



# ANNUAL REPORT

2018



**Eckert & Ziegler**  
*Contributing to saving lives*

## KEY DATA ECKERT & ZIEGLER

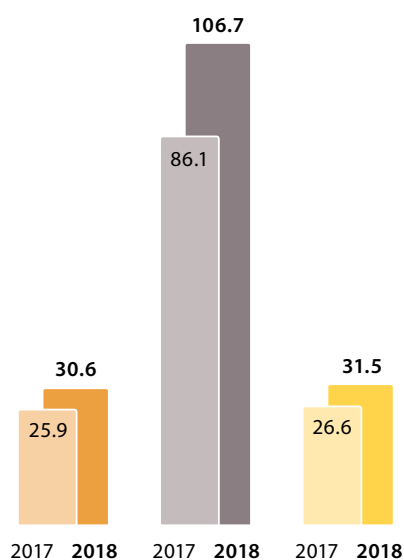
based on continuing operations

		Change	2017	2018
<b>Sales and Earnings</b>				
Sales	€ million	+ 22 %	138.6	168.7
EBITDA	€ million	+ 20 %	26.6	32.0
Depreciations	€ million		8.6	8.6
EBIT	€ million	+ 30 %	18.0	23.4
EBIT margin	%		13%	14%
Tax rate	%		30%	26%
Net profit for the year after taxes and minorities	€ million	+ 10 %	14.7	16.1
Earnings per share	€	+ 42 %	2.19	3.12
<b>Cash Flow</b>				
Cash flow from operating activities	€ million	- 22 %	26.9	21.1
Liquid assets as of 31 December	€ million	- 6 %	57.7	54.2
<b>Balance</b>				
Shareholders' equity	€ million	+ 5 %	117.5	123.9
Total assets	€ million	+ 6 %	216.9	229.1
Equity ratio	%		54%	54%
Net liquidity (liquidity minus debts)	€ million	- 3 %	55.9	54.1
<b>Employees</b>				
Average number of employees	People	+ 6 %	740	788
Number of employees as of 31 December	People	+ 3 %	764	788
<b>Key figures share</b>				
Average number of shares in circulation	Item in thousand	- 2 %	5,293	5,168
Book value per share as of 31 December	€	+ 12 %	21.2	23.7
Dividend*	€	+ 50 %	0.8	1.20

\*Dividend to be proposed to the Annual General Meeting by the Group

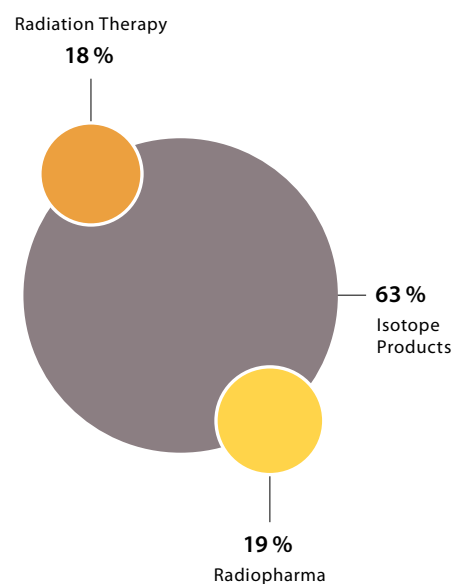
### SALES TRENDS BY SEGMENTS

in € million



### SALES BY SEGMENTS

in %



# CONTENT

## MANAGEMENT

LETTER TO THE SHAREHOLDERS	2
GROUP EXECUTIVE COMMITTEE	6
REPORT OF THE SUPERVISORY BOARD	8
THE SUPERVISORY BOARD	11

<b>OUR SEGMENTS</b>	12
---------------------	----

## COMPANY

MILESTONE 2018	16
THE SHARE	18
ENVIRONMENT AND SAFETY	20
SOCIAL COMMITMENT	22
OUR PRODUCTS	24

<b>GROUP MANAGEMENT REPORT</b>	29
--------------------------------	----

1. GROUP PRINCIPLES	30
2. BUSINESS REPORT	34
3. REPORT ON OPPORTUNITIES & RISKS	44
4. OUTLOOK	53
5. OTHER DISCLOSURES	56

<b>GROUP FINANCIAL INFORMATION</b>	62
------------------------------------	----

CONSOLIDATED INCOME STATEMENT	63
CONSOLIDATED COMPREHENSIVE INCOME	64
CONSOLIDATED BALANCE SHEET	65
CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY	66
CONSOLIDATED CASH FLOW STATEMENT	68
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENT	69
STATEMENT OF CHANGES IN FIXED ASSETS	124
INDEPENDENT AUDITOR'S REPORT	126
INDIVIDUAL FINANCIAL STATEMENTS OF THE ECKERT & ZIEGLER AG	134

## ADDITIONAL INFORMATION

GLOSSARY	136
FINANCIAL CALENDAR   IMPRINT   CONTACT	138

## COVER

KEY DATA
LOCATIONS AND SALES WORLDWIDE
FOUR-YEAR KEY DATA
CORPORATE STRUCTURE

*We have used the traditional plural form in our Annual Report when referring to men, women and others to streamline the language used and facilitate reading. It goes without saying that everyone is included.*

*The official version of the Eckert & Ziegler annual report is in German. The English translation is provided as a convenience to our shareholders. While we strive to provide an accurate and readable version of our annual report in English, the technical nature of an annual report often yields awkward phrases and sentences. We understand this can cause confusion. So, please always refer to the German annual report for the authoritative version.*



## SALES BY REGIONS



America  
**€ 58**  
million\*

### NORTH-/SOUTH-AMERICA

- 1 Los Angeles, California, USA
- 2 Atlanta, Georgia, USA
- 3 Hopkinton, Massachusetts, USA
- 4 Mount Vernon, New York, USA
- 5 Fortaleza, Brazil
- 6 São Paulo, Brazil



Europe  
**€ 80**  
 million\*

Asia,  
 Afrika & Australia

**€ 31**  
 million\*

**EUROPE**

- 7 Berlin, Germany (Headquarters)
- 8 Braunschweig, Germany
- 9 Düsseldorf, Germany
- 10 Dresden, Germany
- 11 Leipzig, Germany
- 12 St. Gangloff, Germany
- 13 Seneffe, Belgium
- 14 Paris, France
- 15 Didcot, Great Britain
- 16 Pfäffikon, Switzerland
- 17 Madrid, Spain
- 18 Prague, Czech Republic

**ASIA AND REST OF WORLD**

- 19 New Delhi, India

 production site

 distribution site

# LETTER TO THE SHAREHOLDERS

*Dear Shareholder,*

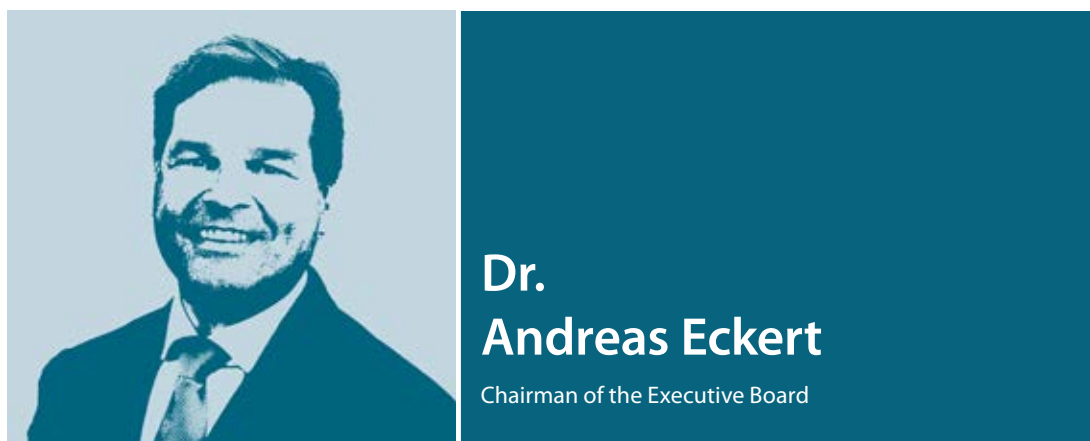
At this point, as in every year, I give you a straight-up, unfiltered and subjective assessment of the past financial year. I offer this as my personal opinion to help you interpret the results. This has not received the official seal of approval from auditors or lawyers, and it is thus not part of the regular management report.

