Berlin with the Company's Chief Financial Officer, who exercised this office through 12 March 2020, and other First Sensor employees responsible for preparing the estimates.

We also conducted numerous conference calls and bilateral phone conversations during the audit. In a conference call held on 30 March 2020, First Sensor's Chief Financial Officer informed us of a reassessment of the Company's risks and opportunities, as well as the Projection which had been prepared on this basis. The associated analyses were performed in order to provide an outlook for Financial Year 2020. The expected impact of the coronavirus pandemic could not be included in First Sensor's Forecast.

The persons named to us to provide the information have also explained to us *inter alia* the market and competitive environment, the business model and strategy, the historical and current business situation as well as the forecast of First Sensor, and answered our questions. On 14 April 2020, we also made ourselves available to the members of the Supervisory Board of First Sensor to answer questions on the conduct and findings of our audit.

The subject of our audit is the Agreement[15] and in particular the adequacy of the proposed recurring compensation and the proposed exit compensation.[16]

In view of the large number of documents made available, the Valuation Expert set up a data exchange portal to ensure the necessary confidentiality and efficient performance of the valuation and audit work,

---

13 "Valuation Opinion"
14 "Contract Report"
15 § 293b (1) AktG.
16 § 293e (1), Sentence 2 AktG

and provided us with access to the data room as of 3 February 2020. We also exchanged individual documents and working papers via e-mail with the project participants.

In particular, the following documents were submitted to us for our audit:

- Contract Report of 14 April 2020 including a copy of the Agreement and letter of comfort of TE Connectivity Ltd., Schaffhausen, Switzerland[17] of 13 April 2020, a copy of which is attached as Annex 2
- Articles of Association (version of 24 April 2019) and Commercial Register excerpt (retrieved on 11 February 2020) of TE Connectivity
- Articles of Association (version dated 17 January 2020) and Commercial Register excerpt (retrieved on 5 March 2020) of First Sensor
- Minutes of the meetings of the Supervisory Board of First Sensor for the period from 2017 to 2019 as well as resolution of the Supervisory Board by circulatory ballot of 11, 12 and 13 January 2020 on the budget for financial year 2020 presented by the Management Board at its meeting on 3 December 2019 and on the mid-term forecast for 2021 and 2022
- Reports on the audit of the consolidated financial statements and the consolidated management reports of First Sensor prepared in accordance with International Financial Reporting Standards,[18] as applicable in the European Union,[19] and the supplementary requirements of German commercial law in accordance with § 315a (1) HGB for the financial years 2017 to 2019 including the accompanying consolidated financial statements and consolidated management report which bear an unqualified auditor's opinion and have been attached as annexes
- Reports on the audit of the annual financial statements and management reports of First Sensor prepared in accordance with the German Commercial Code for financial years 2017 to 2019, including the annual financial statements and management report issued an unqualified auditor's opinion as an annex
- First Sensor's consolidated, IFRS-based,[22] integrated estimates for financial years 2020 to 2022, including the breakdowns, ancillary calculations and related notes as well as the corresponding information for the financial years 2017 to 2019 for comparison purposes[23]
- The Projection, prepared over the course of the Company's regular management and controlling processes for the purpose of providing an outlook for Financial Year 2020 which reflects First Sensor management's expectations as to the impact of the coronavirus pandemic reflects First Sensor management's expectations as to the impact of the coronavirus pandemic, which could not be included in the Forecast[24]
- Documents with which TE Connectivity has identified and roughly quantified synergy potentials
- Presentations and other documents of First Sensor suitable for explaining the business model and market positioning
- The Valuation Opinion of 9 April 2020
- Extracts from PwC's working papers on the market and competitive environment, on the analysis of the Company's financial, liquidity and earnings position in the observed historical period, including an adjustment of results, and an analysis of forecast accuracy, an analysis of the forecast, the derivation of future net cash flows and conversion into perpetual earnings, as well as other data relevant to the valuation, in particular the derivation of the discount rate and the valuation model used to derive the value, and a comparative valuation

---

17 TE Ltd. together with the companies dependent on it in the terms of § 17 AktG, “TE Group”
18 “IFRS”
19 “EU”
22 " Forecast"; presented by the Management Board to the Supervisory Board and so adopted at the latter's meeting on 3 December 2019, and confirmed by the Supervisory Board by way of a written circulatory ballot on 11, 12 and 13 January 2020 and therefore approved (2020 budget) and acknowledged (mid-term forecast for 2021 and 2022).
23 For the 2019 financial year on the basis of the state of knowledge at the time the estimates were prepared ("Forecast 3").
24 The "Projection"; prepared by the Management Board on 29 March 2020 and acknowledged by the Supervisory Board on 14 April 2020.

- Information on the market and competitive environment, in particular the market studies mentioned in the Valuation Opinion
- Letter from the Federal Financial Supervisory Authority, Bonn and Frankfurt am Main,[25] dated 17 December 2019 on the weighted average price pursuant to § 5 WpÜG-AngVO for a share of First Sensor (DE0007201907) in the three months prior to announcement of the intent to conclude a DPLTA

In addition, we made use of other publicly available information, particularly capital market data. When determining capital market data, we relied primarily on the data provided by the financial information service provider S&P Global Market Intelligence LLC New York City, USA.[26]

For the performance of our engagement, we have taken into account the opinion of the Main Expert Committee[27] of the German Independent Auditors' Institute[28] in Düsseldorf, HFA 6/1988 "Concerning merger audits in accordance with § 340b (4) AktG" in analogous application[29] and the IDW standard, "Principles for the performance of enterprise valuations" (IDW S 1 as amended) 2008) of 2 April 2008.[30]

The IDW S 1 is not a legal norm and is therefore not binding for courts in particular. However, the recommendations contained in it are an essential source of information for courts in their examination of the adequacy of compensation in order to be able to judge whether the respective procedure as to how an enterprise value has been fundamentally analytically determined is methodologically flawless in any specific case.[31]

All explanations and documentation requested by us was readily provided.

Today, the Management Boards of First Sensor and TE Connectivity submitted to us a declaration of general representativeness in compliance with professional standards, confirming in writing that the explanations and information relevant to the audit of the Agreement have been provided completely and accurately.

Our audit results are essentially based on the audit of documents of First Sensor, on information provided by the persons appointed to provide information, as well as on the Valuation Opinion and supplementary information provided by the Valuation Expert. In addition to the information obtained in this way, we have made our own investigations and calculations.

We have documented the nature and scope of our audit procedures in our working papers.

We initiated our audit work before PwC completed the valuation work on 9 April 2020. This procedure is customary within the framework of adequacy tests and is recognised by high court rulings.[32] It is justified by the need to deliver a final audit opinion promptly after completion of the valuation work. There were no

25 "BaFin"
26 "S&P Global"
27 "HFA"
28 "IDW"
29 Opinion HFA 6/1988 was rescinded in 2013, but continues to apply accordingly with regard to the statements contained therein on requirements for the performance and reporting of audits.
30 "IDW S 1"
31 Cf. Federal Supreme Court, Ruling of 29 September 2015, Case II ZB 23/14, *AG* 2016, beginning on p. 135.
32 Cf. Federal Supreme Court, Ruling of 18 September 2006, Case II ZR 225/04, BB 2006, beginning on p. 2543.

diverging opinions between the Valuation Expert and ourselves. Audit findings were incorporated into the valuation model.

The responsibility for the proper content of the Contract Report lies with the Management Boards of First Sensor and TE Connectivity.

We further expressly note that we have not performed any audit of the accounting, the consolidated financial statements, the consolidated management reports, the annual financial statements and management reports or the management of the companies involved. Such audits did not form part of our audit. The compliance of the audited financial statements presented with the relevant legal requirements has been affirmed by the auditor without qualification. With regard to the completeness of the financial statements and compliance with accounting principles, we therefore assume that the documents submitted to us are correct.

If, in the period between the conclusion of our audit (16 April 2020) and the planned date of the resolution of the shareholders in general meeting of First Sensor on the conclusion of the Agreement (26 May 2020) there should be material changes compared with the assumptions made when Valuation Opinion or this Audit Report was signed, such changes would have to be taken into account in determining the adequate recurring compensation payment and/or adequate exit compensation. For this purpose, we will obtain cut-off date declarations from the Contracting Parties on the date of First Sensor's annual general meeting.

Pursuant to § 293e AktG, we submit the following report on the findings of our audit.

This Audit Report has been prepared solely for the purposes set out above. These include the provision of the Audit Report in the run up to the annual general meeting of First Sensor[33] to resolve on the conclusion of the Agreement and the submission of the Report to the competent court.[34]

Our Audit Report may only be passed on in full, with a written declaration of the purpose of the underlying engagement, subject to our express written consent and the restrictions on disclosure and liability conditions underlying the engagement, and then only to third parties provided the respective third party has previously agreed in writing to the General Terms and Conditions of Engagement, supplemented by an individual liability agreement and a binding confidentiality obligation towards us.

The execution of the engagement and our responsibility, also in relation to third parties, shall be governed by the "General Terms and Conditions of Engagement for Independent Auditors and Independent Auditing Companies" as amended on 1 January 2017 and attached as Annex 3. § 293d (2) AktG as related to § 323 HGB apply to our responsibility towards the Contracting Parties and their shareholders.

---

[33] Including its publication on the websites of the Company and for other publications, outlays and measures in connection with the preparation and conduct of the extraordinary general shareholders' meeting.

[34] Also in court proceedings following the general meeting, for example.

B. Subject, type and scope of audit of the Agreement

The subject, type and scope of the audit of the Agreement are derived from §§ 293b (1) and 293e (1), Sentence 2 AktG. Pursuant to § 293b (1) AktG, the subject of our audit is the Agreement. Pursuant to § 293e (1), Sentence 2 AktG, the audit focuses on the assessment of the adequacy of recurring compensation (§ 304 AktG) and exit compensation (§ 305 AktG). Details on the content of the report on our audit of the Agreement are set out in § 293e (1) AktG.

Accordingly, as part of the formal section of our audit, we examined whether the Agreement accurately contains all the legally prescribed components and thus complies with the provisions of law. Second, as part of the substantive section of our audit, we have examined whether the proposed recurring compensation and exit compensation can be regarded as adequate in light of First Sensor's circumstances. We have not undertaken any further legal examination, in particular of the tax implications, nor have we examined the expediency of the Agreement or the procedure. The completeness and accuracy of the Contract Report likewise did not form part of the subject of the audit of the Agreement.

In its opinion HFA 6/1988 on merger audits, the HFA established essential principles for delimiting the tasks between the management board and the merger auditor and, in particular, specified the methods to be used to determine adequacy. According to prevailing opinion, the recommendations made in HFA 6/1988 are also applicable to the audit of the Agreement in accordance with § 293e AktG and in principle continue to apply even after the standard was repealed. We have therefore based our audit on them analogously.

The substantive audit extends to the issue of whether the methods used to calculate the recurring compensation and exit compensation correspond to the generally accepted principles for the performance of enterprise valuations, whether the data on which they are based are professionally derived and whether the future estimates appear plausible. It is not the auditor's task to perform the enterprise valuation required to derive the recurring compensation and the exit compensation.

The expert auditor must report in writing on the result of the audit.[35] The audit report must be concluded with a statement as to whether the proposed recurring compensation and proposed exit compensation are adequate.[36]

[35] § 293e (1), Sentence 1 AktG
[36] § 293e (1), Sentence 2 AktG

The report is also to include an indication of[37]

- the methods used to determine the recurring compensation and exit compensation;
- the reasons why the use of these methods is appropriate;
- the recurring compensation or exit compensation that would result from the application of different methods, if more than one has been applied; at the same time, the weight given to the different methods in determining the proposed recurring compensation or exit compensation and the values on which it is based and the particular difficulties encountered in the valuation.

Our Audit Report reproduces the result of our audit of the adequacy of the proposed recurring compensation and proposed exit compensation and, in this context, provides a comprehensive and detailed description of the audit procedures and the audit results. With respect to the detailed figures and the grounds for the calculation of earnings and value components, we refer to the detailed information in the Valuation Opinion, which is attached to the Contract Report as an annex, in order to avoid repetition.

In this respect, though the addressees of this Report are put into a position to be able to comprehend the adequacy of the recurring compensation and the exit compensation on the basis of our Audit Report alone, they may also avail themselves of the Report on the Agreement, in particular the Valuation Opinion attached thereto, for more detailed information if required.

[37] § 293e (1), Sentence 3 AktG

C. Formal audit of the domination and profit and loss transfer agreement

The minimum content of a DPLTA required under corporate law results from §§ 291 ff. AktG. The audit of the completeness and accuracy of the Agreement therefore relates to the general information on the Contracting Parties, the determination of the subject matter of the agreement, the commencement and duration of the agreement and the agreements on recurring compensation and exit compensation.

Name and registered office of the companies involved

The company names and registered offices of the companies involved are named in the Agreement and correspond to the entries in the commercial registers of First Sensor and TE Connectivity.

Management (§ 1 of the Agreement)

First Sensor has placed TE Connectivity under the management of its company.[38] Accordingly, TE Connectivity is entitled to give general and specific instructions to the Management Board of First Sensor with respect to the management of the company, particularly with respect to the preparation of the annual financial statements of First Sensor.[39] This right of instruction does not extend to the modification, maintenance or cessation of the Agreement.[40]

The Management Board of First Sensor is obliged to follow the instructions of TE Connectivity in accordance with § 1 (1) of the Agreement and in conformance with § 308 AktG[41]

For reasons of legal certainty, the Agreement stipulates that instructions must be in text form or, if given verbally, must be confirmed in text form immediately if the Management Board of First Sensor so requests.[42]

The subordination of the management of the company is constitutive for a domination agreement. The relevant provisions of the Agreement are in line with the legal requirements.[43]

Transfer of profits (§ 2 of the Agreement)

First Sensor agrees to transfer all its profits to TE Connectivity.[44] This provision is constitutive for a profit and loss transfer agreement.[45]

The maximum amount to be transferred - subject to the creation or reversal of reserves - is[46] the maximum amount permitted pursuant to § 301 AktG as amended.[47] Under current law, this is at most the net income arising without the profit transfer, less any loss carried forward from the previous year, less the amount to be allocated to the statutory reserves in accordance with § 300 AktG and the amount which is not available for distribution in accordance with § 268 (8) HGB.[48]

---

[38] Cf. § 1 (1), Sentence 1 of the Agreement.
[39] Cf. § 1 (1), Sentences 2 and 3 of the Agreement.
[40] Cf. § 1 (3) of the Agreement.
[41] Cf. § 1 (2) of the Agreement.
[42] Cf. § 1 (4) of the Agreement.
[43] § 291 (1), Sentence 1 and §§ 299 and 308 AktG.
[44] Cf. § 2 (1), Sentence 1 of the Agreement.
[45] § 291 (1), 2nd Alternative AktG.
[46] Cf. § 2 (2) of the Agreement.
[47] Cf. § 2 (1), Sentence 2 of the Agreement.
[48] § 301, Sentence 1 AktG.

First Sensor may transfer amounts from the net profit to other earnings reserves with the written or textual consent of TE Connectivity in accordance with § 126b BGB, provided this is permissible under commercial law and financially justified upon a prudent commercial assessment.[49] Reserves formed in this way can be reversed again at the request of TE Connectivity and either used to offset a net loss or transferred as profit.[50] Other reserves or a profit carry forward from the period prior to the commencement of the Agreement may not be used either to transfer profits or to offset a net loss.[51]

The obligation to transfer profits exists beginning in the financial year starting on 1 January 2021 or later in which the Agreement takes effect upon entry into the commercial register of First Sensor, and extends to the entire profit of the then current financial year of First Sensor.[52] The profits are payable within two weeks of the adoption of the annual financial statements of First Sensor for the respective financial year.[53]

The provisions on the profit transfer are in line with the legal requirements[54] and the relevant legal rulings. By linking to the currently valid version of § 301 AktG, it is ensured that the provisions on the profit transfer will be permissible at all times.

Transfer of losses (Article 3 of the Agreement)

The provision of § 302 AktG is to be applied in its entirety in the currently valid version.[55] According to the currently valid version of § 302 (1) AktG, TE Connectivity is obliged to assume losses by compensating for any net loss otherwise incurred during the term of the Agreement, unless such loss is compensated by withdrawing from other earnings reserves contributions that were allocated to them during the term of the Agreement.

The obligation to assume losses exists for the first time for the financial year beginning on 1 January 2020 or the later financial year in which the Agreement takes effect upon entry in the commercial register of First Sensor and extends to the entire net loss of the then current financial year of First Sensor.[56] The obligation to compensate losses through TE Connectivity is due at the end of each financial year of First Sensor.[57] In the event the contract ceases during the year, the loss compensation must be determined on the basis of a cut-off date balance sheet.[58]

By linking to the statutory provisions in their currently valid version, it is ensured that the provisions on the assumption of losses will be permissible at all times.

Guaranteed Dividend and Recurring Compensation Payment (§ 4 of the Agreement)

TE Connectivity guarantees the outside shareholders of First Sensor for the financial year 2020 of First Sensor the payment of a certain share of the profits pursuant to § 4 (3) of the Agreement as adequate

49 Cf. § 2 (2), Sentence 1 of the Agreement.
50 Cf. § 2 (2), Sentence 2 of the Agreement.
51 Cf. § 2 (2), Sentence 3 of the Agreement.
52 Cf. § 2 (3), Sentence 1 as related to § 7(2) of the Agreement
53 Cf. § 2 (3), Sentence 2 of the Agreement.
54 § 300 (1) as related to § 150(2) and § 301 AktG.
55 Cf. § 3 (1) of the Agreement.
56 Cf. § 3 (2), Sentence 1 as related to § 7(2) of the Agreement.
57 Cf. § 3 (2), Sentence 2 of the Agreement.
58 Cf. § 3 (3) of the Agreement.

recurring compensation ("Guaranteed Dividend").[59] To the extent that the dividend (including advance payments) per First Sensor share paid by First Sensor for financial year 2020 is less than the Guaranteed Dividend, TE Connectivity will pay each outside shareholder of First Sensor the corresponding difference per Fist Sensor share.[60]

TE Connectivity further undertakes to pay to the outside shareholders of First Sensor an annually recurring cash payment ("Recurring Compensation Payment") for the duration of the Agreement as adequate recurring compensation to the outside shareholders of First Sensor from the financial year of First Sensor for which TE Connectivity's claim to the profit transfer becomes effective.[61]

For each full financial year of First Sensor, the Guaranteed Dividend and the Recurring Compensation Payment amount to € 0.56 ("Gross Recurring Compensation Amount") for each no-par-value bearer share of First Sensor with a gross notional value in the share capital of € 5.00 ("Gross Recurring Compensation Amount") less any amount for corporate income tax and the solidarity surcharge at the tax rate applicable for such taxes for the respective financial year ("Net Recurring Compensation Amount"). This deduction is to be made only on that part of the Gross Exit Compensation Amount that relates to profits subject to German corporate income tax.[62]

According to the circumstances at the time of the conclusion of the Agreement, € 0.09 is to be deducted from the Gross Recurring Compensation Amount for corporate income tax (15.0%) and the solidarity surcharge (5.5% of the corporate income tax). This results in a Net Recurring Compensation Amount of € 0.47 per First Sensor share. It is agreed that any withholding taxes (e.g. corporate income tax plus the solidarity surcharge) will be withheld from the Net Recurring Compensation Amount in accordance with the provisions of law.[63]

The granting of a Guaranteed Dividend for financial year 2020, in which First Sensor is subject exclusively to TE Connectivity's control, but a profit transfer obligation does not yet exist, is in line with the legal requirements for control agreements in which the transfer of the entire profit is not also agreed.[64]

The granting of a Recurring Compensation Payment for financial year 2021 or the later financial year in which the Agreement takes effect upon entry in the commercial register of First Sensor complies with the provisions of law for profit and loss transfer agreements.[65] No use was made of the possibility of agreeing[66] on variable recurring compensation dependent on the profit of the controlling company instead of the fixed recurring compensation.

With regard to the determination of the amount of recurring compensation and our audit of its adequacy, we refer to our comments on the substantive audit of the Agreement.[67]

[59] Cf. § 4 (1), Sentence 1 of the Agreement.
[60] Cf. § 4 (1), Sentence 2 of the Agreement.
[61] Cf. § 4 (2) as related to § 2(3) of the Agreement.
[62] Cf. § 4 (3), Sentence 1 of the Agreement.
[63] Cf. Article 4 (3), Sentence 2 of the Agreement.
[64] § 304 (1), Sentence 2 AktG.
[65] § 304 (1), Sentence 1 and § 304(2), Sentence 1 AktG.
[66] § 304 (2), Sentences 2 and 3 AktG.
[67] Cf. Section D, starting on p. 16, in particular Section D.II.2, starting on p. 22, and Section D.IV.9.b), starting on p. 115.

Any difference between the Guaranteed Dividend and the dividend paid for the 2020 financial year is payable on the third banking day following the annual general shareholders' meeting of First Sensor for the 2020 financial year.[68] The Recurring Compensation Payment is due on the third bank working day after the annual general shareholders' meeting of First Sensor for each financial year just closed, but no later than 8 months after the end of the respective financial year.[69] These provisions are customary and appropriate, since the recurring compensation in addition to or as a replacement for the previous dividend claim is thus generally due at the same time as the dividend claim to be added or removed would otherwise have been due.

The Guaranteed Dividend will be paid for the financial year 2020 of First Sensor when the Agreement takes effect in 2020. The Recurring Compensation Payment will be granted for the first time for the financial year of First Sensor beginning on 1 January 2021 or the later financial year of First Sensor in which the Agreement becomes effective upon entry in the commercial register of First Sensor and TE Connectivity acquires a claim to the profit transfer.[70]

It is to be reduced on a prorated basis in the event of the formation of a stub period for First Sensor or in the event of the cessation of the Agreement in the course of a financial year of First Sensor.[71]

The provisions on how to proceed in the case of capital increases from company funds or through cash or non-cash contributions[72] are confirmed by the prevailing view in the legal literature.

If guaranteed dividends and/or recurring compensation payments are increased by a non-appealable decision in judicial review proceedings, the shareholders already compensated may also demand a corresponding addition to the recurring compensation they have already received, to the extent provided by law.[73] This corresponds to the statutory provision in § 13, Sentence 2 SpruchG. Such a supplementary claim also arises in the case of a court-recorded settlement to end judicial review proceedings, to the extent provided by law.

---

68 Cf. § 4 (1), Sentence 3 of the Agreement.
69 Cf. § 4 (4) of the Agreement.
70 Cf. § 4 (5) in conjunction with § 2(3) and § 7(2) of the Agreement.
71 Cf. § 4 (6) of the Agreement.
72 Cf. § 4 (7) of the Agreement.
73 Cf. § 4 (8) of the Agreement.

Exit compensation (§ 5 of the Agreement)

TE Connectivity undertakes, at the request of any outside shareholder of First Sensor, to sell their First Sensor shares in exchange for a cash exit compensation of € 33.27 per share of First Sensor.[74]

Since TE Connectivity is a controlled company in the terms of § 17 AktG and TE Ltd., the controlling company and majority shareholder in TE Connectivity, has its domicile in Switzerland, the exit compensation in accordance with § 305 AktG is to be paid as cash compensation.[75]

With regard to the determination of the amount of the cash exit compensation and the audit of its adequacy, we refer to our comments on the substantive audit of the Agreement.[76]

TE Connectivity's obligation to acquire the First Sensor shares is subject to a time limit.[77] In practice, a time limit for the exit compensation offer is also common practice. The provisions[78] in this regard are in line with the provisions of law.[79]

The provisions on how to proceed in the case of capital increases from company funds or through cash or non-cash contributions[80] are confirmed by the prevailing view in the legal literature.

The transfer of First Sensor shares in exchange for compensation is free of charge for First Sensor's outside shareholders.[81] There are no associated legal requirements.

If the exit compensation is increased by a non-appealable decision in judicial review proceedings, the shareholders who have already been compensated may also request a corresponding addition to the compensation they have already received, provided this is stipulated by law.[82] This corresponds to the statutory provision in § 13, Sentence 2 SpruchG. Such a supplementary claim also arises in the case of a court-recorded settlement to end judicial review proceedings, to the extent provided by law.

A temporary right of disposal in the event of termination of the Agreement[83] ensures that outside shareholders who did not accept the cash exit compensation offer and remained in the company will not suffer any detriment from the termination. In this case, the cash exit compensation offer of [€ 33.27][84] per share is revived. In this respect, shareholders are granted additional protection that goes beyond that required by law.

Interest is not regulated in the Agreement, but neither is it required. Accordingly, the provision of law applies, according to which the exit compensation is subject to interest at an annual rate of 5 percentage

74 Cf. § 5 (1) of the Agreement.
75 § 305 (2), Sentence 3 AktG.
76 See section D, starting on p. 16., in particular Section D.II.1, p. 21 and section D.IV.9.a), starting on p. 112.
77 Cf. § 5 (2), Sentence 1 of the Agreement.
78 Cf. § 5 (2), Sentences 2 and 3 of the Agreement.
79 § 305 (4) AktG.
80 Cf. § 5 (3) of the Agreement.
81 Cf. § 5 (4) of the Agreement.
82 Cf. § 5 (5) of the Agreement.
83 Cf. § 5 (6) of the Agreement.
84 In the event of an increase in a judicial review proceeding or through a settlement to avert or end judicial review proceedings, the increased amount applies when the right of disposal is exercised (cf. § 5 (6) of the Agreement).

points above the respective base interest rate in accordance with § 247 BGB after the end of the day on which the Agreement has become effective, whereby the assertion of further damages is not excluded.[85]

Right to information (§ 6 of the Agreement)

TE Connectivity has rights to information and First Sensor has duties to provide such information.[86]

The general opinion is that the right of the controlling company to information is part of the group management authority resulting from § 308 (1) AktG. The clarifying provisions are not objectionable.

Effective date and term (§ 7 of the Agreement)

In accordance with the provisions of law[87], the Agreement requires the approval of both the shareholders of First Sensor and those of TE Connectivity in general meeting to be effective.[88]

It is drafted in written form in accordance with the legal requirements.[89]

In accordance with the provisions of law,[90] the Agreement takes effect upon entry into the Commercial Register of First Sensor.[91]

The Agreement is concluded for an indefinite period of time and may be terminated in writing[92] with a notice period of three months effective from the end of any financial year, by TE Connectivity only.[93] For tax reasons, a minimum term of five years (60 months) has been agreed after the beginning of the financial year for which First Sensor's obligation to transfer profits becomes effective.[94] The Agreement may be terminated by either party without notice for good cause.

The legal requirements regarding termination for good cause[95] have been observed.[96]

In the event of cessation of the Agreement, First Sensor's creditors are to be provided with a security in accordance with § 303 AktG.[97]

---

85 § 305 (3), Sentence 3 AktG.
86 Cf. § 6 of the Agreement.
87 § 293, Paragraphs 1 and 2 AktG.
88 Cf. § 7 (1) of the Agreement.
89 § 293 (3) AktG.
90 § 294 (2) AktG.
91 Cf. § 7 (2) of the Agreement.
92 Cf. § 7 (8) of the Agreement.
93 Cf. § 7 (3), Sentences 1 and 3 of the Agreement.
94 Cf. § 7 (3), Sentence 2 of the Agreement.
95 § 297 (1) AktG.
96 Cf. § 7, Paragraphs 4 to 6 of the Agreement.
97 Cf. § 7 (7) of the Agreement.

Letter of comfort (§ 8 of the Agreement)

TE Connectivity is an indirect subsidiary of TE Ltd,[98] which, without joining the contract as a contracting party, issued by separate declaration of 13 April 2020 a letter of comfort to First Sensor.[99]

In this letter of comfort, which is attached to the Agreement for information purposes, TE Ltd. has given First Sensor an unrestricted and irrevocable commitment to ensure that TE Connectivity is financially equipped such that TE Connectivity is always in a position to meet all its obligations from or in connection with the Agreement completely and on time (hard letter of comfort).[100]

The letter of comfort issued by TE Ltd. directly secures First Sensor's claims to loss compensation and indirectly secures the claims of outside shareholders to recurring compensation and exit compensation.

Furthermore, TE Ltd. irrevocably and unconditionally guarantees the outside shareholders of First Sensor that TE Connectivity will fulfil all obligations towards them arising from or in connection with the Agreement, in particular the payment of the recurring compensation and exit compensation, in full and in due time.[101]

This declaration by TE Ltd. provides the outside shareholders with a direct claim and thus additionally serves to secure their claims to the recurring compensation and exit compensation.

Neither the letter of comfort nor the envisaged liability towards outside shareholders are required by law. In this respect, the provisions in favour of the outside shareholders go beyond the security mechanisms stipulated by law for the protection of outside shareholders.

Final provisions (§ 9 of the Agreement)

The final provisions are in accordance with standard contractual practice and are not objectionable.

Audit conclusion

The Agreement accurately contains all provisions set out in §§ 291 ff. AktG and thus complies with the provisions of law.

[98] Cf. § 8 (1), Sentence 1 of the Agreement.
[99] Cf. § 8 (1), Sentence 2 of the Agreement.
[100] Cf. § 8 (2), Sentence 1 of the Agreement.
[101] Cf. § 8 (3), Sentence 2 of the Agreement.

D. Substantive audit of the domination and profit and loss transfer agreement

I. Valuation principles and methods

There is no legally prescribed method for the valuation of enterprises. The value of an enterprise regularly results from the benefit that the enterprise can provide in the future, in particular due to its substantive assets, its innovative strength, its products and position on the market, its internal organisation and its management. Provided that only financial targets are pursued, the value of a company is derived from its ability to generate income for the company's owners through the interaction of all factors influencing its profitability.

In business administration, legal rulings and valuation practice, generally accepted valuation principles have been developed that are applied to the valuation of enterprises. These are reflected in IDW S 1 in particular.

In line with many years of valuation practice and German legal rulings, the enterprise value[102] is to be derived from the objective enterprise value in accordance with the principles of IDW S 1 in direct consideration of the taxation of shareholders in the case of corporate valuation events such as the conclusion of a DPLTA. The objective enterprise value normally represents the inter-subjectively verifiable value of future earnings from the point of view of the typical domestic shareholder with unlimited tax liability if the enterprise is continued as a going concern unchanged.

1. Value of future earnings

The value of future success corresponds to the present value of the net cash flows to the company's owners associated with the ownership of the company.[103] The value of future earnings can be determined using the earnings value method or a discounted cash flow method.[104] Both methods are basically equivalent and lead to identical results with the same valuation assumptions and simplifications, especially with regard to financing, as they are based on the same investment theory (net present value calculation).[105]

The earnings value is calculated as the present value, discounted at the discount rate, of the future cash flows to the enterprise owners. These cash flows are derived from future earnings arising from core assets and the financial results from the sale of non-core assets or the valuations of other separately valuated assets.[106]

Proper application of the net present value calculation presupposes that the numerator (cash flows to shareholders) and denominator (discount rate) of the valuation equation must be equivalent in terms of uncertainty, breadth and temporal structure (principle of equivalence). The central principle of risk equivalence may be taken into account either with the security equivalence method or the risk premium method. Since the quantification of security equivalents, particularly with regard to a classification of shareholders,

[102] As well as exit compensation and recurring compensation, which are generally to be derived from enterprise value.
[103] Cf. IDW S 1, Marginal No. 4.
[104] Cf. IDW S 1, Marginal No. 7.
[105] Cf. IDW S 1, Marginal No. 101.
[106] Cf. IDW S 1, Section 7.2.

has not yet been convincingly resolved to date, the risk premium method has established itself, at least in the determination of objective enterprise values, in theory, legal rulings and valuation practice.[107]

With regard to the problem of a clear demarcation, the risk premium method is not supposed to distinguish between enterprise-specific and general risks, but is supposed to consider all risk exclusively in the discount rate. The numerator in the valuation equation must therefore always include values expected for net income or cash flows to the shareholders.[108]

The forecast of future net income represents the core problem of any enterprise valuation.[109] The earnings power proven in the past generally serves as a starting point for plausibility assessments.[110] Within the framework of an objective evaluation, only those results are to be taken into account which derive from measures already initiated or from a sufficiently documented and concrete business concept.[111] If the earnings prospects are different in the future for reasons related to the enterprise and/or due to changed market and competitive conditions, recognisable differences must be taken into account.

Within the framework of forecasting future earnings, it must be assessed whether and, if so, to what extent synergy effects are to be taken into account. Synergy effects are defined as changes in earnings resulting from the financial integration of two or more companies and differing from the sum of their stand-alone earnings. IDW S 1 distinguishes between real and virtual synergies. Real synergies concern changes that can only be achieved through cooperation between certain companies on the basis of their specific characteristics or as a result of the measure giving rise to the valuation. Virtual synergy effects, on the other hand, can be implemented with almost any number of partners or can be realised without the need for the relevant measure.

Virtual synergies are only to be taken into account in an objective valuation if the synergy-producing measures have already been initiated or documented in the enterprise concept and only if they relate to the valuation object.[112]

In the valuation of corporate groups, earnings can be determined using various methods.[113] The appropriate method in each specific case results from the planning and management approach of the corporate group, taking into account the question of whether a presentation of the assets of individual group companies is meaningful, desirable or necessary.

The objective enterprise value is determined on the basis of the distribution of those earnings that are actually available for distribution after taking into account the enterprise concept[114] documented on the valuation date and legal restrictions (e.g. regulatory requirements).[115]

---

107 Cf. e.g. IDW, WPH Edition, *Bewertung und Transaktionsberatung*, Düsseldorf 2018, Chapter A, Marginal Nos. 210 ff.
108 Cf. e.g. IDW, WPH Edition, *Bewertung und Transaktionsberatung*, loc. cit., Chapter A, Marginal No. 332.
109 Cf. IDW S 1, Marginal No. 68.
110 Cf. IDW S 1, Marginal No. 72.
111 Cf. IDW S 1, Marginal No. 32.
112 Cf. IDW S 1, Marginal No. 33 f.
113 Step-by-step by including the results in the investment result of each participating company or simultaneously by summation and consolidation. In addition, the valuation of corporate groups can also be carried out by adding the values of each group company, with due regard to the shareholding structure ("sum-of-the-parts").
114 Including the planning of distributions
115 Cf. IDW S 1, Marginal No. 35.

If the forecast distinguishes two phases, the first phase[116] breaks down earnings into distributions and retained earnings, including their appropriation, based on the forecast itself. If there are no plans for the retention of earnings and the investment planning does not provide for any concrete use, an appropriate premise for the use of funds must be established. If increases in value from retained earnings are subject to a capital gains tax, this must be taken into account in the valuation.[117]

For the second phase,[118] it is to be assumed that the distribution practices of the valuation object are equivalent to those of the alternative investment. For the reinvestment of retained earnings in the second phase, it is assumed that this can be represented either by an investment at the discount rate before corporate income taxes, which is neutral in terms of net present value, or by a notional direct allocation of the reinvestments to the shareholders.[119]

The value of an enterprise is determined by the amount of freely available net cash flows to the investor. These net cash flows must be determined in accordance with the IDW's recommendations, with due regard to the enterprise's income taxes and the owners' income taxes resulting from ownership of the enterprise.[120] Due to the relevance of personal income taxes to value, it is necessary to classify the tax circumstances of shareholders in relation to specific occasions when determining objective enterprise values.[121]

In accordance with many years of valuation practice and German legal rulings, in the case of corporate and contractual valuation events such as the conclusion of an inter-company agreement, the classification is based on the tax situation of a domestic natural person with unlimited tax liability who is not significantly involved in management of the company. Within the framework of determining the classification, appropriate assumptions regarding the personal taxation of net cash flows must be made based on the valuation object or an alternative investment.

In the withholding tax system applicable in Germany since 2009, income of a preclassified shareholder from dividends and capital gains as a consequence of increases in value (price gains) as well as his or her interest income are subject to a uniform nominal tax rate of 26.375%.[122] For distributed profits, the resulting effective tax burden is derived directly from a deduction of the nominal tax liability.

Based on the interest effect, the effective tax liability of capital gains on reinvested earnings depends on the personal holding period of the shareholder. In the opinion of IDW's expert committee for business valuation and business administration,[123] it is appropriate to assume long holding periods and a correspondingly low effective tax liability on reinvested earnings when estimating the effective personal tax rate for capital gains. The IDW expert committee recommends assuming an effective tax liability of half

116 The “detailed planning phase”
117 Cf. IDW S 1, Marginal No. 36.
118 The so-called “phase of the perpetual annuity”
119 Cf. IDW S 1, Marginal No. 37.
120 Cf. IDW S 1, Marginal No. 28 ff.
121 Cf. IDW S 1, Marginal No. 43 ff.
122 Income tax including the solidarity surcharge; church tax is not taken into account.
123 "FAUB”

the nominal tax rate.[124] Accordingly, a tax rate of 13.1875% is currently to be applied as the effective tax liability on capital gains on reinvested earnings.