The gist of the 2018 financial year is perhaps best reflected in the saying “Behind every successful man, there stands a surprised woman.” There is no doubt that our success came as a surprise. When we prepared the first forecasts in autumn 2017, there was nothing on the horizon that would indicate to us that we will be hit by a flow of orders from the energy industry at the beginning of 2018. By mid 2018, we already exceeded the full-year earnings target for this segment. When we closed the books on 31 December, the Industry segment generated a record net after-tax profit of € 12 million. Looking back over the past few years, this was quite an exceptional result.

Even if the success came as a surprise, it was not undeserved. Luck, as we know, is what happens when preparation meets opportunity, and this is what happened this year. Our ability to deliver was thus based on solid preparation, full warehouses and adequate capacity reserves. We were able to process the huge order pipeline within a reasonable period of time and satisfy all our customers.

Less surprisingly, the second growth driver in 2018 was active ingredients for radiopharmaceutical products. Encouraging indications of revenue growth were there already at the end of 2017, when a new substance for the precise diagnosis of neuroendocrine tumours attracted considerable interest from specialists and their patients in the key US market. As we had a de facto supply monopoly for the active pharmaceutical ingredient of the substance, it was foreseeable that orders would increase. The market was not yet mature, reimbursement was attractive, and the product was backed by a strong pharmaceutical company. In addition, our competitors had difficulties with approvals. While we could see the growth and could have been much more vocal in promoting it, we held back. Uncertainty about our own supply capacities on the one hand and the actual competitive situation on the other prevented us from embracing the opportunity head on and translating our hopes into publicly presented revenue and earnings forecasts. The development was too new and the ice felt too thin to venture out on it with steep profit forecasts.

In addition, we had to deal with the downside of considerable exceptional items. For years, Eckert & Ziegler AG had a burdensome, operationally complex intermediate holding company, which was in a way imposed on the company to bundle its therapy business. It was Eckert & Ziegler BEBIG SA, which was also listed on the stock exchange and previously traded as IBt or International Brachytherapy. Due to an unclear Belgian legal norm, which was only clarified by the ruling of the highest Belgian court, we stumbled into a takeover bid almost ten years ago, which gave us 80% of the shares, but also minority shareholders and complicated rules. Every major structural change, every capital measure had to be prepared by lawyers, approved by a special committee in accordance with the formal requirements and



often published in three languages – Flemish, French and English – in accordance with the rules of the supervisory authority of the Belgian stock exchange. The time and cost involved tied up valuable management capacity.

When we set out at the beginning of 2018 to dissolve the intermediate holding company under European law through a cross-border merger, the costs involved were difficult to estimate. While there were hardly any precedents for this process, we faced many pitfalls and the risk of being hit by a whirlwind of lawsuits. To err on the side of caution, we assumed for the year under review that the merger would cost almost as much as we expected in terms of additional earnings on the back of increased demand for radiopharmaceutical products. As we did not have any inkling of the impending demand in the industrial products segment at this point in time and used conservative assumptions in our forecasts, we only came close to the previous year's result from continuing operations overall. This was the worst-case scenario, and we felt there was some upside potential. We felt confident to communicate this to the public. We did not expect that at € 3.12, our earnings per share for the 2018 financial year would exceed our original forecast of € 2.20 by more than 40 %.

I wanted to discuss this gap between the actual and forecast result, because this report is again required to contain an outlook for the 2019 financial year. Forecasting is a never-ending process, and we are yet again required to look into the crystal ball. It is wise to note that even with the best intentions of those involved, forecasts are not an exact science and the actual results can fall short of or exceed forecasts.

What can we expect next year? Overall we expect stable business performance with no dramatic drops. In 2019, we will not be able to match the previous year's result (EBIT) in the Industrial segment of € 15.6 million. We expect the result to be about 20 % lower. On the other hand, we expect further revenue and earnings growth in the Pharma segment in 2019. On an EBIT basis, it should compensate for the decline in profits in the Industry segment and almost reach the level of the Industry segment. As we do not anticipate any merger-related exceptional items in 2019, the profit generated by the Therapy segment should offset any traditional holding losses. We therefore expect the overall result for 2019 (expressed as EBIT) to come in higher than in the 2018 financial year and reach some € 25 million. We anticipate that this EBIT could translate into a net profit for the year of € 18.3 million, which when divided by the number of shares of 5.23 million, results in earnings per share of € 3.50.

The driver of our growth in 2019 will be the continued strong interest of the pharmaceutical industry in radiopharmaceutical approaches. One focus is on so-called precision oncology, in which the expensive anti-tumour medication is only given to a patient if a molecularly almost identical diagnostic has previously confirmed that the patient is responding to the therapy. With the preliminary examination, the health insurance companies avoid considerable costs and spare the insured from the unnecessary, endless diagnosis and treatment. In addition, radiopharmaceuticals have great potential, in particular, with respect to treatment of resistant cancers. In terms of market penetration, precision oncology is still in its infancy.

We are, therefore, optimistic that our revenue growth in recent years will only be a prelude to a stronger and more sustainable trend. To date, our growth in radiopharmaceutical preparations has been primarily attributable to diagnostic applications, and, in particular, our Gallium-68 generators. However, they cover only half of the theoretically necessary isotope demand. The other half, if not the great momentum, comes as soon as the corresponding therapeutics are launched on the market. In addition, precision oncology today is still limited to diseases with relatively low annual case numbers, mainly neuroendocrine tumours. For more frequent indications, especially prostate cancer, a range of new drugs is already in late stages of clinical development. It can be assumed that at least one of these preparations can circumvent the many pitfalls of the approval process. If this is the case, the boom in the field of radiopharmaceuticals could open up numerous business opportunities for Eckert & Ziegler.

Of course, there are no guarantees that if successfully developed and approved, the new drugs will be used by physicians and patients. On the other hand, the fact that large pharmaceutical companies such as Novartis and Bayer, which understand clinical needs much better than we do, have invested billions in this field, gives us optimism. We therefore see developments in 2018 as a taste of interesting growth opportunities to come.



The positive outlook is rounded off by encouraging developments in China. Here, so-called interventional oncology is on the rise, i. e. the treatment of cancer with minimally invasive isotope technology. The Chinese health reforms of recent years are beginning to take effect and open up new markets for radiopharmaceutical preparations. The dynamic is favoured by the partial release of the Chinese nuclear medicine industry from traditional state ties.

A focus of activities is substances for the treatment of hepatocellular carcinomas, commonly referred to as liver cancer. It is particularly frequent in China and affects almost 0.4 million patients per year. In 2018, a UK and Australian company specialising in the treatment of liver cancer have been acquired for billions of dollars. The prices can only be justified on the assumption that their Yttrium-90-based radiopharmaceuticals will be approved and generously reimbursed in China in the coming years. If the approvals are forthcoming, Eckert & Ziegler, one of the world's largest producers of pharmaceutical Yttrium-90, will be extremely well positioned to tap into a range of business opportunities. In the medium term, therefore, the Group has tailwind in at least two areas.

It remains to be seen to what extent Eckert & Ziegler will benefit from the developments in 2019. We assume, as shown above, that the situation will not deteriorate compared to previous years. We would be delighted if you would take a similar view and continue to support us as our shareholders.

Sincerely,



**DR. ANDREAS ECKERT**  
Chairman of the Executive Board

# GROUP EXECUTIVE COMMITTEE

The Group Executive Committee is comprised of the managers of the most important segments – who are mostly the same members of the Executive Board – and the executive managers of the larger subsidiaries. The responsibilities and duties of the Group Executive Committee include providing regular updates regarding business trends and transactions, discussing strategic issues and implementing decisions made by the Executive Board.



## Dr. Andreas Eckert

Chairman of the Executive Board

Dr. Eckert studied economics and social science in Heidelberg, New York and Berlin. After completing his Ph. D., he represented the Secretary-General as Information Officer for the United Nations in New York, Latin America, Asia and Africa. Dr. Eckert returned to Berlin after German reunification and worked as an independent management consultant. He then founded Eckert & Ziegler Strahlen- und Medizintechnik AG as well as other technology companies that are predominantly involved in the life science sectors.

## Dr. Lutz Helmke

Member of the Executive Board  
Radiopharma Segment

Dr. Helmke studied Mathematics and Chemistry at FU Berlin. After graduating from Radio Chemistry studies and receiving his PhD, he switched to Medical Technology and started his career in the marketing department of Biotronik. After that, he held various management positions at Abbott, St. Jude Medical, and most recently MagForce over a period of 25 years. As the head of various task forces within the German Federal Association for Medical Technology, Dr. Helmke also gained a wide range of experience in market launches and the reimbursement aspects of medical products.



## Dr. Harald Hasselmann

Member of the Executive Board  
Radiation Therapy Segment

After completing his doctorate studies in economics he gained experience at various international pharmaceutical companies. He was head of controlling for Europe at Bayer Pharma, managing director at Schering's Hungarian subsidiary and director of the Berlin-based biotech company metaGen. He has held various positions in large and medium-sized healthcare companies and has an excellent track record in sales, controlling and implementing restructuring measures. In January 2017 he was appointed a member of the Executive Board of Eckert & Ziegler.





## Dr. Gunnar Mann

Member of the Group Executive Committee  
Intragroup Services

Dr. Mann holds an MBA and a Ph. D. in physics. After completing his studies, he worked at the Dresden University of Applied Sciences and TÜV Energieund Systemtechnik GmbH. In 1998, Dr. Mann joined the Eckert & Ziegler Group, first as a physicist, then as Product Development Manager.

## Frank Yeager

Member of the Group Executive Committee  
Isotope Products Segment

After completing a degree in mechanical engineering and an MBA, Mr. Yeager worked in executive-level positions at international industrial corporations. Since the end of 2001, he has served as CEO and Head of the Isotope Products division at the American subsidiary of Eckert & Ziegler Isotope Products, Inc.



## Claudia Goulart

Member of the Group Executive Committee  
Isotope Products Segment

After completing her studies in Economics and a post-graduation in Psychology, Mrs. Goulart worked in executive-level positions at Brazilian and International Corporations. Since 2003 she has served as President and CEO for Healthcare companies in Brazil and Latin America. She has also been appointed a member of the Board of Directors for multiple Brazilian corporations. In May 2018 she joined Eckert & Ziegler as General Manager of the Brazilian Subsidiaries.



## Joe Hathcock

Member of the Group Executive Committee  
Isotope Products Segment

Joe Hathcock graduated in Mechanical Engineering and holds an MBA. After various management positions at Northrop Grumman and British Petroleum he joined Eckert & Ziegler in 2001 as Chief Operating Officer of the Isotope Products segment. He became a member of the Executive Board of Eckert & Ziegler in January 2019.



# REPORT OF THE SUPERVISORY BOARD

## DEAR SHAREHOLDERS,

In fiscal year 2018, the Supervisory Board properly fulfilled the tasks incumbent upon it according to the law, the Articles of Association, and the rules of procedure. It continuously monitored the Executive Board and advised it on its corporate management activities. The Supervisory Board was directly involved in all decisions of fundamental importance to the company.

The Executive Board regularly, promptly, and extensively informed the Supervisory Board about corporate planning, business performance, and strategic progress, as well as the Group's current situation.

The Chairman of the Executive Board also regularly informed the Chairman of the Supervisory Board outside the Supervisory Board's meetings about current developments and significant business transactions. Moreover, the Chairman of the Supervisory Board and the Chairman of the Executive Board liaised on a regular basis on issues related to strategy, planning, general business development, the risk situation, risk management, and compliance. A total of six Supervisory Board meetings took place during the period under review. If necessary, the Supervisory Board also issued authorizations by written procedure. Resolutions of fundamental importance were either passed on the basis of relevant documentation or after direct discussions with the Executive Board. There were no committees of the Supervisory Board during the period under review. With the exception of two members who were each unable to attend one or respectively two of the meetings personally, all members of the Supervisory Board participated in all Supervisory Board meetings. On average, all members of the Supervisory Board attended 92 % of the meetings.

## KEY TOPICS ADDRESSED BY THE SUPERVISORY BOARD

The following key topics formed the focus of the individual Supervisory Board meetings:

At the meeting on January 23, 2018, the Executive Board mainly reported on the preliminary key figures for fiscal year 2017 and the economic situation. The sustainability report as well as the company's risk report, which describes the key risk positions and the Group's risk management, were discussed and approved during this meeting. The audit of the annual financial statements and management reports for the Group and company as well as the declaration of compliance with the German Corporate Governance Code were the main topics of the meetings on March 20, 2018 and March 29, 2018. At the meeting on May 30, 2018, the focus was on the business figures for the first quarter of 2018, and on the preparations for the Annual General Meeting.

At its constituent meeting after the annual general meeting, the supervisory board conducted the necessary election for the nomination of the chairman of the Supervisory Board. The Supervisory Board meeting on July 24, 2018, discussed the business figures for the second quarter of 2018. The focus of the meeting on October 12, 2018 was the presentation and approval of the budget for fiscal year 2019 as well as the presentation of the business figures for the third quarter of 2018. Another topic



## Prof. Dr. Wolfgang Maennig

Chairman of the Supervisory Board

on the agenda was the strategic positioning of the Radiation Therapy, Radiopharma and Isotope Products segments. At the Supervisory Board meeting on December 20, 2018, the main focus was on the preparation of the extraordinary general meeting for the merger of the Belgian Eckert & Ziegler BEBIG SA with Eckert & Ziegler AG.

### **CORPORATE GOVERNANCE PRINCIPLES**

In the period under review, the Supervisory Board continued to deal with the further development of the standards of good and responsible corporate governance, taking into account the German Corporate Governance Code as amended on February 7, 2017. On December 3, 2018, the Executive Board and the Supervisory Board issued a new Declaration of Conformity with the German Corporate Governance Code. An updated version has been concluded on March 26, 2019. Additional details regarding Corporate Governance are available in the Group's Corporate Governance Report, which is published on the Group's website in connection with the Declaration on Compliance.

In the period under review, there were no conflicts of interest among members of the Supervisory Board.

### **AUDIT OF THE ANNUAL FINANCIAL STATEMENTS FOR 2018**

The annual financial statements of Eckert & Ziegler Strahlen- und Medizintechnik AG, the consolidated financial statements of the Eckert & Ziegler Group, and the management reports were audited, together with the accounting system, by the auditors appointed by the Annual General Meeting for fiscal year 2018, BDO AG Wirtschaftsprüfungsgesellschaft, Berlin, Germany. The auditor has concluded that all legal requirements have been met and has granted an unqualified auditor's opinion. Furthermore, the auditor has concluded that the Executive Board has implemented the measures incumbent upon it pursuant to Section 91 (2) of the German Stock Corporation Act (Aktiengesetz, AktG) regarding the establishment of a risk-monitoring system in a suitable form and that this system is suitable for the early detection of developments that endanger the continued existence of the company as a going concern. In regard to the report presented by the Executive Board on the company's relationships to affiliated enterprises in accordance with Section 312 AktG (affiliated company report), the auditor has confirmed that the statements made in the report are correct and that the payments made by the company for the legal transactions listed in the report were not inappropriately high.

The annual financial statements, including the affiliated company report and the auditor's audit report, were submitted to the Supervisory Board. A representative of the auditor took part in the Supervisory Board's balance-sheet meetings on March 26, 2019 and reported on the key findings of the audit. The Supervisory Board acknowledged and approved the auditor's results.

Based on its subsequent examination, the Supervisory Board raises no objections against the audited annual financial statements and the affiliated company report, including the Executive Board's concluding statement. The Supervisory Board therefore approved the annual financial statements of Eckert & Ziegler Strahlen- und Medizintechnik AG and the consolidated financial statements of the Eckert & Ziegler Group. The annual financial statements of Eckert & Ziegler Strahlen- und Medizintechnik AG are thereby adopted. The Supervisory Board concurs with the Executive Board's recommendation on the appropriation of net profit.

## PERSONNEL ISSUES

On August 31, 2018, the Supervisory Board of Eckert & Ziegler AG dismissed Dr. André Heß from the Executive Board with immediate effect. Simultaneously, Dr. Lutz Helmke was appointed a new member of the Executive Board of Eckert & Ziegler AG.

The Supervisory Board of Eckert & Ziegler AG had two changes on December 31, 2018: Dr. Edgar Löffler, medical physicist and long-standing EZAG Executive Board member, who was elected by the Annual General Meeting as successor in May 2018, moves into the Supervisory Board and replaces the radiobiologist Dr. Gudrun Erzgräber. On the same reporting date, Hans-Jörg Hinke also hands over his position to Hamburg-based China expert Jutta Ludwig. Their networks and experiences are supposed to help with the development of the Asia business of the group. The Supervisory Board and Executive Board would like to thank both outgoing members for their support and wish them all the best for their future activities.

## ACKNOWLEDGMENT

The Supervisory Board would like to thank the management as well as all employees for their commitment and performance in the fiscal year 2018.