The discount rate to be used to derive the present value represents the return on the most adequate alternative investment possible to an investment in the valuation object.[125] This rate of return can be broken down using the capital asset pricing model[126] into a risk-free rate (base interest rate) and a risk premium demanded by shareholders in exchange for the assumption of entrepreneurial risk. Income tax effects at the shareholder level must be taken into account when determining the risk-free rate and risk premium. In order to record growth effects in the form of steadily growing earnings after the end of the detailed forecast period, the discount rate is reduced by a growth discount.

Any assets that may not be required for the operation of the business (non-core assets) must normally be considered separately in addition to the earnings value of the core assets and encompass those assets that can be freely sold without affecting the actual corporate purpose of the enterprise. Consideration as a non-core asset also comes into consideration for other assets that cannot be depicted or can only be incompletely depicted in the earnings valuation.

2. <u>Liquidation value and net asset value</u>

Pursuant to IDW S 1, the lower limit for the enterprise value is the liquidation value if the present value of the earnings that would result from the liquidation of the enterprise as a whole exceeds the earnings value when assuming that the enterprise will continue as a going concern.

The net asset value is the reconstruction or replacement value of all assets and liabilities in the enterprise. Since the net asset value is generally not directly related to future financial surpluses, it generally has no independent significance in determining the enterprise value.

3. <u>Simplified pricing</u>

Comparative analyses based on public capital market data or on transactions can be undertaken to check the plausibility of enterprise valuations based on internal business data. According to IDW S 1, such simplified pricing cannot replace a "fundamental analytical" enterprise valuation.[127]

The plausibility of an enterprise value is assessed according to this method on the basis of a multiple of earnings or asset parameters or an industry-specific ratio determined by means of a multiplier. Suitable multipliers are derived either from capital market data of comparable listed enterprises[128] or from comparable transactions.

The values determined on the basis of multipliers can normally only provide a first rough indication. On the one hand, some multipliers do not take sufficient account of enterprise-specific earnings and cost

[124] For valuation dates from 1 January 2009; cf. the online results report on the 95th meeting of the IDW expert committee (FAUB) on 29 November 2007, https://www.idw.de/blob/41084/2953225b8794b951b3342babf0cb9429/ergebnisbericht-095-sitzung-faub-data.pdf, last retrieved on: 13 February 2020.
[125] Cf. e.g. IDW, WPH Edition, *Bewertung und Transaktionsberatung*, loc. cit., Chapter A, Marginal No. 331.
[126] "CAPM"
[127] Cf. IDW S 1, Marginal No. 143 f.
[128] "Peers"; together, the "peer group".

structures. On the other hand, the forecast periods of the analysts' estimates for the peers are often not long enough to adequately take into account the changes expected for the valuation object in the distant future based on internal data. Finally, other special features of the valuation object, such as loss carry-forwards and non-core assets, can also limit the meaningfulness of multiplier valuations.

In the case of multipliers derived based on transaction prices, it should also be noted that purchase prices actually paid are determined by the interests of the transaction partners. They take into account, for example, subjective expectations, particularly regarding the synergy effects that can be achieved. In addition, the specific form of the agreements and their influence on the agreed purchase price are generally not known. In this respect, this approach is normally less meaningful for the plausibility check of an objective enterprise value compared to multiples derived from stock market prices.

The ratios computed through comparative analyses can therefore only be applied to the valuation object to a limited extent. However, a multiplier valuation usually nonetheless makes it possible to subject the valuation result to a final overall assessment by comparing it with the computed range.

4. Purchase prices and market prices paid

The extent to which prices paid by a majority shareholder for shares in the valuation object ("pre-acquisitions") can be used directly in determining the value of the enterprise and in deriving an exit compensation and recurring compensation is controversial in legal rulings and literature. According to IDW S 1, prices actually paid for enterprises and shares in enterprises can be used as an indicator for the economic plausibility of enterprise and share values, but are no substitute for a valuation.[129]

If market prices are available for shares in an enterprise, these must be used to assess the plausibility of the enterprise and/or share value determined by fundamental analysis. Special factors which may have had an effect on stock exchange prices must be carefully analysed and presented.[130] In particular, if only a small number of shares are in free float and only a small number of shares are traded, or if the market price is influenced by other non-value-related events, it is not possible to deduce a generally valid market value of the enterprise from the result of individual sales.

---

[129] Cf. IDW S 1, Marginal No. 13.
[130] Cf. IDW S 1, Marginal No. 15.

II. Determination of adequate exit compensation and recurring compensation

1. Adequate exit compensation pursuant to § 305 AktG

A DPLTA must contain, among other things, the obligation of the other party to the agreement, i.e. the controlling company, to acquire, at the request of an outside shareholder, the latter's shares in return for an adequate exit compensation specified in the agreement (§ 305 (1) AktG).

According to business administration theory, legal rulings[131] and valuation practice, the value of an enterprise forms the appropriate basis for determining the cash exit compensation. The value of the enterprise as a whole is decisive. This is in line with the postulate developed by the courts that exit compensation should be paid at the full value of the investment.

When converting the enterprise value to a share, any special features of the respective valuation object[132] may have to be taken into account by allocating the enterprise value in a way that differs from the proportional allocation.

According to the high court rulings of the Federal Constitutional Court[133] and the Federal Supreme Court[134] on listed joint stock corporations, the stock market price is the lower limit of an exit compensation to be granted if it reflects the market value of the share. Whether the market price of the share actually reflects the market value must be examined on a case-by-case basis. This is not the case in the absence of marketability or manipulation of the stock exchange price. Whenever the stock market price is used, it must always be based on a suitable average price.

2. Adequate recurring compensation pursuant to § 304 AktG

Pursuant to § 304 (1), Sentence 1 AktG, a profit and loss transfer agreement must provide for adequate recurring compensation for outside shareholders by way of a recurring cash payment (recurring compensation payment) based on the shares in the share capital. Pursuant to § 304 (1), Sentence 2 AktG, a domination agreement must guarantee the outside shareholders a certain annual share in profits in accordance with the amount determined for the recurring compensation payment as adequate recurring compensation in cases where the company is not also obliged to transfer its entire profit.[135]

As a rule,[136] in accordance with § 304 (2), Sentence 1 AktG, at least the annual payment of the amount that could probably be distributed to the individual share as an average profit share on the basis of the company's previous earnings situation and its future earnings prospects, taking into account appropriate depreciation and allowances, but without forming other earnings reserves, is to be guaranteed as a recurring compensation payment.

Cf.[131] Federal Supreme Court, Ruling of 12 March 2001, Case II ZB 15/00, BGHZ 147, starting on p. 108.
[132] E.g. different share classes
[133] Federal Constitutional Court, Ruling of 27 April 1999, Case 1 BvR 1613/94, *BVerfGE* 100, pp. 289 ff.
Cf.[134] Federal Supreme Court, Ruling of 12 March 2001, Case II ZB 15/00, *loc. cit*
[135] § 304 (1), Sentence 2 AktG.
[136] Unless use is made of the option available in certain cases in accordance with § 304 (2), Sentence 2 AktG to derive the compensation payment from the exchange ratio of the contracting parties.

According to the case law of the Federal Supreme Court,[137] recurring compensation by annuity is derived from the objective enterprise value as of the valuation date.

In accordance with § 304 (2), Sentence 1 AktG, the starting point for determining the recurring compensation is generally the earnings value.[138] The earnings value reflects expected cash flows between companies and company owners, discounted to the valuation date. By converting earnings value into an annuity, it is ensured that the expected cash flows, in different amounts for specific periods, will be converted into an "average profit share." The use of the earnings value does not prevent the "average profit share" from being determined without the formation of other earnings reserves. It is true that reinvested earnings are regularly applied when determining an objective enterprise value. However, these strengthen the earnings base of later years, so that the retention of profits does not reduce the average distributable profit share.

In the Ytong Decision, the Federal Supreme Court ruled that the outside shareholders are to be guaranteed the expected distributable average gross profit share per share less the (distribution-related) corporate income tax payable by the company on this amount at the respective tax rate as (fixed) recurring compensation.[139] In the opinion of the Federal Supreme Court, profit before corporate income tax is to be regarded as "earned profit". Adjustments to the corporate income tax will accordingly result in adjustments to the recurring compensation payment to be made after corporate income tax. In the opinion of the Federal Supreme Court, this approach does not violate the cut-off date principle because, when determining the recurring compensation, the average distributable gross profit must be derived as a fixed figure from the objectified value of the company. Only the organisational, financial and legal structures of the company existing on the valuation date are relevant for this, but not the corporate income tax rate itself.

In the literature, this case law has been criticised to the effect that a change in taxation after the valuation date is only to be taken into account with regard to the corporate income tax rate. There is no systematic reason to consider German corporate income tax methodologically differently from trade tax or foreign income taxes. In addition, changes in the determination of the assessment basis for corporate income tax would also have to be taken into account.

In the Ytong Decision, the Federal Supreme Court also found that separately valued assets[140] are not to be taken into account when determining the recurring compensation and that the enterprise value is to be annuitized at the full risk-adjusted discount rate.

Parts of this Decision are not applicable beyond the specific case decided, which was subject to the imputation system in force until 31 December 2000.

This applies in particular to the determination of the annuitization rate. The decision of the Federal Supreme Court does not take into account that the (fixed) recurring compensation payments during the term

---

137 Cf. Federal Supreme Court, Ruling of 21 July 2003, Case II ZB 17/01, ZIP 2003, pp. 1745 ff., "Ytong Decision".
138 Cf. MüKoAktG, van Rossum, § 304, Marginal No. 77. In a more recent decision (decision of 27 June 2019, Case 3-05 O 38/18, *NZG* 2019, pp. 989 ff.), the District Court of Frankfurt am Main derived the enterprise value from an average stock exchange price and the compensation payment was likewise derived on this basis.
139 *loc. cit.*
140 In particular, the non-core assets.

of contract are subject to lower risk than (uncertain) dividend payments. The risk for the outside shareholder before the conclusion of an inter-company agreement is quantified in the discount rate. In view of a lower risk after the conclusion of the inter-company agreement, the annuitization rate must therefore be lower than the discount rate.

In order to quantify the risk to be taken into account in the annuitization rate, it must first be taken into account that the risk situation of the outside shareholder during the term of the inter-company agreement is determined by the creditworthiness of the contracting party obliged to pay the recurring compensation. In addition, it must be taken into account that there is also a regular risk that the agreement will be terminated. In this case, the shareholder again has to bear the full risk of uncertain dividend payments after termination of the agreement, especially since the company's earnings power may be reduced during the term of the contract - also as a result of measures detrimental to the controlled company.

In valuation practice, the annuitization rate is therefore regularly calculated as the average of the present value-equivalent risk-adjusted discount rate on which the company valuation is based and the quasi-risk-free base interest rate. However, in cases where the aforementioned risk of termination of the agreement no longer applies because the agreement provides that the outside shareholders are entitled to offer their shares to the other contracting party for contractually agreed compensation even after the expiry of an original time limit, it is appropriate to base the determination of the annuitisation rate exclusively on the creditworthiness of the contracting party obliged to pay the recurring compensation or a third party liable for it.

In the meantime, the prevailing view is that it is not appropriate to completely disregard separate assets when determining the recurring compensation[141] At the very least, values for separate assets for assets that could also have been included in the earnings value of the core assets, but which have been recognised separately for reasons of presentation, are mandatory. Since non-core assets can also contribute to the company's profit, in valuation practice, separate assets are regularly included in the enterprise value which is to be converted into an annuity.

III. Audit procedures

The representatives of First Sensor and the Valuation Expert presented us with explanations, both verbally and in writing, particularly relating to the following topics:

- the business activities of First Sensor Group including the market and competitive environment;
- historical operating results and the forecast of future results;[142]
- calculation of net interest income and corporate taxes;
- derivation of earnings in the perpetual annuity period;
- valuation approach and current status of valuation work.

[141] Cf. MüKoAktG, van Rossum, § 304, Marginal No. 91.
[142] EBIT Earnings before interest and taxes

With the aid of the documents provided and the supplementary verbal information, we have checked the plausibility, consistency and mathematical accuracy of the forecasting approaches and examined the methodology and content of the valuation.

In addition, we carried out our own additional investigations and calculations, particularly with regard to the components of the discount rate.

Our audit focused on the following issues:

- plausibility of the estimates presented by the Company;
  - plausibility of the Forecast (not including the expected economic impact of the coronavirus pandemic);
  - plausibility of the Projection (including the expected economic impact of the coronavirus pandemic);
- appropriate incorporation of the Projection into the valuation model;
- appropriate derivation of net cash flows;
- cogent explanation of operating results and net cash flows in the perpetual annuity period;
- appropriate derivation of the discount rate;
- fair and generally appropriate application of the valuation methodology;
- identification of circumstances requiring separate valuation, such as e.g. non-core assets, and inclusion in the valuation if necessary;
- assessment of valuation methods and benchmarks other than earnings value;
- derivation of the recurring compensation from the enterprise value, and particularly the annuitisation rate to be used for this purpose.

In addition to these substantive focal points, our audit focused on individual components of earnings and net cash flows according to their significance for the valuation.

The analysis of historical data provides a basis for checking the plausibility of the forecast. We have satisfied ourselves that material effects on historical earnings which are unforeseeable or unlikely to recur were not carried forward in preparation of the forecast as such, and that these effects are accurately presented in the Valuation Opinion. For this purpose, we analysed the financial statements and audit reports for the comparative historical period under review[143] using further classifications and explanations.

In order to be able to assess the quality of First Sensor's forecasting system, we first had the regular forecasting process explained to us and verified whether it complies with the principles of proper planning.

The quality of the forecasting system can also be assessed in particular on the basis of a retrospective analysis of past forecasts. In valuation practice, the focus is usually only on the budget for the next year, since forecast accuracy generally decreases over time.

Accordingly, the Valuation Expert examined forecast accuracy based on a comparison of historical revenue, expenses and EBIT (actual data) in Financial Years 2016 to 2019 against the respective forecast

[143] Financial years 2017 to 2019.

values (estimates). The comparison includes the estimates for the first forecast year (budget year) prepared in third to fourth quarters of the previous year. We have examined whether the Valuation Expert's analyses are proper and whether the conclusions derived from them are comprehensible.

The prospective assessment of a specific forecast draws on (adjusted) actual historical data and thus on trends in the company's development (comparison over time), as well as actual data and estimates for the relevant markets and competitors (peer comparison). We have used appropriate comparisons based on key figures and ratios to analyse whether the estimates for Financial Years 2020-2022[144] plausibly reflect the further development of the First Sensor Group based on current knowledge.

The Projection presented by First Sensor forms the basis for the determination of the earnings value by the Valuation Expert. As a result, we examined whether the Projection has been fully and accurately incorporated into the valuation model. We also examined whether the valuation model was methodologically consistent overall.

The Company's Projection does not include any synergy effects from the merger with TE Ltd. The Valuation Expert has supplemented the Projection in this respect on the basis of the information in the voluntary public takeover offer of 8 July 2019[145] and supplementary explanations provided by First Sensor and TE Ltd. and presented the synergy effects which were to be taken into account for the valuation separately.

PwC also revised the Company's Projection by incorporating modifications into the model used to derive value as required for the purposes of the valuation. We have verified the initial parameters of these modifications, the underlying assumptions and the methodological consistency of the corresponding calculations.

Since the projected operating results in the final year of the Detailed Forecast Phase (2022), supplemented by synergy effects, do not conform to average expected results in the perpetual annuity period, in the Valuation Expert's view, the Valuation Expert estimated the average operating results expected in the perpetual annuity period. Applying a growth rate for future company and segment-specific inflation and efficiency expectations, the Valuation Expert carried an annuity resulting from a side calculation of perpetual earnings into the perpetual annuity phase (beginning in 2023). We subjected the Valuation Expert's assumptions and the associated calculations to a separate appraisal.

The Company's forecast does not include estimated distributions. On the basis of the additional information provided by the Company about its intended distribution policy, the Valuation Expert prepared a forecast of distributions. The Valuation Expert assumed market average distribution practices in the perpetual annuity phase. We have examined the underlying considerations and verified the calculations of the resulting personal income taxes and the resulting net cash flows to shareholders.

---

[144] 2020 budget and the 2021 and 2022 forecast years; as a whole, the "Detailed Forecast Period"
[145] Cf. Section D.IV.1.a), beginning on p. 28.

The Valuation Expert calculated the discount rate by referring to the return on an alternative investment equivalent to an investment in the Valuation Object. We verified the derivation of the individual components of the discount rate in terms of both method and content and reconciled it with associated observations from capital market data.

On this basis, PwC compounded the earnings value as of the technical valuation date (31 December 2019) to the legal valuation date, the planned date of the general meeting at which the shareholders of First Sensor are to adopt the corresponding resolution (26 March 2020). We have verified this calculation.

The Valuation Expert did not identify any assets which could not be reflected as part of the calculation of earnings value, or could only be reflected to an incomplete extent, specifically non-core assets. We have verified whether this assessment is correct.

In the Valuation Opinion, scenario analyses are presented which examine the impact on the enterprise value per share of First Sensor and the net recurring compensation per share of First Sensor if the (pre-tax) risk-free rate differs from the one used in the present valuation. We have reviewed the relevant calculations. Our presentation relates to the impact of these changes on enterprise value. We have also performed a sensitivity analysis for two other key valuation parameters (unlevered beta factor and growth rate).

The Valuation Expert estimated the liquidation value of First Sensor and explained the main features of the calculations in the Valuation Opinion. We have checked the methodology and arithmetic of this rough calculation.

The Valuation Expert has checked the plausibility of the valuation, which is fundamentally calculated using the earnings value method, by means of a comparative valuation based on multiples. We have reviewed the data compiled by the Expert and the Expert's calculations and results. In addition, we have also checked the plausibility of the valuation result by considering further comparative criteria.

PwC translated the valuation into a value per First Sensor share and considered the question of whether the stock market price, as the market value of the shares, represents a possible lower limit of the adequate cash exit compensation. We have verified the considerations and calculations in this respect.

The Valuation Expert calculated the adequate recurring compensation pursuant to § 304 AktG in the form of an annuity on the enterprise value. We reconciled the necessary starting parameters and verified the mathematical derivation of the recurring compensation.

IV. Audit findings

1. Valuation Object

a) Legal and tax circumstances

First Sensor has its registered office in Berlin and is entered in the Commercial Register of the Local Court of Berlin-Charlottenburg under Commercial Register No. B 69326.

The Articles of Association of First Sensor were last amended by resolution of the Supervisory Board of 17 January 2020. This amendment increases capital stock by issuing new shares due to the exchange of pre-emption rights arising from stock options.

Pursuant to § 2 of the Articles of Association, the corporate purpose consists of the development, production and distribution in Germany and abroad of sensor systems of all kinds as well as electronic components and devices. [146] The Company is entitled to establish branches in Germany and abroad, to conclude inter-company agreements and to acquire interests in other companies. Furthermore, it is entitled to take all measures suitable to serve the corporate purpose.

The financial year of First Sensor conforms to the calendar year.

The Company's fully paid-in share capital amounts to € 51,346,980.00 and is divided into 10,269,396 no-par-value bearer shares of the same class, with each share representing € 5.00 of the share capital. According to the information in the Contract Report, First Sensor does not hold any treasury shares.

The Management Board of First Sensor is authorised to increase the Company's share capital by up to € 25,379,150.00 (Authorised Capital 2015) until 27 May 2020 in return for cash and/or non-cash contributions. In addition, the share capital has been conditionally increased by up to € 190,000.00 (Conditional Capital 2013/I), € 2,600,000.00 (Conditional Capital 2016/II), € 1,200,000.00 (Conditional Capital 2017/I) and € 19,000,000.00 (Conditional Capital 2017/II) to enable the issuance of options.

First Sensor shares (ISIN DE0007201907) are admitted for trading on the regulated market with additional post-admission obligations on the Frankfurt Stock Exchange (Prime Standard), where they are traded in the electronic trading system ("XETRA") of Deutsche Börse AG, Frankfurt am Main. The shares are also traded on the over-the-counter markets of the stock exchanges in Berlin, Düsseldorf, Hamburg, Munich and Stuttgart as well as on the Tradegate Exchange. First Sensor shares are currently included in the CDAX[147] share index.

According to the Contract Report, TE Connectivity directly holds 7,380,905 First Sensor shares as of 13 April 2020. This corresponded to a share in the outstanding share capital of the Company of around 71.87%. According to the published voting rights, one further shareholder holds approximately 5.32% of

---

[146] The range of products offered by First Sensor extends from sensor chips and components to micro-electronic packaging products, which integrate sensor components for customer applications.

[147] Composite DAX (Germany's largest share index)

the First Sensor shares. According to the information provided, the remaining shares (around 22.81%) are in free float.

TE Connectivity's interest in First Sensor was acquired by execution of the voluntary takeover offer published on 8 July 2019.

On 26 May 2019, First Sensor announced in an ad-hoc notice that the company was in advanced negotiations with TE Ltd. regarding a takeover. This expression of interest puts the estimated offer price at around € 28.00 per share. On 3 June 2019, First Sensor then announced in an ad-hoc notice that a business combination agreement had been signed on the same day with TE Connectivity and TE Ltd. and that TE Connectivity had announced its decision to make a voluntary public takeover offer for all First Sensor shares at an offer price of € 28.25 per share, in cash. Various shareholders have already irrevocably agreed to tender shares totalling approximately 67% of the outstanding shares for the offer. The completion of the voluntary public takeover offer is in any case not dependent on a minimum acceptance threshold, but is subject to approval in merger control law and other official approvals.

The voluntary public takeover offer published on 8 July 2019 contains the following statements on future business activities and strategy, as well as the conceivable synergies, each of which reflects the views of TE Connectivity at the time the offer document was published:

- significant strengthening of the joint position in the market for sensor systems;
- significant increase in the value of both Groups;
- plan to combine the product offerings of both groups to create a more comprehensive range of sensor solutions for customers in a wide variety of industries;
- plan to leverage the operational size, customer base and existing sensor expertise of TE Group to expand the solutions offered by First Sensor Group and/or the international orientation of First Sensor Group;
- plan to increase the value of First Sensor Group by boosting the promotion of organic growth, e.g. by leveraging TE Group's relationships with distribution partners worldwide;
- plan to increase the value of the First Sensor Group through potential synergies, e.g. through the optimisation of procurement activities and production processes, as well as cost savings;
- cost synergies in the combined company estimated at up to € 15 million p.a. in total through 2022;
- reference to the preliminary nature of the estimates made by TE Group as to cost synergies and to the reservation of further talks and analysis with First Sensor Group, which can only take place after the transaction has been completed.

After the additional acceptance period ending on 19 September 2019, 7,380,905 shares in the Company were tendered as a result of the voluntary public takeover offer, representing 71.87% of the total share capital and voting rights of First Sensor at that time. At this point in time, implementation was still dependent on clearances in foreign trade law in Germany and the United States.

On 10 December 2019, First Sensor announced in an ad hoc notice that TE Connectivity intends to enter into a DPLTA with TE Connectivity as the controlling company and First Sensor as the controlled company. The talks on the conclusion of a DPLTA are subject to the execution of the voluntary public takeover offer from TE Connectivity and therefore to the conditions of the still outstanding clearances in foreign trade law in Germany and the United States.

The final approval required for the execution of the takeover offer was issued on 5 March 2020. Closer cooperation and interlocking services between First Sensor Group and the TE Group than those that exist between independent competitors, which are necessary to realise expected synergies, were not possible before the settlement of the takeover offer (12 March 2020) and the planned conclusion of the Agreement.

Through TE Connectivity and a chain of other intermediate holding companies, First Sensor is a subsidiary of TE Ltd, a leading global technology company and manufacturer of connectivity and sensor solutions. The shares issued by TE Ltd. are traded on the New York Stock Exchange, among others. TE Group operates in the segments "Transportation Solutions," "Industrial Solutions" and "Communications Solutions." In Financial Year 2018/2019, TE Group earned net profit of $1,844 million with net revenues of $13,448 million. As of 27 September 2019, the TE Group employed approx. 78,000 people.

As the parent company of First Sensor Group, First Sensor performs centralised administrative and holding functions within the First Sensor Group and is responsible for the strategic development of the Group, in addition to the operating activities carried out at its two locations in Berlin. The Company holds direct interests in three domestic and six foreign Group companies, each of which is included in the consolidation base. With the exception of First Sensor Mobility GmbH, Dresden, and First Sensor Scandinavia AB, Kungens Kurva, Sweden, for which minority interests must be taken into account, First Sensor is the sole shareholder in the subsidiaries.

First Sensor Group is considering plans for corporate restructuring. The Valuation Expert has correctly stated that these plans have yet to be executed and would not affect the valuation of First Sensor in any case.

First Sensor is the parent company of a single-entity relationship for income and value added tax purposes with First Sensor Microelectronic Packaging GmbH, Dresden, and First Sensor Lewicki GmbH, Oberdischingen.

The Company was subject to tax audits through 2012. The audit for the assessment periods 2013 to 2017 has not yet been completed. According to the information provided, no significant risks were discernible at the time of completion of the valuation and audit work.

Tax loss carry-forwards exist exclusively at First Sensor Corp., Montreal, Canada (31 December 2019: € 1.7 million).

The Company has a tax deposit account with a balance of € 19.7 million as of 31 December 2019. According to the Company's calculations, which we have reproduced without objection, portions of the tax deposit account balance can only be used for the distribution of expected earnings in Financial Years 2020 and 2021; in the other years, the Company will have "distributable profit" in terms of § 27 of the Corporate Tax Act, so that distributions will be subject to the flat tax.

b) Economic fundamentals

ba) Business activity

First Sensor was formed in 1991 as Silicon Sensor GmbH. The Company used the capital raised during its IPO in 1999 to make investments in its growth. In the period from 2000 to 2010, the Company grew along the value chain by acquiring national and international suppliers in the sensor technology sector. In 2011, the Company received its current name and also made further acquisitions to strengthen sales. In 2015, the Group companies were brought together under a common umbrella brand.

First Sensor Group develops, produces and sells sensor chips, sensor components, sensors and sensor systems in the fast-growing sensor technology market. First Sensor Group's added value is characterised by the following core competencies:

- design and manufacture of silicon-based sensor chips;
- electronic packaging, which is required together with microchips for sensors and sensor systems.

The product range of the First Sensor Group can generally be broken down as follows:

- customised solutions (solution business);
- standard sensors (distribution business); and
- extension of the product portfolio by further sensors or complementary products from partner companies.

The sales organisation of First Sensor Group relies on key account management specialising in specific markets and applications, especially with regard to customised solutions. Sales of high-volume standard solutions are handled by regional sales departments. The Company's own sales organisation is also supported by a global network of trading partners in many different countries.

The First Sensor Group's revenue management is based on the "Industrial", "Medical" and "Mobility"[148] target markets and on the sales markets "DACH,"[149] "Rest of Europe", "North America", "Asia" and "Rest of World".[150]

The product offering in the individual target markets can be summarised as follows:[151]

- Industrial (53.7%): Products for "Industry 4.0" (e.g. sensors for so-called "smart building" or factory automation applications), which focus on the networking of virtual and physical devices in the "Internet of Things" and interaction solutions for "smart cities"
- Medical (21.9%): Sensors for medical technology applications (e.g. optical diagnostics or ventilation and dialysis systems), assistance systems and solutions in the field of prevention and screening
- Mobility (24.4%): pressure sensors for fuel-efficient low-emissions combustion engines and hybrid vehicles (green mobility), as well as optical sensors and camera systems for semi- and fully autonomous vehicles

[148] Segments according to primary segmentation within the segment reporting of First Sensor.
[149] Germany, Austria, Switzerland and Liechtenstein.
[150] Segments according to supplementary regional segment information within the segment reporting of First Sensor.
[151] Including the share in total sales of the First Sensor Group in financial year 2019.

In particular, applications for current product offerings in the industrial target market include:

- process monitoring (level sensors, laser alignment systems, filter and pressure monitoring, leak detection);
- length measurement (laser rangefinders, laser scanners/LiDAR,[152] encoders);
- radiation and security (container and luggage scanners, radiation detectors);
- aviation and aerospace (laser alignment systems, cabin pressure gauges, navigation);
- smart building (filter, room pressure and condition monitoring, volume flow controllers).

The individual applications in the medical target market are as follows:

- diagnostics (glucometers, pulse oximeters, CT scanners, gamma probes, endoscopes);
- dialysis und Infusion (dialysis machines, infusion pumps);
- breathing and respiration (ventilators, anaesthesia equipment, sleep diagnostic equipment, sleep apnoea therapy devices, spirometers, oxygen concentrators);

The following applications are addressed in the mobility target market:

- passenger vehicles (cruise control, fuel tank leak detection and pressure monitoring, temperature monitoring, fuel injection control, sun and rain detection, automatic start-stop systems);
- commercial and specialized vehicles (pressure control, headway monitoring, fuel tank leak detection, driver assist systems);
- smart cars (adaptive cruise control, parking and lane keep assist, detecting pedestrians and traffic signs, collision avoidance systems, blind spot detection systems).

According to the actual figures for the 2019 Financial Year (€ 161.3 million), total revenue of the First Sensor Group is primarily attributable to the DACH (46.8%), mainly Germany) and the Rest of Europe (24.0%) sales markets, while the North America (13.4%, mainly USA) and Asia (15.8%, mainly China) regions have so far only achieved lower shares of revenues.

The First Sensor Group has a total of 892 permanent employees,[153] 23 temporary employees and 30 trainees (31 December 2019). Major parts of development and production are carried out at the six German sites. A further three development and production sites are maintained in the Netherlands, the United States and Canada. In addition, First Sensor Group has sales locations in other countries and is currently establishing a sales organisation in China.

The main tasks of First Sensor Group's individual locations and Group companies can be described as follows:

- First Sensor AG, Berlin-Oberschöneweide (FSO): Group headquarters with centralised departments, Solution Business (silicon chips on 4- and 6-inch wafers for optical sensors and pressure sensors for microelectromechanical systems);[154]
- First Sensor Microelectronic Packaging GmbH, Dresden-Klotsche (FSP): solution business (concentrating on electronic packaging; customized miniaturization of optical sensors and MEMS pressure sensors, Integrated Manufacturing Services (IMS) for packaging of microelectronic products);

---

[152] Light detection and ranging.
[153] Full Time Equivalent ("FTE")
.[154] "MEMS“

- First Sensor Mobility GmbH, Dresden-Albertstadt (FSD): solution business (specializing in the automotive industry, focus on on-site production of automotive products; pressure, flow and optical sensors, as well as system solutions);
- First Sensor AG, Munich (FSM): distribution business (focus on pressure sensors; applications: breathing and respiration, dialysis and infusion, as well as diagnostic procedures);
- First Sensor AG, Berlin-Weißensee (FSW): solution business (concentrating in electronic packaging, specializing in packaging of electronic microsystems for pressure and flow sensors, optical sensors);
- First Sensor Inc., Westlake Village, USA (FSI): solution business (development and production, focus on optical sensor solutions);
- First Sensor Lewicki GmbH, Oberdischingen near Ulm (FSL): solution business (concentrating in electronic packaging; specializing in hybrid circuits, electronic modules, power electronics and semiconductors for high-reliability circuits in aerospace; focus on aviation and aerospace, industrial safety technology, medical technology and industrial applications)
- Klay Instruments BV, Dwingeloo, Netherlands (FSK): distribution business (focus on processing industry, as well as marine and shipbuilding; pressure, level and temperature transmitters, submersible sensors);
- First Sensor Corp., Montreal, Canada (FSC): distribution business (development and production; specializing in flow and ultra-low-pressure sensors).

bb) Market and competition

The extensive statements made by the Valuation Expert within the framework of its market and competition analysis, which are correct in our view, focus on the regional sales markets that are important for the segments of the First Sensor Group, insofar as a differentiation is possible on the basis of the market studies used and other sources of information in accordance with the breakdown in First Sensor's reporting. The Valuation Expert's statements reflect the expected impact of the coronavirus pandemic on the relevant market and competitive conditions, to the extent possible at the present time. Its statements can be further summarised as follows:

bca) Macroeconomic development

According to the forecasts which were published in October 2019 and updated in January 2020 by the International Monetary Fund, Washington D.C., USA,[155] for the years up to 2024, real GDP[156] growth at the global level is expected to fall to 2.9% in 2019, the lowest level since 2008/2009. To a large extent, the consequences of the coronavirus pandemic for economic growth are not yet reflected in its expectations for the future.

Based on the information available in January 2020, the IMF projects economic growth to accelerate starting in 2020, with mid-term growth rates (starting in 2022) on par with the level posted in 2018 (3.6%). But in the sales markets of greatest importance for First Sensor Group, the IMF projects that the growth rates posted in 2018 will not be attainable in the medium term even before taking into account the consequences of the coronavirus pandemic.

---
155 “IMF”
156 "GDP": gross domestic product

According to its forecasts, the slump in growth in Germany to 0.5% (2019) due to a general decline in industrial production, weaker export demand, increased uncertainty among people about future developments, especially in connection with BREXIT,[157] and the decline in automotive production due to uncertainties related to climate change is expected to be followed by a moderate recovery to figures between 1.1 and 1.4%. However, a repetition of the growth observed in 2017 appears unattainable in the medium term given the other relevant growth-limiting factors (relatively weak production growth, demographic challenges and the threat of additional trade conflicts).

For Europe (EU), the IMF is forecasting a largely similar development as for Germany, with a more moderate decline in 2019 and a correspondingly smaller recovery thereafter. For the United States and China, the IMF expects a substantial decline in growth rates in the medium term as a result of the trade dispute between these countries.

The IMF forecasts which are summarised above do not reflect the consequences of the coronavirus pandemic for economic growth. The measures which have brought production and trade to a standstill in some cases, as well as the restrictions on travel, will have a negative impact on economic performance, at least for the time being. The scale of the coronavirus pandemic's economic impact remains uncertain. Despite numerous fiscal and monetary policy measures, the crisis is expected to have a significant negative impact on the global economy. According to a press release of 23 March 2020, the IMF is expecting the global economy to enter recession in 2020.

In a Special Report published on 22 March 2020, the German Council of Economic Experts[158] examines the impact of the coronavirus pandemic on real GDP in 2020, revising its previous global GDP forecast downward by 2.3 percent. Germany in particular is facing a considerable recession according to the revised forecast for 2020 (real GDP down by 3.1% in the baseline scenario). The GCEE also presents a more pessimistic scenario, in which Germany's real GDP slumps by 5.7 percent, for a decline similar to the one observed in 2009, during the financial and economic crisis.

This slump in GDP will be accompanied by a decrease in inflation, according to the GCEE's Special Report, which is not yet reflected in the IMF's inflation expectations from October 2019. The IMF forecasts indicate that inflation rates[159] are expected to rebound from their broadly anticipated decline in 2019 and return to the European Central Bank's inflation target of around 2% in Germany and Europe (EU) by 2024. A comparable development at a slightly higher level is expected for the United States. In China, the observed rise in the inflation rate is expected to continue, so that a level of around 3% is expected in the medium term.

[157] The exit of Great Britain from the European Union.
[158] "GCEE"
[159] Measured by the change in the consumer price index compared to the respective previous year

bcb) <u>Development of customer markets</u>

While the first estimates as to the impact of the coronavirus on the economy as a whole are now being presented, we are not aware of any market studies for First Sensor's markets which specify how the crisis will alter First Sensor's market and competitive environment.

But even without such a specification, it can already be observed that a slight increase in demand in the medical target market will not be nearly enough to make up for interruptions in the supply chain and significant drawdowns in demand in First Sensor's key target markets (industrial and mobility) as a result of the crisis. Changes in First Sensor's risk position may also be assumed as a result of the coronavirus pandemic, with a higher risk of customer insolvency for the time being.

The following presentation of market conditions is based on studies from 2018 and 2019 and therefore does not reflect the general impact of the coronavirus pandemic on First Sensor's market and competitive environment which is cited above.

Industrial target market

In the industrial market,[160] by far the most important target market for First Sensor, sensors are used both in the processing industry and in the discrete manufacturing industry. Industrial sensors are devices that convert physical quantities into electrical signals. The industrial sensor market is divided into the following segments, based on what the sensors are designed to measure:

- Motion sensors
- Pressure sensors
- Flow sensors
- Moisture sensors
- Gas sensors
- Proximity sensors
- Level sensors
- Optical sensors
- Position sensors
- Temperature sensors

[160] In the 2019 financial year, around 54% of total revenue.