Berlin, March 2019  
For the Supervisory Board



**PROF. DR. WOLFGANG MAENNIG**  
Chairman of the Supervisory Board

# THE SUPERVISORY BOARD

**Prof. Dr. Wolfgang Maennig**

Chairman of the Supervisory Board  
Berlin

**Prof. Dr. Helmut Grothe**

Deputy Chairman of the Supervisory Board  
Wandlitz

**Prof. Dr. Detlev Ganten**

Berlin

**Albert Rupprecht, MdB**

Waldthurn

**Dr. Gudrun Erzgräber (until December 31, 2018)**

Birkenwerder

**Dr. Edgar Löffler (since January 1, 2019)**

Berlin

**Hans-Jörg Hinke (until December 31, 2018)**

Berlin

**Jutta Ludwig (since January 1, 2019)**

Hamburg

# FACTS

The Eckert & Ziegler Group is one of the world's largest providers of isotope technology for medical, scientific and industrial use. The core businesses of the Group are products for cancer therapy, industrial radiometry and nuclear imaging. In some of its business fields the Group is world market leader.

# 10

## COUNTRIES



# 19

## SITES

# +71%

## IN 2018

### PERFORMANCE OF THE ECKERT & ZIEGLER SHARE

# 1.20

€ per Share  
in 2018



## DIVIDEND

## EQUITY RATIO

# 54%

# 788



## EMPLOYEES





» My family gives me strength every day anew. With the brachytherapy I hope to finally defeat the cancer.«

Pilar S., Nicaragua

1

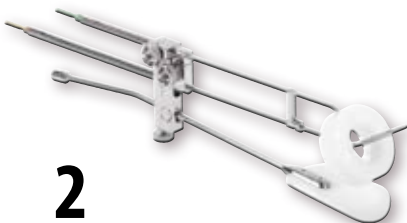


## RADIATION THERAPY SEGMENT

Eckert & Ziegler is one of the globally leading manufacturers of brachytherapy products. Using brachytherapy, a form of radiation therapy, the tumor is irradiated from a very short distance. The products include small, radioactive implants for the treatment of prostate and brain cancer (Seeds) as well as tumor irradiation devices (Afterloader) and eye applicators. In 2018, the tumor irradiation device SagiNova® was installed for the first time in Nicaragua.

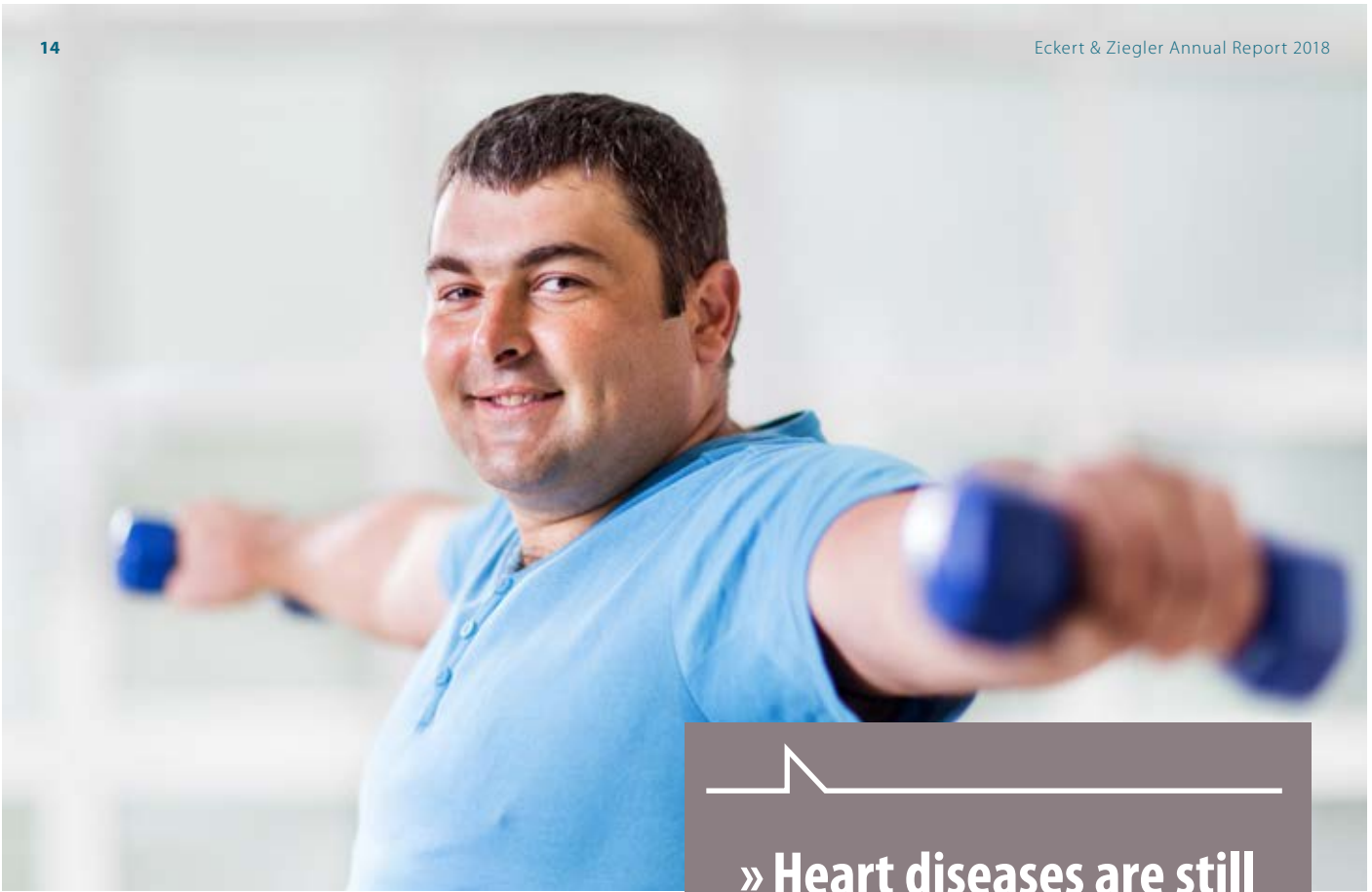
- <sup>1</sup> Treatment planning software for afterloading therapy
- <sup>2</sup> Applicator for treating gynecological tumors
- <sup>3</sup> SagiNova® afterloader for treating cancer with the afterloading technique. The radiation source in the afterloader is placed by remote control and with the help of applicators within the tissue close to the tumor. This enables the tumor to be irradiated while sparing surrounding healthy tissue.

2



3





## ISOTOPE PRODUCTS SEGMENT

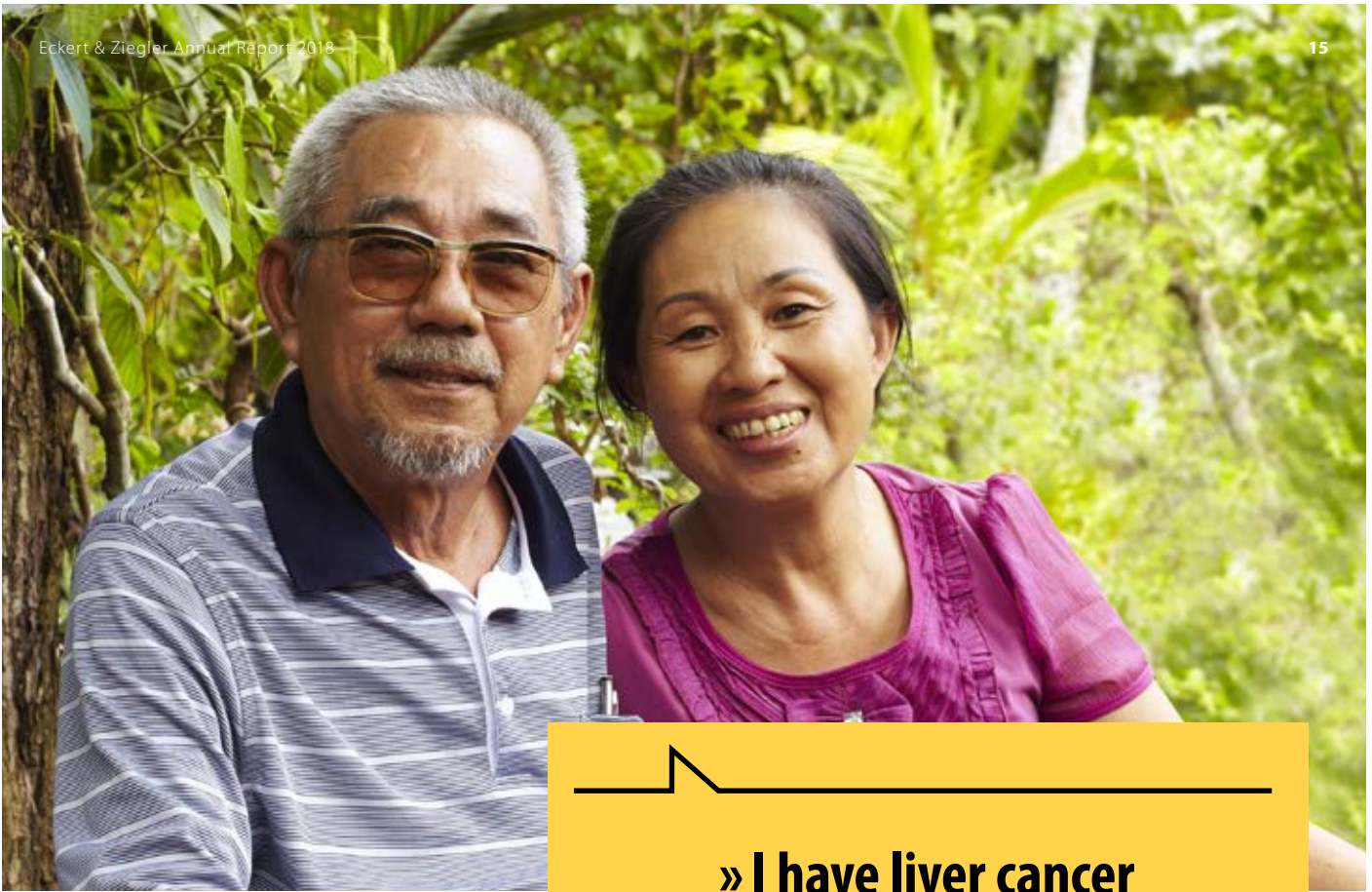
Eckert & Ziegler is one of the leading manufacturers of radiation sources for imaging processes. This also includes calibration sources for gamma cameras, which, for example, create myocardial scintigraphy. To make sure that gamma cameras deliver images with the highest precision there must be done a quality check-up on a daily basis. With Perflexion™, Eckert & Ziegler offers the users an easy-to-operate calibration tool.

» Heart diseases are still the leading cause of death. However, if they are diagnosed early enough, they can be treated properly nowadays. Therefore my Doctor sent me to myocardial scintigraphy. «

Andrew S., Los Angeles



*Perflexion™: a unique flexible radiation source used in the calibration of nuclear medicine imaging equipment*



» I have liver cancer  
and I just want to live  
as normal as possible. «

Phong und Lan N., Vietnam

## RADIOPHARMA SEGMENT

Eckert & Ziegler is one of the leading manufacturers in the field of nuclear medicine. This includes devices for radiosynthesis and quality assurance as well as radiopharmaceuticals for the diagnose and therapy of cancerous diseases. Furthermore Eckert & Ziegler is a competent partner for contract services in the pharmaceutical industry. For selective internal radiotherapy (SIRT), a form of treatment for inoperable liver cancer, Eckert & Ziegler manufactures (/produces) Yttrium-90 at its location in Braunschweig.



*Yttrium-90 is worldwide  
used in cancer medicine.*

# MILESTONES

# 2018



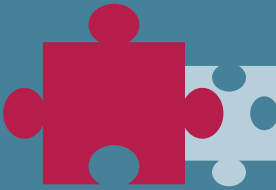
## ◀ MODULAR-LAB EAZY IN ARGENTINA

In Argentina, a Modular-Lab easy was installed for the first time. It is the smallest synthesis system available on the market for the production of theranostic tracers for cancer diagnosis and treatment.



## ▲ FELIX MICK BRACHYTHERAPY AWARD

Eckert & Ziegler BEBIG granted the Felix Mick Brachytherapy Award 2018 to two young radio oncologists who are dedicated to the brachytherapy of prostate cancer. The winners, Andreia Ponte, M.D. and Dr. Jose A. Domínguez Rullán got a free of charge participation in a brachytherapy teaching course organized by the European Society for Radiotherapy and Oncology.



## ◀ MERGER WITH ECKERT & ZIEGLER BEBIG SA

The Extraordinary General Shareholders' Meeting of Eckert & Ziegler AG approved the merger between Eckert & Ziegler AG as absorbing company with the Belgian Eckert & Ziegler BEBIG SA as absorbed company.



## CHANGE IN THE SUPERVISORY BOARD ▶

Dr Edgar Loeffler, medical physicist and former member of the Executive Board and Jutta Ludwig, a Hamburg based China expert have joined the Supervisory Board as of January 1, 2019.

## DIVIDEND ▼

A dividend in the amount of € 0.80 is decided at the Annual General Meeting on 30 May 2018.



## ▼ PROSTATE SEEDS IN THE REPUBLIC OF SOUTH AFRICA

Eckert & Ziegler BEBIG entered the South African seed implant market with its IsoSeed® I25.S06. The first patients were successfully treated in Polokwane, Limpopo. Prostate seed implantation is a minimally invasive procedure for treating prostate cancer in which radioactive seeds are placed in the prostate gland to target cancer cells while maximizing the preservation of healthy tissue.





### ◀ MANUFACTURING PARTNER FOR BAYER'S INNOVATIVE TARGETED THORIUM CONJUGATES IN EUROPE

Eckert & Ziegler has been selected as manufacturing partner for clinical supply of Bayer's innovative Targeted Thorium Conjugates (TTCs) in Europe. TTCs are a versatile, next-generation targeted alpha therapy (TAT). The approach uses tumor targeting molecules such as antibodies that carry alpha-particle emitting Thorium-227 to the tumor. TTCs have the potential to be used in a broad range of tumors, and also for patients who are refractory to chemotherapy or conventional targeted oncologics.

### SHARE BUYBACK OFFER I

As part of a voluntary public share buyback offer Eckert & Ziegler has repurchased 125,000 of its own shares.



### NEW GENERAL MANAGER IN BRAZIL ▼

Claudia Goulart was appointed General Manager of Eckert & Ziegler in Brazil in May 2018. She is also member of the Group Executive Committee of Eckert & Ziegler AG.



### SHARE BUYBACK OFFER II

As part of a voluntary public share buyback offer Eckert & Ziegler has repurchased 125,000 of its own shares. Since a total of 954,024 shares were tendered within the acceptance period, not all acceptance declarations could be accepted in full.

### FIRST PATIENTS TREATED WITH THE SAGINOVA® HDR AFTERLOADER AT HOSPITAL MILITAR CENTRAL IN MEXICO CITY ▶

The SagiNova® afterloader entered into operation at Hospital Militar Central in Mexico City. With SagiNova® the radiation oncology department of the hospital will mainly serve GYN (cervix, endometrium, vagina) cancer patients as well as patients to be treated for breast and extremity sarcomas.



### NEW EXECUTIVE BOARD MEMBER FOR RADIOPHARMA ▼

The Supervisory Board appointed Dr. Lutz Helmke as new member of the Board of Directors of Eckert & Ziegler Strahlen- und Medizintechnik AG effective September 17, 2018.



### ◀ SAGINOVA® IN NEPAL

Eckert & Ziegler BEBIG has delivered its first SagiNova® system to Nepal, enabling government-run BP Koirala Memorial Cancer Hospital to resume its HDR brachytherapy service. With around 10,000 cancer patients per year it is one of the leading cancer centers in Nepal.