The expected market development in the industrial sensor market is mainly influenced by the following factors and trends:

- generally rising demand with generally falling prices;
- in particular, increasing demand for “smart factories,” industrial Internet of Things (IoT) applications and wireless sensors in the processing industry;
- growing demand for sensors due to the increasing introduction of intelligent plant monitoring systems and the continuing trend towards simplified wireless networks;
- miniaturisation;
- bandwidth limits;
- short product life cycles;
- challenges due to new regulations and standards, which can lead to costly adjustments of products and production processes;
- cyclical fluctuations due to economic conditions, especially in the key consumer industries: the automotive and semiconductor industries

With average growth accelerating from 7.6% (2017/2019) to 8.1% (2019/2022),[161] the global industrial sensor market is expected to reach a volume of around $54.1 billion in 2022. The APAC region accounts for approximately 40 % of this total,[162] and the EMEA[163] and Americas regions for approximately 30% each.[164]

Compared to the other two regions, growth expectations for the EMEA region (6.8%) remain below average despite accelerating momentum. The predicted growth is driven in particular by investments in industrial sensors for production in the automotive industry and regulatory requirements for the food industry. For Germany, by far the most important sub-market in the region, government initiatives such as Industry 4.0 represent an additional growth driver.

The continued above-average growth in the Americas region (8.7%), which, as expected, is again accelerating considerably, is primarily linked to the expectation that production in the United States, by far the most important sub-market, will be relocated from overseas back to the home market through the construction of smart factories in the end consumer target market.

The likewise above-average growth expectations for the APAC region (8.6%) are based on government initiatives, the demand for regionally produced vehicles and the generally strong manufacturing sector in the region, as well as the general trend towards increasing automation. For China, which is by far the most important sub-market in the region, the Valuation Expert cites the government initiative "China 2025" as a particular growth driver.

The global industrial sensor market has a fragmented supplier structure. With regard to the competitors operating in the market for industrial sensors, the Valuation Opinion correctly lists 8 companies, some of which, however, are very broad in terms of their product range. Due to their strong focus on the sensor

---

161 "CAGR" (compound annual growth rate)
162 Asia-Pacific (East Asia, Southeast Asia, Australia and Oceania; economic area with roughly the same stock exchange hours).
163 Europe, Middle East and Africa (Europe, Arabia (Middle East) and Africa; economic area with approximately the same stock exchange hours).
164 America (North, Central and South America; economic area with approximately the same stock exchange hours).

business, the competitors Elmos Semiconductor AG, Dortmund, Sensata Technologies Holding plc, Attleboro, U.S.A., and TE Ltd. should be mentioned. The intensity of competition is expected to increase in the coming years.

Medical target market

In the medical target market, which is important for First Sensor in the DACH region,[165] sensors are used in particular in ventilation and anaesthesia equipment as well as in endoscopy. Medical sensors are electronic systems used in medical devices, probes and other equipment that rely on sensor signals for operation, more accurate diagnosis and treatment. The medical sensor market is divided into the following segments, based on what the sensors are designed to measure:

- Imaging sensors
- Pressure sensors
- Optical sensors
- Radiation sensors
- Temperature sensors

The expected market development in the medical technology sensor market is mainly influenced by the following factors and trends:

- increasing use in the diagnosis of diseases and in health care applications (e.g. in remote patient monitoring);
- increasing spread of chronic diseases;
- progress in the life science sector;
- increasing use of wireless sensors and portable sensor devices;
- growing demand for digital medicine and sensor-based tablets;
- scientific advances in medical sensor technology;
- increasing number of end users, especially in-home health care (for ventilators);
- liability risks due to inaccuracy or malfunctions;
- lack of reimbursement guidelines for continuous patient monitoring;
- strict legal regulations, which can lead to costly process adaptations or even to the abandonment of products.

With average growth accelerating from 8.1% (2017/2019) to 9.2% (2019/2022), the global medical technology sensor market is expected to reach a volume of around $17.8 billion in 2022. North America accounts for around 42% of this number, Europe around 36% and Asia around 15%.

The European market for medical technology sensors is expected to continue to grow along with the global market, i.e. at a fast pace (9.2%), which can be attributed to initiatives such as the European Sensor Systems Cluster. In Germany and Great Britain, the most important sales markets in the region,

165 In the 2019 financial year, around 22 % of total revenue.

this market trend should be driven primarily by the increasing number of events and conferences relating to medical technology sensors.

Growth expectations for North America (8.8%), Asia (10.9%) and the Rest of World (8.2%) are not of great significance for First Sensor, as the Company does not sell medical technology sensors in these markets or only sells such them to a very limited extent in accordance with its current business model.

The global market for medical technology sensors is currently concentrated among a small number of competitors. In the future, the market is expected to become more fragmented. With regard to the competitors' active in the market for medical technology sensors, the Valuation Opinion correctly names five other companies in addition to First Sensor. The competitors Sensata Technologies Holding plc and TE Ltd. should be mentioned in particular as their opportunities and risks are generally more comparable to those in First Sensor's business model. The intensity of competition is expected to increase in the coming years.

Mobility target market

The automotive industry is of key importance for the mobility[166] target market. According to the parameters to be measured, the automotive sensor market is essentially segmented as follows:

- Imaging sensors
- Pressure sensors
- Gas sensors
- Speed sensors
- Proximity sensors
- Level sensors
- Position sensors
- Temperature sensors

The use of sensors in the automotive industry has increased continuously in recent years. Today's vehicles already contain around 60 to 100 sensors, and even up to 200 in more advanced versions.

The anticipated market development in the automotive sensor market is mainly influenced by the following factors and trends:

- the trend towards low-emissions smart cars;
- creation of additional functions with simultaneous reduction of cabling in sensors for MEMS sensors for active and passive safety systems and powertrain sensors;
- growing demand for premium vehicles;
- increasing pressure from governments and consumers to develop better safety systems for vehicles;
- increasing regulation of emission controls;
- increasing number of electronic vehicle components;
- growing demand for driver assistance systems and autonomous vehicles;

[166] In the 2019 financial year, around 24% of total revenue.

- growing number of electric vehicles;
- risks of potential reliability and safety issues and associated product recalls;
- risks of rising development costs;
- risks of lack of standardisation in the production of MEMS sensors;
- cyclically induced fluctuations in automobile production.

With average growth accelerating from 2.8% (2017/2019) to 3.8% (2019/2022), the global automotive sensor market is expected to reach a volume of around $41.7 billion in 2022. The Asia-Pacific region accounts for around 56% of this growth, Europe for around 22% and North America for around 17%.

The European automotive sensor market is expected to continue to grow faster than the market as a whole, posting growth rates that are higher than those posted the recent past (4.1%). Europe, as the centre of modern and technologically innovative vehicles, has correspondingly high and growing demand for sensors. Strict government regulations on safety and emissions will provide further impetus for growth. Along with France, Great Britain and Spain, Germany is a key market for automobile manufacturers.

Growth expectations for the North American automotive sensor market are also expected to increase sharply, albeit at a lower level (2.7%). The main growth drivers in this market are stricter road safety standards, an improved economic situation and the relocation of production to domestic markets.

The growth expectations for the automotive sensor market in the Asia-Pacific region (4.0%) are largely in line with those for the European market in terms of level and rate of growth, although this is mainly due to population growth, progressive industrialisation and government subsidies. In addition to China, by far the most important national market, India, Japan and South Korea are also important.

The global automotive sensor market is highly fragmented and includes a large number of small to medium-sized companies like First Sensor, as well as large and globally active manufacturers. Of the five competitors correctly named in the Valuation Opinion, some are very broadly positioned in terms of their product range. Due to a stronger focus on the sensor business, the competitors Melexis NV, Ieper, Belgium, and CTS Corporation, Lisle, IL, USA, should be mentioned above all. In the coming years, it is expected that the intensity of competition for small to medium-sized companies will increase, as the larger global competitors with superior capacity will be able to exploit economies of scale.

c) Financial, liquidity and earnings position

The Valuation Expert has performed an analysis of the financial, liquidity and earnings position of First Sensor Group based on the audited and certified consolidated financial statements for the Financial Years 201-2019.

ca) Financial and liquidity position

Its comments on the financial and liquidity position as of the reporting dates for Financial Years 2017-2019 can be summarised and supplemented as follows:

- continuous increase of total assets to € 179.6 million (2019);
- shift from non-current to current assets, particularly as a result of a decrease in intangible assets and an increase in inventories (2018), increase in intangible assets and continued decrease in trade receivables (2019) not permanent;
- major share of intangible assets resulting from corporate acquisitions, including goodwill in the amount of € 29.8 million (2019);
- increase in intangible assets to € 54.3 million (2019) mainly due to the first-time application of IFRS 16 for lease accounting;
- continuous increase in property, plant and equipment to € 41.1 million (2019) due to investments in new machinery and equipment for capacity expansion, process stabilisation and process improvement;
- steady increase in inventories to € 35.7 million (2019), particularly in the 2019 financial year due to contractually agreed buffer stocks and delayed orders;
- gradual decrease in trade receivables to € 12.5 million (2019) due to factoring;
- also as a result of this, cash and cash equivalents increased to € 32.3 million (2019);
- shift from current to non-current liabilities and equity, mainly due to a higher proportion of non-current financial liabilities (2018), more than offset by opposite progression (2019);
- increase in equity to € 89.9 million (2019) in subscribed capital and surplus capital due to the granting and partial exercise of stock options, overall equity ratio relatively stable at 50.0% (2019);
- after increase in non-current financial liabilities (2018) due to disbursement of a loan, decrease to € 25.6 million (2019) due to reclassifications of maturities;
- after decrease in current financial liabilities (2018) due to scheduled repayment of a loan, increase to € 29.9 million due to reclassifications of maturities and the first-time application of IFRS 16 for lease accounting;
- increase in trade payables not sustainable, reduction to € 8.8 million (2019) associated with a normalisation in purchasing volume;
- increase in other current liabilities to € 17.0 million in connection with preparations for the acquisition by TE Connectivity.

cb) Earnings position

The Valuation Expert's statements about the earnings position can be summarised as follows:

- continuous increase in total revenue to € 161.3 million (2019) due to growing demand for sensors and sensor solutions in the Industrial and Medical target markets;
- increase in revenue in the Industrial target market of 7.8% to € 86.6 million (2019) mainly due to increasing demand from China for optical sensors;
- rapid rise in revenue in the Medical target market due to increasing demand for optical sensors with simultaneously increased production capacities (2018) followed by normalisation of growth to an average of 2.5% with revenues of € 35.4 million (2019);
- continued decline in revenue in the Mobility target market to € 39.2 million (2019) due to delayed ordering of delivery volumes arising from framework agreements as a result of the geopolitical environment and structural challenges in the automotive industry;
- flat revenues in the DACH region, with € 75.4 million (2019);
- revenues in the Rest of Europe region declined to € 37.8 million (2019) due to cyclical developments in the automotive industry, especially in Hungary;
- significant increase in revenue in the North America region to € 21.7 million (2019) due to projects in all three target markets;
- substantial increase in revenue in the Asia region to € 25.4 million (2019) due to growing demand in China for photonic and pressure applications in the Industrial and Medical target markets;
- significant increases in inventories of finished goods and work in progress as a result of high pre-production to ensure delivery capability (2018);
- own work capitalised increased to € 3.6 million (2019), including € 2.7 million for research & development[167] and € 0.9 million for capacity extensions and technological capabilities;
- average increase in total output of 5.5% to € 165.4 million;
- disproportionately high increase in cost of materials/cost of purchased services, also due to increased hiring of temporary workers (2018), subsequently limited to € 75.3 million by efficiency improvement projects and a cost/income ratio of 46.7%, resulting in an increase in the gross profit margin to 55.9% (2019);
- disproportionate increase in personnel expenses to € 56.2 million and a cost/income ratio of 34.8% (2019), mainly due to extraordinary expenses in connection with the merger with TE Ltd. and the filling of vacant positions;
- increase in other operating expenses (mainly legal and consulting expenses, costs of premises, maintenance and repairs as well as sales and marketing costs) to € 20.3 million and the cost/income ratio to 12.6% (2019), most recently mainly due to extraordinary expenses in connection with the merger with TE Ltd.;
- after initial improvement, EBITDA[168] decreased to € 16.2 million and the EBITDA margin to 10.0%;
- increase in depreciation and amortisation to € 11.1 million and the cost/income ratio to 6.9% (2019) as a result of investment initiatives and the first-time application of IFRS 16 for lease accounting;
- after initial improvement, EBIT slumped to € 5.1 million and EBIT margin to 3.1% (2019);
- slight improvement in net interest expenses to -€1.5 million (2019), on balance no more exchange rate losses (2019);
- after initial improvement, EBT[169] slumped to € 3.5 million and EBT margin to 2.2% (2019);
- income tax expenses after special effects in previous years normalised at € 1.0 million and a cost/income ratio of 29.7% (2019);

---

167 "R&D".
168 Earnings before interest, taxes, depreciation and amortization of goodwill.
169 Earnings before taxes

- increase in net profit and margin from € 4.4 million and 3.0% (2017) to € 7.5 million and 4.8% (2018) respectively, followed by a decrease to € 2.5 million and 1.5% (2019) as a result of the developments described above.

cc) Adjustment of earnings position

In order to improve the comparability of the forecast periods with the observed historical period so that forecast overruns or shortfalls can be explained at least partially by extraordinary and unforeseeable circumstances, it is standard valuation practice to analyse historical results in light of circumstances of a one-off or non-recurring nature, as well as extraordinary items and items relating to other periods.

In addition, it can be expedient to make so-called "pro forma adjustments" to take account of the fact that the Valuation Object has changed as a result of restructuring, acquisitions and disposals of enterprises and business units. Pro forma adjustments are also made on a regular basis if comparability is impaired by a change in the financial year. It may also be appropriate to make pro forma adjustments if the accounting policies have changed in the past period under review and/or for the forecast period.

The Valuation Expert has made adjustments in the first category. In so doing, it relied on the information provided in the audited consolidated management reports and supplementary information and documentation provided by the Company. The adjustments concern the following:

- one-off effects from the reversal of provisions and accrued liabilities and corresponding excessive expenses arising from their formation in the previous year;
- one-off effects from insurance compensation;
- extraordinary / non-period income and expenses; and
- one-off effects from expenses in connection with preparations for the acquisition of First Sensor by TE Ltd.

The Valuation Expert concluded that no adjustments of the second category were necessary and we share this conclusion.

The Valuation Expert translated the operating results before adjustments into results after adjustments. The adjustments for the first financial year of period under review result in a net reduction in adjusted operating earnings, while operating profit for the 2018 and 2019 financial years increases as a result of the adjustments.[170] On the whole, the adjustments have the effect of smoothing, i.e. normalising the Company's results. After the adjustments, the EBIT margin in the historical period under review first increases from 6.6% to 8.0% and then drops back slightly, to 7.7%.

We were able to verify the adjustments cited above without objection. Having examined the audit reports and using the other information available to us, we satisfied ourselves that there are no further matters that would have required an adjustment.

---

[170] € --0.9 million (2017), € 0.2 million (2018) and € 7.4 million (2019).

Otherwise, we consider an adjustment exclusively at the level of operating results to be appropriate, as the following items in the income statement[171] are generally not comparable with those in the historical period.

> **Audit conclusion**
>
> The adjustments carried out ensure that forecasting accuracy ca be analysed based on comparable developments from the Company's own historical data.

d) Key success factors of the business concept

The Valuation Expert summarises its detailed analysis of the business model of First Sensor, including the market and competitive environment, in a SWOT analysis.[172] This can be condensed and supplemented by further aspects as follows:

Strengths	Weaknesses
▪ Specialised knowledge of the regional sales markets (all target markets) ▪ Forward integration along the value chain as a solution provider (all target markets) ▪ Niche strategy to avoid competitive disadvantages against large, globally active competitors (all target markets) ▪ Concentration on key customers with high-volume purchases (all target markets) ▪ Development of customised solutions based on existing platforms with customer retention over several years of orders (all target markets) ▪ Market leadership in a key product ("avalanche photodiodes") for autonomous driving (target market: Mobility)	▪ Competitive disadvantages compared to large, globally active competitors in terms of economies of scale and sales organisation (all target markets) ▪ Focus on Europe, especially Germany, with correspondingly limited sales potential (all target markets) ▪ High dependence on key customers (all target markets) ▪ Short product life cycles with corresponding need for adaptation (all target markets) ▪ Focus on target markets with heavy economic fluctuations (target markets: Industrial and Mobility)
Opportunities	**Risks**
▪ Development of further sales markets through branches (all target markets) ▪ Trend towards "Industry 4.0", especially "Predictive Maintenance" (target market: Industrial) ▪ Trend towards autonomous driving (target market: Mobility) ▪ Rising demand for new solutions in the field of diagnostics and treatment (target market: Medical) ▪ Rising demand for mobile ventilation and dialysis systems as well as e-health applications that enable continuous monitoring of health status through connected sensor technology (target market: Medical) ▪ Higher demand for sensors as a result of the coronavirus pandemic (medical target market)	▪ Higher risk of customer insolvency as a result of the coronavirus pandemic (all target markets) ▪ Change in the ordering practices of key customers (all target markets) ▪ Delayed order releases due to purchasing variations for long-term framework agreements (all target markets) ▪ Order risks in purchasing due to BREXIT and the consequences of the coronavirus pandemic (all target markets) ▪ Economic fluctuations (target markets: Industrial and Mobility) ▪ Lower demand for sensors as a result of the coronavirus pandemic (industrial and mobility target markets) ▪ Reliability and safety problems with corresponding liability (especially target markets: Medical and Mobility) ▪ Lack of regulatory framework for autonomous driving (target market: Mobility)

As can be seen from the above list, the strengths and weaknesses as well as opportunities and risks of First Sensor in the markets relevant to it are largely balanced, on the whole.

[171] "Income Statement"
[172] Strengths, weaknesses, opportunities and threats; a strategic planning tool developed by Harvard Business School

e) Structure and definition of the Valuation Object

First Sensor, including its subsidiaries, is correctly viewed as the Valuation Object.

The valuation of corporate groups can be carried out according to various methods, which, if properly applied, should produce identical results.[173] The selection of one of these methods depends on the structure of the underlying forecast, the management purpose of the forecast and the question of whether the presentation of individual assets is expedient or necessary.

At present, the business is primarily planned and managed at a Group level based on information concerning the segments (target markets, regions). In addition, the determination of enterprise values for individual subsidiaries is not necessary in the case of this specific valuation.

In accordance with the structure of the forecast presented by the Company, the Valuation Expert therefore carried out a simultaneous valuation at the Group level and derived the earnings value from the Group forecast. Its analyses also take into account the target markets and regions.

For the reasons stated above, we consider the procedure described above to be expedient. We have ensured through consultations that the subsidiaries have been fully included in the calculation of the enterprise value of First Sensor.

In summary, we consider the procedure used by the Valuation Expert to structure and define the Valuation Object to be appropriate.

2. Valuation date

The legal valuation date, representing the "delimitation function of the valuation date for information," is the date of the general meeting at which First Sensor shareholders are to adopt the relevant resolution, i.e. 26 May 2020. With regard to adequate exit compensation, this is directly evident from the law, according to which the circumstances of the Company at the time the shareholder resolution is adopted must be taken into account.[174] It is also widely recognised that this legal valuation date also marks the moment for determination of adequate recurring compensation, for which there is no corresponding provision in the law.[175]

The Valuation Expert chose 31 December 2019 as the technical valuation date in the terms of the "delimitation function of the valuation date for changes in value." In doing so, the Valuation Expert takes account of the fact that, because accounting and forecasting are performed in annual periods, the earning for Financial Year 2020 which were posted before 26 May 2020 cannot be identified and ascertained with confidence, so that these earnings had not yet been credited to the outside shareholders of First Sensor at the time the shareholder resolution was adopted.

---

[173] Cf. Section D.I.1, beginning on p. 16.
[174] § 305(3), Sentence 2 AktG.
[175] Cf. Hüttemann/Meyer in Fleischer/Hüttemann (Eds.), *Rechtshandbuch Unternehmensbewertung*, 2nd Edition 2019, § 14, Marginal No. 33.

In the valuation, the Valuation Expert assumes for the sake of simplicity that annual results are evenly distributed over the course of the year. In accordance with standard valuation practice, both retained earnings and distributions are uniformly attributed to shareholders at the end of each financial year.

The value contributions from distributions (dividends) and retained earnings are discounted to the technical valuation date (31 December 2019) using the period-specific discount rates and compounded to the legal valuation date (26 May 2020).

In summary, we consider the above-described procedure to be appropriate. It was also carried out correctly from a mathematical point of view.

Audit conclusion

The Valuation Date (26 May 2020) conforms with § 327b (1), Sentence 1 AktG.

3. Valuation method

The valuation of First Sensor was carried out in accordance with the earnings value method laid down in IDW S 1. According to prevailing opinion in business administration theory and in the auditing profession, the earnings value method, as a possible method of calculating the value of future earnings, is the authoritative and accepted method for determining the value of enterprises whose going concern value exceeds their liquidation value. The earnings value method is also accepted as standard practice in legal rulings.

No other valuation methods were used in the valuation of First Sensor. The Valuation Expert roughly estimated the liquidation value and explained the main features of the related calculations in the Valuation Opinion. We have checked the methodology and arithmetic of this rough calculation. As the roughly estimated liquidation value is significantly lower than the earnings value, we also do not consider it necessary to derive and present the liquidation value separately.[176]

In order to check the plausibility of the results of the valuation on the basis of the earnings value method, the Valuation Expert carried out a comparative valuation using stock market multiples.[177] We have reviewed the data collected and calculations made by the Expert and also assessed the results.[178] In addition, we have also checked the plausibility of the valuation result by considering further standards of comparison.[179]

In accordance with prevailing opinion, the Valuation Expert determined the earnings value as an objective enterprise value, i.e. according to the perspective of a typical shareholder. This typical shareholder is assumed to be a domestic natural person with unlimited tax liability who, due to his or her small shareholding, is unable to exert any financial or corporate influence.

[176] Cf. Section D.IV.6.d), p. 105.
[177] Trading multiples
[178] Cf. Section D.IV.8.a), beginning on p. 108.
[179] Cf. SectionD.IV.8.b), starting on p. 111.

In addition, the determination of an objective enterprise value is to be carried out in such a way that synergies that could only arise from the exclusion of minority shareholders ("real synergy effects") are not taken into account, while synergies that can also be realised without this measure ("virtual synergy effects") and which are part of the business concept documented on the valuation date are to be taken into account.

The company's forecast does not contain any synergy effects arising from the merger with TE Ltd. The Valuation Expert therefore supplemented the company's forecast by adding attainable virtual synergy effects at the level of First Sensor. [180]

Audit conclusion

We consider the procedure of using the earnings value method as described to be appropriate for the valuation of First Sensor.

4. Derivation of net cash flows to be capitalised

a) Structure of the forecast and the forecasting process

In accordance with the principles of IDW S 1, the valuation of First Sensor is based on the assumption that the companies in First Sensor Group will be continued indefinitely. Since a dedicated forecast is not possible for an infinite period, a distinction must be made between the Detailed Forecast Period and the phase of the perpetual annuity.

The Detailed Forecast Period is determined by the forecast presented by the Company, which covers the years 2020 to 2022. The first year of the forecast (the budget) is planned on a monthly basis in order to take special seasonal features into account.

First Sensor's Forecast was prepared in line with its external reporting standards in accordance with IFRS. The Forecast consists of an integrated income statement, balance sheet and cash flow forecast. The information on the income statement, balance sheet and cash flow statement which is combined at the Group level can also be filtered for numerous other breakdowns and analyses (e.g. by target market, region, location, customer or product).

The regular forecasting process in the First Sensor Group begins "top-down" every year in the third quarter, with the Management Board of the Company providing the persons responsible for planning at the respective locations with essential planning assumptions, e.g. concerning expected future incoming orders, revenues, changes in material prices and EBIT. In a multi-stage forecasting process running in two parallel work processes, the relevant forecast parameters are planned "bottom-up" by the individual locations and centralised functions and then subjected to "top-down" review.

[180] Cf. Section D.IV.4.e), beginning on p. 64.

In its Valuation Opinion, the Valuation Expert included graphic presentations of the associated sub-processes and forecasting parameters as well as specific verbal explanations, and therefore accurately summarised the complete forecasting manual.

The forecasting process ends "top-down" in the fourth quarter of each year with a final review by the Management Board. In its review, the Management Board takes into account the fact that not all of the goals set by the persons responsible for planning can be achieved. Its adjustments in this regard are explained to the Supervisory Board of the Company in a transparent manner.

The Management Board of First Sensor presented the Forecast, which was prepared over the course of the regular forecasting process, to the Company's Supervisory Board at its meeting on 3 December 2019, at which point it was conclusively adopted. The Supervisory Board of First Sensor confirmed the Forecast by means of a written circulatory ballot on 11, 12 and 13 January 2020, approving the 2020 budget and acknowledging the mid-term forecast for 2021 and 2022.

With regard to the specifications for forecasting exchange rates, we are satisfied based on analyst estimates and forward rates that the assumptions made when preparing the forecast are justifiable.

In view of the systematic forecasting process described above, we consider the Forecast presented by the Company to be fundamentally suitable for the purposes of the valuation.

However, the Forecast does not reflect the substantial impact of the coronavirus pandemic on the economic situation in general and on First Sensor's specific supplier and consumer markets in particular. Over the course of its routine management and controlling processes, First Sensor's management board reassessed the Company's risks and opportunities and prepared a Projection based on a deviation analysis. The purpose of the analysis performed by First Sensor's management was to provide an outlook for Financial Year 2020 which reflects current expectations as to the impact of the coronavirus pandemic on First Sensor Group's operations. First Sensor's management board conducted a survey of production and distribution locations in order to help evaluate the impact of the crisis on 2020 revenues in particular.

First Sensor's management board presented the Projection on 29 March 2020. It was acknowledged by the supervisory board on 14 April 2020.

The Projection accounts for the financial impact which the coronavirus pandemic is expected to have and is already having on First Sensor's expected earnings and investments. The analyses reflect the expected loss of revenues in 2020 from cancelled and scaled-back orders, as well as the associated impact and adjustments on the cost side.

It is still too early to make specific adjustments for the ensuing years. First Sensor's management board therefore accounted for the mid-term impact of the coronavirus pandemic by carrying forward its estimates based on the projected revenue estimate for Financial Year 2020.

The Valuation Expert based its valuation on the Projection, as it reflects present conditions.

After checking the plausibility of the Forecast, we are satisfied that Projection adequately reflects the expected impact of the coronavirus pandemic on First Sensor.

b) <u>Analysis of forecast accuracy</u>

The Valuation Expert verified forecasting accuracy by comparing actual revenues and operating results (EBITDA and EBIT) of First Sensor Group (actual data) in Financial Years 2017-2019 against the budgeted values for those years (estimates).

For the forecast year 2019, it also made a supplementary analysis on an adjusted basis (actual data), as the special effects from the preparation of the acquisition by TE Ltd. were not foreseeable when the forecast was drawn up and also had a considerable effect on earnings, which might distort the results of the analysis.

In view of the fact that forecasting certainty for subsequent forecast years is typically much lower, the forecast analysis is limited to the first forecast year in each case (the budget year).

We consider the basic procedure of how the Valuation Expert analysed forecasting accuracy to be appropriate. The Expert's extensive explanations of the deviations of estimates and actual figures as well as the findings of this analysis can be summarised as follows:

- revenues were largely in line with forecasts;
- revenue estimates are generally optimistic given (minor) shortfalls in all budget years;
- deviations higher for operating results (EBITDA and EBIT) than for revenues, which is understandable due to a large number of possible unforeseeable effects;
- earnings estimates were optimistic, with shortfalls in all budget years;
- the forecast is suitable for calculation of First Sensor's earnings value in light of the forecasting process.

We have been able to follow the Valuation Expert's analyses without any objections. We would also point out that the forecasting errors would have been significantly larger if the Company's Management Board had not made any adjustments to the forecasts initially presented by the various locations in the course of its annual review process.

In our opinion, the forecasting errors identified are to be regarded as rather minor in comparison. Consequently, the analysis of forecasting accuracy, including the findings of our analysis of the forecasting process, has also shown, in our opinion, that First Sensor's estimates are generally suitable for purposes of the valuation.

Our assessment as expert auditors is based in particular on the fact that the analysis of forecasting accuracy has shown, among other things, that the estimates of First Sensor do not understate expected values in a one-sided manner.

Audit conclusion

The forecast (Projection) presented by First Sensor can generally be used to calculate the enterprise value of First Sensor.

The Valuation Expert generally based its valuation on the forecast presented by the Company without change. The Valuation Expert differentiated between the Forecast and the Projection in both its analysis and its presentation.

For the purposes of the valuation, the Valuation Expert supplemented the Company's Projection by making the following adjustments to the Projection presented by the Company:

- supplementing the Projection through the addition of relevant synergy effects;
- adding a forecast of distributions to the Projection;
- making resulting adjustments to net interest income and corporate taxes;
- carrying forward the balance sheet estimates from the Forecast in light of the adjustments to earnings and investments in the Projection.

We have verified the initial parameters of these calculations, the underlying assumptions and the overall methodological consistency of the calculations.

c) Analysis of the EBIT forecast (Forecast)

ca) Overview

Relative to the adjusted data for the observed historical period,[181] the forecast of operating profit (EBITA) in the Forecast is as follows, along with selected key ratios:

First Sensor – Konzern	Ist			Planungsrechnung			CAGR	
EBIT	unbereinigt	unbereinigt	bereinigt					
€ Mio.	2017	2018	2019	2020	2021	2022	2017- 2019	2019-2022
Industrial	75,1	80,4	86,6	95,4	113,9	135,1	7,4%	16,0%
Medical	27,9	34,6	35,4	34,3	31,8	29,6	12,7%	-5,8%
Mobility	44,5	40,2	39,2	44,5	45,5	47,4	-6,1%	6,5%
Umsatzerlöse	**147,5**	**155,1**	**161,3**	**174,2**	**191,2**	**212,1**	**4,6%**	**9,6%**
Bestandsveränderungen an fertigen und unfertigen Erzeugnissen	-1,5	4,5	0,5	0,2	0,3	0,3	n.a.	-15,1%
Andere aktivierte Eigenleistungen	2,5	2,0	3,6	3,2	2,7	2,9	20,4%	-6,8%
Gesamtleistung	**148,5**	**161,6**	**165,4**	**177,6**	**194,2**	**215,3**	**5,5%**	**9,2%**
Materialaufwand/Aufwand für bezogene Leistungen	-69,3	-76,1	-75,3	-78,9	-84,6	-93,8	4,2%	7,6%
Rohertrag	**79,2**	**85,5**	**90,1**	**98,7**	**109,6**	**121,6**	**6,7%**	**10,5%**
Sonstige betriebliche Erträge	3,3	2,6	1,0	0,9	0,8	0,7	-44,0%	-10,7%
Personalaufwand	-46,6	-49,0	-52,5	-55,3	-59,6	-62,2	6,2%	5,8%
Sonstige betriebliche Aufwendungen	-16,3	-17,8	-15,0	-15,8	-16,0	-16,5	-4,0%	3,1%
EBITDA	**19,6**	**21,3**	**23,6**	**28,5**	**34,7**	**43,6**	**9,6%**	**22,8%**
Abschreibungen auf Sachanlagen u. immaterielle Vermögenswerte	-9,1	-9,0	-11,1	-11,6	-11,5	-10,3	10,7%	-2,7%
EBIT	**10,6**	**12,2**	**12,4**	**16,9**	**23,2**	**33,4**	**8,6%**	**38,9%**
Kennzahlen								
Umsatzwachstum Industrial	n.a.	7,0%	7,8%	10,2%	19,3%	18,7%		
Umsatzwachstum Medical	n.a.	23,9%	2,5%	-3,2%	-7,1%	-7,0%		
Umsatzwachstum Mobility	n.a.	-9,7%	-2,4%	13,3%	2,4%	4,0%		
Umsatzwachstum Gesamt	n.a.	5,2%	3,9%	8,0%	9,8%	10,9%		
Umsatz-Anteil Industrial	50,9%	51,8%	53,7%	54,8%	59,6%	63,7%		
Umsatz-Anteil Medical	18,9%	22,3%	22,0%	19,7%	16,6%	14,0%		
Umsatz-Anteil Mobility	30,2%	25,9%	24,3%	25,5%	23,8%	22,3%		
in % der Umsatzerlöse								
Materialaufwand/ Aufwand für bezogene Leistungen	-47,0%	-49,0%	-46,7%	-45,3%	-44,3%	-44,2%		
Rohertrag	53,7%	55,1%	55,9%	56,6%	57,3%	57,3%		
Sonstige betriebliche Erträge	2,3%	1,7%	0,6%	0,5%	0,4%	0,4%		
Personalaufwand	-31,6%	-31,6%	-32,6%	-31,7%	-31,2%	-29,3%		
Sonstige betriebliche Aufwendungen	-11,1%	-11,5%	-9,3%	-9,0%	-8,4%	-7,8%		
EBITDA-Marge	13,3%	13,7%	14,6%	16,4%	18,2%	20,6%		
Abschreibungen auf Sachanlagen u. immaterielle Vermögenswerte	-6,2%	-5,8%	-6,9%	-6,7%	-6,0%	-4,8%		
EBIT-Marge	7,2%	7,9%	7,7%	9,7%	12,1%	15,7%		

Quellen: Unternehmensinformationen, Angaben des Bewertungsgutachters, eigene Analysen.

cb) Revenues

Until early 2020, the Company expected revenues to increase significantly in Financial Years 2020-2022. The average growth rate for the forecast period is 9.6% (CAGR for the period from 2019 through 2022), far higher than the average revenue growth which was observed in the 2017-2019 period (CAGR: 4.6%).

The expected revenue growth will largely be driven by growth in the industrial target market. Revenues in this segment recently (2019) accounted for the majority of total revenues, 53.7%, and were expected to grow at an average rate of 16.0% per year in the forecast period based on expectations in early 2020. Revenue growth in the industrial target market is expected to be much faster than the overall revenue growth rate, especially in 2021 and 2022, so that the revenue share of the industrial target market will continue to increase, to 63.7% (2022).

After increasing from 2017 through 2019, revenues in the medical target market are expected to decrease in the forecast period, so that this target market's share in overall revenues will drop to 14.0% (2022).

The opposite progression was expected in the mobility target market at the start of 2020: after falling steadily from 2017 through 2019, revenues are expected to rebound in 2020 back to their level in 2017

[181] The adjustments for Financial Years 2017 and 2018 could not be fully matched to individual income statement items. The table below therefore contains the unadjusted data.

and go higher from there. Given the relatively low revenue growth rate in this target market, averaging 6.5% per year, its revenue share will continue to drop, to 22.3% (2022).

A breakdown of expected revenues by degree of confidence shows that, according to the Forecast, around two thirds of expected revenues for 2020 could be predicted with a high degree of certainty as of the time the forecasting work was completed (Levels 1 and 2). 43.4% of expected revenues in 2020 were from existing orders which are already in the production or development stage (Level 1) and another 24.2% were from development projects (solution business) for which the expected minimum volumes and/or follow-up orders are already known from existing framework agreements (Level 2).

Naturally, only a small proportion of the expected revenues in the remaining forecast years can be projected with the highest degree of confidence. More than two thirds of expected revenues for the years 2021 and 2022 consist of Level 2 revenues or are from development projects in which the minimum volumes were not yet known from framework agreements as of the time the forecasting work was completed (Level 3). These development projects largely depend on sales in the target markets themselves and on OEMs' perception of the market.[182] The revenue share of orders for standardized products (distribution business) and potential new orders, estimated based on historical values (Levels 3 and 4), is also expected to increase starting in 2021.

In aggregate, revenues for the five First Sensor locations/Group companies with the highest revenue shares[183] were expected to increase by an average of 13.5% (CAGR, 2019-2022) according to the Forecast. Because of the expected drop in revenues in the medical target market, the aggregate expected revenue growth rate for the FSM location is 11.3% (CAGR, 2019-2022), lower than the aggregate expected growth rate for First Sensor in the industrial target market (16.0%). The same is true for the FSW location, for which a growth rate of 13.6% can be derived. The FSO location's contribution to First Sensor Group's growth expectations is average (17.1%). This development is attributable above all to LIDAR sensors, a key technology for the automation of industrial processes and for applications in fully automated and autonomous driving, whose importance is expected to increase. The growth which had been expected in 2019 failed to materialise as OEMs postponed their plans to focus more intensely on the trend towards autonomous driving in light of the tense economic environment, but the Company now expects these growth expectations to be realised in the forecast period, particularly in the years beginning with 2021. The largest share of total revenues is generated at the FSP location. The revenue growth which is expected for this location, averaging 12.3% per year, is attributable above all to the boost in growth from the expected launch in 2022 of products which have been developed for an important customer. FSD's revenues are expected to increase by 13.7% (CAGR, 2019-2022), as the loss of nearly its entire optical sensors business to a competitor was partially offset by the development of a new and improved product.

182 Original equipment manufacturer.
183 Before cost of sales and consolidation effects.

The industrial target market by region

According to the Forecast, revenues in the individual regional markets of the industrial target market were expected to change as follows in the forecast period relative to the figures in the most recent financial year (2019):

First Sensor – Zielmarkt Industrial Umsatzerlöse nach Regionen € Mio.	Ist 2019	Planungsrechnung 2020	2021	2022	CAGR 2019-2022
DACH-Region	38,8	42,8	50,1	61,3	16,5%
Übriges Europa	21,2	21,3	23,6	25,8	6,8%
Nordamerika	9,5	14,7	18,5	21,6	31,4%
Asien	17,1	16,7	21,7	26,4	15,6%
Umsatzerlöse Idustrial Gesamt	**86,6**	**95,4**	**113,9**	**135,1**	**16,0%**

Quellen: Unternehmensinformationen, eigene Analysen.

Average growth in the industrial target market is expected to be higher than for First Sensor Group as a whole, which is particularly attributable to growing demand for First Sensor's optoelectronic products. The forecast also reflects the expectation that First Sensor's products will be increasingly used in fully automated industrial environments, particularly LiDAR and MEMS sensors. A newly developed multi-sensor system is also expected to provide a growth boost once it enters serial production.

Expected growth in the DACH (16.5% per year) and North America (31.4% per year) regions is particularly attributable to the expectation of growing demand for Series H pressure sensors. First Sensor hopes that revenues in these regions will grow at a substantially faster pace than expected growth for the industrial sensor market as a whole in these regions.[184] First Sensor's growth estimate for the Asia region (15.6%) is also higher than market expectations.[185]

First Sensor's substantial growth expectations for the industrial target market are largely rooted in customised development projects. As a result, the revenue share of the solution business should increase from 58.4% (2019) to 61.8% (2022).

Medical target market by region

According to the Forecast, revenues in the individual regional markets of the medical target market are expected to change as follows in the forecast period relative to the figures in the most recent financial year (2019):

First Sensor – Zielmarkt Medical Umsatzerlöse nach Regionen € Mio.	Ist 2019	Planungsrechnung 2020	2021	2022	CAGR 2019-2022
DACH-Region	26,0	24,8	23,7	22,9	-4,2%
Übriges Europa	2,6	2,8	3,1	3,5	9,6%
Nordamerika	6,7	6,7	4,9	3,2	-22,0%
Asien	0,0	0,0	0,0	0,0	n.a.
Umsatzerlöse Medical Gesamt	**35,4**	**34,3**	**31,8**	**29,6**	**-5,8%**

Quellen: Unternehmensinformationen, eigene Analysen.

While average revenue growth for the medical sensor market as a whole is expected to remain high (9.2% per year) over the forecast period (2019-2023), as the global trend continues, First Sensor's revenues in the medical segment are expected to decrease by 5.8% per year from 2020 to 2022, after posting gains in the recent past.

184 Approximated by expected market growth for the EMEA (in aggregate: 6.8% per year) and Americans (in aggregate: 8.7% per year) regions.
185 Approximated by expected market growth for the APCA region (in aggregate: 8.6% per year).

This trend can be explained primarily by the extraordinarily favourable change in demand for standard Series H pressure sensors in Financial Year 2018. It is expected that the level of demand posted by the medical target market in 2018 and 2019 cannot be sustained over the medium term. The present 2019 forecast assumes that Series H sales were overestimated in the 2018 forecast, and is therefore based on more cautious expectations. It also takes into account the fact that a major customer has indicated that its future demand for ventilator sensors will be lower following increased volume in 2018 and 2019.

The circumstances described above are reflected in the performance of the medical target market in its most important region by far, the DACH region, where revenues are expected to drop at a rate of 4.2% per year in the forecast period. The decrease in revenues in the North America region (22.0% per year) is attributable to falling order volumes for ceramic microchips. The forecast reflects an announcement from a major customer that one of its products, which requires First Sensor products, has reached the end of its life cycle.

Demand for standardized products in the medical target market is expected to increase, so that the revenue share of the distribution business should increase to 45.6% (2022) in the forecast period, at the expense of the solution business. This change is expected to be associated with a higher intensity of competition and increased price pressure.

Mobility target market by region

According to the Forecast, revenues in the individual regional markets of the mobility target market are expected to change as follows in the forecast period relative to the figures in the most recent financial year (2019):

First Sensor – Zielmarkt Mobility Umsatzerlöse nach Regionen € Mio.	Ist 2019	Planungsrechnung 2020	2021	2022	CAGR 2019-2022
DACH-Region	10,6	13,9	14,5	15,3	13,1%
Übriges Europa	14,9	14,6	14,1	15,1	0,5%
Nordamerika	5,4	7,8	9,6	11,5	28,2%
Asien	8,3	8,1	7,3	5,5	-12,9%
Umsatzerlöse Mobility Gesamt	**39,2**	**44,5**	**45,5**	**47,4**	**6,5%**

Quellen: Unternehmensinformationen, eigene Analysen.

Despite the wide variety of circumstances which are inhibiting growth (particularly the decrease in automotive registrations, followed by a drop in automotive production, the loss of confidence due to the "diesel scandal" and trade conflicts) and the risks (particularly cyclical fluctuations, geopolitical tensions and changes in regulatory conditions), the global automotive sensor market is expected to post modest growth in the 2019-2023 period, with an average growth rate of 3.8% per year.

First Sensor should benefit to a particular degree from the trends which are boosting growth (particularly autonomous driving, growing demand for driver assistance systems and the continuing development of fuel-efficient low-emission engines). The Company's average revenue growth in the 2022-2022 forecast period is expected to significantly outpace expectations for the market as a whole.

The growth rates which First Sensor is expected to post in the DACH (13.1% per year) and North America regions (28.2% per year) are several times the market expectations for these regions, while the Company expects revenues in the Rest of Europe region to remain stagnant and revenues in the Asia region to fall.

Because of its capacity for innovation, First Sensor Group's business in the mobility target market is comprised almost entirely of customised solutions. The solution business has a nearly constant revenue share in the mobility target market of a good 95%.

cc) Operating profit (EBIT)

Including minor changes in inventories and own work capitalized in the forecast period (2022-2022), which are expected to be comparable, on average, to those in the observed historical period (2017-2019), total output in the forecast period is expected to increase at an average rate of 9.2% per year according to the Forecast, to € 215.3 million.

The forecast of cost of materials is based on estimated sales volumes and takes into account measures to boost efficiency, particularly savings in connection with the switch from 4-inch wafers to 6-inch wafers and the insourcing of specific (e.g. chemical) processes. The continuous drop in the cost of materials ratio, from 46.7% (2019) to 44.2% (2022), is also attributable to scale effects. As a result, gross earnings in the forecast period should increase faster than revenues according to the Forecast, climbing by an average of 10.5% per year to € 121.6 million (2022).

The forecast of other operating income includes income from subsidies, income from the reversal of extraordinary items which had been recognised in the past for investment grants and subsidies and income from payments in kind. This income is of secondary importance. After applying the adjustments for Financial Years 2017 and 2018, it is evident that this item has decreased continuously, from € 1.8 million (2017) to € 0.7 million (2022).

The expected increase in personnel expenses, by an average of 5.8% per year to € 62.2 million (2022), is the result of expected increases in collective wages and the general inflation-based salary trend (2.5%), as well as increases in the number of employees. The assumptions for the 2019 forecast do not specify an exact number of employees, but rather specify ranges in which FTEs could fall. Based on the value at the middle of the range specified for the 2022 forecast year, employee capacity is expected to increase by a total of 6.8% over the forecast period. In view of the fact that revenues are expected to increase by a total of around 32%, productivity[186] is expected to increase by around 19% in the forecast period. As a result, the personnel expense ratio should decrease continuously, from 32.6% (2019, adjusted) to 29.3% (2022).

Other operating expenses are broken down into a large number of items, of which the cost of premises, the cost of maintenance and repairs and selling and marketing expenses in particular account for a significant share of total expenses. The slight increase in expenses in the forecast period, by an average of 3.1% per year to € 16.5 million (2022), is almost entirely attributable to an increase in selling expenses, while the other expense types are expected to remain nearly constant. Advertising, trade show and marketing expenses are expected to double as the Company tries to meet its ambitious revenue targets, in

[186] Measured as revenues per FTE.

addition to the opening of a sales office in South Africa. The overall expense ratio should decrease steadily, from 9.3% (2019, adjusted) to 7.8% (2022).

On this basis, EBITDA should nearly double in the forecast period, to € 43.6 million (2022). EBITDA margin is expected to increase from 14.6% (2019, adjusted) to 20.6% (2022).

In view of the fact that depreciation from purchase price allocations will expire in the forecast period, total depreciation on property, plant and equipment and intangible assets is expected to decrease after 2020. As a result, the depreciation ratio is expected to drop in the Detailed Forecast Period from 6.9% (2019) to 4.8% (2022). Excluding depreciation from purchase price allocations, depreciation should increase in the forecast period as a result of planned investments.

A significant percentage of planned new investments in 2020, € 3.2 million out of the total of € 8.0 million, is directed towards increasing capacity, as the Company seeks to ensure that it will be able to continue meeting demand, which is expected to grow. Including investments which had been planned and approved for 2019, based on the Forecast, but which ultimately could not be carried out in 2019 and are therefore to be made up in 2020 (€ 3.2 million), as well as own work capitalised (€ 3.2 million), total investment volume in 2020 is expected to be € 14.4 million. Total investment volume is expected to be lower in the ensuing years (€ 10.7 million and € 11.0 million) because the forecast for those years does not include deferred investment effects.

Despite these investments, it may be assumed, in light of the strong revenue growth projected in the Forecast, that capacity will be nearly exhausted at the end of the forecast period, and the overall depreciation ratio is expected to decrease in the Detailed Forecast Period, from 6.9% (2019) to 4.8% (2022).

On this basis, EBIT is expected to nearly triple in the forecast period, to € 33.3 million (2022). EBIT margin should increase from 7.7% (2019, adjusted) to 15.7% (2022).

The forecast has been prepared using the cost summary method, in accordance with outside accounting standards. Nevertheless, the forecast can be converted so as to conform to the cost of sales method. Using this method, production costs in the forecast period are expected to increase from € 112.1 million (2020) to € 132.4 million (2020) according to the Forecast, a rate which is largely even with the pace of revenue growth. In view of the substantial expected growth, selling expenses are also expected to increase by a not insignificant amount, from € 10.8 million (2020) to € 12.3 million (2022), albeit not nearly as fast as revenues. The expected increases in R&D expenses (from € 7.7 million (2020) to € 8.3 million (2020)), distribution and shipping expenses (from € 1.8 million (2020) to € 1.9 million (2022)) and especially administrative expenses (from € 23.6 million (2020) to € 24.7 million (2022)) are considerably smaller than the expected growth in revenues, demonstrating that substantial scale effects are expected according to the Forecast.

cd) Overall assessment

On the whole, the individual changes described above will result in revenues increasing to € 212.1 million through the end of the Detailed Forecast Period according to the Forecast, and EBIT improving to € 33.4 million. This would correspond to an annual revenue growth rate of 9.6% (2019-2022) and the EBIT margin would more than double, to 15.7% (2022).

In light of the forecast documentation, the information provided and external industry and market data, the Valuation Expert deems the Company's forecast to be generally suitable for valuation purposes. However, the Forecast was no longer reliable at the time the Valuation Opinion was signed since it did not yet reflect the negative impact of the coronavirus pandemic.

The measures planned by management to boost revenues are generally comprehensible, in the Valuation Expert's estimation. However, it notes that the projected average revenue growth rate in the Forecast appears highly optimistic in light of market expectations. In the Valuation Expert's view, the profitability forecast in the Forecast may be classified as very optimistic in view of the long-term risks and the profitability achieved in the past.

As part of our review of the Forecast, we compared this forecast against the historical[187] and expected[188] performance of the peer group companies.[189] The results of this analysis can be summarised as follows:

- The Company's revenue forecast is well above the median growth expectations for the peer group.
- Historical EBITDA and EBIT margins are far lower than margins posted by peer group companies, which include market operators whose size enables them to realize much larger scale effects.
- The forecast calls for margins to approach those of the peer group companies.

Considering the results of this analysis, as well as the key strengths and weaknesses, risks and opportunities of First Sensor's business model, we also find the revenue and EBIT forecast in the Forecast to be optimistic. In our view, the EBIT forecast in the Forecast reflects the risks and opportunities of the business model presented to us such that opportunities outweigh risks.

[187] Annual Reports for the years 2017-2019.
[188] Analyst estimates for the years 2020-2022.
[189] The peer group companies used for derivation of the beta factor for the valuation of First Sensor; cf. Section D.IV.5.bcc), beginning on p. 94.

d) Outlook in the Projection

The Forecast does not take into account the considerable impact of the coronavirus pandemic on the economic situation in general and on First Sensor's specific supplier and consumer markets in particular.

As a result of its analysis of current expectations as to the impact of the coronavirus pandemic on First Sensor Group's operations, the management board of First Sensor prepared an outlook which includes the following differences between the original Forecast and the current Projection:

First Sensor – Konzern Abweichungsanalyse € Mio.	Prognoserechnung 2020	 2021	 2022
Umsatzerlöse	**-18,8**	**-20,7**	**-22,9**
Bestandsveränderungen an fertigen und unfertigen Erzeugnissen	0,0	0,0	0,0
Andere aktivierte Eigenleistungen	-0,1	0,0	0,0
Gesamtleistung	**-19,0**	**-20,7**	**-22,9**
Materialaufwand/Aufwand für bezogene Leistungen	9,1	9,0	10,0
Rohertrag	**-9,9**	**-11,7**	**-13,0**
Sonstige betriebliche Erträge	0,0	0,0	0,0
Personalaufwand	1,0	1,1	1,1
Sonstige betriebliche Aufwendungen	0,7	0,7	0,7
EBITDA	**-8,2**	**-9,9**	**-11,1**
Abschreibungen auf Sachanlagen u. immaterielle Vermögenswerte	0,2	0,0	0,0
EBIT	**-8,0**	**-9,9**	**-11,1**
Prognoserechnung (in % der Umsatzerlöse)			
Materialaufwand/ Aufwand für bezogene Leistungen	-45,0%	-44,3%	-44,3%
Rohertrag	57,2%	57,4%	57,4%
Sonstige betriebliche Erträge	0,6%	0,5%	0,4%
Personalaufwand	-34,9%	-34,3%	-32,3%
Sonstige betriebliche Aufwendungen	-9,7%	-9,0%	-8,4%
EBITDA-Marge	13,1%	14,6%	17,2%
Abschreibungen auf Sachanlagen u. immaterielle Vermögenswerte	-7,4%	-6,8%	-5,4%
EBIT-Marge	5,7%	7,8%	11,7%

Quellen: Unternehmensinformationen, Angaben des Bewertungsgutachters, eigene Analysen.

The deviations between the Forecast and the Projection are particularly attributable to problems on the supplier side and to plant closures by automotive companies which have been announced or have already taken place. Based on the information provided to us, half of the update to the 2020 revenue forecast has already materialised, primarily through the change in orders on hand. The remainder of the update can be largely attributed to the announcement that the measures taken to curb the coronavirus pandemic will last for longer than originally expected.

Due to the fact that some orders have been postponed, while others have been cut back or cancelled, the original estimate of 2020 revenue growth (8.0%) is now unrealistic. Expectations for the 2020 forecast year have been reduced by around 10.8 percent, so that revenues are now expected to decrease slightly (by 3.7%) from the previous year based on the Projection.

The economic consequences of the coronavirus pandemic are not expected to result in a fundamental impairment of the Company's business model, in the estimation of First Sensor's management board, so that mid-term growth expectations have not been revised. While the growth rates in the Forecast have been retained, mid-term revenue expectations (for 2021 and 2022) were scaled back in absolute terms due to the reduction in the starting value, i.e. the forecast for the current year (2020). Revenues currently expected in forecast year 2022 (€ 189.2 million) are around 17.2% higher than the Company's most recent (2019) revenue figure (€ 161.3 million). Despite the economic consequences of the coronavirus pandemic, the growth posted by First Sensor in the observed historical period (2017-2019; CAGR: 4.6%) is expected to continue in the medium term (2020-2022) according to the updated expectations (CAGR from 2019 to 2022: 5.5%).

In revising the forecast, it was necessary to account for the fact that expenses cannot always be scaled back in proportion to the decrease in revenues. Due to the somewhat fixed character of personnel expenses and other operating expenses, the measures which have been taken and planned to reduce spending will not have an effect equal to that of the expected reductions in revenues, so that expense ratios will be higher than projected in the Forecast in some cases. This is particularly true for the personnel expense ratio, which was originally expected to decrease substantially, but is now expected to increase at first before dropping back (32.3% in 2022) to the level posted most recently (32.6% in 2019).

EBIT margin is no longer expected to gradually increase to 15.7%. Instead, the Projection projects that EBIT margin will drop from 7.7% (2019, adjusted) to 5.7% (2020). EBIT margin should return to the level observed in the past as early as 2021 (7.8%) and is expected to improve substantially in 2022 (11.7%).

Although it incorporates the expected impact of the coronavirus pandemic on First Sensor's operations, the Valuation Expert concludes, in summary, that the revised forecast of First Sensor Group's performance is optimistic in light of the existing risks and the earnings which have been posted in the past.

Based on our analysis, we are also of the opinion, in summary, that First Sensor's Projection tends to be optimistic in light of the existing risks.

Audit conclusion

Based on our findings from analysis of the forecasting process, forecasting accuracy and the forecast itself, we can state that the Projection presented to us, which has been adjusted to reflect the economic impact of the coronavirus pandemic, is suitable as a basis for calculating the objective enterprise value of First Sensor as of 26 May 2020.

e) Earnings contributions of relevant synergies

In view of the fact that it was adopted on 3 December 2019, the Forecast presented to us includes no synergy effects from the merger with TE Ltd. The same is true for the Projection.

Based on the principle that "virtual synergies" are to be taken into account in calculating objective enterprise value, the Valuation Expert estimated synergies of relevance for the valuation based on the statements in the takeover offer of 8 July 2019[190] as well as additional explanations from First Sensor and TE Ltd.

First Sensor and TE Ltd. consider it possible that the cooperative business relationship which already exists between the two companies will be further intensified in the future, possibly resulting in revenue and cost synergies. The planned conclusion of the DPLTA is not necessary for the realisation of revenue synergies, in their estimation. These virtual synergies are to be taken into account when calculating the objective enterprise value of First Sensor provided that the measures which generate these synergies have already been specified to a sufficient extent, and provided they are to be taken by First Sensor. First

[190] Cf. SectionD.IV.1.a), beginning on p. 28.

Sensor and TE Ltd. are also of the opinion that it is necessary to conclude the DPLTA before cost synergies can be realised. Based on the definition in the IDW S1 standard, these therefore qualify as real synergies which are generally not taken into account when calculating objective enterprise value.

We can understand the view that, for legal reasons, it is necessary to await the planned conclusion of the DPLTA before measures can be taken for the realisation of cost synergies.

After all, there are narrow limits to the management and coordination of activities within the de facto Group relationship. In accordance with § 76 (1) of the Stock Corporation Act, the Management Board of First Sensor is still responsible for managing First Sensor. In accordance with § 311 (1) of the Stock Corporation Act, no transactions may be executed with TE Group companies which are not also members of First Sensor Group at the behest of or in the interest of TE Connectivity, and no measures may be taken or omitted at the behest of or in the interest of TE Connectivity which has an adverse effect for First Sensor unless the adverse effects for First Sensor are quantifiable and are compensated by TE Connectivity These transactions and measures must be reported pursuant to § 312 of the Stock Corporation Act, so that an assessment has to be made for each of these transactions and measures as to whether they are disadvantageous for First Sensor and whether any disadvantages have been compensated by TE Connectivity.

Such an examination of each individual case may require extensive analysis, requiring a heavy commitment of resources by the Management Board, even though the examination will not result in an absolutely certain conclusion in every case. This is particularly true for the exchange of know-how and business information. In those cases, it is difficult in practice, and often impossible, to quantify any adverse effects for the controlled company and compensate for them with corresponding benefits. As a result, it is not sufficiently certain that such measures can be taken in a de facto Group relationship, so that they are only possible at considerable expense for purposes of examination and documentation, if they are possible at all. It therefore seems understandable to us that the Management Board of First Sensor has taken the position that the close exchange of information which is necessary for the realisation of cost synergies is not possible prior to conclusion of the planned DPLTA due to legal considerations.

On the other hand, certain cost synergies can be realised even without the conclusion of a domination agreement, creating additional earnings potential for First Sensor which would benefit all shareholders, including the outside shareholders. The Management Board is therefore required to assess whether possible synergy-generating measures could result in beneficial effects in any individual case which could potentially outweigh the associated adverse effects.

Only a rough estimate of cost synergies can be made based on the analyses which have been performed to date. Moreover, it is presently uncertain not only whether these synergies can be realised at all without a DPLTA but also how the synergy potential should be allocated to First Sensor and TE Ltd. Despite the uncertainty as to whether these synergies can be realised without a domination agreement, the Valuation Expert assumed, for the purposes of the valuation, that 50% of cost synergies are comprised of virtual synergies, and that 50% of these apply to First Sensor Group and can be added to its valuation.

Based on the available information, we find the assumption that no more than 50% of cost synergies can be realised without the conclusion of a domination agreement to be comprehensible. By selecting a value at the middle of the range, our view is that the Valuation Expert adequately accounts for the full range of possibilities, marked by the extremes cited below:

- 100% real synergies (assessment by First Sensor and TE Ltd. that the conclusion of a domination agreement is necessary for every measure for the realisation of cost synergies); and
- 100% virtual synergies (all measures can be taken because the exchange of information necessary for the realisation of cost synergies do not result in adverse effects).

Based on the available information, we also find the assumption that 50% of cost synergies apply to First Sensor Group to be comprehensible. By selecting a value at the middle of the range, our view is that the Valuation Expert adequately accounts for the full range of possibilities, marked by the extremes cited below:

- proportional breakdown of cost synergies based on the relative sizes of TE Group without First Sensor Group, on the one hand, and First Sensor Group on the other;
- optimisation potential largely concentrated in First Sensor Group because size-related purchasing advantages have already been utilised in TE Group, so that potential for boosting production efficiency exists only in First Sensor Group, for the most part.

In the estimation of the Valuation Expert, it may generally be presumed that it will no longer be possible to fully realise the synergies which had originally been expected because of the coronavirus pandemic. The Valuation Expert notes that it is questionable whether the expected revenue synergies can be realised given the slump in demand as a result of the crisis. The Valuation Expert also points out the risk that expected cost synergies may not materialise as originally expected because the crisis may complicate collaborative efforts and delay integration measures. Nevertheless, the Valuation Expert left the amount of synergies unchanged.

We find the Valuation Expert's assessment to be comprehensible. Including synergies in the same amount as in the original assessment is appropriate in terms of the German Stock Corporation Act.

On this basis, the Valuation Expert supplemented the Company's Projection by adding the following earnings contributions of relevant synergies:

First Sensor – Konzern Prognoserechnung ergänzt um Synergien € Mio.	Plan 2020	 2021	 2022
EBIT (Prognoserechnung) vor Synergien	**8,9**	**13,3**	**22,2**
Umsatzseitige Synergien	1,5	8,9	13,5
Aufwendungen in Verbindung mit umsatzseitigen Synergien	-1,3	-7,4	-11,3
Kostenseitige Synergien	1,3	2,5	3,8
EBIT (Prognoserechnung) nach Synergien	**10,3**	**17,3**	**28,2**
EBITDA-Marge (Prognoserechnung) vor Synergien	13,1%	14,6%	17,2%
EBITDA-Marge (Prognoserechnung) nach Synergien	13,9%	16,0%	19,0%
EBIT-Marge (Prognoserechnung) vor Synergien	5,7%	7,8%	11,7%
EBIT-Marge (Prognoserechnung) nach Synergien	6,6%	9,6%	13,9%

Quellen: TE Ltd. und First Sensor, Angaben des Bewertungsgutachters.

TE Ltd. and First Sensor expect that First Sensor will be able to realise revenue synergies based on cross-selling initiatives. These will come in part from First Sensor's significantly stronger expertise in optical sensors, which it will now be able to market through TE Ltd.'s global sales organisation. In addition, the products of First Sensor and TE Ltd. are highly compatible in general, creating the expectation of additional revenue synergies for First Sensor.

Realising revenue synergies will require a certain amount of lead time, which is why it is assumed that only a fraction of the synergies included in the perpetual annuity period (€ 27.6 million per year starting in 2024) can be realised in the 2020 forecast year. A side calculation was presented to us showing the breakdown of revenue synergies by product segment and the expected time at which each will be realised. First Sensor is expected to earn additional revenues from the marketing of optical sensors in the APCA and Americas regions as early as 2020. The other expected revenue synergies relate to four areas of application for which additional revenues are expected beginning in 2021.

This side calculation also includes a calculation of EBIT attainable from revenue synergies. This calculation results in EBIT margins of 13.3% (2020) and 16.4% (starting in 2021), which are significantly higher (in the case of 2020 and 2021) or slightly higher (2022) than the EBIT margins which would result for First Sensor on a stand-alone basis.[191] Accordingly, the calculation shows the impact of scale effects.

The Contracting Parties have identified cost synergies arising from improvements in production efficiency, as well as cost synergies in purchasing. The takeover offer of 8 July 2019 states that the potential cost savings from the merger will amount to as high as € 15.0 million per year through 2022. Based on the assumption that 50% of these cost synergies are virtual synergies, and therefore generally qualify for inclusion in the valuation, and further assuming that 50% of these virtual synergies are applicable to First Sensor, a potential cost reduction in the amount of € 3.75 million would have to be taken into account in the valuation of First Sensor for the year 2022. The Valuation Expert further assumed, for the sake of simplicity, that this potential will be reached in a linear progression, beginning in 2020.

We deem this simplifying assumption to be appropriate, particularly since it must be kept in mind that the realisation of cost synergies requiring a certain amount of lead time.

In the course of our audit, we were able to verify the calculation of relevant synergies both substantively and mathematically. There were no objections in this regard. However, we point out that, for legal reasons, a dedicated analysis of potential cost savings has yet to be performed. The Valuation Expert's calculation of relevant cost synergies based on simplifying assumptions is appropriate, in our view. Over the course of our audit, we found no evidence to support the view that additional virtual synergy effects can be realised.

In summary, we find the Valuation Expert's efforts to supplement the Company's Projection by accounting for the earnings contributions of relevant synergies to be appropriate and comprehensible.

[191] Cf. SectionD.IV.4.ca), p. 52.

f) Permanent operating profit (EBIT)

In order to derive operating profit (EBIT) in the perpetual annuity phase, the Valuation Expert estimated the future earning power of First Sensor Group assuming that the company is continued on a permanent basis and without investments in extending capacity.

First, the Valuation Expert used First Sensor Group's revenues in the final year (2022) of the Projection to calculate expected revenues in the perpetual annuity period.

The Valuation Expert is of the opinion that volume-driven growth for First Sensor Group may continue for three additional years after the end of the Detailed Forecast Period because, according to the Forecast, First Sensor Group had planned to have enough capacity available to deliver the revenues which had originally been expected for 2022 (€ 212.1 million). Given the revenues which are now expected in 2022 according to the Projection (€ 189.2 million) and the estimation by First Sensor's management board that the revenues which had originally been expected in 2022 will be posted three years later, the Valuation Expert accounted for the additional growth potential through a linear increase in revenues in the period from 2023 to 2025.

After the growth potential arising from the Forecast is fully accounted for, First Sensor Group's capacity will be nearly exhausted. The Valuation Expert notes that further volume-driven growth for First Sensor Group is inconceivable without substantial investments in the construction of new production sites and facilities, investments which would involve a great deal of uncertainty. In any case, no such investments are planned.

Based on our audit, we consider the assessment by the Valuation Expert which is presented above, that First Sensor's growth can be expected to continue for three additional years after the Detailed Forecast Period, to the extent described above, but that sustained increases in volume are not to be expected after that, to be accurate.

Accordingly, only inflation-based growth effects are to be taken into account, for the most part, when calculating expected revenues for the perpetual annuity period. Pointing out the cyclical nature of the Company's sales markets, the increase in competitive intensity in the sensor market and the fact that price competition has been mounting over a long period of time, the Valuation Expert assumes an annual revenue growth rate of 1.0% in the perpetual annuity period.

An inflation-based revenue growth rate of 1.0% for First Sensor is not objectionable, in the auditors' view.[192]

The revenues which the Company had originally expected in 2022 according to the Forecast (€ 212.1 million) are now expected three years later, a change which is reflected by an extension of the Projection. Including expected inflation-based growth, revenues in the perpetual annuity period are expected to amount to € 214.2 million starting in 2025 (not including synergies) according to the Valuation Expert's calculations. With revenues expected to increase considerably in the years 2023-2025, translating the

[192] Cf. Section D.IV.5.c), beginning on p. 98.

forecast into an annuity of equivalent present value yields an average revenue level of € 208.8 million (not including synergies) for the years beginning in 2023, which is € 19.6 million higher than estimated revenues in the final year (2022) of the Projection (€ 189.2 million).

In calculating the attainable revenue level for the period beginning in 2025, not including revenue synergies (€ 214.2 million), and the resulting annuity of equivalent present value to be used for the period beginning in 2023 (€ 208.8 million), the Valuation Expert included inflation-based growth amounting to 1.0%. In our view, inflation-based growth should not be included until 2026 because the revenue estimates in the Forecast, on which the side calculation is based, contain the revenues which were originally expected, and are now expected to materialise after a three-year delay, and therefore reflect both volume- and inflation-based growth.

The revenue forecast resulting from the side calculation for the years 2023-2025 is therefore too high, in our view, since it includes additional inflation-based growth amounting to a total of 1.0%. This approach is not objectionable in terms of the German Stock Corporation Act.

In addition to the perpetual revenues presented above (not including synergies), revenue synergies arising from the proposed collaboration with TE Group must also be taken into account. The revenue synergies which are expected for 2022, like the revenues which are projected according to the Projection, are not a suitable basis for directly estimating the level of revenue synergies which are to be expected in the perpetual annuity period because it is expected that potential synergies will not be fully realised until 2024.

The Valuation Expert accurately calculated an annuity with a present value of € 27.0 million based on the revenue synergies expected for 2023 and 2024, with revenues expected to increase by 1.0% per year from then on. On this basis, the total level of revenues in the perpetual annuity period was calculated as € 235.7 million.

In a second step, the Valuation Expert used perpetual revenues and an EBITDA margin which it deemed appropriate for the perpetual annuity period in order to calculate perpetual EBITDA. Since First Sensor's management expects that the impact of the coronavirus pandemic on First Sensor Group's operations will be limited to the near and medium term, the Valuation Expert states that it is to be expected that the earnings projected in the Forecast will be attainable in the long run.

In the Valuation Expert's estimation, the EBITDA margin for the final year of the Forecast (20.6%) is not a suitable starting point for estimating the average EBITDA margin which is to be expected in the perpetual annuity period. After all, the Valuation Expert points out that First Sensor will be exposed to economic and cyclical fluctuations over the long term, while the Company expected its EBITDA margin to increase steadily over the forecast period, according to the Forecast, based on the assumption of a positive economic and industry-specific environment.

In order to account for fluctuations in the economy and cyclical fluctuations within the sector, the Valuation Expert calculated the perpetual EBITDA margin (without synergies) by taking the average from the last two years (2021 and 2022) of the Forecast (19.4% not including synergies). The Valuation Expert also assumed that the full improvement in the margin (2.2 percent) over the Projection (2022: 17.2% not including synergies) will be realised in linear fashion over the period 2023-2025. Translating this forecast into an annuity of equivalent present value for the period beginning in 2023 results in perpetual EBITDA of € 40.2 million (not including synergies) and an EBITDA margin of 19.3%.

The resulting EBITDA margin must be adjusted to account for the effects of revenue synergies and the associated expenses on the perpetual EBITDA margin. In calculating revenue synergies in the perpetual annuity period, the Valuation Expert calculated an annuity which took into account the fact that revenue synergies in the potential annuity period will only be realised starting in 2024. The Valuation Expert followed the same procedure in calculating permanent EBITDA based on revenue synergies. The effect of cost synergies in the perpetual annuity period also has to be taken into account. This effect is calculated by applying the annual growth rate (1.0%) to the cost synergies in 2022. On this basis, the Valuation Expert calculated EBITDA in the permanent annuity period as € 48.4 million and a perpetual EBITDA margin of 20.5%.

In the course of our audit, we were able to verify the methodology presented above and the associated calculations without objection. We conducted intensive discussions with the Valuation Expert with regard to identification of a suitable period for derivation of the average earnings level which is to be expected in the perpetual annuity period. In our view, the method which was ultimately chosen does not understate the earnings level which is to be expected in the perpetual annuity period.

The perpetual EBITDA margin (20.5%) is higher than the average margin for the observed historical period (12.3%) and for the Detailed Forecast Period (19.5% according to the Forecast and 16.3% according to the Projection). Based on its "benchmarking analysis," the Valuation Expert points out that an EBITDA margin of 20.5% is below the range of historical and expected EBITDA margins posted by the first, second and third quartile of peer group companies, and below the median for the peer group. However, the expected EBITDA margin (not including synergies) is close to the higher margins posted by peer group companies in the Detailed Forecast Period.

In evaluating the Valuation Expert's benchmarking analysis, it should be kept in mind that the peer group companies include market operators which are in a position to generate significantly higher scale effects because of their size. In light of the cyclical nature of the industrial and mobility target markets and expectations that competitive intensity in all three target markets will increase, the perpetual EBITDA margin used in the valuation can be viewed as optimistic.

In our view, the analyses presented above provide no evidence that the perpetual EBITDA margin may have been set too low.

In translating EBITDA into EBIT, the Valuation Expert set investments in the perpetual annuity period at the amount which it viewed as necessary in a steady state. To derive this amount, it took net investments in property, plant and equipment and intangible assets in the final forecast year (2022) and applied an annual growth rate of 1.0%. The resulting amount of necessary investments in the perpetual annuity period determined on this basis (€ 12.7 million) takes into account that production capacity will be nearly exhausted as of Financial Year 2025. However, investments in preserving and renovating assets and ensuring technological progress will have to be made in order to maintain the revenue level.

Based on our audit, we deem the average investments which the Valuation Expert assumes to be necessary in the perpetual annuity period to be adequately well-founded and accurately derived, as a whole.

Assuming a steady state, depreciation is to be set in the same amount (€ 12.7 million). These normalisations result in perpetual EBIT of € 35.7 million and a perpetual EBIT margin of 15.2%. This margin is significantly higher than the margins posted over the observed historical period and the average expected EBIT margins in the forecast period.

In summary, in light of the explanations provided by the Valuation Expert, the documents that have been made available to us and our understanding of the business model, we deem the method used by the Valuation Expert for derivation of the average level of EBIT expected in the perpetual annuity period to be well-founded, on the whole, and we find the Valuation Expert's results plausible. We were able to verify the associated calculations without objection. In our view, the assumptions made in this regard are appropriate in terms of the German Stock Corporation Act.

Audit conclusion

The Valuation Expert has derived permanent operating profit (EBIT) in a plausible and generally comprehensible manner.

g) <u>Net cash flow after personal taxes</u>

ga) <u>Cash flow adjustments in the perpetual annuity</u>

EBIT in the perpetual annuity period is to be translated into perpetual net income from operations. Like earnings, fixed assets, net current assets and financial liabilities also generally increase at the rate of inflation in the perpetual annuity period.

As a result, valuation practitioners often withhold part of perpetual earnings to finance growth in the balance sheet as a result of inflation, so that the net distributions attributable to shareholders are diminished by retained earnings and cash flow adjustments to finance this growth.

In the present case, the Valuation Expert has refrained from withholding part of perpetual earnings to finance growth effects in the balance sheet due to materiality considerations.

In our estimation, net cash flow to shareholders would be only slightly diminished if such an adjustment were to be made in the case of the present valuation. Accordingly, the method used by the Valuation Expert is not objectionable.

gb) <u>Net interest income</u>

The Valuation Expert derived net interest income based on the company's financial status as of 31 December 2019 as part of the balance sheet forecast and the integrated financial projection. The Valuation Expert used the company's balance sheet and financial forecast as the basis for its work.

The Valuation Expert made changes to the forecast of liquid funds for the purpose of the valuation in consultation with the Company. In the estimation of First Sensor's Management Board, it is necessary, but also adequate, to maintain liquidity in the amount of one month's revenues. Accordingly, the liquid funds which the Management Board considers necessary for operations, € 13.4 million, is only a fraction of the liquid funds reported as of 31 December 2019 (€ 32.3 million). For the purposes of the valuation, the Valuation Expert netted out the liquid funds were not necessary for operations (€ 18.9 million) with interest-bearing current liabilities. The Valuation Expert independently modified the balance sheet and financial forecast on this basis.

We deem the estimation of necessary liquidity by the Company's Management Board to be comprehensible. In fact, recent developments relating to the coronavirus crisis have demonstrated that a minimum liquidity in the amount of one month's revenues is by no means too generous. In the course of our audit, we were able to verify the balance sheet forecast and financial projection which was prepared on this basis without objection.