# THE SHARE



€ 70.00

## HIGHEST PRICE

in the financial year 2018  
previous year: € 41.10



€ 33.70

## LOWEST PRICE

in the financial year 2018  
previous year: € 25.02

### BASIC INFORMATION ON THE ECKERT & ZIEGLER SHARE

#### International Securities

Identification Number  
(ISIN) DE0005659700

#### Security Identification Number

(WKN) 565 970

#### Stock exchange sector

Prime Standard, Frankfurt

#### Stock exchange abbreviation and symbols

EUZ (Deutsche Börse)  
EUZ (Bloomberg)  
EUZG (Reuters)

#### Free float

58.9 %

#### Quotation in indices of the German Stock Exchange

CDAX  
DAX International Mid 100  
DAXplus Family Index  
DAXsector All Pharma & Healthcare  
DAXsector Pharma & Healthcare  
DAXsubsector All Medical Technology  
DAXsubsector Medical Technology  
Prime All Share  
Technology All Share

### KEY DATA

		Dec 31, 2017	Dec 31, 2018	in %
Closing price for the financial year*	€	36.11	61.70	71
Highest price in the financial year*	€	41.10	70.00	70
Lowest price in the financial year*	€	25.02	33.70	35
Price-Earnings Ratio (PER)	€	11.50	19.78	72
Earnings per share (EPS)	€	2.78	3.12	12
Cashflow per share	€	5.07	4.08	- 20
Book value per share	€	21.22	23.73	12
Average shares in circulation	shares	5,288,165	5,168,026	- 2
Number of shares outstanding as of the reporting date	shares	5,292,983	5,292,983	0
Market capitalization	€ million	191	327	71
Average trading volume per day	shares	9,913	9,178	- 7

\* Xetra

### Development of the share

The 2018 stock market year was difficult and for most investors disappointing. Concerns about a slowing global economy, the trade dispute between the USA and China and an approaching Brexit weighed heavier on the DAX than on companies in the USA. The DAX dropped by around 18 % in 2018.

The Eckert & Ziegler share however was able to hold its ground excellently in this unfavorable market environment and achieved an annual increase of more than 70 %. The share is currently on the watch list of index analysts and is considered as a candidate for the SDAX.

After a stable sideways movement until the middle of the year, the Eckert & Ziegler share responded after the announcement of the positive half-year numbers with a significant price increase. The increase in the profit forecast and the pleasing results for the nine-month period honoured the share with a renewed rise. The share reached its annual high of € 70.00 at the beginning of December and closed the year at a price of € 61.70, corresponding to a significant plus of over 70 %. The average trading volume in 2018 was 9,178 shares per day (previous year: 9,913 shares).

### Earnings per share of € 3,12

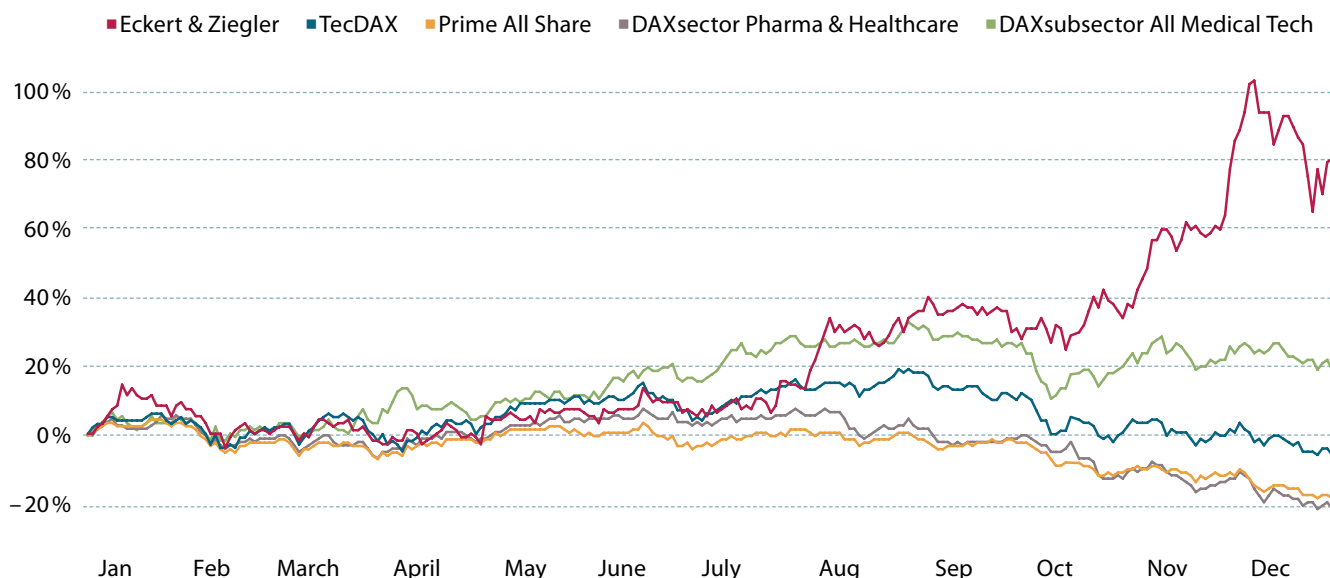
In the period under review, the Eckert & Ziegler Group generated consolidated earnings per share of € 3.12. Earnings per share is calculated by dividing the consolidated net income by the average number of shares in the fiscal year.

### IR-KONTAKT

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DYNAMIC PERFORMANCE OF THE ECKERT & ZIEGLER SHARE IN 2018 (INDEXED AT 100)



**Dividend of € 1,20**

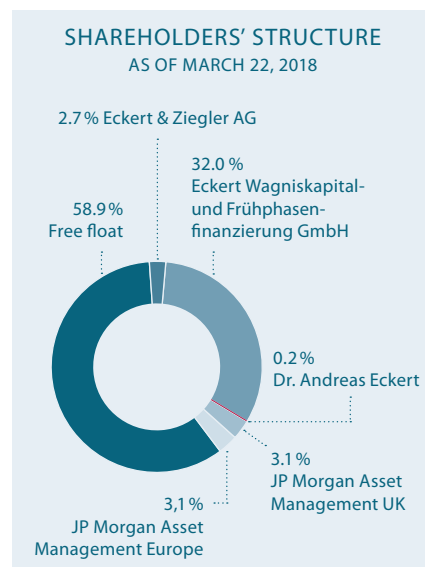
The company intends to continue its ongoing dividend policy of the past years and distribute roughly a third of consolidated net income as dividends. The Executive Board and Supervisory Board will therefore propose to the General Annual Meeting on May 29, 2019 a dividend of € 1.20 per share for the fiscal year 2018. Based on the annual closing price of € 61.70, this works out at a dividend yield of 2.2%. In comparison, the average dividend yield of the eight TecDAX stocks that cover the health care sector stands at just 0.7%.

**Analyst recommendations**

Hauck & Aufhäuser and DZ Bank report on Eckert & Ziegler. In the period under review, these institutions published a total of nine studies and brief analyses on Eckert & Ziegler.

**Investor Relations**

The objective of our investor relations activities is to provide private shareholders, institutional investors, financial analysts, and the press with open and timely information about the company. Essential components of this communication with the capital market comprise stock exchange and press releases, quarterly reports, interviews, and conference calls. At the analyst conference held in March, the DVFA spring conference in May, the Annual General Meeting in June and the German Equity Forum in November the Executive Board also presented information regarding new developments and, in cooperation with the employees from the Corporate Communications and Finance departments, were available year-round for enquiries or visits by interested parties. Published studies by stock analysts and other company information can be found on our website under [www.ezag.com](http://www.ezag.com) > *Investors*. If you would like to join the IR mailing list and receive stock exchange and press releases regularly by email, call or email us now.



# ENVIRONMENT AND SAFETY

## OCCUPATIONAL SAFETY

Protecting our employees from work-related dangers has top priority at Eckert & Ziegler. Industrial operations that use ionizing radiation or that use radio nuclides actually are in the lowest hazard class – at 0.65 – of all industrial branches of the chemistry sector (Source: BG RCI, annual report 2017), nevertheless we intend to reduce even further the number of accidents at our company, which is low compared to other industrial corporations. We are working towards this goal together with the relevant authorities and employers' liability insurance associations. In the period under review, the number of work-related accidents – at 7 per 1,000 full-time employees (prior year: 9) – was significantly below comparable values for 2017 of approximately 18 work-related accidents per 1,000 fulltime employees in Germany, according to the 2017 annual report of the Employers' Liability Insurance Association for Electrical Engineering, Textiles and Precision Mechanics (Berufsgenossenschaft Energie Textil Elektro Medienerzeugnisse BG ETEM). The comparable value according to the 2017 annual report of the Employers' Liability Insurance Association for Raw Materials and Chemical Industry (Berufsgenossenschaft Rohstoffe und chemische Industrie BG RCI) was around 18. The year under review saw no radiological incidents (prior year: 0) throughout the Group. However, it is important to note that the radiological incidents in recent years were merely deviations from normal operations. None of the incidents were safety-relevant. The competent authorities were informed in accordance with radiation protection regulations or specific conditions set forth by the respective authorizations. Although neither persons nor the environment were harmed, the causes were examined



*Protecting our employees from work-related dangers has top priority at Eckert & Ziegler.*

in painstaking detail in each case, and measures were taken in conjunction with regulatory agencies to avoid similar incidents in the future. The precautions taken consisted mainly of organizational and administrative changes to the work processes in question.