The Valuation Expert's balance sheet forecast includes an estimate of distributions. The Company's forecast does not reflect the appropriation of earnings. In his balance sheet forecast, the Valuation Expert assumed a distribution rate of 30.0%, based on the Company's planned distribution policy. Since retained earnings are notionally attributed directly to shareholders even in the Detailed Forecast Period, this procedure is followed in the balance sheet forecast and financial projection as well.

Interest-bearing liabilities largely consist of long-term bank loans and lease liabilities, as well as pension reserves. Based on the integrated balance sheet forecast and financial projection, total interest-bearing liabilities will decrease at first and then increase slightly. Interest-bearing liabilities will average € 52.2 million over the Detailed Forecast Period. Based on the calculations which have been performed, they are expected to average € 59.0 million in the perpetual annuity period.

The Valuation Expert calculated net interest income based on the average interest rate for the specific type of exposure (1.7%) and the interest rates used in the Company's accounting for lease liabilities (4.3%) and pension reserves (0.6%). An interest rate of 0.01% was assumed for liquid funds not necessary for operations as of 31 December 2019. Consistent with the valuation assumptions, no interest was calculated for liquid funds necessary for operations.

In the course of our audit, we have verified the interest rate conditions used in calculating the (minimal) interest income and interest expenses without objection. In estimating future interest rates on debt, it should also be kept in mind that interest rates on safe investments have been down lately, but at the same time, risk premiums on corporate bonds have increased significantly. Accordingly, using an exposure-specific debt interest rate derived from the loan portfolio as of 31 December 2019 and present capital market conditions is not objectionable, in our view. It should also be pointed out that companies are increasingly being charged custodial fees on their liquid funds. Accordingly, the assumption that liquidity necessary for operations will earn no interest is not objectionable.

On this basis, we consider the procedure followed by the Valuation Expert in calculating net interest income to be appropriate, on the whole.

gc) <u>Corporate taxes and the earnings share of minority interests</u>

The Valuation Expert calculated corporate taxes based on estimated pre-tax earnings in accordance with IFRS, modified for the purposes of the valuation.

When deriving the tax base from pre-tax earnings, the Valuation Expert had to eliminate non-deductible depreciation arising from purchase price allocation. In calculating the tax base for entities engaged in a single-entity tax relationship, the Valuation Expert also considered the fact that, in accordance with § 8b (5) of the Corporate Tax Act, distributions in the amount of 5% from subsidiaries which are not part of the single-entity tax relationship are not tax-exempt and are therefore subject to double taxation. The Valuation Expert took into account the tax loss carry-forward existing on 31 December 2019 in calculating the tax base for First Sensor Corp. Future tax savings from the amount remaining as of 31 December 2022 are accounted for in the form of annuity equal to the present value of the remaining amount.

Given the variety of trade tax multipliers in Germany, tax bases are subject to an aggregate nominal tax rate ranging from 27.7% (Oberdischingen) to 33.0% (Munich). Nominal tax rates for foreign Group companies lie in a range from 21.7% (Netherlands; tax rate cut as of 2021) to 29.8% (Canada).

On average, First Sensor Group's effective tax rate for earnings in the Detailed Forecast Period, determined in accordance with IFRS, is between 29.1% and 29.6%. The effective tax rate used for the perpetual annuity period is 30.0%.

The Valuation Expert's calculation of corporate taxes is not objectionable. We were able to verify the underlying data, ensure that the necessary assumptions are plausible and reproduce the calculation mathematically. For the sake of simplicity, decided not to include non-deductible expenses and additions to taxable income in the calculation. This choice is not objectionable from the viewpoint of outside shareholders.

The earnings share of minority shareholders relates to First Sensor Scandinavia AB and First Sensor Mobility GmbH. Minority interests are accurately calculated based on the Company's Projection.

gd) Distributions and personal income taxes

In determining the objective enterprise value for the Detailed Forecast Period in accordance with IDW S 1, it is to be assumed that the earnings which are actually available for distribution with due regard for the company concept which is documented as of the valuation date and legal restrictions will be distributed to shareholders. For the perpetual annuity phase, it is generally assumed that the company's distribution practices will be equivalent to those of the alternative investment, except insofar as the unique circumstances of the industry, capital structure or legal conditions need to be taken into account.

The Company's forecast does not include estimated distributions. The Valuation Expert has prepared a forecast of distributions based on additional information provided by the Company about its planned distribution policy. A standard distribution rate of 30% was applied for the Detailed Forecast Period.

We checked the plausibility of this distribution rate in light of First Sensor's past distribution practices. The distributions made for the years 2017 and 2018 serve to confirm this distribution rate. The distribution which is planned for Financial Year 2019 (€ 2.1 million) may imply a higher distribution rate, but results in Financial Year 2019 has been shaped by extraordinary effects which have weighed down earnings. On the whole, we therefore deem the distribution rate selected by the Valuation Expert to be plausible. A comparison with the distribution practices of the peer group companies also serves to confirm the distribution rate chosen by the Valuation Expert.

The Valuation Expert assumed a distribution rate of 50% for the perpetual annuity phase. This distribution rate is consistent with longstanding market practice, according to the Valuation Expert, and is based on the historically observed distribution rates of German companies.

The studies we consulted to verify this assumption confirmed that average distribution rates were between 40% and 60%, so that the distribution rate of 50% applied by the Valuation Expert lies in the middle of this range. On this basis, we deem the distribution rate assumed by the Valuation Expert for the perpetual annuity phase to be appropriate.

The Valuation Expert attributes retained earnings in the detailed forecast phase to shareholders directly, since there are no concrete options for use of these funds within the company's business model. Retained earnings in the perpetual annuity phase are also attributed directly to shareholders, consistent with standard valuation practice.

Dividends are generally reduced by the nominal tax rate (26.375%) to reflect the impact of shareholders' personal taxes. Since the distributions for Financial Years 2021 and 2022 can be made from the tax deposit account, the Valuation Expert did not deduct personal taxes for those years.

This approach is not objectionable. Given that tax-free distributions from the deposit account are subtracted from the cost of the shares for tax purposes, the originally tax-free distribution amount would result in a tax expense when the shares are sold. Accordingly, the distributions which the Valuation Expert treated as tax-free could have been taxed as the Company's effective tax rate.[193]

In deducting personal taxes on retained earnings, the Valuation Expert followed the Committee's recommendation and used an effective tax rate amounting to one half the nominal tax rate (13.1875%).

An effective tax rate amounting to one half the nominal tax rate conforms to the assumption of very long holding periods.[194] This assumption is not objectionable from the viewpoint of the outside shareholders.

In summary, we consider the course of action chosen by the Valuation Expert in the valuation of First Sensor with respect to distribution practices and associated taxation to be fair and appropriate in terms of the German Stock Corporation Act for the reasons explained above.

Audit conclusion

The net cash flow available to the shareholders of First Sensor is derived in an appropriate manner from the integrated forecast, with due regard to personal taxes. The assumptions made in this regard are appropriate in terms of the German Stock Corporation Act (AktG).

5. Discount rate

a) Risk-free rate

When determining the risk-free rate, it must be kept in mind that an investment in the company for which the valuation is being performed must be compared against a risk-free alternative investment with an equivalent term. Insofar as the valuation involves a company with an unlimited term, the rate of return on a risk-free capital market investment with an unlimited term would have to be used as the risk-free rate.

There is no such thing as a risk-free investment. In view of their virtually risk-free character, top-rated municipal bonds typically satisfy the criterion of a risk-free investment due to the fact that their issuer cannot go bankrupt. This is particularly true of German government bonds. Moreover, limiting consideration to domestic bonds is an appropriate method in general, particularly when determining the alternative investments available to German investors.[195]

The yields on publicly traded German government bonds provide a broad basis for the derivation of risk-free rates from market data. However, since government bonds are typically "coupon" bonds, characterised by a fixed annual cash flow with a defined expiration date, while cash flows from equities investments fluctuate and continue for an indefinite period of time, bond yields of this kind are not directly usable in business valuations. Rather, what are required are period-specific interest rates for individual payments, so-called zero-coupon bonds, or "zero bonds." Such "zero bond" yields are directly observable in the capital market only in isolated cases, but can be derived mathematically from observed coupon yields.[196]

[193] Cf. Bertram, WPg 2017, beginning on p. 150.
[194] Cf. Wagner/Saur/Willershausen, WPg 2008, beginning on p. 731.
[195] Cf. e.g. IDW, WPH Edition, *Bewertung und Transaktionsberatung*, ibid., Ch. A, Marginal No. 375
[196] Cf. e.g. IDW, WPH Edition, *Bewertung und Transaktionsberatung*, ibid., Ch. A, Marginal No. 377.

To date, however, German government bonds have a maximum duration of 30 years and explicit forecasts of German government bond yields beyond a term of 30 years are not available. Accordingly, an assumption has to be made with respect to risk-free yields after 30 years.[197]

In light of this situation, IDW S 1 recommends deriving the risk-free rate based on current interest yield curves.[198] The IDW Committee for Valuations and Business Administration elaborated upon this recommendation through the notes on calculation of the risk-free rate based on market data using interest yield curves which appeared in the IDW Industry News.[199]

Interest yield curves can be derived or estimated in a variety of ways. In accordance with the Valuation Committee's recommendations, Deutsche Bundesbank data or methodically comparable data of the European Central Bank should be used in all cases in order to ensure objectivity.

Deutsche Bundesbank has been estimating the interest yield curve since 1997 on a daily basis using the "Svensson method." This method involves directly estimating yields on zero-coupon bonds based on the observable current yields of government bonds and discount paper with residual terms of up to 30 years. When estimating yields on zero-coupon bonds for terms in excess of 30 years, the Committee's view is that the yields on zero-coupon bonds with a residual term of 30 years can generally be used as a perpetual estimate given the residual terms included in the exponential function developed by Deutsche Bundesbank and in view of general forecasting uncertainty.

When using the interest yield curve, the income for each year is generally discounted using the interest rate for the equivalent term. In the interests of practicability, a single risk-free rate is typically calculated based on the interest yield curve for the entire period. To this end, a single interest rate with an equivalent present value is determined from the interest yield curve depending on the length of the forecast period and the growth rate which has been selected for the subsequent perpetual annuity phase.

In order to smooth out short-term market fluctuations and possible errors in estimation, the Committee also recommends against using just the estimated yield on zero-coupon bonds as of the valuation date, but instead using averages, particularly for the long-term yields which are typically relevant in business valuations. These period-specific averages are to be derived from the yields observed in the three months prior to the valuation date.[200] In valuation practice, the risk-free rate is typically rounded up or down to the nearest quarter of a percent, a practice which is recognised by the courts.[201] In view of the continuing low-interest rate environment, the Committee has recommended since 2016 that risk-free rates of less than 1.0% which are derived from Deutsche Bundesbank's yield curve data should be rounded to the nearest tenth of a percent, rather than the nearest quarter of a percent.[202]

On 19 September 2012, the Committee adopted updated guidelines for how to account for the impact of the financial crisis when calculating the discount rate based on the CAPM/Tax CAPM. In the context of

197 Cf. e.g. IDW, WPH Edition, *Bewertung und Transaktionsberatung*, ibid., Ch. A, Marginal No. 377.
198 IDW S1 p 1, Marginal No. 117.
199 IDW-FN 2005, beginning on p. 555, IDW-FN 2008, beginning on p. 490 and IDW-FN 2013, beginning on p. 363.
200 Approving the calculation of averages, e.g. Higher Regional Court of Düsseldorf, Order of 6 June 2016, Case No. I-26 W 4/12 [AktE], AG 2017, beginning on p. 487
201 Cf. e.g. Higher Regional Court of Saarbrucken, Order of 11 June 2014, Case No. 1 W 18/13, ZIP 2014, beginning on p. 1784
202 Cf. IDW Life 2016, beginning on p. 731

these recommendations, the Committee also resolved to continue to engage in regular analysis of the factors affecting calculation of the discount rate at its meetings and to update the recommendations accordingly if those factors change.[203]

In light of the European Central Bank's continuing and recently redoubled employment of an expansive monetary policy ("quantitative easing"), which represents a unique European approach and for which there is currently no end in sight, the Committee discussed at its meeting on 22 October 2019 whether it makes sense to adhere without change to the basic method of deriving the risk-free rate based on the zero-coupon yield curve of German government bonds. In particular, the Committee discussed the suggestion presented above of continuing the curve into Year 31 using the spot rate for Year 30. The Committee ultimately decided to keep the existing method for the time being, while continuing to subject it to critical scrutiny.[204]

Determining the risk-free rate using Deutsche Bundesbank's yield curve data is regarded by the courts as an appropriate method which satisfies the interests of the various parties, since the reliance on hypothetical zero bond yields ensures the necessary objectivity.[205]

There is isolated criticism in the literature of the Committee's recommendation to use averages and rounding in order to reduce complexity and smooth out short-term market fluctuations, as well as possible errors in estimation.

Nevertheless, we deem the course of action described above to be appropriate, on the whole, for the reasons cited.

With regard to the rounding of the risk-free rate, it should be pointed out that the determination of a risk-free rate with several digits after the decimal point may falsely imply a degree of precision which is not attainable in business valuations in view of the uncertainty associated with forecasting future earnings and the fact that the market risk premium is typically expressed in rounded figures.

With respect to estimation of the risk-free rate for the period more than 30 years in the future, it should be pointed out that, in light of the continuing low-interest rate environment, valuation practitioners have been increasingly discussing methods of continuing the interest yield curve by estimating an "ultimate forward rate," which is arrived at by extrapolating from the most recent spot rate obtained from current market data.[206]

In the present case, the Valuation Expert followed the Committee's recommendations and calculated a standard risk-free rate of 0.04% before personal income taxes. This rate is based on an estimate of future average interest rates based on interest yield curve data from Deutsche Bundesbank for the three-month

---

[203] Cf. FAUB, IDW-FN 2012 p. 568.
[204] Cf. online minutes to the 136th meeting of the Business Valuation Working Group on 22 October 2019, https://www.idw.de/blob/120160/4e4a03c61aff8d8331d8920ca5b00c3c/ergebnisbericht-136-sitzung-faub-data.pdf, last viewed on 14 February 2020.
[205] Cf. e.g. Order of the Higher Regional Court of Düsseldorf of12 November 2015, Case No. I-26 W 9/14, AG 2016, beginning on p. 331.
[206] The European Insurance and Occupational Pensions Authority, Frankfurt am Main, last calculated the ultimate forward rate at 3.55% and set the applicable ultimate forward rate for 2020 at 3.75%.

period from 9 January through 8 April 2020. The Valuation Expert rounded the rate to the nearest tenth of a percent, so that the risk-free rate used in the valuation is 0.00% before personal income taxes.

For the conversion of period-specific interest rates into a single risk-free rate for all periods, the Valuation Expert applied a standard annual growth rate of 1.0%.

We have verified the Valuation Expert's calculations for determination of the risk-free rate. Our own additional calculation[207] shows a standard pre-tax risk-free rate of 0.0349%. In the present valuation case, rounding to the nearest tenth of a percent would have the effect of marginally increasing the present valuation. On the other hand, using a rate for the subsequent period which is higher than the interest rate for the last year for which current market data are available, contrary to the Valuation Committee's recommendation, would have the effect of significantly increasing the risk-free rate. This would result in a lower earnings value relative to the Valuation Expert's method.

In ascertaining whether the cash compensation is at least equivalent to the shareholder's share of the company's value at the time of the general meeting of 26 May 2020, it must be kept in mind that, in accordance with the method recommended by the Committee, the risk-free rate is generally to be determined based on the data for the three most recent months prior to that date. If there is a change in the valuation and the exit and recurring and/or compensation amounts, such a change need not necessarily involve a change in the risk-free rate: the possible impact of the other valuation parameters would also have to be examined in this case.

The risk-free rate of 0.0% which is used in the valuation applies regardless of whether the valuation is performed before or after personal taxes.

Audit conclusion

In summary, we find the after-tax risk-free rate used in the valuation, 0.0%, to be well-founded and appropriate.

b) <u>Risk premium</u>

ba) <u>Calculating risk</u>

An investment in a company carries a higher risk than an investment in public-sector securities. In order to create an equivalency of risk between the alternatives, the uncertainty with respect to future net cash flows can essentially be incorporated into the valuation as a discount from future cash flows or added as a premium to the discount rate.

The risk premium method, which is typically applied nationally and internationally, has the advantage of being based on empirically observable practices. Regardless of which form and shape a risk/benefit function assumes in theory, the risk premium method is capable of reflecting market-oriented practices in the

[207] Derivation of the standard risk-free rate using data points for 16 January through 15 April 2020 based on the expected net income of First Sensor, with adjustments for the purposes of the valuation, and a growth rate of 1.0%.]

determination of risk premiums. The risk premium method is consistent with IDW S 1 and the method typically applied in valuation practice.

Determination of the risk premium generally depends on the shareholder's risk preference. In a case where a large number of shareholders are involved, however, it is not possible to ascertain their individual risk preference. As a result, it is typical when performing objective business valuations to rely on capital market pricing models in order to ascertain the risk premium and to derive the risk premium directly from the capital market. This assumption makes it possible to describe the risk assessment of a large number of shareholders in the valuation model, which is reflected in the share price through supply and demand.

Since the company for which the valuation is being performed generally differs from the companies for which the historical risk premiums were measured given its specific risk structure, the risk premium has to be adjusted to account for these differences. The company-specific risk premium should reflect both operating risk, which is based on the nature of the company's operations, and capital structure risk, which is affected by the company's debt ratio.

The IDW S1 standard explicitly refers to the CAPM as well as the Tax CAPM, which supplements the standard CAPM by taking into account the impact of personal income taxes, for the determination of discount rates in business valuations based on theoretical capital market models.

In the CAPM and the Tax CAPM, the risk premium is determined by multiplying the average market price for assuming risk in the capital market (the market risk premium) by the company-specific risk (beta factor). Market risk is defined as the difference between the rate of return from the shares of a group of publicly traded companies[208] and the rate of return from a virtually risk-free capital market investment (the risk-free rate). Individual company risk is measured by the beta factor, which represents the covariance between the fluctuation in the rate of return of an individual stock and that of the general market. In other words, it describes the sensitivity of one stock's performance to the performance of the underlying market portfolio. If, in any individual case, the risk associated with the individual company corresponds to the risk of the stock portfolio, then the discount rate equals the portfolio's rate of return.

The use of the CAPM for the determination of risk premiums in business valuations is not uncontroversial in the literature and case law. In fact, use of the CAPM is rejected in certain isolated judgments, citing the numerous fundamental concerns about the model. To support their view, opponents of the CAPM argue that the capital market, due to its incomplete nature, cannot supply reliable information as to the future scope of risk of any given company.

Despite all criticism, the CAPM continues to be the preferred model for the determination of risk premiums in accordance with the prevailing view in valuation literature and practice.[209] This conclusion is also drawn in almost all cases in the recent case law.[210]

208 Consolidated in the form of a market index.
209 Cf. Wagner/Jonas/Ballwieser/Tschöpel, WPg 2004, beginning on p. 889.
210 Cf. e.g. Higher Regional Court of Düsseldorf, Order of 30 April 2018, Case No. 26 W 4/16 [AktE], source: https://www.justiz.nrw.de/nrwe/olgs/duesseldorf/j2018/26_W_4_16_AktE_Beschluss_20180430.html, last viewed on: 9 January 2019; Higher Regional Court of Frankfurt am Main, Order of 5 February 2016, Case No. 21 W 69/14, AG 2016, beginning on p. 588.; Higher

Furthermore, the Higher Regional Court of Frankfurt am Main confirms that the CAPM is superior to free estimation of the risk premium if only due to the greater transparency of the former method, stressing that the CAPM is currently the most important model for determining risk-appropriate capital costs.[211] The Higher Regional Court of Düsseldorf had already designated the CAPM as the "state of the art," also laying particular stress on the objectivity and verifiability of this method.[212]

Audit conclusion

For the reasons cited above, we deem it appropriate for the risk premium to be determined using the CAPM or Tax CAPM in the case of this valuation as well.

bb) <u>Market risk premium</u>

The market risk premium can be determined for future periods directly or based on an analysis of historical capital market data. Although calculation based on future estimates directly[213] has the theoretical advantage of being based on expected payments and current prices, this method has yet to become fully accepted in practice.[214]

Through 2012, valuation practitioners have derived market risk premiums entirely, or at least primarily, based on historical market data. The question as to which of the many available capital market studies recording the historical yields of risky securities and comparing these yields to (virtually) risk-free capital market investments[215] represent a suitable basis for estimating the expected future market risk premium has for years been a subject of controversy in the literature and case law. There is also controversy surrounding the question as to how data for past periods should be adjusted to present conditions.

Above all, the controversy involves the following questions relating to methodology:

- composition of the market portfolio of risky securities; selection of a reference index, particularly the question as to whether this index should reflect national or global conditions;
- measurement of the comparative yields of (virtually) risk-free capital market investments;
- observation period: validity and statistical meaningfulness with respect to the start and end points, as well as the length of the period;
- condensation of observed yield differences into a mean value: use of arithmetic or geometric mean, alternative methods or a combination of various methods;
- impact of shareholders' personal taxes: conversion of observed pre-tax yields into after-tax yields, including questions relating to the holding period for the shares;
- application of events observed in the past to future periods: assumption that market risk premiums or total yields will remain constant over time and adjustments to account for expectations with regard to future trends and unique capital market conditions.

Regional Court of Düsseldorf, Order of 12 November 2015, Case No. I-26 W 9/14, ibid.; Higher Regional Court of Karlsruhe, Order of 23 July 2015, Case No. 12a W 4/15, AG 2016, beginning on p. 220; Higher Regional Court of Düsseldorf, Order of 25 May 2016, Case No.. I-26 W 2/15 [AktE], BeckRS 2016, 21367, Marginal No. 58.

211 Cf. Order of 2 May 2011, Case No. 21 W 3/11, http://www.lareda.hessenrecht.hessen.de/lexsoft/default/ hessenrecht_ lareda.html#docid:4507881, last viewed on 14 February 2020.

212 Cf. Higher Regional Court of Düsseldorf, Order of 27 May 2009, Case No. I-26 W 5/07 (AktE), WM 2009, beginning on p. 2220.

213 E.g. by surveying experts or using models for the estimation of implicit capital costs.

214 Cf. Franken/Schulte in Fleischer/Hüttemann, *Rechtshandbuch Unternehmensbewertung*, 2nd ed., 2019, § 6 beginning with Marginal No. 45.

215 For a comprehensive overview of the empirical data concerning market risk premiums in Germany and worldwide, cf. e.g. Wollny, *Der objektivierte Unternehmenswert*, 3rd ed., Herne 2018, beginning on p. 557.

We do not expect these questions to be convincingly resolved in the foreseeable future in such a way as to settle all controversies.

In light of this situation, and in an effort to standardise valuation practice, the IDW Committee for Valuations and Business Administration has been issuing recommendations since December 2004 concerning the amount of the market risk premium which is to be used in business valuations, both before and after personal taxes. The Committee's recommendations concerning the market risk premium, like those of IDW as a whole, are routinely heeded by auditors and valuation practitioners and in the accounting of the companies they audit. Since the interests of majority shareholders in accounting questions tend to differ from those in matters relating to the compensation of squeezed-out minority shareholders, we believe that it safe to assume that the Committee's recommendations take these various interests into account and that they are generally balanced.

In recent cases, the courts have also deemed it appropriate to follow the Committee's recommendations, pointing out that the Committee is an expert committee comprised of auditors engaged in business valuation. They have also noted that there is no indication that deviating from these recommendations would result in "more accurate" valuations.[216]

In summary, the Committee's recommendations concerning the amount of the market risk premium (before and after personal taxes) have changed as follows over time:[217]

Marktrisikoprämie	Datum der	Vor persönlichen Steuern			Nach persönlichen Steuern		
Empfehlungen des FAUB	Empfehlung	Bandbreite		Mittelwert	Bandbreite		Mittelwert
Halbeinkünfteverfahren	10.12.2004	4,00%	5,00%	4,50%	5,00%	6,00%	5,50%
Abgeltungssteuer	29.11.2007	4,50%	5,50%	5,00%	4,00%	5,00%	4,50%
Niedrigzinsumfeld	19.09.2012	5,50%	7,00%	6,25%	5,00%	6,00%	5,50%
Nullzinsumfeld	22.10.2019	6,00%	8,00%	7,00%	5,00%	6,50%	5,75%

Quelle: Eigene Darstellung

The Committee's recommendation of 10 December 2004[218] was based primarily on the observation of historical market data, but even this recommendation included an adjustment in the form of a discount to account for expected market changes in the future.

In its recommendation of 29 November 2007,[219] the Committee estimated the impact on domestic market risk premiums which would be caused by the substantial changes in the taxation of capital gains, interest and dividends in Germany in connection with adoption of the flat tax. Since the available historical capital market data from before introduction of the changes were no longer relevant, the Committee moved even further away from its reliance on historical capital market data for measurement of the market risk premium.

216 Cf. Higher Regional Court of Frankfurt, Order of 26 January 2017, Case No. 21 W 75/15, juris Marginal No. 108, and with the same conclusion e.g. Higher Regional Court of Düsseldorf, Order of 6 April 2017, Case No. I-26 W 10/15, ZIP 2017, beginning on p. 1157.
217 Disregarding the recommendations which were issued for a transitional period.
218 Cf. online minutes to the 84th meeting of the Business Valuation Working Group on 10 December 2004, https://www.idw.de/blob/41138/ 0e7b1e9be3678913d684a314b64e96cd/kurzbericht-aku-84-sitzung-data.pdf, last viewed on 14 February 2020.
219 Cf. online minutes to the 95th meeting of the Business Valuation Working Group on 29 November 2007, https://www.idw.de/blob/41084/ 2953225b8794b951b3342babf0cb9429/ergebnisbericht-095-sitzung-faub-data.pdf, last viewed on 14 February 2020.

In its recommendation on 19 September 2012,[220] the Committee observed that the capital market situation at the time was not in line with the historical average due to the fact that yields on long-term German government bonds were extraordinarily low in a historical comparison, while shorter-term yields were actually negative. At the same time, it stated that the long-term trends which had been assumed until then in forecasting market risk premiums had been overshadowed by other factors. The Committee found that the financial market crisis had altered the parameters entering into the forecast of market risk premiums, particularly risk tolerance, so that higher market risk premiums were justified relative to previous years.

In the Committee's view, market surveillance and capital market studies, as well as ex-ante analyses based on forecasts by financial analysts and rating agencies concerning "implicit" market risk premiums, support the position that equity yields, and the market risk premiums derived from those yields, should be placed at the upper edge of the historical range. The Committee noted that this view is confirmed if forecasts based on an analysis of historical data are supplemented by considerations with regard to the development of inflation-adjusted equities yields.[221]

The Committee also resolved on 19 September 2012 to continue to analyse the factors affecting derivation of the discount rate at its meetings and to update the recommendation accordingly in the event of changes. At every meeting since then, the Committee has examined whether there has been a change in the capital market situation which induced it to extend the range of its recommendation.

In light of what it called the "unique" situation which currently exists, in which the yield curve calculated as described above[222] has been in the negative range for nearly the entire 30-year period prior to the date of the Committee's most recently published recommendations on determining the cost of capital (22 October 2019) so that the standard risk-free rate derived from this curve was effectively zero percent for the first time and threatened to turn negative in the foreseeable future, the Committee once again adjusted its recommendations concerning the amount of the market risk premium.[223]

If the previously recommended range for the pre-tax market risk premium (5.5% to 7.0%) is used, applying the method of deriving the risk-free rate which is still regarded as appropriate would produce a risk-free rate of around zero percent, meaning that the total expected return for valuation purposes would be 5.5% through 7.0%. Examining the parameters used in its pluralistic approach,[224] the Committee has tried to determine whether this result is defensible in light of recent observations.

In the end, it found that, while analyses have pointed to a slight decrease in total returns, particularly in the short period since 2012/13, this decrease is out of proportion to the decrease in yields on German government bonds. It noted that a cautious overall assessment of all these analyses would place the total

---

[220] Cf. *Hinweise des FAUB zur Berücksichtigung der Finanzmarktkrise bei der Ermittlung des Kapitalisierungszinssatzes in der Unternehmensbewertung*, FN-IDW 2012 p. 568.

[221] The analyses and further considerations underlying the Committee's recommendations are explained in greater detail in the following articles, which directly precede or follow the recommendation: Zeidler/Tschöpel/Bertram, CFB 5/2012, beginning on p. 70; Wagner/Mackenstedt/Schieszl/Lenckner/Willershausen, WPg 2013, beginning on p. 948; Bertram/Castedello/Tschöpel, CF 2015, beginning on p. 468.

[222] Cf. Section D.IV.5.a), beginning on p. 77.

[223] Cf. online minutes to the 136th meeting of the Business Valuation Working Group on 22 October 2019, https://www.idw.de/blob/120160/4e4a03c61aff8d8331d8920ca5b00c3c/ergebnisbericht-136-sitzung-faub-data.pdf, last viewed on 14 February 2020.

[224] Historical equities yields, inflation-adjusted long-term equities yields and implicit cost of capital based on ex-ante analysis.

nominal rate of return in a range from 7% to 9%, a conclusion which is supported by recent studies conducted by Deutsche Bundesbank.

On this basis, the Committee raised its recommendation for the pre-tax market risk premium from 6.0% to 8.0%. It noted that, in doing so, it was staying towards the lower edge of the range of observed total yields, taking into account the possibility that this number might decrease slightly over time. Converting these figures into a world after personal taxes, the recommendation for the after-tax market risk premium was adjusted slightly as well, to a range from 5.0% to 6.5%.

After the previous recommendation was issued (19 September 2012), there was criticism from several quarters claiming that this recommendation was not sufficiently well-founded. In particular, critics charged that the Committee failed to specify a specific source for the derivation of market risk premiums or a clear mathematically reproducible method for its recommendation.[225]

In a more recent publication,[226] the authors of the recommendation, including the Committee Chairman and two other members of the Committee, responded to this criticism by disclosing and explaining the analyses and calculations underlying the Committee's recommendation concerning the market risk premium, as presented below:

The further statements in the article by Castedello et al are preceded by a detailed explanation as to why the capital market situation which was observed upon derivation of the recommendation can be described as unusual with respect to assessment of the parameters of the discount rate for the purpose of business valuations, and why this is still the case.

With a risk-free interest rate derived from current market conditions, the Committee notes that the unusually low yields on fixed-interest federal securities relative to historical averages[227] would result in total yield expectations which are out of line with empirically observable conditions in the capital market if the Committee's previous quantitative recommendation concerning the market risk premium, which is based primarily on a long-term historical analysis,[228] were to be adopted unchanged.

Unlike the market risk premium, total yields are observable in the capital market. However, there is no investment instrument like government bonds from which a direct estimate of total yields can be derived. Accordingly, an indirect estimate is required, for which several conceptual approaches are available. Since each of these approaches has its strengths and weaknesses and none is superior to the others, the Committee takes a pluralistic approach in order to assume the broadest possible perspective. Accordingly, it is not possible to cite a single definitive source or an algorithm which is applicable in every case.

In the Committee's view, the results of three different methods of analysis indicate that total yields have not decreased to the extent that would be suggested by the decrease in the risk-free interest rate if it is

---

[225] Cf. e.g. Rowoldt/Pillen, CF 2015, beginning on p. 115.
[226] Cf. Castedello/Jonas/Schieszl/Lenckner, WPg 2018, beginning on p. 806.
[227] This circumstance can be explained by the combination of a sovereign debt crisis, the flight of capital into remaining safe investments and an unparalleled "easy money" policy which was adopted in an effort to overcome the sovereign debt crisis.
[228] In which the present capital market situation is heavily underrepresented.

assumed that the market risk premium is unchanged. Rather, the Committee states that a comprehensive analysis supports the view that a higher market risk premium should be assumed relative to earlier analyses.

The authors describe the results of the following three forms of analysis as indications that the market risk premium has increased:

- ex-post analysis of real historical yields and market risk premiums derived from average real equities yields;
- ex-ante analysis of the implicit cost of capital;
- the CAPM without risk-free borrowing.

Ex-post analyses of real historical yields indicate that the so-called "historical" approach, according to which the market risk premium has remained constant over time, cannot explain the development of market yields as of 2012. These results support the view that the "total market return" approach, according to which total yields remain constant over time or stay within a corridor in the short and medium terms, may be a superior method, at least for today's unusual capital market situation, which has continued for a long time. A regression analysis of real market yields over 30-year investment periods also give no indication that real yields decrease over time. Accordingly, given the low risk-free rates, it can be inferred that the market risk premium has increased. Using the total market return approach, an expected market risk premium of about 7% (geometric mean) or around 10% (arithmetic mean) can be derived from real equities yields over an extended investment period through a retrograde analysis.

The advantage of ex-ante analysis over ex-post analysis is that it, like the risk-free rate, is based on current capital market data. Moreover, this method of determining a company's capital costs, the denominator in the valuation equation, is highly compatible with the method for determining and checking the plausibility of the numerator in the valuation equation. Accordingly, since October 2017,[229] the Austrian counterpart of IDW's Valuation Committee has been recommending that the implicit capital costs method should be applied exclusively for calculation of the market risk. Independently of the methods chosen in individual cases for the determination of implicit capital costs, the available studies have, on the whole, concluded that implicit market risk premiums have increased steadily since 2010.

Modifying the CAPM so as to abandon the unrealistic assumption that investors can borrow money at the risk-free rate also indicates that, given the increased risk aversion which is demonstrated by the spread between the risk-free rate and the inter-bank interest rate, the equities yields demanded by investors are currently between 0.5% and 1.0% higher than those which would result if yields were derived in the traditional manner, by taking government bond yields and adding the average historical market risk premium.

Due to tax deferral effects for capital gains, conversion of the pre-tax market risk premium, derived from historical data as explained in detail above, into an after-tax market risk premium depends on the assumptions which are made concerning the holding period, the market's distribution rate, the taxation of

[229] Cf. Castedello/Jonas/Schieszl/Lenckner, WPg 2018, p. 820; KFS/BW 1 E7, Marginal No. 4.

capital gains in the Detailed Forecast Period and the relationship between market yields and the risk-free rate.

In Germany's current tax system, featuring the flat tax, it is possible to derive an after-tax market risk premium between 0.5 and 1.5 percentage points below the Committee's recommended range for the pre-tax market risk premium.

Ideally, a pre-tax market risk premium which is rounded to the nearest quarter of a percent would correspond to a lower after-tax market risk premium which is likewise rounded to the nearest quarter of a percent. In converting these figures, which are not specified by the Valuation Expert in each case,[230] necessary rounding is acceptable provided the conversion produces plausible results.

Use of the value at the middle of the range recommended by the IDW Valuation Committee on 19 September 2012 for the after-tax market risk premium (5.5%), which is analysed in detail above based on a recent journal article, has also largely met with approval from the courts.[231] The courts have yet to rule on any cases in which the valuation opinion incorporated the recent adjustment to the Committee's recommendation concerning the amount of the market risk premium (22 October 2019; middle value: 5.75%).

The Valuation Expert considers the centre of the range suggested by the Committee for the after-tax market risk premium to be appropriate in the present case, although this value is towards the lower end of the range of market risk premiums based on empirical data. He therefore set the after-tax market risk premium at 5.75%. With a distribution rate of 50%, this comes out to a pre-tax market risk premium of 7.17%, which also falls in the middle of the Committee's recommended range for the pre-tax market risk premium.

The Valuation Expert explains his decision with regard to selection of the market risk premium by pointing out that basic conditions in the capital market continue to support the recommendation issued by the Committee in October 2019. In particular, he cites the following observations and conclusions:

- yields on long-term German government bonds are around zero percent, lower than those of government bonds in other EU member states, and are actually negative after adjusting for inflation;
- the theory that the total expected return (the total market return method) has been relatively constant, moving in a narrow corridor, is supported by individual empirical observations;
- simplified methods which have been applied in the past to derive total expected return for valuation purposes, i.e. the return on an attractive alternative investment, using a constant market risk premium based on historical average values are no longer appropriate;
- implied risk premiums for equities are currently higher than where they were prior to the banking and sovereign debt crisis;
- market surveillance and capital market studies, as well as ex-ante analyses of implicit risk premiums based on forecasts by financial analysts all support staying towards the upper edge of the range of historically measured equities yields and the risk premiums which are derived from those yields;

[230] Market risk premium before personal taxes or market risk premium after personal taxes.
[231] Cf. e.g. for rulings by superior courts: Higher Regional Court of z Düsseldorf, Order of 30 April 2018, Case No. 26 W 4/16 [AktE], https://www.justiz.nrw.de/nrwe/olgs/duesseldorf/j2018/26_W_4_16_AktE_Beschluss_20180430.html, last viewed on 14 February 2020; Higher Regional Court of Frankfurt am Main, Order of 26 January 2017, Case No. 21 W 75/15, DB 2017, p. 713, and of 29 January 2016, Case No. 21 W 70/15, BeckRS 2016, 4317, Marginal No. 65; Higher Regional Court of Hamburg, Order of 30 June 2016, Case No. 13 W 75/14, and of 18 September 2015, Case No. 13 w 44/14 (both not published).

- pre-tax market risk premiums significantly higher than 8.0% can presently be derived for publicly traded German companies based on capital market data.

We have performed a critical assessment of the Committee's arguments and the statements made by the Valuation Expert. In this context, we have also examined recent statements in opposition to the observations and conclusions cited by the Committee.

Contrary to the overwhelming majority of rulings by other superior courts, the Higher Regional Court of Munich has yet to accept an after-tax market risk premium of 5.5%, which would be at the centre of the range recommended by the Committee from September 2012 through October 2019. While it may typically be assumed that the Committee's recommended range would also be considered appropriate for a court's estimate of enterprise value, the increase in the recommended range by 1.0% has been the subject of controversy among economists and professional auditors given the long-enduring low-interest environment as a result of the financial crisis. In particular, the assumption that expected total returns have remained constant despite a significant decrease in the risk-free rate is controversial and has yet to be clarified in economic theory or in professionally recognized empirical studies. Accordingly, the competent Division of the Higher Regional Court of Munich has consistently used an after-tax market risk premium of 5.0%, i.e. at the lower edge of the recommended range, in all cases with valuation dates after the IDW raised its recommendation.[232]

Our findings indicate that it is true that the total market return method, which the Higher Regional Court of Munich refuses to accept without reservations, is not without controversy. The authors of a recent journal article conclude that the data they collected about implicit market returns for the period from 1 January 2008 through 31 December 2018 does not support the view that market returns have remained constant, but might indicate that the market risk premium has been stable.[233] After all, a decrease in implicit market returns has been observed in Germany as the risk-free rate has gradually decreased.

This conclusion is consistent with those of the Committee, whose analyses have found a slight decrease in total returns. Moreover, in our view, the regression lines derived by the authors of this article clearly demonstrate that total expected returns have not decreased as sharply as the yields on fixed-interest federal securities, which are unusually low by a historical comparison and have now dropped to lows which have never been seen before, a development which can be explained by the combined effect of the sovereign debt crisis, the associated flight into the remaining safe investments and the unparalleled easy money policies which have been adopted in an effort to manage the sovereign debt crisis.

The various studies cited in this article find an implied (pre-tax) market risk premium of 7.8% to 9.0% for the fourth quarter of 2018. Total expected returns changed only marginally over the course of 2019 and in early 2020 relative to 2018,[234] while the risk-free rate dropped by around one percent and is now 0.0%.

---

232 Cf. most recently, Higher Regional Court of Munich, Order of 20 March 2019, Case No. 31 Wx 185/17, AG 2019, beginning on p. 659.

233 Cf. Beumer/Jürgens, BewertungsPraktiker 2019, beginning on p. 71.

234 The implied market yield has increased significantly as a result of upheavals in the equities markets due to as yet unforeseeable economic consequences of the coronavirus pandemic. But given the fact that current analyst estimates do not yet fully reflect the decrease in corporate earnings which is to be expected as a result of the crisis, we expect the implied market yield to drop back to the level observed prior to the coronavirus pandemic.

In our view, this implies that the market risk premium has increased by one percent. [It is therefore understandable that the Committee has raised the upper edge of its recommended range for pre-tax market risk premiums by one percent, from 7.0% to 8.0%.

The Higher Regional Court of Munich has also cited the need for empirical evidence in support of the total market return method. In an effort to derive this evidence from observed historical data, Wollny has tried to draw conclusions about the future development of the market risk premium by carrying forward Stehle's data (compiled for the period from 1955 through 2003), which served as the basis for the IDW's first recommendation concerning the amount of the market risk premium. He concluded that, if the observation period were to be extended through 2013, the market risk premium before personal taxes would increase by just 0.30%, to 6.03%. Based on these findings, he concluded that an increase was not necessary, and he therefore adhered in practice to the previous market risk premium (after personal taxes) of 4.5%.[235]

The following objections can be made to Wollny's methodology and conclusions, in our view:

- The conclusion that the market risk premium is unchanged cannot be demonstrated using data for such a short period (2004-2013).
- At the very least, the results indicate that the market risk premium for this period (7.47%) is higher than the premium which was measured for the extended period which preceded it, 1955-2013 (5.73%).
- This period is no longer current and therefore does not reflect the significant continued decrease in the risk-free rate which has occurred since then.
- There are conceptual weaknesses regarding the use of this method for valuation purposes due to the fact that the risk-free rate for the period from 2004 through 2013 is derived using REXP, a "performance index," resulting in distortions due to increases in share prices.[236]

In our view, the objections cited above do not amount to evidence that the Committee's recent recommendations result in market risk premiums which are unduly high. However, we also lack clear evidence that the Committee's recommendations with respect to market risk premiums are appropriate, as the relationships presented above are still the subject of discussion in academia.

In our view, it would therefore be unwise to limit analysis to individual circumstances or models, such as historical market risk premiums alone, particularly in light of the current market environment, which is characterised by mounting micro- and macroeconomic uncertainty and disruptive developments. Given the overall context, the Committee's pluralistic approach is a far more suitable foundation for a balanced recommendation, in our view.

---

[235] Cf. Wollny, *Der objektivierte Unternehmenswert*, 3rd ed., 2018, beginning on p. 579.
[236] Cf. Popp, *WPg 2019*, beginning on p. 1222. The author attests that the other two studies cited there also have conceptual weaknesses for valuation purposes, particularly when it comes to derivation of the risk-free rate.

We therefore consider the Valuation Expert's decision to use an after-tax market risk premium of 5.75%, at the centre of the range recommended by the Committee (5.0% to 6.5%), to be appropriate.

Audit conclusion

For the reasons explained above, the after-tax market risk premium of 5.75% selected by the Valuation Expert in the middle of the range recommended by the IDW Committee for Valuations and Business Administration is appropriate.

bc) Beta factor

bca) Questions relating to methodology and application in practice

The estimated risk premium for a total market portfolio (market risk premium) must be adapted to suit the specific risk structure of the company for which the valuation is being performed. The relationship between general market risk and individual, company- and sector-specific risk is expressed by the "beta factor."

The beta factors which are derived from capital market data incorporate both the operational risks and the financing risks of the valuation object. It is common practice to begin by calculating an unlevered beta factor, which reflects the company's operational risks only. The impact of financing on the uncertainty of future cash flows is then taken into account by means of "relevering."

Calculation of a precise beta factor raises a large number of questions with regard to methodology and application in practice. Valuation practitioners have developed standards for some of these questions, and in the remaining cases, the selection has been whittled down to just a few sensible methods or, ideally, one preferred method. Nevertheless, binding standard methods cannot be defined as the leeway available to valuation practitioners remains broad in spite of these standards.

The fact that a certain amount of leeway is available is a good thing, in our view, as this allows valuation experts to vary their method of calculating beta factors based on their professional discretion and to adapt this calculation to the specific case so as to satisfy the principle of equivalency. However, the existing discretion must not be exercised in a one-sided manner. Accordingly, it is necessary to examine the impact when selecting individual parameters and applying various combinations so as to obtain an overview as to the range of conceivable results. It is also advisable to describe the method which is ultimately chosen to an adequate degree of precision.

The key questions relating to methodology and application in practice and the possible/typical solutions to these questions can be summarised as follows:

- Derivation based on fundamentals, historical data or future projections?
- National, inter-regional or global reference index, taking the form of a performance or price index?
- Observation period of five years, three years, two years, one year or a combination of multiple annual periods?
- Return interval: monthly, weekly or daily?
- Distortion-free calculation of share prices, measured by the liquidity of the shares;
- filtering based on statistical criteria such as coefficient of determination and t-test;

- forecast of future beta factors by taking historical raw beta factors and adjusting them using standardised adjustment procedures or based on independent expert assessment;
- consideration of capital structure risk (unlevering/relevering) to account for an independent or value-based financing policy (tax shield risk) and debt in danger of default or not in danger of default (debt beta);
- components and market value of net financial liabilities for unlevering/relevering.
- Beta factor for the valuation object or for a group of comparable companies ("peer group")?
- Qualitative and quantitative criteria for selecting possible comparable companies and condensing them into a peer group.

Derivation of beta factors using historical capital market data is the predominant practice among valuation practitioners. This method is also viewed as appropriate in the literature.[237]

Accordingly, the Valuation Expert calculated the beta factors based on historical data.

Since a perfect and complete market portfolio comprising all risky assets in the world, weighted by market value, does not exist and cannot be constructed, valuation practitioners instead tend to use national or international equities indices as an approximation of the ideal market portfolio. A general statement concerning selection of the suitable reference index cannot be made.[238] The index used should be a performance index.[239]

In order to give the valuation the broadest possible perspective, the Valuation Expert performed his analysis based on a common global index ("MSCI World") as well as local performance indices (like the "CDAX" in Germany) using the relevant local currency.

The most common observation periods and return intervals are five years/monthly, two years/weekly and one year/daily.[240] These combinations ensure that enough data points will be collected to allow for statistically significant conclusions. However, an objection to daily measurement of yields is that daily yields tend to have less favourable empirical properties and the beta factors which are derived on this basis fluctuate more sharply than those which are measured in longer intervals.[241] Accordingly, we have observed that the combinations five years/monthly and two years/weekly are by far the most common in valuation practice.

The Valuation Expert calculated beta factors for these two combinations in order to give the valuation the broadest possible perspective. In doing so, he took advantage of the respective advantages of both methods.

To measure the reliability of the calculated beta factors, the Valuation Expert relied primarily on liquidity criteria (analysis of trading volume/free float and bid-ask spread as an indicator of transaction costs), as

237 Cf. Dörschell/Franken/Schulte, *Der Kapitalisierungszinssatz in der Unternehmensbewertung*, 2nd ed., Düsseldorf 2012, p. 134.
238 Cf. Dörschell/Franken/Schulte, ibid., beginning on p. 149.
239 Cf. Dörschell/Franken/Schulte, ibid., pp. 156, 242 f.
240 Cf. Dörschell/Franken/Schulte, ibid., p. 158.
241 "Intervalling effect." See Dörschell/Franken/Schulte, ibid., beginning on p. 162 and the literature cited there.

well as the coefficient of determination and the t-test. In individual cases, he performed further analyses of price performance, returns and beta factors.

Valuation practitioners often subject historical beta factors ("raw beta") to standardised adjustments through the use of "adjusted beta" factors. Adjusted beta factors are comprised of the market portfolio beta (by definition= 1.0), with a weight of one third, and the raw beta factor, with a weight of two thirds. In economic terms, this approach is based on the idea that companies' systemic risk should approach the market average over time. Particularly in cases where the historical development shows particularly high or low risk, the question is raised as to whether historical betas should be used for future periods or whether an adjustment is required, e.g. use of adjusted beta factors, to better reflect future risk. In present case, the Valuation Expert has made no such adjustment.

In adjusting the levered beta factors for capital structure risk, the Valuation Expert assumed a value-based ("living and breathing") financing policy, which is a plausible assumption for a capital market-oriented company.

The Valuation Expert uses debt beta to account for the risk of default on debt to lenders in the course of unlevering. For this purpose, it calculates an average synthetic debt rating based on a method used by a ratings provider for the "semiconductors" industry. The debt beta for lenders is equal to the difference between the after-tax debt interest rate calculated in this manner and the after-tax market yield.

The Valuation Opinion also estimates the market value of net financial liabilities in the course of unlevering by taking the book values of non-core interest-bearing liabilities[242] and pension reserves and subtracting the book value of liquid assets.

The adjustment to account for First Sensor's capital structure risk ("relevering") was also performed by the Valuation Expert using the formula for a value-based financing policy and based on debt beta, since the cost of capital significantly exceeds the risk-free interest rate.

bcb) <u>Company-specific beta factor of First Sensor</u>

Since shares of First Sensor are publicly traded, a specific beta factor for First Sensor can be derived from the trading data. Accordingly, the Valuation Expert calculated and analysed the beta factor for First Sensor using S&P Global data for the aforementioned reference indices (local and global) and observation periods/return intervals (two years/weekly, five years/monthly).

As a result of his analysis, the Valuation Expert concluded that a decoupling from market trends in connection with the takeover offer has had the effect of distorting the historical price of First Sensor shares, and that the impact of capital market speculation also cannot be ruled out. He points out in this context that First Sensor's beta factor has fluctuated widely over time, making it impossible to derive a reliable and undistorted empirical beta factor from the trading data of First Sensor shares.

---

[242] Approximated by the assumption that also for the peer group companies a liquidity in the amount of the average turnover for one month must be kept as operationally necessary.

As a result, the beta factor he used for the valuation of First Sensor was not derived based on the company-specific beta factor, but rather was derived with the help of a peer group.

In the course of our audit, we have been able to verify the data underlying the above analyses without objection. Our analysis revealed that, at the time this analysis was performed, the rolling levered beta factor fluctuated from around 0.1 to 1.7 over a four-year period in all four measurements. Since we therefore find the Valuation Expert's conclusions to be comprehensible and well-founded, we are also of the opinion that the beta factor for the valuation of First Sensor should be derived from peer group data.

bcc) Selection of peer group companies

In cases where the valuation object's historical beta factor cannot be used for derivation of the future beta factor, as is true in the present case, it is necessary for the purposes of the CAPM, and consistent with typical practice, to identify companies with comparable risk positions for which relevant beta factors can be calculated (peer group).

Since other companies are not comparable with the valuation object in every respect, valuation practitioners generally try to include multiple companies from the relevant industry in their analysis and calculate the average value for this group in order to account for the fact that each individual peer group company is not entirely comparable with the valuation object. This approach also rests upon the idea that the risks and opportunities to which the valuation object and the peer group companies will be exposed in the future in their common industry will become more similar over time.

In searching for peer group companies, the Valuation Expert considered that the peer group companies must be largely comparable to the valuation object with respect to their risks and opportunities. Another consideration was that historical trading data for potential peer group companies must be available in a sufficient quantity and quality.

The Valuation Expert used two parallel methods of searching for suitable peer group companies and combined the results from each of these methods.

In the first method, the Valuation Expert itself identified 459 potential peer group companies by searching S&P Global for suitable industries and keywords (e.g. "Sensor"). In the second method, the Valuation Expert compiled a list of 93 publicly traded competitors mentioned in market studies. After eliminating double entries, the two lists were combined to create a "long list" of 511 potential peer group companies.

In addition, the Valuation Expert also checked whether other companies were classified as peer group companies in recent valuations of First Sensor[243] and cash-generating units of First Sensor[244] which were not included in the long list but may be regarded as sufficiently comparable. The peer groups compiled for the purposes of other valuations included a total of 13 additional companies which were not included

[243] The Fairness Opinion issued by Goldman Sachs Bank Europe SE, Frankfurt am Main, in connection with First Sensor's acquisition by TE Ltd.
[244] Impairment tests performed for accounting purposes on 31 December 2019.

in the long list. Upon closer analysis, however, it became evident that these companies are not to be regarded as sufficiently comparable to First Sensor.

The Valuation Expert condensed the long list of 511 companies by applying qualitative[245] and quantitative[246] filters, to create a "short list" of 70 companies. A more detailed analysis focusing on the comparability of these companies' business activities ("business fit") based on the business description in S&P Global, annual reports and other publicly available information (qualitative criteria), as well as financial performance indicators, particularly concerning segments, products and regions (quantitative criteria), ultimately revealed that 60 of the companies are not sufficiently comparable to First Sensor in the Valuation Expert's view. First Sensor itself was also eliminated from the group for the reasons mentioned above.[247]

As a result of his specific analyses, the Valuation Expert considers only the nine companies[248] which are mentioned and correctly described in the Valuation Opinion to be sufficiently comparable to First Sensor. These nine companies therefore comprise the final peer group which the Valuation Expert used to calculate the beta factor for the valuation of First Sensor.

In the course of our audit, we were able to reproduce the derivation and gradual elimination of potential peer group companies without objection. We also consider the selection criteria set by the Valuation Expert to be appropriate. We therefore consider it appropriate, in summary, to derive the beta factor for the valuation of First Sensor from the beta factors of the nine peer group companies.

The peer group includes seven sensor manufacturers which operate in several of First Sensor's target markets, and whose regional revenue distribution is comparable to that of First Sensor. After taking all circumstances into account, the Valuation Expert considers two additional companies to be comparable to First Sensor even though they do not operate primarily as sensor manufacturers. We find this assessment to be correct.

In the course of our own analyses and inquiries, we have identified five additional companies which, like those two companies, operate primarily as semiconductor manufacturers, but which also manufacture sensors and are otherwise largely comparable with First Sensor, in our view. As a result of our detailed discussions with the Valuation Expert about the composition of the peer group, we find it understandable that these five companies were not included in the final peer group given their gradually diminished comparability.

Nevertheless, and in light of the fact that compiling a peer group inevitably involves ambiguities and marginal cases, we performed additional calculations to verify the stability and reliability of the final peer

[245] Filters relating to Firs Sensor's target markets and its substantive operations in the sensor market.
[246] Profitability (exclusion of companies with negative EBIT).
[247] Cf. Section D.IV 5.bcb), beginning on p. 94.
[248] Including a company which was not included in the Valuation Expert's preliminary peer group but proved sufficiently comparable based on our intensive discussions with the Valuation Expert. However, the inclusion of this company in the final peer group has no impact on the result (the beta factor used by the Valuation Expert, as the rounded average of all calculations).

group's average beta factors, for which purpose we added these five additional companies to the peer group, for a total of 14 companies.

bcd) <u>Beta factor of First Sensor based on a peer group comparison</u>

Based on data for 8 April 2020, the four calculation methods which were applied by the Valuation Expert and presented in the Valuation Opinion result in levered beta factors ranging from 0.77 to 2.90 (individual values), 1.22 to 1.48 (mean values) and 1.27 to 1.33 (medians).

The unlevered beta factors, which were calculated using a debt beta of 0.26 are, for the most part, only slightly lower than the levered beta factors. The unlevered beta factors range from 0.75 to 2.24 (individual values), from 1.10 to 1.34 (mean values) and from 1.03 to 1.28 (medians).

The mean values and median values for the individual calculations have an average value of 1.14 (weekly over two years) and 1.25 (monthly over five years), and therefore round out to 1.2. As a result the Valuation Expert deems an unlevered beta factor of 1.2, at the middle of this range, to be fair and appropriate for the purposes of the valuation of First Sensor.

In the course of our audit, we were able to reproduce the data compiled by the Valuation Expert and the calculations he performed without objection. We also consider the methodology employed by the Valuation Expert to be appropriate.

Our own calculations, performed based on an alternative peer group with five additional companies for the purpose of providing an additional plausibility check, also give no reason to believe that the unlevered beta factor of 1.2 which is used for the valuation of First Sensor is inappropriate.

An unlevered beta factor of 1.2 exceeds the unlevered beta factor for the market as a whole by a not inconsiderable margin. We believe that this is easily justifiable on economic grounds in light of the strong growth in the sensor markets, which is expected to result in significant improvements in First Sensor's earnings.

The Valuation Expert adjusted the unlevered beta factor for calculation of the risk premium as part of the valuation of First Sensor AG to account for the company's expected future capital structure. As a result, the levered beta factor increases from 1.33 to 1.37 over the forecast periods. A levered beta factor of 1.41 is used for the perpetual annuity period.

Conversion of the unlevered beta factor of 1.2 into levered beta factors using the method presented above was performed in a mathematically accurate manner using appropriate methodology.

Audit conclusion

After evaluating the business model of First Sensor, we deem the beta factor which has been selected for the valuation of First Sensor to be appropriate in terms of the German Stock Corporation Act (AktG).

c) Growth discount

Future growth in net income results in part from retained earnings and their reinvestment within the company and, in part, arises organically due to price, volume and structural effects.

In the Detailed Forecast Period, potential growth is included in the company forecast and therefore in the net income forecasts, the individual components of which are forecast as nominal values. A growth discount is therefore unnecessary for this period.

In the perpetual annuity phase as well, the balance sheet and income statement items continue to change, as does the net cash flow to shareholders. This perpetual growth is essentially reflected by the growth discount in the discount rate calculation.

Retained earnings and sums notionally attributable to shareholders in the perpetual annuity phase represent a substantial percentage of the future growth of the Valuation Object. This growth as a result of retained earnings could also be represented in equivalent fashion by discounting additional distributions which are generated by retained earnings.

Assuming that First Sensor permanently earns the cost of capital, which reflects its risk and financing structure, the future growth in distributions corresponds directly with the value contribution of increases in value as a result of retained earnings. Accordingly, the majority of future operational growth, financed through retained earnings, is already taken into account through the direct attribution of the value contribution of increases in value.

Additional growth potential, e.g. temporary additional growth effects which are based on temporarily attainable excess returns as a result of specific market and industry conditions or specific features of the company, as well as inflation-related growth effects, are to be taken into account in the systematic procedure which has been presented for determining the growth discount.

However, the company-specific inflation-based growth effects differ from general economic indicators such as the general rate of inflation, which is measured based on the rate of changes in the consumer price index, or price trends in procurement markets. Accordingly, company-specific inflation-based growth effects are to be determined based on the way in which individual price changes in procurement markets affect each company, the company's ability to continually generate efficiency improvements and the company's ability to raise its own prices.

The Valuation Expert expects the Company's growth rate in the perpetual annuity period to be below the expected mid-term rate of inflation in Germany and Europe based on First Sensor Group's inflation-adjusted growth rate, the fact that First Sensor's large competitors have significantly higher scaling advantages and the fact that the industrial and automotive sectors are highly dependent on the performance of the general economy. On this basis, he estimated a growth rate of 1.0% (before personal taxes) and used this rate in his calculation of perpetual revenues and earnings.

The Valuation Expert applied a growth discount of 0.87% (after personal taxes) in deriving the discount rate to be used for discounting net cash flows in the perpetual annuity period.

In assessing the pre-tax growth discount used by the Valuation Expert (1.0%), it should first be pointed out, in our view, that First Sensor is earning no excess returns which could result in temporary additional growth effects. Accordingly, the growth discount is largely an expression of company-specific inflation-driven growth alone.

As part of our audit, we asked the Company to present us with analyses which can be used to break down growth effects into inflation-based and volume-based changes. First Sensor has explained to us, citing the figures for the most recently completed financial year (2019) and a comparison between revenues earned in that year and revenues earned in the previous year (2018), that the entirety of its revenue growth (3.9%) is largely attributable to volume and/or price mix effects. Based on a net price effect[250] of +0.7%, which is partially explained by favourable extraordinary effects in Financial Year 2019, the Company deems an inflation-based revenue growth rate of at most 0.5% to be realistic for the perpetual annuity phase. On this basis, an inflation-based revenue growth rate of around 1.0% is not objectionable, in the auditors' view.

This assessment is also based on the fact that substantial inflation-based growth is not expected in First Sensor's key target markets. Based on our analyses of market and competitive conditions, we deem it plausible that First Sensor's big competitors will take advantage of their scaling-based cost advantages to gain additional market share by cutting prices. It is also to be expected that manufacturers in the industrial and automotive sectors and their suppliers will try to compensate for decreasing revenues during economic downturns by reducing procurement costs.

The growth discount largely reflects inflation-based changes in earnings and net cash flows to shareholders. A revenue growth rate of 1.0%, with the growth discount also 1.0%, implies a growth rate for expenses of 1.0%. In view of the fact that increases in employee salaries will typically be at least as high as the general inflation rate, it may be assumed that prices for other production factors will increase by a rate of less than 1.0% and/or that price increases will be partially offset by efficiency gains.

In light of the individual considerations explained above, we deem a growth rate of 1.0% (before personal taxes) to be appropriate for the valuation of First Sensor in terms of the Stock Corporation Act.

To calculate the (net) growth discount from the (gross) earnings growth rate, the Valuation Expert deducted personal taxes. In doing so, it accounted for the fact that inflation-based increases in value are taxable as capital gains upon realization. Based on the assumption of long holding periods, it used a tax rate consisting of one half the nominal tax rate when deducting personal taxes.[251] We deem this method appropriate.

In summary, we consider the growth discount of 0.87% (after personal taxes) which was used for the valuation of First Sensor to be appropriate in terms of the Stock Corporation Act.

---

[250] Net effect of price increases and price decreases for all product sales.
[251] 26.375% * 50% = 13.1875%.

In explaining the growth rate he used in the valuation, the Valuation Expert also refers to the expected mid-term inflation rate in Germany and Europe. Empirical studies show that, on average, company-specific inflation-based growth rates are lower than the long-term target value defined by the European Central Bank for consumer inflation (just under 2.0%). Based on the mid-term (2024) inflation expectations for Germany (1.2%) and Europe (1.5%) presented as part of the market and competition analysis, and estimating average inflation-driven growth at around one half of the inflation rate, it is possible to derive a future growth rate of around 0.6% to 0.75% after adjusting for retained earnings. The pre-tax growth discount (1.0%) therefore lies above the range indicated by this plausibility check.

Insofar as it is argued in some parts of the literature that the (average) earnings growth of German companies should be set significantly higher based on statistical analysis, these sources generally fail to recognise the link described above between retained earnings and associated increases in value.

However, when comparing the growth discount applied in business valuations against corporate earnings growth rates which are determined using statistical analysis, it should be kept in mind that, in practice, companies routinely use retained earnings to finance (new) investments. These investments, in turn, have the effect of increasing future earnings. Accordingly, an empirical measure of earnings growth must include both inflation-based earnings growth and growth attributable to retained earnings.

In the earnings value method, net cash flows in the perpetual annuity period are comprised of earnings distributions/dividends and the contribution of increases in value. Since the contribution of increases in value is fully reflected by future dividend growth from retained earnings, the distribution/dividend growth rate which is reflected in the growth discount is essentially comprised only of inflation-based effects, which are associated with the specific inflation rate of the company which is the subject of the valuation in the procurement and sales markets.

In the present valuation, the pre-tax growth discount of 1.0% and the after-tax growth discount of 0.87% used by the Valuation Expert correspond to a perpetual earnings growth rate of 5.5% for First Sensor Group in the context described by Tschöpel/Wiese/Willershausen.[252]

$w = (1 - q) * R^{vSt} + q * \pi$ with

w	=	overall growth rate
q	=	distribution rate
R^{vSt}	=	levered cost of capital before income taxes
π	=	company-specific inflation rate

This value would be the suitable figure for comparison against the average earning growth rate for German companies.

The described impact of growth based on retained earnings is confirmed in an article[253] which is dedicated to analysing the causes of earnings growth. The authors of this article also conclude that inflation-driven

[252] Cf. Tschöpel/Wiese/Willershausen, WPg 2010, beginning on pp. 349 and 405.
[253] Schieszl/Bachmann/Amann, in: Peemöller (ed.), *Praxishandbuch der Unternehmensbewertung*, 6th ed., 2015, 3rd Chapter, Part G.

growth of corporate earnings in Germany ranges from 0.0% to 1.5%. Accordingly, the expected pre-tax growth rate of 1.0% would be classified as slightly above-average on this basis.

For classification of the growth discount used in the valuation, it should also be noted that the growth discounts which are typically used in valuations, and which have been confirmed in the case law, range from 0.0% to 2.1% based on an analysis of decisions by superior courts.

According to a recent study analysing 195 corporate valuations with valuation dates in the 2010-2019 period, the average perpetual earnings growth rate decreased from 1.31% to 0.80% between 2010 and 2019. The median growth rate in the years 2011-2015 decreased from 1.25% (2010) to 1.00% (2011-2015) and then to 0.75% (2016) before climbing back up to 1.00% (2017-2019).[254]

Audit conclusion

In summary, based on the considerations presented above, we find the (after-tax) growth discount of 0.87% applied by the Valuation Expert to be appropriate in terms of the Stock Corporation Act.

d) Discount rate overview

In summary, the discount rate is determined as follows:

First Sensor Ableitung des Kapitalisierungszinssatzes %	Plan 2020	 2021	 2022	TV 2023 ff.
Basiszinssatz vor persönlichen Steuern	0,00%	0,00%	0,00%	0,00%
Persönliche Einkommensteuer	0,00%	0,00%	0,00%	0,00%
Basiszinssatz nach persönlichen Steuern	**0,00%**	**0,00%**	**0,00%**	**0,00%**
Marktrisikoprämie nach persönlichen Steuern	5,75%	5,75%	5,75%	5,75%
Beta (verschuldet)	1,33	1,34	1,37	1,41
Risikozuschlag	**7,64%**	**7,72%**	**7,89%**	**8,09%**
Eigenkapitalkosten vor Wachstumsabschlag	**7,64%**	**7,72%**	**7,89%**	**8,09%**
Wachstumsabschlag				-0,87%
Eigenkapitalkosten nach Wachstumsabschlag	**7,64%**	**7,72%**	**7,89%**	**7,23%**

Quellen: Datengrundlage Bewertungsgutachter, S&P Global.

[254] Cf. i-advise, Study on German Valuation Practice, 6th ed. 2010-2019, hhttp://www.i-advise.de/de/wp-content/uploads/2020/03/I-ADVISE-Studie-zur-Bewertungspraxis-2019.pdf, last viewed on: 14 March 2020.

6. Derivation of enterprise value

a) Earnings value of core assets

The earnings value of the core assets of First Sensor as of 26 May 2020 is calculated as follows:

First Sensor Ertragswert betriebsnotwendiges Vermögen € Mio.	Plan 2020	 2021	 2022	TV 2023 ff.
EBIT	**10,3**	**17,3**	**28,2**	**35,7**
Finanzergebnis	-1,1	-1,0	-1,1	-1,2
EBT	**9,3**	**16,3**	**27,1**	**34,6**
Ertragsteuern	-3,3	-5,3	-8,0	-10,4
Ergebnis nach Ertragsteuern	**5,9**	**11,0**	**19,1**	**24,2**
Ergebnisanteil Minderheiten	-0,2	-0,4	-0,5	-0,6
Ergebnis nach Ertragsteuern und Minderheiten	**5,7**	**10,6**	**18,6**	**23,6**
Thesaurierung	-4,0	-7,4	-13,0	-11,8
Ausschüttung	**1,7**	**3,2**	**5,6**	**11,8**
Persönliche Steuern auf Ausschüttung	0,0	0,0	-1,5	-3,1
Ausschüttung nach persönlichen Steuern	**1,7**	**3,2**	**4,1**	**8,7**
Fiktive Zurechnung von Thesaurierung	4,0	7,4	13,0	11,8
Persönliche Steuern auf fiktive Zurechnung	-0,5	-1,0	-1,7	-1,6
Netto-Einnahmen	**5,2**	**9,7**	**15,4**	**18,9**
Barwertfaktor	0,9291	0,8624	0,7993	11,0624
Barwerte jeweils zum 31. Dezember des Vorjahres	**234,8**	**247,5**	**257,0**	**261,9**
Ertragswert betriebsnotwendiges Vermögen zum 31. Dezember 2019	**234,8**			
Aufzinsungsfaktor	1,0301			
Ertragswert betriebsnotwendiges Vermögen zum 26. Mai 2020	**241,8**			

Quellen: Datengrundlage Bewertungsgutachter, eigene Darstellung.

b) Non-core assets

The Valuation Expert did not identify non-core assets which require separate valuation.

No non-core assets requiring separate valuation came to our attention over the course of our audit as well. Based on the information provided to us, as well as our findings, the Company's real estate is used for business purposes. As a result, all the Company's real estate is to be classified as core assets in accordance with the functional criterion of classification. We have not identified any stocks of art objects or other items whose quantity exceeds the degree which is typically necessary for purposes of itemization or which are of substantial value. There is also no need to include liquid funds as separate non-core assets. In accordance with the financial projection, the liquid funds existing as of 31 December 2019 will be reduced to the level necessary for operations, and the funds will be used to finance investments in property, plant and equipment and net current assets and for the amortization of financial debt.[255]

Assets which valuation practitioners occasionally choose to represent as non-core assets were included by the Valuation Expert in net cash flows to shareholders rather than representing them as non-core assets. Specifically, this was the case for existing tax loss carry-forwards (€ 1.7 million) and the Company's tax deposit account (€ 19.7 million).

Audit conclusion

No non-core assets came to our attention over the course of our audit. In deriving the enterprise value of First Sensor, the Valuation Expert acted correctly in not adding non-core assets to the earnings value of core assets.

[255] Cf. Section **Fehler! Verweisquelle konnte nicht gefunden werden.**, p. 72.

c) Enterprise value

The enterprise value of First Sensor as of the date of the general meeting at which the resolution will be adopted (valuation date: 26 May 2020) conforms to the earnings value of core assets (€ 241.8 million). This comes out to around € 23.55 per share of First Sensor.

In the interests of simplicity, the Valuation Expert did not take into account the dilution effect of the options granted by the Company in calculating the enterprise value per share. This approach is not objectionable from the viewpoint of outside shareholders in First Sensor.

d) Comparison with liquidation value

The Valuation Expert performed a rough calculation to determine whether the liquidation of First Sensor would yield net proceeds in excess of the earnings value. The relevant considerations and the method used for derivation of the approximate liquidation value in each case are presented in the Valuation Opinion. The Valuation Expert chose not to include this calculation in the Valuation Opinion because the approximate liquidation value calculated by the Valuation Expert is well below the company's going concern value and therefore has no relevance for the valuation of First Sensor and for derivation of the value per share of First Sensor.

In the course of our audit, we checked the plausibility of the underlying assumptions, reconciled the starting figures and verified the calculations. In our view as well, calculation of the approximate liquidation value of First Sensor is a plausible approach. Calculation of the precise liquidation value of First Sensor is not necessarily due to the significant difference between the liquidation value and the company's value as a going concern.

e) Particular difficulties

No particular difficulties in terms of § 293e (1) Sentence 3 No. 3 of the German Stock Corporation Act (AktG) were encountered in performing the valuation of First Sensor.

7. Sensitivity analyses (may be moved and placed separately under the sections for exit compensation and recurring compensation)

a) Change in interest rates

The valuation is based on the information available as of the end of the period in which the valuation was performed (9 April 2020). If, during the time between completion of the valuation work and the date of First Sensor's general meeting at which the resolution is to be adopted (26 May 2020), i.e. the valuation date, events should arise which materially affect the valuation, the valuation would have to be adjusted accordingly. In the Valuation Opinion, a scenario analysis is presented which examines the impact on the net recurring compensation per share of First Sensor if the (pre-tax) risk-free rate differs from the one used in the present valuation.

The calculations examine possible changes in the risk-free rate (before personal taxes) of up to +0.5% and -0.5%. In performing these calculations, the Valuation Expert assumed, for the sake of simplicity, that all other valuation parameters and methods would remain unchanged ("ceteris paribus").

The Valuation Expert's calculation of the net recurring compensation per share of First Sensor, which we have reproduced without objection, is based on an enterprise value of First Sensor in the amount specified below:

First Sensor Szenariobetrachtung – Basiszinssatz (vor persönlichen Steuern) € Mio.	Unternehmenswert
0,5%	223,8
0,4%	227,2
0,3%	230,7
0,2%	234,3
0,1%	238,0
0,0%	241,8
-0,1%	245,7
-0,2%	249,7
-0,3%	253,8
-0,4%	257,9
-0,5%	262,2

Quellen: Datengrundlage Bewertungsgutachter, eigene Darstellung.

b) Entrepreneurial risk and growth

Valuation practitioners often perform sensitivity analyses with regard to two other key valuation parameters (unlevered beta factor and growth rate).

Based on our audit, we found that the beta factor used in the valuation and the growth rate used to derive perpetual earnings, i.e. the growth discount used by the Valuation Expert to calculate net cash flows in the perpetual annuity period, are both adequate in terms of the German Stock Corporation Act. In the course of our sensitivity analysis, we nevertheless varied these parameters in a range whose extremes represent the maximum defensible alternative approaches. Since there is a positive correlation between a company's growth and entrepreneurial risk, in the long term at least, the plausible combinations are highlighted in the table below.

On this basis, the enterprise value of First Sensor is determined as follows:

First Sensor – Unternehmenswert Sensitivitätsanalyse € Mio.		Wachstumsabschlag (vor persönlichen Steuern)				
		0,50%	0,75%	**1,00%**	1,25%	1,50%
	1,10	257,3	265,8	274,9	284,8	295,6
	1,15	241,8	249,4	257,5	266,3	275,8
Unverschuldeter Betafaktor	**1,20**	227,8	234,6	**241,8**	249,6	258,0
	1,25	215,0	221,0	227,5	234,5	241,9
	1,30	203,2	208,7	214,5	220,8	227,4

Quellen: Datengrundlage Bewertungsgutachter, eigene Darstellung.

Taking into account the aforementioned correlation between growth and entrepreneurial risk, and limiting our examination to plausible combinations, the sensitivity analysis presented above results in an enterprise value for First Sensor ranging from € 227.4 million to € 257.3 million.