### WORK-RELATED ACCIDENTS AND RADIOLOGICAL INCIDENTS

	2012	2013	2014	2015	2016	2017	2018
<b>Work-related accidents (in absolute values)</b>							
Reported work-related accidents	4	3	5	3	2	7	5
Reported accidents en route to work	5	4	2	4	3	0	4
<b>Reportable work-related accidents (per 1,000 employees)</b>							
Reported work-related accidents	6.7	5.2	9.8	4.3	3.0	9.1	6.7
Reported accidents en route to work	8.4	6.9	2.8	5.8	4.5	0	5.4
<b>Radiation protection</b>							
Radiological incidents *	2	0	0	0	0	0	0

\* Radiological incidents = reportable events in compliance with radiation protection regulations or specific conditions set forth by the respective authorizations. However, it is important to note that the radiological incidents in recent years were merely deviations from normal operations. None of the incidents were safety-relevant.



## ENVIRONMENT

The Eckert & Ziegler Group is considered to be part of the metalworking or chemical and pharmaceutical industries. Like all industrial companies, it is subject to comprehensive rules and regulations that include guidelines on environmental impact.

These rules and regulations often prescribe both limits on emissions as well as their monitoring. The guidelines usually stipulate that independent third parties or government authorities should be responsible for monitoring. The quality of the data can therefore be considered to be of high quality. In the period under review, there were no incidents that led to limits being exceeded. Furthermore, no serious deviations from requirements were recorded in the period under review in terms of the quality management system (DIN EN ISO 9001:2015; DIN EN ISO 13485:2016; ISO/IEC 17025:2005; MDSAP; cGMP; GMP; PAL, u. a.)

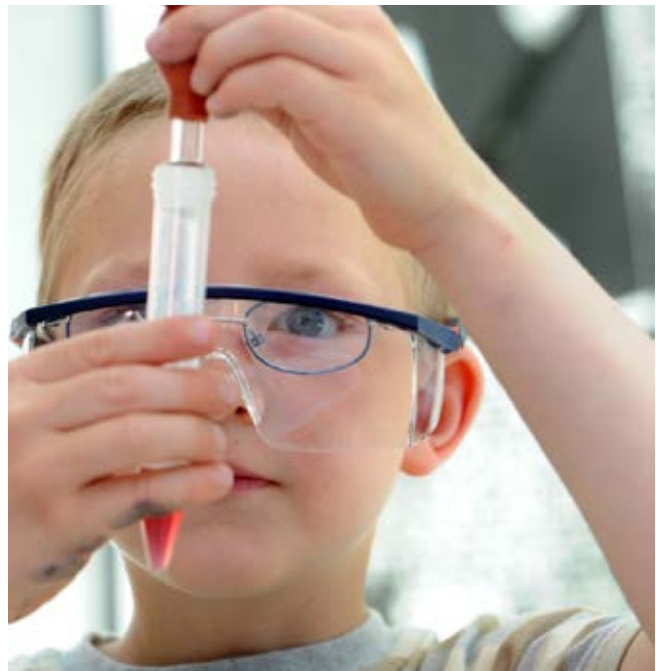
We focus on energy-saving design and construction for new buildings and renovations. The Group headquarters in Berlin-Buch, which we moved into in 2012, is a prime example. The sustainable construction and facilities concept combines a variety of methods: improved insulation standards for the building envelope; district heating generated by combined heat and power; solar water heating for industrial water; solar-fed power from a solar-Protecting our employees from work-related dangers has top priority at Eckert & Zieglerpower system; and a double-flow ventilation system. Thanks to these measures, the building's calculated specific primary energy consumption of 154 kWh/m<sup>2</sup> a is 25 % lower than required by the strict conditions set forth in the Energy Conservation Regulation (Energieeinsparungsverordnung – EnEV).

By taking back used sources and processing them for new products, Eckert & Ziegler is making an additional contribution to environmental conservation. This recycling is extremely useful for all parties involved and helps conserve resources.



# SOCIAL COMMITMENT

At its various locations, Eckert & Ziegler is engaged in projects and initiatives through financial support and the personal commitment of its employees. In this respect, we have set strategic priorities. In particular, the company supports initiatives for education, science, and research, as well as other projects in the region of individual company locations. Several years ago, Eckert & Ziegler launched the “Forschergarten” project ([www.forschergarten.de](http://www.forschergarten.de)) in cooperation with the Life Science Learning Lab Gläsernes Labor in Berlin-Buch and the Friedrich-Fröbel School for Social Pedagogy in order to promote science education among children. The idea of this initiative is to make science and technology come alive for children in kindergartens and schools, reduce their fear of the unknown and enhance the quality of education during early childhood and school. Due to popular demand, the course range has been enhanced and now includes physics classes. Under the motto “Atoms you can touch,” courses have been offered that aim to convey the basics of radiation to high school students in a practical and visual manner. Among other things, the students are allowed to detect natural radioactivity in everyday objects such as building materials, cigarette ash or fertilizer using a Geiger counter, and gain an insight into the use of radiation in medicine. Almost 2,000 young people benefited from this educational program in 2018.



Scientific courses for children at the Forschergarten, an experimental research garden.

Our foreign subsidiaries are also involved in social projects. Eckert & Ziegler sponsors and donates to a team of American employees who raised approximately USD 50,000 in donations by taking part in the National Multiple Sclerosis Society's annual "Walk MS" against multiple sclerosis. The donations will go towards research into fighting the disease, which is still incurable, while those afflicted with the disease will receive financial support. The fundraising campaign has been one of our projects for many years. At our Californian subsidiary, employees volunteered at the children aid organization and donated around 1,400 US dollars. We supported this voluntary work and added the donations of the employees.

Since 2011, Eckert & Ziegler has supported the initiative "Bucher Fuchse" (Buch foxes), a local environmental education project that enables elementary school students in Berlin to undertake scientific explorations in woods and fields. A nature educator accompanies the children on their expeditions through flora and fauna and explains natural phenomena. The children get to have the opportunity to develop their imagination, creativity and the desire to discover and explore at leisure. Through the self-determined discovery sustainable experiences of nature and fundamental insights into ecological interrelationships are created.



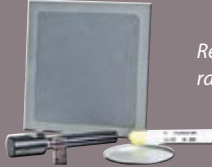
*Eckert & Ziegler supports the "Buch Foxes" initiative, a program that encourages elementary school children to explore nature in the forests and meadows of Berlin-Buch.*



*Employees taking part in the National Multiple Sclerosis Society's annual "Walk MS" against multiple sclerosis*

# OUR PRODUCTS

## REFERENCE SOURCES



Reference sources for the calibration and checking of radiation protection measurement instruments



## CALIBRATION SOURCE

Calibration source used to ensure accurate results in positron emission tomography (PET) scans FLOOD

## FLOOD SOURCE

Perflexion™: a unique flexible radiation source used in the calibration of nuclear medicine imaging equipment



# ISOTOPE PRODUCTS SEGMENT



## INDUSTRIAL SOURCES

Radiation sources used for radiometric measurement of the density, thickness and level of materials in industrial processes

## IRRADIATION DEVICE

Biobeam GM for gamma-irradiation of blood and blood components in transfusion medicine



## PLANT ENGINEERING

Special plant engineering for processing of radioactive materials in clinics and research centres





### RADIOSYNTHESIS SYSTEM

*Modular-Lab easy – the smallest radiosynthesis system on the market*

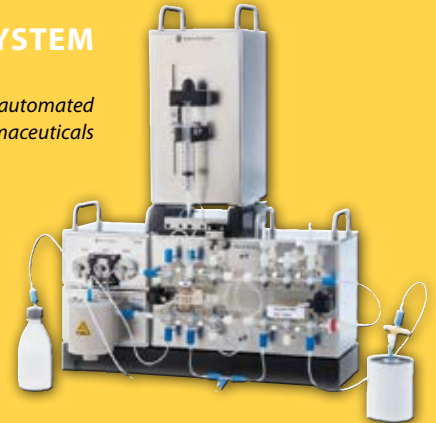


### RADIOSYNTHESIS SYSTEM

*KitLab: Fully automated device for safe processing of PET kits*

### RADIOSYNTHESIS SYSTEM

*Modular-Lab PharmTracer for fully automated routine production of radiopharmaceuticals*