8. Plausibility of the valuation

a) Comparative valuation

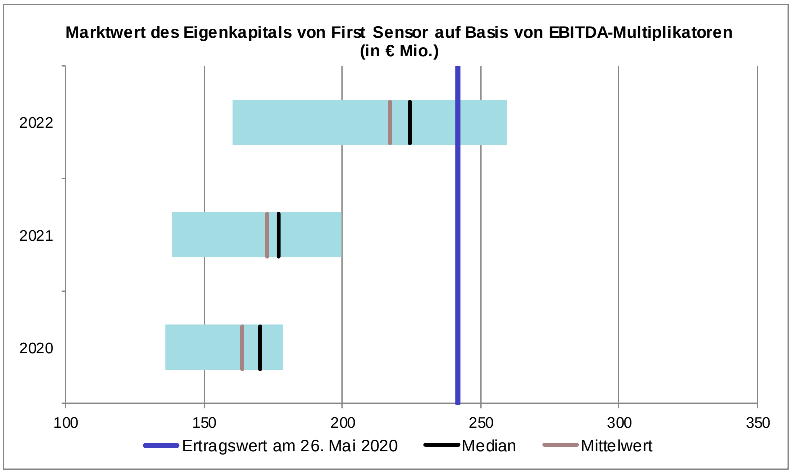
The Valuation Expert checked the plausibility of the (fundamental) valuation of First Sensor, which was determined in accordance with the earnings value method, i.e. decidedly on the basis of internal information and business management principles, based on public capital market data ("trading multiples"). The Valuation Expert understandably dispensed with the use of "transaction multiples" and derived the trading multiples using the peer group, which was also used to calculate the beta factor.

For the comparative valuation, the Valuation Expert calculated multiples based on the ratio of total enterprise value to EBITDA and EBIT for the various peer group companies. The multiples were calculated based on analyst EBITDA and EBIT estimates for Financial Years 2020-2022, which were provided by S&P Global. Estimates for subsequent years were not available in a sufficient quantity.

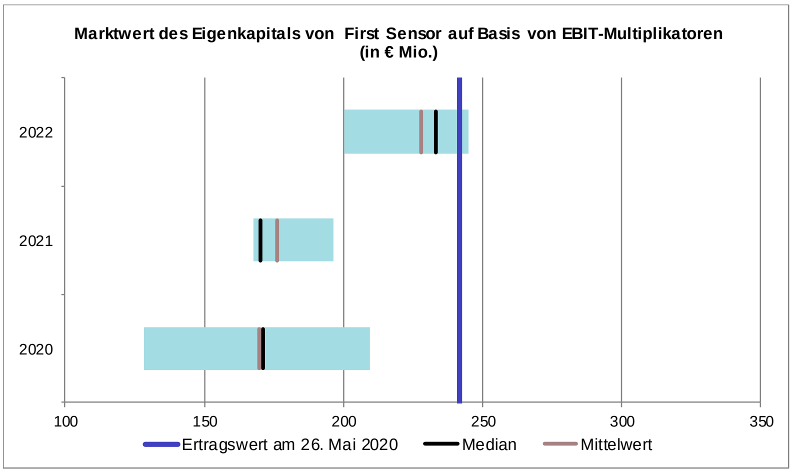
In order to account for the different accounting standards applied by the peer group companies, the Valuation Expert performed its analyses for two separate groups[256] based on differences in lease accounting. In order to prevent the comparison from being distorted by the application of different accounting standards, the Valuation Expert translated First Sensor's estimates (including estimates of relevant synergies) into the equivalent values under US GAAP in order to compare then against companies which perform accounting in accordance with US GAAP.

256 Accounting in accordance with IFRS and US GAAP (United States Generally Accepted Accounting Principles). The Valuation Expert previously excluded a peer group companies from its analysis because its balance sheet and income statement data was insufficiently comparable.

The graph below shows the value of First Sensor's shareholders' equity based on EBITDA multiples in comparison to the enterprise value determined using the earnings value method:



The graph below shows the value of First Sensor's shareholders' equity based on EBIT multiples in comparison to the enterprise value determined using the earnings value method:



The enterprise value of First Sensor, determined using the earnings value method (€ 241.8 million), is at the upper end of the ranges using multiple-based valuation. In the view of the Valuation Expert, this is particularly attributable to the fact that the implicit market risk premiums which are currently being observed on the capital market are higher than the after-tax market risk premium used in the earnings value method, 5.75%. We find this explanation plausible.

In the course of our audit, we were also able to verify the Valuation Expert's methodology and calculations, both substantively and mathematically, using "consensus estimates" from S&P Global without objection.

Based on the comparative market valuation performed by the Valuation Expert in the present case, there is no indication that the valuation calculated using the earnings value method is too low or that the forecast upon which the valuation is based is too conservative.

b) <u>Other comparative standards</u>

We consider the offer price paid by TE Connectivity as part of its acquisition of First Sensor and the share price of First Sensor after adjusting for the impact of the acquisition to be generally suitable comparative standards.

As is evident from the share performance and trading volume graph which is reproduced in the Valuation Opinion, the three-month average price of First Sensor shares stayed in a relatively narrow corridor for an extended period of time.[257] When the takeover offer was announced (3 June 2019), the share price leaped higher on strong volume, after which it held steady at the level of the offer price. The share price after adjusting for the impact of the takeover offer in terms of § 4 of the Offer Document Ordinance to the Securities Acquisition Act [*WpÜGAngVO*][258] is indicated in the takeover offer as € 22.41 per share of First Sensor.

We consider this share price to be a suitable comparative standard. The value per share of First Sensor resulting from the present valuation (€ 23.55) is higher than this comparative standard.

During the offer period, the share price started out on par with the offer price (€ 28.25 per share of First Sensor) and then climbed as high as € 31.70 on declining volume. Once the additional acceptance period expired, the share price climbed to € 36.35 on very light trading volume, so that the share price of First Sensor diverged even more from the general market trend. In our view, the share price in the period after 2 June 2019 is not a suitable comparative standard for the valuation of First Sensor.

The value per share of First Sensor resulting from the present valuation (€ 23.55)) is lower than the offer price (€ 28.25 per share of First Sensor) by a not insubstantial margin. This difference can be attributed to various causes. For example, this can be explained by a change in general market conditions or a change in estimates as to the future performance of First Sensor.

But the decisive consideration, in our view, is that TE Group issued this offer in the hope of realizing not inconsiderable synergies from the merger of the two companies. Some of these synergies are included in the present valuation. However, of the expected cost synergies in the perpetual annuity phase (€ 15.0 million per year), the Valuation Expert correctly leaves out those attributable to TE Group and real synergies at the level of First Sensor (for a total of € 11.2 million).

If this additional synergy potential is taken into account, it is plausible, in our view, that the offer price is higher than the value per share of First Sensor resulting from the present valuation.

[257] € 17.80 to € 26.70.
[258] Volume-weighted average domestic share price in the last three months before publication of the decision to issue the offer as the minimum price.

It remains to be stated that, a comparison against other comparative standards (adjusted share price, offer price) gives no indication that the present valuation is inadequate in terms of the German Stock Corporation Act.

Audit conclusion

In summary, it can be stated that the plausibility checks we have performed give no indication that the present valuation is inappropriate in terms of the German Stock Corporation Act (AktG).

9. Derivation of exit compensation and recurring compensation

a) Adequate exit compensation pursuant to § 305 of the German Stock Corporation Act (AktG)

The company does not have different classes of shares, and there are no other reasons why the enterprise value cannot be divided among the shares on a proportional basis. In the interests of simplicity, the Valuation Expert did not take into account the dilution effect of the options granted by the Company. This approach is not objectionable. The enterprise value of First Sensor as of the general meeting date (Valuation Date: 26 May 2020, in the amount of € 241.8 million comes out to a value of € 23.55 for each share of First Sensor.

In view of the rulings issued by the Federal Constitutional Court,[259] the share price of First Sensor is generally a suitable reference value for determination of the market value of the shares. The share price generally represents the lower limit of the exit compensation which is to be paid to shareholders.

Accordingly, the Valuation Opinion also confronts the question as to whether the share price of First Sensor is to be taken into account when determining the exit compensation which is to be paid to the outside shareholders.

In accordance with an Order issued by the Federal Supreme Court on 19 July 2010, adequate compensation must generally be based on the volume-weighted average price within a three-month reference period before the restructuring was announced. If an extended period of time elapses between the announcement of the restructuring programme and the date of the general meeting and if it appears based on the change in the share price during that period that an adjustment would be appropriate, the share price is to be projected forward based on the performance of the general market or sector, with due regard for the performance of the shares since that time.[260]

On 10 December 2019, First Sensor issued an ad-hoc notice stating that TE Connectivity intended to conclude a Domination and Profit and Loss Transfer Agreement with TE Connectivity as the controlling company and First Sensor as the controlled company. Since public announcement of the restructuring measure took place on 10 December 2019, so that an extended period within the meaning of the Federal Supreme Court's case law has not elapsed between the announcement of the restructuring programme

---

[259] Order of 27 April 1999, Case No. 1 BvR 1613/94, BVerfGE 100, 289 et seq.

[260] Order of 19 July 2010, Case No. II ZB 18/09, BGHZ 186, pp. 229 et seq., repeated in the Order of 28 June 2011, Case No. II ZB 2/00, AG 2011, pp. 590 et seq.

and the date of the general meeting, in the Valuation Expert's view, a reference period ending on 9 December 2019 was chosen for the purposes of the valuation.

We deem the reference period which was chosen in the valuation to be appropriate based on the case law of the Federal Supreme Court. In particular, we agree with the related assessment that no extended period of time between the announcement of the restructuring programme and the date of the general meeting has passed within the meaning of the Order of 19 July 2010, which has been cited above.

However, there are strong arguments against using share price to derive the market value of the shares. In accordance with the findings of the Federal Supreme Court, for example, share price is not a valid source for the derivation of the shares' market value in cases where no trading has taken place for extended periods of time, if minority shareholders have been unable to sell their shares at the share price due to the narrowness of the market or if the share price has been manipulated.[261]

In accordance with the Valuation Expert's findings, sparse trading of First Sensor shares was not observed in the relevant reference period. Furthermore, trading of First Sensor shares took place on all trading days and there were no price shocks of more than 5% on consecutive days. Accordingly, a narrow market cannot be demonstrated based on these criteria. The average share price in this reference period may therefore be taken as an indicator of the market value of the shares.

The Valuation Expert defines the share price as the volume-weighted average three-month average price prior to 10 December 2019 communicated by BaFin, € 33.27 per share.[262] Accordingly, the Valuation Expert deems a share price of € 33.27 as the relevant value for determination of the exit compensation.

In the course of our audit, we have reviewed the extensive considerations presented by the Valuation Expert and verified the share price indicated by the Valuation Expert by inspecting BaFin's letter. We share the Valuation Expert's view that a share price of € 33.27 is the relevant value for determination of the exit compensation from a legal standpoint.

The average share price per share of First Sensor represents the lower limit for the compensation because it is higher than the enterprise value per share of First Sensor based on the earnings value method, in the amount of € 23.55.

Audit conclusion

The cash compensation was therefore set as € 33.27 per share. In summary, based on our audit, we deem this cash compensation to be adequate.

If, in the time between the conclusion of our audit (16 April 2020) and the scheduled date for adoption of the resolution by the shareholders of First Sensor concerning conclusion of the Agreement (26 May 2020), substantial changes should arise in the financial, earnings and liquidity position of First Sensor or other factors underlying the valuation, these changes are to be taken into account in the determination of the

[261] Cf. Federal Supreme Court, Order of 12 March 2001, ibid.
[262] Pursuant to § 31(1) and (7) of the Securities Acquisition Act (WpÜG) in conjunction with § 5 of the Offer Document Ordinance to the Securities Acquisition Act.

exit compensation, especially insofar as these changes result in a value per share which is higher than the exit compensation stipulated in the agreement.

In the Valuation Opinion, a scenario analysis is presented which examines the impact on the enterprise value per share of First Sensor if the (pre-tax) risk-free rate differs from the one used in the present valuation. The calculations examine possible changes in the risk-free rate (before personal taxes) of up to +0.5% and -0.5%. In performing these calculations, the Valuation Expert assumed, for the sake of simplicity, that all other valuation parameters and methods would remain unchanged ("ceteris paribus").

The impact of a change in the risk-free rate relative to the rate used in the present valuation within the range presented in the Valuation Opinion (up to 0.5% higher or lower) would not be significant with respect to the exit compensation (c.p.) because, from a legal standpoint, the share price would still be of relevance for determination of the exit compensation even if the (pre-tax) risk-free rate were to drop by 0.5%.

b) <u>Recurring compensation pursuant to § 304 of the Stock Compensation Act (AktG)</u>

The guaranteed dividend and recurring compensation payment[263] are determined based on the enterprise value per share of First Sensor.

In calculating the annuity for the exit compensation, the Valuation Expert used an interest rate for the equivalent risk and term, which he determined in light of the specific risk situation resulting from the agreement for outside shareholders.

The risk that the enterprise value may be diminished upon termination of a company agreement, particularly a domination agreement, as a result of measures taken by the other contracting party need not be taken into account in the present case. Outside shareholders have the right to sell their shares if the agreement is terminated by First Sensor or TE Connectivity,[264] entitling them to an annual recurring compensation payment during the term of the agreement and to exit compensation upon cessation of the agreement in the amount which they would have received right after the agreement took effect (€ 33.27 per share of First Sensor).

Accordingly, the only remaining risk to outside shareholders in the present case is the risk that the contracting party will fail to comply with its obligation to pay recurring compensation.

TE Ltd. has made an unlimited and irrevocable commitment to First Sensor to ensure that TE Connectivity has the financial resources necessary at all times to meet all obligations arising from or in connection with the agreement, in full and on time (hard letter of support).[265] TE Ltd. has also made an unlimited and irrevocable commitment to the outside shareholders of First Sensor to ensure that TE Connectivity will be able to meet all of its existing obligations arising from or in connection with the agreement, particularly the duty to pay recurring compensation and exit compensation, in full and on time.[266]

---

[263] Each of which is guaranteed in the same amount; both are referred to hereinafter as "recurring compensation."
[264] Cf. § 5(6) of the agreement.
[265] Cf. § 8(2) Sentence 1 of the agreement, as well as the annex.
[266] Cf. § 8(3) Sentence 1 of the agreement.

The risk of default is therefore determined by the (higher) creditworthiness of TE Ltd. Accordingly, the enterprise value of First Sensor is to be converted into an annuity using a rate which reflects the conditions presently offered by TE Ltd. for an unsecured bond issue with a term equivalent to that of the expected term of the agreement.

TE Ltd. itself has issued no bonds. TE Group obtains outside capital market financing through one of the Group companies, Tyco Electronics Group S.A., Luxembourg. However, the bonds issued by Tyco Electronics Group S.A. carry an unlimited guarantee from TE Ltd., so that the risk associated with the bonds issued by Tyco Electronics Group S.A. reflects the (presumably lower) risk attributable to TE Ltd.

On this basis, the Valuation Expert calculated the annuity using the interest rate on bonds issued by Tyco Electronics Group S.A. Due to the fact that market conditions are volatile at the present time, the Valuation Expert determined the credit spread by calculating the average credit spread for the three-month period prior to 9 April 2020. The Valuation Expert took the average US dollar interest rate arising from valuation of the relevant bond issue (3.2%)[267] and subtracted the interest rate on risk-free US Treasury bonds of the same duration (1.5 %) to arrive at a credit spread of 1.7%. In light of the fluctuations in the credit spread which were observed over the three-month period, the Valuation Expert rounded this number up to 2.0% (effectively increasing the recurring compensation amount) and adopted it for the Euro zone.

The residual term of the reference bond issue (around 16.5 years) is considerably longer than the minimum term of the agreement (five years).[268] The Valuation Expert therefore assumes that the agreement will not be terminated immediately after the minimum term expires, but will instead remain in effect over a longer period of time.

This is a plausible assumption, in our view, although it is also possible, in theory, that the term of the agreement will exceed five years but will still fall short of 16 years. Since credit spreads generally increase as the term is extended, which is true in the present case as well, and since using a higher credit spread has the effect of increasing the annuitisation rate and the amount of the recurring compensation, use of the reference bond issue selected by the Valuation Expert is not objectionable from the viewpoint of outside shareholders.

Using a three-month period to calculate the annuitisation rate is also not objectionable based on § 5 (1) of the Offer Document Ordinance to the Securities Acquisition Act and in light of the Federal Supreme Court's rulings concerning use of the share price as a lower limit for the determination of exit compensation, as well as the established case law relating to calculation of the risk-free rate.

---

[267] Senior unsecured notes with an issue volume of $500 million, a duration from 16 April 2008 through 1 October 2037, a coupon rate of 7.13% and an S&P rating of A–.

[268] Cf. § 7(3) of the agreement.

In conclusion, the annuitisation rate used to calculate the recurring compensation amount is determined as follows:

First Sensor Verrentungszinssatz %	
Basiszinssatz vor persönlichen Steuern	0,00%
Persönliche Einkommensteuer	0,00%
Basiszinssatz nach persönlichen Steuern	**0,00%**
Risikozuschlag vor persönlichen Steuern (Credit Spread)	2,00%
Persönliche Einkommensteuer	-0,53%
Risikozuschlag nach persönlichen Steuern	**1,47%**
Verrentungszinssatz nach persönlichen Steuern	**1,47%**

Quellen: Datengrundlage Bewertungsgutachter, S&P Global.

In summary, it can be stated based on our examination of the annuitisation rate that basing the calculation on the guarantor's default risk is appropriate in our view and consistent with standard practice. Moreover, this approach is accepted by the courts.[269] We were also able to verify derivation of the specific annuitisation rate used by the Valuation Expert without objection.

The guaranteed recurring compensation is determined by converting the enterprise value into a fixed annual payment using this annuitisation rate as follows, using the calculation method required by the courts:[270]

First Sensor Ausgleich €	mit KSt/SolZ belastet	nicht mit KSt/SolZ belastet	Gesamt
Unternehmenswert zum 26. Mai 2020 (in € Mio.)	227,0	14,9	241,8
Anzahl Aktien	10.269.396	10.269.396	10.269.396
Unternehmenswert je Aktie	**22,10**	**1,45**	**23,55**
Jährl. Ausgleich je Aktie (nach pers. ESt, nach KSt/SolZ)	**0,33**	**0,02**	**0,35**
Zuzüglich persönlicher ESt	0,12	0,01	0,12
Jährl. Netto-Ausgleich je Aktie (vor pers. ESt, nach KSt/SolZ)	**0,44**	**0,03**	**0,47**
Zuzüglich KSt/SolZ	0,09	0,00	0,09
Jährl. Brutto-Ausgleich je Aktie (vor pers. ESt, vor KSt/SolZ)	**0,53**	**0,03**	**0,56**

Quellen: Datengrundlage Bewertungsgutachter, eigene Darstellung.

Audit conclusion

The guaranteed dividend and recurring compensation amount was therefore set at € 0.47 per share. Before deducting corporate income tax and solidarity mark-up, outside shareholders are therefore guaranteed a gross recurring compensation payment in the amount of € 0.56 per share.

In summary, we deem this compensation to be adequate based on our audit.

In accordance with § 4 (3) of the Agreement, the above net compensation amount, which is calculated based on present circumstances, will be revised in case of a future change in the corporate tax rate or solidarity mark-up.

This is appropriate in light of the case law of the Federal Supreme Court.

If, in the time between the conclusion of our audit (16 April 2020) and the scheduled date for adoption of the resolution by the shareholders of First Sensor concerning conclusion of the Agreement (26 May 2020), substantial changes should arise in the financial, earnings and liquidity position of First Sensor or other factors underlying the valuation, these changes are to be taken into account in the determination of the

[269] For comparable cases, e.g.: Higher Regional Court of Dusseldorf, Order of 25 May 2016, Case No. I-26 W 2/15 [AktE], BeckRS 2016, 21367; Higher Regional Court of Frankfurt am Main, Order of 24 November 2011, Case No. 21 W 7/11, BeckRS 2012, 02278.

[270] Guarantee of a gross recurring compensation (before corporation tax including solidarity surcharge).

guaranteed dividend and recurring compensation payment, especially insofar as these changes result in a guaranteed dividend or recurring compensation payment which is higher than the guaranteed dividend/recurring compensation payment stipulated in the agreement.

In the Valuation Opinion, a scenario analysis is presented which examines the impact on the net recurring compensation payment per share of First Sensor if the (pre-tax) risk-free rate differs from the one used in the present valuation. The calculations examine possible changes in the risk-free rate (before personal taxes) of up to +0.5% and -0.5%. In performing these calculations, the Valuation Expert assumed, for the sake of simplicity, that all other valuation parameters and methods would remain unchanged ("ceteris paribus").

In doing so, the Valuation Expert assumed, for the sake of simplicity, that all other valuation parameters and methods would remain unchanged ("ceteris paribus"). Based on its calculations, which we have verified without objection, the net amount of the recurring compensation payment is as follows for each share of First Sensor:

First Sensor Szenariobetrachtung – Basiszinssatz (vor persönlichen Steuern) €	Netto-Ausgleichsbetrag je Aktie
0,5%	0,54
0,4%	0,53
0,3%	0,52
0,2%	0,50
0,1%	0,49
0,0%	0,47
-0,1%	0,45
-0,2%	0,44
-0,3%	0,42
-0,4%	0,40
-0,5%	0,38

Quellen: Datengrundlage Bewertungsgutachter, eigene Darstellung.

E. Final Declaration

As court-appointed auditors, we have reviewed the Domination and Profit and Loss Transfer Agreement between First Sensor AG and TE Connectivity Holding AG in accordance with § 293b of the Stock Corporation Act (AktG).

This agreement includes the components prescribed in §§ 291 et seq. of the Stock Corporation Act, which are fully and accurately represented, and therefore conforms to statutory requirements.

We hereby issue the following final declaration pursuant to § 293e of the Stock Corporation Act (AktG) with regard to the adequacy of the recurring compensation and exit compensation:

"In accordance with our findings, a net payment of € 0.47 per share of First Sensor to the outside shareholders of First Sensor as a guaranteed dividend for Financial Year 2020, to be made if the Agreement takes effect in 2020 through entry into the Commercial Register, and as a recurring compensation payment for each full financial year after that, as well as the arrangement under which the outside shareholders of First Sensor are to receive exit compensation in cash in the amount of € 33.27 for each share in the company, are appropriate for the reasons explained above. The provision of the Domination and Profit and Loss Transfer Agreement under which the guaranteed dividend and recurring compensation payment is to consist of fixed gross payment of € 0.56 per share of First Sensor minus corporate taxes and solidarity mark-up, accruing at the rate in effect for those taxes in the relevant year, is appropriate in our judgment in light of the Federal Supreme Court's ruling on 21 July 2003 in Case No. II ZB 17/01."

There were no particular difficulties in connection with the valuation of First Sensor AG.

Düsseldorf, 16 April 2020

ADKL AG
Wirtschaftsprüfungsgesellschaft

Wolfram Wagner
Auditor

p.p. Ulrich Kühnen
Auditor

Landgericht Berlin
Az.: 102 AR 1/20 AktG

Beschluss

In dem Verfahren

nach § 293 Abs. 1 Satz 1 und 2 AktG

betreffend die

First Sensor AG,

wird auf Antrag der

1) **First Sensor AG**, vertreten durch d. Vorstand, Peter-Behrens-Straße 15, 12459 Berlin
- Antragstellerin-

2) **TE Connectivity Sensors Germany Holding AG**, vertreten durch d. Vorstand, Ampérestraße 12-14, 64625 Bensheim
- Antragstellerin -

hat das Landgericht Berlin - Kammer für Handelssachen 102 - durch den Vorsitzenden Richter am Landgericht Pade als Vorsitzenden am 22.01.2020 beschlossen:

Die ADKL AG Wirtschaftsprüfungsgesellschaft,
Breite Straße 29-31, 40213 Düsseldorf,

wird zur gemeinsamen Vertragsprüferin hinsichtlich der Angemessenheit der Ausgleichszahlung in einem zwischen den oben genannten Gesellschaften beabsichtigten Beherrschungs- und Gewinnabführungsvertrag bestellt.

Die Wirtschaftsprüfungsgesellschaft erfüllt nach der dem Gericht gegenüber abgegebenen Erklärung vom 22. Januar 2020 die Bedingungen des § 293 d Abs. 1 AktG und ist insbesondere nicht nach § 319 Abs. 2 und 3 HGB von der Prüfertätigkeit ausgeschlossen.

Ansprüche, die auf Gebühren- und/oder Auslagenerstattung gegen das Land Berlin gerichtet sind, kann die Prüferin aus der Bestellung nicht herleiten.

Die Antragstellerinnen haben die Kosten dieses Bestellungsverfahrens nach einem Verfahrenswert von 20.000,00 € zu tragen.

Rechtsbehelfsbelehrung:

Gegen die Entscheidung findet das Rechtsmittel der **sofortigen Beschwerde** (im Folgenden: Beschwerde) statt.

Die Beschwerde ist binnen einer Notfrist von 2 Wochen (Beschwerdefrist) bei dem

Landgericht Berlin
Littenstraße 12-17
10179 Berlin

oder bei dem

Kammergericht
Elßholzstraße 30-33
10781 Berlin

einzulegen.

Die Notfrist beginnt mit der schriftlichen Bekanntgabe des Beschlusses. Erfolgt die schriftliche Bekanntgabe durch Zustellung nach den Vorschriften der Zivilprozessordnung, ist das Datum der Zustellung maßgebend. Erfolgt die schriftliche Bekanntgabe durch Aufgabe zur Post und soll die Bekanntgabe im Inland bewirkt werden, gilt das Schriftstück 3 Tage nach Aufgabe zur Post als bekanntgegeben, wenn nicht der Beteiligte glaubhaft macht, dass ihm das Schriftstück nicht oder erst zu einem späteren Zeitpunkt zugegangen ist. Kann die schriftliche Bekanntgabe an einen Beteiligten nicht bewirkt werden, beginnt die Frist spätestens mit Ablauf von 5 Monaten nach Erlass des Beschlusses. Fällt das Fristende auf einen Sonntag, einen allgemeinen Feiertag oder Sonnabend, so endet die Frist mit Ablauf des nächsten Werktages.

Liegen die Erfordernisse der Nichtigkeits- oder Restitutionsklage vor, so kann die Beschwerde auch nach Ablauf der genannten Frist innerhalb der für diese Klagen geltenden Fristen erhoben werden.

Die Beschwerde wird durch Einreichung einer Beschwerdeschrift oder zur Niederschrift der Geschäftsstelle eingelegt. Die Beschwerde kann zur Niederschrift eines anderen Amtsgerichts erklärt werden; die Beschwerdefrist ist jedoch nur gewahrt, wenn die Niederschrift rechtzeitig bei einem der Gerichte, bei denen die Beschwerde einzulegen ist, eingeht. Die Beschwerdeschrift bzw. die Niederschrift der Geschäftsstelle ist von dem Beschwerdeführer oder seinem Bevollmächtigten zu unterzeichnen.

Die Beschwerde muss die Bezeichnung des angefochtenen Beschlusses sowie die Erklärung enthalten, dass Beschwerde gegen diesen Beschluss eingelegt wird.

Die Beschwerde soll begründet werden.

Rechtsbehelfe können auch als **elektronisches Dokument** eingereicht werden. Eine einfache E-Mail genügt den gesetzlichen Anforderungen nicht.

Das elektronische Dokument muss
- mit einer qualifizierten elektronischen Signatur der verantwortenden Person versehen sein oder
- von der verantwortenden Person signiert und auf einem sicheren Übermittlungsweg eingereicht werden.

Ein elektronisches Dokument, das mit einer qualifizierten elektronischen Signatur der verantwortenden Person versehen ist, darf wie folgt übermittelt werden:
- auf einem sicheren Übermittlungsweg oder
- an das für den Empfang elektronischer Dokumente eingerichtete Elektronische Gerichts- und Verwaltungspostfach (EGVP) des Gerichts.

Wegen der sicheren Übermittlungswege wird auf § 130a Absatz 4 der Zivilprozessordnung verwiesen. Hinsichtlich der weiteren Voraussetzungen zur elektronischen Kommunikation mit den Gerichten wird auf die Verordnung über die technischen Rahmenbedingungen des elektronischen Rechtsverkehrs und über das besondere elektronische Behördenpostfach (Elektronischer-Rechtsverkehr-Verordnung – ERVV) in der jeweils geltenden Fassung sowie auf die Internetseite www.justiz.de verwiesen.

Pade
Vorsitzender Richter am Landgericht

Für die Richtigkeit der Abschrift
Berlin, 27.01.2020

Schumann, JBesch
Urkundsbeamtin der Geschäftsstelle
Durch maschinelle Bearbeitung beglaubigt
- ohne Unterschrift gültig

Beherrschungs- und Gewinnabführungs-vertrag

Domination and Profit and Loss Transfer Agreement

zwischen

by and between

First Sensor AG,

Peter-Behrens-Straße 15, 12459 Berlin,

eingetragen im Handelsregister des Amtsgerichts Berlin-Charlottenburg unter HRB 69326

registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Berlin-Charlottenburg under register number HRB 69326

(im Folgenden "**First Sensor**")

(hereinafter referred to as "**First Sensor**")

und

and

TE Connectivity Sensors Germany Holding AG,

Ampèrestraße 12-14, 64625 Bensheim,

eingetragen im Handelsregister des Amtsgerichts Darmstadt unter HRB 99155

registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Darmstadt under register number HRB 99155

(im Folgenden "**TE Connectivity**");

(hereinafter referred to as "**TE Connectivity**");

dieser Beherrschungs- und Gewinnabführungsvertrag im Folgenden "**Vertrag**" genannt.

this domination and profit and loss transfer agreement hereinafter referred to as "**Agreement**".

§ 1
Leitung

(1) First Sensor unterstellt TE Connectivity die Leitung ihrer Gesellschaft ab dem Zeitpunkt der Wirksamkeit dieses Vertrags. Dementsprechend ist TE Connectivity berechtigt, dem Vorstand der First Sensor in Bezug auf die Leitung der First Sensor sowohl allgemeine als auch auf den Einzelfall bezogene Weisungen zu erteilen. TE Connectivity ist ebenfalls be-

§ 1
Managerial Control

(1) First Sensor agrees that the management of its company shall be under the control of TE Connectivity as from the date of the effectiveness of this Agreement. Accordingly, TE Connectivity shall be entitled to give instructions to the management board of First Sensor with respect to the management of First Sensor in general or on a case

rechtigt, Weisungen in Bezug auf die Aufstellung des Jahresabschlusses der First Sensor zu erteilen. Unbeschadet des Weisungsrechts obliegen die Geschäftsführung und Vertretung der First Sensor dem Vorstand der First Sensor.

by case basis. TE Connectivity is also entitled to give instructions with respect to the preparation of the annual accounts of First Sensor. Notwithstanding the right to give instructions, the Management Board of First Sensor is responsible for the management and representation of First Sensor.

(2) Der Vorstand der First Sensor ist verpflichtet, Weisungen der TE Connectivity nach § 1 Abs. 1 dieses Vertrags und in Übereinstimmung mit § 308 AktG zu befolgen.

(2) The management board of First Sensor is required to comply with the instructions of TE Connectivity as specified in § 1 para. 1 of this Agreement and in accordance with § 308 of the German Stock Corporation Act (*Aktiengesetz* – "**AktG**").

(3) TE Connectivity ist nicht berechtigt, dem Vorstand der First Sensor Weisungen in Bezug auf die Änderung, Aufrechterhaltung oder Beendigung dieses Vertrags zu erteilen.

(3) TE Connectivity shall not be entitled to give instructions to the management board of First Sensor pertaining to amending, maintaining, or terminating this Agreement.

(4) Weisungen bedürfen der Textform nach § 126b BGB oder sind, sofern sie mündlich erteilt werden, unverzüglich in Textform zu bestätigen, sofern der Vorstand der First Sensor dies verlangt.

(4) Any instructions require text form according to § 126b of the German Civil Code (*Bürgerliches Gesetzbuch* – "**BGB**") or, if the instructions are given orally, they shall be confirmed in text form without undue delay, if requested by the management board of First Sensor.

§ 2
Gewinnabführung

(1) First Sensor verpflichtet sich, ihren ganzen Gewinn an TE Connectivity abzuführen. Vorbehaltlich der Bildung oder Auflösung von Rücklagen nach § 2 Abs. 2 dieses Vertrags ist der nach § 301 AktG in dessen jeweils geltender Fassung zulässige Höchstbetrag abzuführen.

§ 2
Transfer of Profit

(1) First Sensor undertakes to transfer its entire annual profit (*Gewinnabführung*) to TE Connectivity. Subject to establishing or dissolving reserves in accordance with § 2 para. 2 of this Agreement, the maximum amount permissible under § 301 AktG, as amended from time to time, shall be

transferred.

(2) First Sensor kann mit schriftlicher oder in Textform nach § 126b BGB erfolgender Zustimmung der TE Connectivity Beträge aus dem Jahresüberschuss in andere Gewinnrücklagen (§ 272 Abs. 3 HGB) einstellen, soweit dies handelsrechtlich zulässig und bei vernünftiger kaufmännischer Beurteilung wirtschaftlich begründet ist. Während der Vertragslaufzeit gebildete andere Gewinnrücklagen sind auf schriftliches oder in Textform nach § 126b BGB erfolgendes Verlangen der TE Connectivity aufzulösen und als Gewinn abzuführen. Sonstige Rücklagen oder ein Gewinnvortrag, der aus der Zeit vor der Wirksamkeit dieses Vertrags stammt, dürfen weder als Gewinn abgeführt noch zum Ausgleich eines Jahresfehlbetrages verwendet werden.

(2) If and to the extent permissible under commercial law and economically justified by reasonable commercial judgement, First Sensor may, with the consent of TE Connectivity in writing or text form pursuant to § 126b BGB, allocate parts of its annual profit to other profit reserves (§ 272 para. 3 of the German Commercial Code (*Handelsgesetzbuch* – "**HGB**"). Other profit reserves which have been created during the term of this Agreement shall be liquidated upon request of TE Connectivity in writing or text form according to § 126b BGB and transferred as profit. Other reserves or profits carried forward from the period prior to the term of this Agreement may neither be transferred as profit nor be used to compensate for any annual deficit.

(3) Die Verpflichtung zur Abführung des gesamten Gewinns besteht erstmals für das am 1. Januar 2021 beginnende Geschäftsjahr oder dasjenige spätere Geschäftsjahr der First Sensor, in dem dieser Vertrag nach § 7 Abs. 2 dieses Vertrages wirksam wird. Die Verpflichtung ist in jedem Fall innerhalb von zwei Wochen nach Feststellung des Jahresabschlusses für das betreffende Geschäftsjahr der First Sensor fällig.

(3) The obligation to transfer the annual profit applies for the first time to the entire profits generated in the fiscal year of First Sensor beginning on 1 January 2021 or to the entire profits of any later fiscal year in which this Agreement becomes effective pursuant to § 7 para. 2 of this Agreement. In each case, the obligation becomes due within two weeks following the approval of the respective annual financial statement of First Sensor.

§ 3
Verlustübernahme

(1) Die Vorschrift des § 302 AktG ist in ihrer Gesamtheit in der jeweils geltenden Fassung anzuwenden.

§ 3
Balancing of Losses

(1) The provision of § 302 AktG applies in its entirety, as amended from time to time.

(2) Die Verpflichtung zum Ausgleich des gesamten Jahresfehlbetrags besteht erstmals für das am 1. Januar 2020 beginnende Geschäftsjahr oder dasjenige spätere Geschäftsjahr der First Sensor, in dem dieser Vertrag nach § 7 Abs. 2 dieses Vertrages wirksam wird. Die Verpflichtung wird in jedem Fall zum Ende eines Geschäftsjahrs der First Sensor fällig.

(2) The obligation to balance any losses applies for the first time to the entire losses generated in the fiscal year of First Sensor beginning on 1 January 2020 or to the entire losses of any later fiscal year in which this Agreement becomes effective pursuant to § 7 para. 2 of this Agreement. In each case, the obligation becomes due at the end of the respective fiscal year of First Sensor.

(3) Bei einer Beendigung dieses Vertrags während eines Geschäftsjahrs, insbesondere durch eine Kündigung aus wichtigem Grund, ist TE Connectivity zur Übernahme desjenigen Fehlbetrags der First Sensor, wie er sich aus einer auf den Tag des Wirksamwerdens der Beendigung zu erstellenden Stichtagsbilanz ergibt, verpflichtet.

(3) In the event this Agreement is terminated during a fiscal year, and specifically in the event of termination for cause (*wichtiger Grund*), TE Connectivity is required to balance the losses of First Sensor as shown in the balance sheet to be drawn up as of the date of the effectiveness of the termination in accordance with applicable accounting rules.

§ 4
Garantiedividende und Ausgleichszahlung

§ 4
Guaranteed Dividend and Recurring Compensation Payment

(1) TE Connectivity garantiert den außenstehenden Aktionären von First Sensor für das Geschäftsjahr 2020 von First Sensor die Zahlung eines bestimmten Gewinnanteils gemäß nachfolgendem § 4 Abs. 3 dieses Vertrages als angemessenen Ausgleich ("**Garantiedividende**"). Soweit die für das Geschäftsjahr 2020 von First Sensor gezahlte Dividende (einschließlich eventueller Abschlagszahlungen) je First Sensor-Aktie hinter der Garantiedividende zurückbleibt, wird TE Connectivity jedem außenstehenden Aktionär von First Sensor den entsprechenden Differenzbetrag je First Sensor-Aktie zahlen. Die Zahlung eines etwaigen Differenzbetrags

(1) TE Connectivity guarantees that it will pay to the outside shareholders of First Sensor in respect of the fiscal year 2020 of First Sensor a certain portion of the profit pursuant to § 4 para. 3 of this Agreement below as adequate cash compensation ("**Guaranteed Dividend**") (*Garantiedividende*). To the extent that the dividend (including any payments on account) paid in respect of the fiscal year 2020 by First Sensor for each share of First Sensor falls short of the Guaranteed Dividend, TE Connectivity will pay to each outside shareholder of First Sensor the corresponding difference per share. Payment

ist am dritten Bankarbeitstag nach der ordentlichen Hauptversammlung von First Sensor für das Geschäftsjahr 2020 fällig.

of any such difference is due on the third banking day after the ordinary general shareholders' meeting of First Sensor for First Sensor's fiscal year 2020.

(2) TE Connectivity verpflichtet sich, den außenstehenden Aktionären der First Sensor ab dem Geschäftsjahr der First Sensor, für das der Anspruch der TE Connectivity auf Gewinnabführung gemäß § 2 Abs. 3 dieses Vertrages wirksam wird, für die Dauer dieses Vertrags als angemessenen Ausgleich nach § 304 Abs. 1 AktG eine wiederkehrende Geldleistung ("**Ausgleichszahlung**") zu zahlen.

(2) TE Connectivity undertakes to pay to outside shareholders of First Sensor as adequate compensation pursuant to § 304 para. 1 AktG a recurring cash compensation ("**Recurring Compensation Payment**") (*Ausgleich*) from and including the fiscal year of First Sensor in relation to which the claim of TE Connectivity for the transfer of the annual profit under § 2 para. 3 of this Agreement takes effect, and for the further duration of this Agreement.

(3) Die Garantiedividende und die Ausgleichszahlung betragen für jedes volle Geschäftsjahr der First Sensor für jede auf den Inhaber lautende Stückaktie der First Sensor mit einem rechnerischen Anteil am Grundkapital von EUR 5,00 (jede einzelne eine "**First Sensor-Aktie**", insgesamt die "**First Sensor-Aktien**") brutto EUR 0,56 ("**Bruttoausgleichsbetrag**"), abzüglich eines etwaigen Betrags für Körperschaftsteuer und Solidaritätszuschlag in Höhe des für diese Steuern für das jeweilige Geschäftsjahr jeweils geltenden Steuersatzes ("**Nettoausgleichsbetrag**"), wobei dieser Abzug nur auf den Teil des Bruttoausgleichsbetrags, der sich auf die der deutschen Körperschaftsteuer unterliegenden Gewinne bezieht, vorzunehmen ist. Klarstellend wird vereinbart, dass, soweit gesetzlich vorgeschrieben, anfallende Quellensteuern (etwa Kapitalertragsteuer zuzüglich Solidaritätszuschlag) von dem Nettoausgleichsbetrag

(3) The Guaranteed Dividend and the Recurring Compensation Payment payable for each full fiscal year of First Sensor with respect to each no-par value bearer share of First Sensor (*nennwertlose Inhaberaktie*), each representing a proportionate amount of the share capital of EUR 5.00 (each a "**First Sensor Share**", together the "**First Sensor Shares**"), shall be equal to EUR 0.56 gross ("**Gross Compensation Amount**"), less any amount of corporate income tax (*Körperschaftsteuer*) and solidarity surcharge (*Solidaritätszuschlag*) at the prevailing rate of these taxes for the relevant fiscal year ("**Net Compensation Amount**"), provided that this deduction is to be effected only on such portion of the Gross Compensation Amount that relates to profits subject to German corporate income tax. For the avoidance of doubt, it is agreed that any withholding tax (such as capital gains tax plus soli-

einbehalten werden.

(4) Die Ausgleichszahlung ist am dritten Bankarbeitstag (Frankfurt am Main) nach der ordentlichen Hauptversammlung der First Sensor für das jeweils abgelaufene Geschäftsjahr, jedoch spätestens acht Monate nach Ablauf des jeweiligen Geschäftsjahrs fällig.

(5) Die Garantiedividende wird für das Geschäftsjahr 2020 der First Sensor gewährt, wenn dieser Vertrag im Jahr 2020 wirksam wird. Die Ausgleichszahlung wird erstmals für dasjenige Geschäftsjahr der First Sensor gewährt, für das der Anspruch der TE Connectivity auf Gewinnabführung gemäß § 2 Abs. 3 dieses Vertrages wirksam wird.

(6) Falls dieser Vertrag während eines Geschäftsjahrs der First Sensor endet oder First Sensor während der Laufzeit dieses Vertrags ein Rumpfgeschäftsjahr bildet, vermindert sich der Bruttoausgleichsbetrag für das betroffene Geschäftsjahr zeitanteilig.

(7) Falls das Grundkapital der First Sensor aus Gesellschaftsmitteln gegen Ausgabe neuer Aktien erhöht wird, vermindert sich der Bruttoausgleichsbetrag je First Sensor-Aktie in dem Maße, dass der Gesamtbetrag des Bruttoausgleichsbetrags unverändert bleibt. Falls das Grundkapital der First Sensor durch Ausgabe neuer Aktien gegen Bar- und/oder Sacheinlagen erhöht wird, gelten die Rechte aus diesem § 4 dieses Vertrages auch für die von au-

darity surcharge thereon) shall be withheld from the Net Compensation Amount to the extent required by statutory law.

(4) The Recurring Compensation Payment is due on the third banking day (Frankfurt am Main) following the ordinary general shareholders' meeting of First Sensor for the respective preceding fiscal year, but in any event within eight months following expiration of this fiscal year.

(5) For the fiscal year 2020 of First Sensor the Guaranteed Dividend is granted if this Agreement becomes effective in the year 2020. The Recurring Compensation Payment is first granted for the fiscal year of First Sensor in which the claim of TE Connectivity for transfer of profit under § 2 para. 3 becomes effective.

(6) If this Agreement ends during a fiscal year of First Sensor or if First Sensor establishes a short fiscal year (*Rumpfgeschäftsjahr*) during the term of this Agreement, the Gross Compensation Amount is reduced *pro rata temporis* for the relevant fiscal year.

(7) If the share capital of First Sensor is increased from own funds of First Sensor in exchange for the issuance of new shares, the Gross Compensation Amount per First Sensor Share is reduced to such extent that the aggregate amount of the Gross Compensation Amount remains unchanged. If the share capital is increased by the issuance of new shares against cash contributions and/or contributions in kind,

ßenstehenden Aktionären bezogenen Aktien aus einer solchen Kapitalerhöhung. Der Beginn der Berechtigung aus den neu ausgegebenen Aktien nach diesem § 4 dieses Vertrages korrespondiert mit dem von First Sensor bei Ausgabe der neuen Aktien festgesetzten Zeitpunkt zur Gewinnanteilsberechtigung.

the rights under this § 4 of this Agreement also apply for the shares subscribed to by outside shareholders in such capital increase. The beginning of the entitlement to rights under this § 4 of this Agreement in respect of the newly issued shares follows the beginning of entitlement to dividends as set out by First Sensor at the time of issuance of the new shares.

(8) Falls die Ausgleichszahlung und/oder die Garantiedividende nach § 4 Abs. 1 und 2 dieses Vertrags für jede First Sensor-Aktie durch eine rechtskräftige Entscheidung in einem Spruchverfahren oder in einem gerichtlich protokollierten Vergleich zur Beendigung eines Spruchverfahrens erhöht wird, können auch die bereits nach Maßgabe des § 5 dieses Vertrages abgefundenen Aktionäre eine entsprechende Ergänzung der von ihnen bereits erhaltenen Ausgleichszahlung und/oder Garantiedividende verlangen, soweit gesetzlich vorgesehen.

(8) If the Recurring Compensation Payment and/or the Guaranteed Dividend pursuant to § 4 para. 1 and 2 of this Agreement is increased for each First Sensor Share by a legally binding court decision in appraisal proceedings (*Spruchverfahren*) or a judicially recorded settlement to terminate the appraisal proceedings (*gerichtlich protokollierter Vergleich*), the outside shareholders, even if they have already been compensated pursuant to § 5 of this Agreement, are entitled to demand a corresponding additional payment to the Recurring Compensation Payment and/or the Guaranteed Dividend to the extent required by the applicable statutory law.

§ 5
Abfindung

(1) TE Connectivity verpflichtet sich, auf Verlangen eines jeden außenstehenden Aktionärs der First Sensor dessen First Sensor-Aktien gegen eine Barabfindung ("**Abfindung**") in Höhe von EUR 33,27 je First Sensor-Aktie zu erwerben.

(2) Die Verpflichtung der TE Connectivity

§ 5
Compensation

(1) TE Connectivity undertakes upon demand of any outside shareholder of First Sensor to purchase the First Sensor Shares tendered by such shareholder in exchange for a cash compensation ("**Compensation**") (*Abfindung*) in the amount of EUR 33.27 for each First Sensor Share.

(2) The obligation of TE Connectivity to

zum Erwerb der First Sensor-Aktien ist befristet. Die Frist endet zwei Monate nach dem Tag, an dem die Eintragung des Bestehens dieses Vertrags im Handelsregister des Sitzes der First Sensor nach § 10 HGB bekannt gemacht worden ist. Eine Verlängerung der Frist nach § 305 Abs. 4 Satz 3 AktG wegen eines Antrags auf Bestimmung der angemessenen Ausgleichszahlung oder der angemessenen Abfindung durch das in § 2 SpruchG bestimmte Gericht bleibt unberührt; in diesem Fall endet die Frist zwei Monate nach dem Tag, an dem die Entscheidung über den zuletzt beschiedenen Antrag im Bundesanzeiger bekannt gemacht worden ist.

acquire First Sensor Shares is limited in time. The time limitation period ends two months after the date on which the entry of the existence of this Agreement has been published in the commercial register at the registered seat of First Sensor pursuant to § 10 HGB. An extension of the time limitation period pursuant to § 305 para. 4 sent. 3 AktG as a result of a filing for determination of the adequate Recurring Compensation Payment or the adequate Compensation by a court pursuant to § 2 of the German Act of Appraisal Proceedings (*Spruchverfahrensgesetz*) remains unaffected; in this event, the time limitation period shall expire two months after the date on which the decision on the last motion disposed has been published in the Federal Gazette (*Bundesanzeiger*).

(3) Falls bis zum Ablauf der in § 5 Abs. 2 dieses Vertrags genannten Frist das Grundkapital der First Sensor aus Gesellschaftsmitteln gegen Ausgabe neuer Aktien erhöht wird, vermindert sich die Abfindung je First Sensor-Aktie in dem Maße, dass der Gesamtbetrag der Abfindung unverändert bleibt. Falls das Grundkapital der First Sensor bis zum Ablauf der in § 5 Abs. 2 dieses Vertrages genannten Frist durch Ausgabe neuer Aktien gegen Bar- und/oder Sacheinlagen erhöht wird, gelten die Rechte aus diesem § 5 dieses Vertrages auch für die von außenstehenden Aktionären bezogenen Aktien aus der Kapitalerhöhung.

(3) If the share capital of First Sensor is increased from own funds of First Sensor in exchange for the issuance of new shares prior to the expiration of the time limitation period set forth in § 5 para. 2 of this Agreement, the Compensation for each First Sensor Share is reduced to such extent that the aggregate amount of the Compensation remains unchanged. If the share capital of First Sensor is increased by the issuance of new shares against cash contributions and/or contributions in kind prior to the expiration of the time limitation period set forth in § 5 para. 2 of this Agreement, the rights under this § 5 of this Agreement also apply for the shares subscribed to by outside shareholders in such capital increase.

(4) Die Übertragung der First Sensor-Aktien gegen Abfindung ist für die außenstehenden Aktionäre der First Sensor kostenfrei, sofern sie über ein inländisches Wertpapierdepot verfügen.

(4) The transfer of First Sensor Shares in exchange for Compensation is without charge to outside shareholders of First Sensor, provided that they have a domestic securities deposit account.

(5) Falls die Abfindung nach § 5 Abs. 1 dieses Vertrags für jede First Sensor-Aktie durch eine rechtskräftige Entscheidung in einem Spruchverfahren oder in einem gerichtlich protokollierten Vergleich zur Beendigung eines Spruchverfahrens erhöht wird, wird TE Connectivity die von außenstehenden Aktionären angebotenen First Sensor-Aktien gegen Zahlung der erhöhten Abfindung erwerben, soweit gesetzlich vorgesehen.

(5) If the Compensation pursuant to § 5 para. 2 of this Agreement is increased for each First Sensor Share by a legally binding court decision in an appraisal proceeding (*Spruchverfahren*) or a judicially recorded settlement to terminate the appraisal proceedings (*gerichtlich protokollierter Vergleich*), TE Connectivity will acquire the First Sensor Shares tendered by the outside shareholders against payment of the increased Compensation to the extent required by applicable statutory law.

(6) Falls dieser Vertrag durch Kündigung der First Sensor oder TE Connectivity zu einem Zeitpunkt endet, zu dem die Frist nach § 5 Abs. 2 dieses Vertrags für den Erwerb der First Sensor-Aktien durch TE Connectivity gegen Abfindung nach § 5 Abs. 1 dieses Vertrags abgelaufen ist, hat jeder außenstehende Aktionär der First Sensor das Recht, seine First Sensor-Aktien, die er im Zeitpunkt der Beendigung dieses Vertrags hält, TE Connectivity gegen Abfindung nach § 5 Abs. 1 dieses Vertrages anzubieten und TE Connectivity ist verpflichtet, die von dem außenstehenden Aktionär angebotenen First Sensor-Aktien zu erwerben. Falls die Abfindung nach § 5 Abs. 1 dieses Vertrages für jede First Sensor-Aktie durch eine rechtskräftige Entscheidung in einem Spruchverfahren oder durch einen gerichtlich protokollierten Vergleich zur Abwendung oder Beendigung eines

(6) If this Agreement ends upon termination by First Sensor or TE Connectivity at a time when the period pursuant to § 5 para. 2 of this Agreement to tender the First Sensor Shares to TE Connectivity against the Compensation pursuant to § 5 para. 1 has expired, every outside shareholder of First Sensor is entitled to tender the First Sensor Shares held at the time of termination of this Agreement to TE Connectivity against the Compensation pursuant to § 5 para. 1 of this Agreement and TE Connectivity shall be obliged to acquire the First Sensor Shares tendered by the outside shareholder. If the Compensation pursuant to § 5 para. 1 of this Agreement for each First Sensor Share is increased as a result of non-appealable appraisal proceedings (*Spruchverfahren*) or as a result of a judicially recorded settlement (*gericht-*

Spruchverfahrens erhöht wird, wird TE Connectivity die von dem außenstehenden Aktionär angebotenen First Sensor-Aktien gegen Zahlung der im Spruchverfahren oder im gerichtlich protokollierten Vergleich festgesetzten Abfindung erwerben. Das Recht unter § 5 Abs. 6 dieses Vertrages ist befristet. Die Frist endet zwei Monate nach dem Tag, an dem die Eintragung der Beendigung dieses Vertrags im Handelsregister des Sitzes der First Sensor nach § 10 HGB bekannt gemacht worden ist. § 5 Abs. 3 und § 5 Abs. 4 dieses Vertrags gelten entsprechend.

lich protokollierter Vergleich) in order to avert or terminate appraisal proceedings (*Spruchverfahren*), TE Connectivity will acquire the First Sensor Shares tendered by the outside shareholders against payment of the Compensation for each First Sensor Share as determined in the appraisal proceedings or judicially recorded settlement (*gerichtlich protokollierter Vergleich*). The right of disposal as set forth in § 5 para. 6 of this Agreement is limited in time. The time limitation periods ends two months after the date on which the registration of the termination of this Agreement has been published in the commercial register at the registered seat of First Sensor pursuant to § 10 HGB. § 5 para. 3 and § 5 para. 4 of this Agreement apply accordingly.

§ 6
Auskunftsrecht

(1) TE Connectivity ist berechtigt, Bücher und Schriften der First Sensor jederzeit einzusehen.

(2) Der Vorstand der First Sensor ist verpflichtet, TE Connectivity jederzeit alle verlangten Auskünfte über sämtliche Angelegenheiten der First Sensor zu geben.

(3) Unbeschadet der vorstehenden Rechte ist First Sensor verpflichtet, TE Connectivity über die geschäftliche Entwicklung, insbesondere über wesentliche Geschäftsvorfälle, laufend zu informieren.

(4) Solange die First Sensor-Aktien im regulierten Markt zugelassen oder im Freiverkehr einbezogen sind, sind die Parteien verpflichtet, die kapitalmarktrechtlichen Vorschriften, insbesondere die Markt-

§ 6
Right to Information

(1) TE Connectivity is entitled to inspect the books and records of First Sensor at any time.

(2) The management board of First Sensor is obliged to supply TE Connectivity at any time with all requested information on all matters relating to First Sensor.

(3) Notwithstanding the rights above, First Sensor is required to keep TE Connectivity continuously informed on the business development and, specifically, on material transactions.

(4) As long as First Sensor Shares are admitted to the regulated market or are listed on the open market the Parties are obliged to comply with the capital market law requirements, in particular

missbrauchsverordnung (EU) Nr. 596/2014, einzuhalten.

with Market Abuse Regulation (EU) No 596/2014.

§ 7
Wirksamwerden und Dauer des Vertrags

§ 7
Effectiveness and Term of this Agreement

(1) Dieser Vertrag bedarf zu seiner Wirksamkeit der Zustimmung der Hauptversammlung der First Sensor und der Hauptversammlung der TE Connectivity.

(1) This Agreement requires for its effectiveness the consent of the general shareholders' meeting of First Sensor and the general shareholders' meeting of TE Connectivity.

(2) Dieser Vertrag wird wirksam, sobald sein Bestehen in das Handelsregister des Sitzes der First Sensor eingetragen worden ist.

(2) This Agreement becomes effective upon registration of its existence in the commercial register at the registered seat of First Sensor.

(3) Dieser Vertrag wird auf unbestimmte Zeit geschlossen. TE Connectivity kann diesen Vertrag mit einer Frist von drei Monaten zum Ablauf eines Geschäftsjahres der First Sensor ordentlich kündigen, jedoch erstmals zum Ende des Geschäftsjahrs der First Sensor, das mindestens fünf Zeitjahre (60 Monate) nach Beginn des Geschäftsjahrs, für das die Verpflichtung von First Sensor zur Gewinnabführung gemäß § 2 Abs. 3 dieses Vertrags wirksam wird, endet. Das ordentliche Kündigungsrecht für First Sensor ist ausgeschlossen.

(3) This Agreement is concluded for an indefinite period. TE Connectivity may terminate this Agreement for convenience with a notice period of three months prior to the end of the fiscal year of First Sensor, but not earlier than as of the end of the fiscal year of First Sensor that ends at least five years (*Zeitjahre*) (60 months) after the beginning of the fiscal year in which the profit transfer obligation of First Sensor pursuant to § 2 para. 3 of this Agreement becomes effective. The termination for convenience for First Sensor is excluded.

(4) Jede Partei kann diesen Vertrag aus wichtigem Grund ohne Einhaltung einer Kündigungsfrist kündigen. § 297 Abs. 1 Satz 2 AktG bleibt unberührt.

(4) Each party may terminate this Agreement for cause (*aus wichtigem Grund*) without compliance with any notice period. § 297 para. 1 sent. 2 AktG remains unaffected.

(5) Insbesondere sind die Vertragsparteien zur Kündigung aus wichtigem Grund berechtigt, sofern:

(5) The parties to this Agreement are entitled to terminate this Agreement in particular, but without limitation to, if one of the following events occurs:

(a) TE Connectivity wegen einer Veräußerung der First Sensor-Aktien, einer Einbringung der First Sensor-Aktien in eine andere Gesellschaft oder eines anderen Grunds in der Hauptversammlung der First Sensor nicht mehr die Mehrheit der Stimmrechte zusteht;

(b) ein Rechtsformwechsel, eine Verschmelzung, Spaltung oder Liquidation einer der Vertragsparteien stattfindet.

(6) Im Fall einer fristlosen Kündigung aus wichtigem Grund endet dieser Vertrag mit dem Ablauf des in der Kündigung genannten Tags, frühestens jedoch mit Ablauf desjenigen Tags, an dem die Kündigung zugeht.

(7) Endet dieser Vertrag, hat TE Connectivity den Gläubigern der First Sensor nach Maßgabe des § 303 AktG Sicherheit zu leisten.

(8) Die Kündigung muss schriftlich erfolgen.

§ 8
Patronatserklärung

(1) Die TE Connectivity Ltd. mit Sitz in Schaffhausen, Schweiz ("**TE Ltd.**") hält mittelbar 100 % der Aktien an TE Connectivity. Die TE Ltd. hat in ihrer Eigenschaft als mittelbare Aktionärin, ohne diesem Vertrag als Vertragspartei beizutreten, die diesem Vertrag informationshalber als Anlage beigefügte Patronatserklärung abgegeben. Diese Patronatserklärung ist nicht Bestandteil dieses Vertrags.

(2) In dieser Patronatserklärung hat die TE

(a) TE Connectivity ceases to hold the majority of the voting rights in the general shareholders' meeting of First Sensor as a result of a disposal of First Sensor Shares, or a contribution of First Sensor Shares to another entity, or for another reason;

(b) a change in legal form, merger, demerger or liquidation of one of the parties to this Agreement.

(6) In the event of termination for cause without notice, this Agreement lapses at the end of the date stated in the notice of termination, provided that this date is no earlier than the day on which notice of termination is served.

(7) If the Agreement is terminated, TE Connectivity must furnish security to the creditors of First Sensor under the conditions set forth in § 303 AktG.

(8) Any notice of termination must be in writing.

§ 8
Comfort Letter

(1) TE Connectivity Ltd. with registered office in Schaffhausen, Switzerland ("**TE Ltd.**") indirectly holds 100% of the shares in TE Connectivity. TE Ltd. in its capacity as a indirect shareholder, without joining this Agreement as a party, has issued the comfort letter attached to this Agreement for information purposes. This comfort letter is not part of this Agreement.

(2) In this comfort letter TE Ltd. has

Ltd. sich uneingeschränkt und unwiderruflich verpflichtet, dafür Sorge zu tragen, dass TE Connectivity in der Weise finanziell ausgestattet wird, dass TE Connectivity stets in der Lage ist, alle ihre Verbindlichkeiten aus oder im Zusammenhang mit diesem Vertrag vollständig und fristgemäß zu erfüllen. Dies gilt insbesondere für die Pflicht zur Verlustübernahme nach § 302 AktG in seiner jeweils gültigen Fassung.

committed itself unconditionally and irrevocably to ensure that TE Connectivity is financially in a position that TE Connectivity will always be able to fulfil all its obligations from or in connection with this Agreement in full and in due time. This applies in particular to the obligation to assume losses as set forth in § 302 AktG in its currently valid version.

(3) Die Verpflichtung der TE Ltd. nach den beiden voranstehenden Sätzen führt nur dann zu einer Zahlungsverpflichtung, sobald und soweit konkret absehbar ist, dass TE Connectivity ihre Pflichten aus oder in Zusammenhang mit diesem Vertrag bei Fälligkeit nicht vollumfänglich wird erfüllen können. Die TE Ltd. steht nach dieser Patronatserklärung zudem den außenstehenden Aktionären der First Sensor gegenüber unwiderruflich und uneingeschränkt dafür ein, dass TE Connectivity alle ihnen gegenüber bestehenden Verpflichtungen aus oder im Zusammenhang mit diesem Vertrag, insbesondere zur Zahlung einer Garantiedividende, Ausgleichszahlung und Abfindung, vollständig und fristgemäß erfüllt. Insoweit steht den außenstehenden Aktionären der First Sensor ein eigener Anspruch nach § 328 Abs. 1 BGB gerichtet auf Zahlung an TE Connectivity aus der Patronatserklärung zu.

(3) The obligation of TE Ltd. according to the two previous sentences will only lead to a payment obligation as soon as and to the extent it is precisely foreseeable that TE Connectivity will not be in a position to fulfil its obligations from or in connection with this Agreement in full when due. According to this comfort letter, TE Ltd. is irrevocably and unconditionally liable *vis-á-vis* the minority shareholders of First Sensor that TE Connectivity will timely fulfil all of its obligations towards them from or in connection with this Agreement in full, in particular the payment of a Guaranteed Dividend, Recurring Compensation Payment and the Compensation. In this respect, the outstanding shareholders of First Sensor are entitled to a claim in accordance with § 328 para. 1 BGB for payment against TE Connectivity under the comfort letter.

(4) Die Haftung der TE Ltd. gemäß den vorgenannten Absätzen aus der Patronatserklärung greift jedoch nur, soweit TE Connectivity ihre Verpflichtungen gegenüber den außenstehenden Aktionären der First Sensor aus oder im Zusammenhang mit diesem Vertrag nicht vollständig

(4) The liability of TE Ltd. according to the aforementioned paragraphs from the comfort letter only applies, however, if TE Connectivity does not timely fulfil its obligations vis-á-vis the outstanding shareholders of First Sensor arising from or in connection with this

und fristgemäß erfüllt und die TE Ltd. ihrer vorstehenden Ausstattungspflicht nicht nachkommt.

Agreement timely and in full and if TE Ltd. does not fulfil its aforementioned obligation to put TE Connectivity in a position to fulfil its obligations.

§ 9
Schlussbestimmungen

(1) Sollte eine Bestimmung dieses Vertrags oder eine künftig in ihn aufgenommene Bestimmung ganz oder teilweise unwirksam, undurchführbar oder nicht durchsetzbar sein oder werden, ist davon die Gültigkeit, Wirksamkeit und Durchsetzbarkeit der übrigen Bestimmungen nicht berührt. Anstelle der unwirksamen, undurchführbaren oder nicht durchsetzbaren Bestimmung gilt eine wirksame, durchführbare und durchsetzbare Bestimmung, die dem wirtschaftlich Gewollten und dem mit der unwirksamen, undurchführbaren oder nicht durchsetzbaren Bestimmung Bezweckten im Rahmen des rechtlich Zulässigen am nächsten kommt. Entsprechendes gilt für den Fall einer unbeabsichtigten Lücke dieses Vertrags. Die Parteien vereinbaren, dass durch das Vorstehende nicht nur eine Beweislastumkehr eintritt, sondern auch die Anwendbarkeit des § 139 BGB ausgeschlossen ist.

(2) Zur Auslegung dieses Vertrags sind die ertragsteuerlichen Bestimmungen für die Anerkennung einer Organschaft, insbesondere §§ 14-19 KStG in deren jeweils geltender Fassung, zu berücksichtigen.

(3) Die Parteien erklären ausdrücklich, dass dieser Vertrag keine rechtliche Einheit (§ 139 BGB) mit anderen Rechtsgeschäf-

§ 9
Miscellaneous

(1) Should any present or future provision of this Agreement be or become invalid, ineffective or unenforceable as a whole or in part, the validity, effectiveness and enforceability of the remaining provisions shall not be affected thereby. Any such invalid, ineffective or unenforceable provision shall be deemed replaced by such valid, effective and enforceable provision (within the framework of what is legally permissible) as comes closest to the economic intent and the purpose of such invalid, ineffective or unenforceable provision. The aforesaid shall apply analogously to any unintended gap in this Agreement. The parties agree that the aforesaid shall not only reverse the burden of proof but that the application of § 139 BGB shall be excluded in its entirety as well.

(2) When construing this Agreement, the income tax provisions for recognition of a fiscal unity, especially §§ 14-19 of the German Corporate Income Tax Act (*Körperschaftsteuergesetz*), as amended from time to time, shall be taken into account.

(3) The parties explicitly declare that this Agreement is not intended to form a legal unity (§ 139 BGB) with other le-

ten oder Vereinbarungen, die zwischen den Parteien getätigt oder abgeschlossen wurden oder werden, bildet oder bilden soll.

(4) Änderungen und Ergänzungen dieses Vertrags bedürfen zu ihrer Wirksamkeit der Schriftform. Dies gilt insbesondere auch für diese Schriftformklausel. Im Übrigen gilt § 295 AktG.

(5) Soweit rechtlich zulässig, ist Berlin Erfüllungsort für die beiderseitigen Verpflichtungen aus diesem Vertrag sowie ausschließlicher Gerichtsstand.

(6) Nur der deutsche Text dieses Vertrags ist rechtsverbindlich. Der englische Text ist nicht Teil des Vertrags und nur eine unverbindliche Übersetzung.

gal transactions or agreements which are or will be concluded and/or effected between the parties.

(4) Amendments and supplements to this Agreement must be in writing to be effective. This specifically applies to this clause requiring written form as well. § 295 AktG applies.

(5) As far as legally permissible, Berlin is the place of performance for reciprocal obligations and the exclusive legal venue.

(6) Only the German text of this Agreement is legally binding. The English text is not part of this Agreement and a non-binding convenience translation only.

First Sensor AG

Der Vorstand / The Management Board

Berlin, den 14. April 2020 / the 14 April 2020

Dr. Dirk Rothweiler	Marcus Resch
Vorstandsvorsitzender	Vorstand Finanzen
Chairman of the Management Board / CEO	*Member of the Management Board / CFO*

TE Connectivity Sensors Germany Holding AG

Der Vorstand / Management Board

Bensheim, den 14. April 2020 / the 14 April 2020

Jörg Mann
Mitglied des Vorstands
Member of the Management Board

Erik Olsson
Mitglied des Vorstands
Member of the Management Board

[Signature page domination and profit and loss transfer agreement]

<u>Anlage / Attachment</u>:

Patronatserklärung der TE Connectivity Ltd. / Comfort letter by TE Connectivity Ltd.

Patronatserklärung

Die TE Connectivity Sensors Germany Holding AG, Ampèrestraße 12-14, 64625 Bensheim, Deutschland, eingetragen im Handelsregister des Amtsgerichts Darmstadt unter HRB 99155 („**TE Connectivity**") beabsichtigt, einen Beherrschungs- und Gewinnabführungsvertrag („**Vertrag**") mit der First Sensor AG, Peter-Behrens-Straße 15, 12459 Berlin, Deutschland, eingetragen im Handelsregister des Amtsgerichts Berlin-Charlottenburg unter HRB 69326 („**First Sensor**") abzuschließen, mit der First Sensor als beherrschtem und zur Gewinnabführung verpflichtetem Unternehmen. Die TE Connectivity Ltd. mit Sitz in Schaffhausen, Schweiz („**TE Ltd.**") hält mittelbar 100 % der Aktien an TE Connectivity. Die TE Ltd. gibt hiermit folgende Erklärungen ab, ohne dem Vertrag als Partei beizutreten:

(1) Die TE Ltd. verpflichtet sich uneingeschränkt und unwiderruflich dafür Sorge zu tragen, dass die TE Connectivity in der Weise finanziell ausgestattet wird, dass die TE Connectivity stets in der Lage ist, alle ihre Verbindlichkeiten aus oder im Zusammenhang mit dem Vertrag vollständig und fristgemäß zu erfüllen. Dies gilt insbesondere für die Pflicht zur Verlustübernahme nach § 302 AktG in seiner jeweils gültigen Fassung. Die Verpflichtung der TE Ltd. nach den beiden voranstehenden Sätzen führt nur dann zu einer Zahlungsverpflichtung, sobald und soweit konkret absehbar ist, dass die TE Connectivity ihre Pflichten aus oder in Zusammenhang mit dem Vertrag bei Fälligkeit nicht vollumfänglich wird erfüllen können.

(2) Die TE Ltd. steht den außenstehenden Aktionären der First Sensor gegenüber

Comfort letter

TE Connectivity Sensors Germany Holding AG, Ampèrestraße 12-14, 64625 Bensheim, Germany, registered in the commercial register of the Local Court of Darmstadt under HRB 99155 ("**TE Connectivity**") intends to enter into a domination and profit and loss transfer agreement ("**Agreement**") with First Sensor AG, Peter-Behrens-Straße 15, 12459 Berlin, Germany, registered with the commercial register of the Local Court of Berlin-Charlottenburg under HRB 69326 ("**First Sensor**"), with First Sensor as the dominated company obliged to transfer profits. TE Connectivity Ltd. with registered office in Schaffhausen, Switzerland ("**TE Ltd.**") indirectly holds 100% of the shares in TE Connectivity. TE Ltd. hereby declares the following without joining the Agreement as party:

(1) TE Ltd. commits itself unconditionally and irrevocably to ensure that TE Connectivity is financially equipped in such a way that TE Connectivity is always able to completely and timely fulfill all its liabilities arising from or in connection with the Agreement. This applies in particular to the obligation to balance losses in accordance with § 302 AktG in its currently valid version. The obligation of TE Ltd. according to the two previous sentences only leads to a payment obligation as soon as and as far as it is concretely foreseeable that TE Connectivity will not be able to fully meet its obligations from or in connection with the Agreement when due.

(2) TE Ltd. is unconditionally and irrevocably liable to the minority sharehold-

uneingeschränkt und unwiderruflich dafür ein, dass die TE Connectivity alle ihnen gegenüber bestehenden Verpflichtungen aus oder im Zusammenhang mit dem Vertrag, insbesondere zur Zahlung einer Garantiedividende, Ausgleichszahlung und Abfindung, vollständig und fristgemäß erfüllt. Insoweit steht den außenstehenden Aktionären der First Sensor ein eigener Anspruch nach § 328 Abs. 1 BGB gerichtet auf Zahlung an die TE Connectivity zu. Die Haftung der TE Ltd. gemäß den beiden vorgenannten Sätzen greift jedoch nur, soweit die TE Connectivity ihre Verpflichtungen gegenüber den außenstehenden Aktionären der First Sensor aus oder im Zusammenhang mit dem Vertrag nicht vollständig und fristgemäß erfüllt und soweit TE Ltd. ihrer Ausstattungsverpflichtung nach Ziffer 1 dieser Patronatserklärung nicht nachkommt.

(3) Diese Patronatserklärung unterliegt dem Recht der Bundesrepublik Deutschland. Die TE Ltd. unterwirft sich soweit rechtlich zulässig für Streitigkeiten und Ansprüche aus oder im Zusammenhang mit dieser Patronatserklärung der Zuständigkeit der deutschen Gerichte und der örtlichen Zuständigkeit der Gerichte in Berlin. Die TE Ltd. erkennt die Vollstreckbarkeit rechtskräftiger Entscheidungen deutscher Gerichte in diesem Zusammenhang an. Zustellungsbevollmächtigter der TE Ltd. in Deutschland für die Geltendmachung von Ansprüchen aus oder im Zusammenhang mit dieser Patronatserklärung ist die TE Connectivity, Ampèrestraße 12-14, 64625 Bensheim, Deutschland.

ers of First Sensor that TE Connectivity will fulfil all of its obligations *vis-á-vis* them arising from or in connection with the Agreement in full and timely, in particular the payment of a guaranteed dividend, recurring compensation payment and the compensation. In this respect, the minority shareholders of First Sensor are entitled to a claim for payment *vis-á-vis* TE Connectivity according to § 328 para. 1 BGB. However, the liability of TE Ltd. according to the two aforementioned only applies if TE Connectivity does not fulfil its obligations *vis-á-vis* the minority shareholders of First Sensor arising from or in connection with the Agreement in full and timely and if TE Ltd. does not fulfil its obligation to put TE Connectivity in a position to fulfil its obligations in accordance with clause (1) of this comfort letter.

(3) This comfort letter is subject to the law of the Federal Republic of Germany. TE Ltd. submits itself to the jurisdiction of German courts and to the local jurisdiction of the Berlin courts for any disputes and claims arising from or in connection with this comfort letter. TE Ltd. acknowledges the enforceability of final and binding decisions of German courts in this context. The authorized recipient of TE Ltd. in Germany for the legal assertion of claims from or in connection with this comfort letter is TE Connectivity, Ampèrestraße 12-14, 64625 Bensheim, Germany.

Im Namen der TE Connectivity Ltd. / On behalf of TE Connectivity Ltd.

Ort / Place: Schaffhausen, Schweiz / Switzerland

Datum / Date: 13. April 2020 / 13 April 2020

Harold G. Barksdale

Vice President

Im Namen der TE Connectivity Ltd. / On behalf of TE Connectivity Ltd.

Ort / Place: Schaffhausen, Schweiz / Switzerland

Datum / Date: 13. April 2020 / 13 April 2020

Mario Calastri

Senior Vice President

[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.