# RADIOPHARMA SEGMENT



### QUALITY CONTROL DEVICE

*With this GMP-conform TLC-Scanner various radioisotopes can be identified to ensure the purity of radiopharmaceuticals*



### RADIOPHARMACEUTICAL

*GalliaPharm® is a <sup>68</sup>Ge/<sup>68</sup>Ga radionuclide generator for in vitro radioactive labelling of various carrier molecules*



### SOFTWARE

*Treatment planning software for afterloading therapy*

# RADIATION THERAPY SEGMENT



### X-RAY THERAPY DEVICE

*X-ray therapy device ioRT-50 for the treatment of tumor diseases*

### OPHTHALMIC APPLICATORS

*Ruthenium applicators for treating eye cancer*



### SEEDS

*Low-level radiation iodine seeds for treatment of prostate and brain cancer*



### TUMOR IRRADIATION DEVICE

*SagiNova® afterloader for treating cancer with the afterloading technique, the radiation source in the afterloader is placed by remote control and with the help of applicators within the tissue immediately around the tumor. This enables the tumor to be irradiated while sparing surrounding healthy tissue.*





OPEN TO  
NEW IDEAS

FLAT  
HIERARCHIES



CONTINUING  
TRAINING





DIVERSITY



INTER-NATIONAL TEAMS



FAMILY-FRIENDLY







# GROUP MANAGEMENT REPORT

<b>1. GROUP PRINCIPLES</b>	<b>30</b>
1.1 Business model of the Group	30
1.2 Business model of Eckert und Ziegler Strahlen- und Medizintechnik AG	31
1.3 Goals and strategies	31
1.4 Management system	31
1.5 Research & development	32
<b>2. BUSINESS REPORT</b>	<b>34</b>
2.1 Business development, financial position and performance of the Group	34
2.2 Financial position and performance of Eckert & Ziegler Strahlen- und Medizintechnik AG – Notes based on the German Commercial Code (HGB)	40
2.3 Employees	41
2.4 Overall statement on the economic situation	43
<b>3. REPORT ON OPPORTUNITIES &amp; RISKS</b>	<b>44</b>
3.1 Organisation of risk management	44
3.2 Accounting-related risk management and internal control system	45
3.3 Financial risks	47
3.4 Political risks	48
3.5 Legal risks	48
3.6 IT risks	48
3.7 Personnel risks	48
3.8 Procurement risks	49
3.9 General risks from the production and handling of radioactivity	49
3.10 Market risks and strategic risks	50
3.11 Risks posed by cost increases due to price hikes	50
3.12 Main customer risk	51
3.13 Research and development risks	51
3.14 Risks due to insufficient innovations in the Radiation Therapy segmente	51
3.15 Risks relating to financial instruments	51
3.16 Risk development	51
3.17 Opportunity report	52
<b>4. OUTLOOK</b>	<b>53</b>
4.1 Comparison with the previous year	53
4.2 Economic environment	53
4.3 Future business development in the Isotope Products segment	54
4.4 Future business development in the Radiation Therapy segment	54
4.5 Future business development in the Radiopharma segment	54
4.6 Future business development in the holding company	54
4.7 Future business development in the Group	54
4.8 Future business development of Eckert & Ziegler Strahlen- und Medizintechnik AG	55
<b>5. OTHER DISCLOSURES</b>	<b>56</b>
5.1 Non-financial Group report (Article 315b of the Commercial Code (HGB))	56
5.2 Remuneration report	56
5.3 Information required under takeover law	58
5.4 Corporate governance statement (Article 315d HGB)	61
5.5 Affiliated company report	61
5.6 Insurance of legal representatives (balance-sheet oath)	61

# 1. GROUP PRINCIPLES

## 1.1 BUSINESS MODEL OF THE GROUP

The Eckert & Ziegler Group (Eckert & Ziegler) is an internationally active producer of isotope technology components for medical, scientific and industrial applications. In addition to Eckert & Ziegler Strahlen- und Medizintechnik AG, a listed German stock corporation with registered office in Berlin, the Group comprises 38 additional companies, including minority interests. The Group is managed by the Executive Board, which is supported in its decisions by the advice of the Extended Executive Board. It consists of the Executive Board of Eckert & Ziegler AG and heads of selected business units.

The company's core competencies include the handling and processing of isotope technology materials in specially equipped and approved production facilities in Europe, United States and Brazil. In addition, Eckert & Ziegler develops, produces, and sells medical devices for cancer therapy as well as radionuclide generators and synthesis equipment for the production of radiopharmaceuticals. Plant engineering and the retrieval of isotope technology waste from hospitals and research institutions round off the portfolio.

There are comparatively few providers in the international markets where Eckert & Ziegler operates. Since its competitors serve only specific market niches, Eckert & Ziegler has no direct competitor offering the same range of products. There are considerable barriers to market entry due to strict regulatory requirements.

The operating business is managed through subsidiaries in the three segments of Radiation Therapy, Radiopharma and Isotope Products, which target differing customer groups with their different product groups. The holding company pools intragroup services such as radiation protection, the legal department, accounting, IT and human resources.

The **Isotope Products** segment manufactures isotope technology components for imaging techniques, scientific applications, quality assurance and industrial measurement purposes. The segment's headquarters are located in Los Angeles in the US. Other production sites are located in Atlanta in the US, Braunschweig, Dresden and Leipzig in Germany, and Prague in the Czech Republic.

The segment also retrieves, processes and conditions low-level radioactive isotope technology waste from hospitals and other facilities.

With the acquisition of the companies of the Gamma-Service Group on 31 May 2017, which were added in their entirety to the Isotope Products segment, the construction of medical devices, so-called blood irradiation devices and a company for recycling isotope technology residues and other services are added, in addition to isotopic plant engineering.

The **Radiation Therapy** segment targets its products at radiation therapists, a group of doctors that is specialised in treating cancer through irradiation. Its two most important products are small radioactive implants for treating prostate cancer based on iodine-125 (so-called "seeds") and tumour irradiation equipment based on cobalt-60 or iridium-192 (so-called "afterloaders"). The product range is rounded off by eye applicators based on ruthenium-106 and iodine-125 for the treatment of uveal melanoma (eye cancer). With the takeover of WOLF Medizintechnik GmbH in January 2018, the radiotherapy product portfolio was expanded to include X-ray therapy devices for the treatment of superficial skin tumours and joint diseases.

From 2008 to 18 February 2019, the **Radiation Therapy** segment was managed under the umbrella of Eckert & Ziegler BEBIG SA, listed on the NYSE Euronext in Brussels, in which Eckert & Ziegler held an interest as at 31 December 2018 representing 80.8 % of the economic result and 84.2 % of voting rights in a general meeting. In December 2018, the shareholders of Eckert & Ziegler BEBIG SA and Eckert & Ziegler Strahlen- und Medizintechnik AG approved the merger of the two companies. As a result of the merger, Eckert & Ziegler BEBIG SA will no longer be listed on the stock

exchange. Eckert & Ziegler Strahlen- und Medizintechnik AG as the absorbing company will receive all shares, assets and liabilities. The subsidiaries of Eckert & Ziegler BEBIG SA and the customer base were transferred in advance to Eckert & Ziegler BEBIG GmbH, which was in turn transferred into Eckert & Ziegler Strahlen- und Medizintechnik AG as a result of the merger. Under the draft terms of the merger, the merger date was set to 01 October 2018, and the results are, therefore, attributable to the transferring company from this date. The merger became legally effective upon entry of the merger in the commercial register on 18 February 2019.

The products of the Radiopharma segment, with head office in Berlin, Braunschweig, Germany and Hopkinton, MA, US, comprise the approved  $^{68}\text{Ge}/^{68}\text{Ga}$  generator, laboratory equipment, including radiosynthesis devices and the associated consumables, as well as devices for the required quality control. The segment also produces long-lived radioisotopes for pharmaceutical applications (especially yttrium-90 as an approved drug Yttriga). This substance has a number of uses, such as in the production of radioactive embolic agents for the treatment of liver tumours.

The segments' markets are only loosely connected with each other. Each has its own cycles and distinctive characteristics. There are also national differences in the overall conditions. This is particularly the case with medical products, where the intensity and dynamics of demand are influenced by the level of services provided by national healthcare systems and the presence of local competitors.

## **1.2 BUSINESS MODEL OF ECKERT UND ZIEGLER STRAHLEN- UND MEDIZINTECHNIK AG**

Eckert & Ziegler Strahlen- und Medizintechnik AG operates as a financial and administrative holding company and as a strategic development partner for its subsidiaries; it does not conduct its own business operations. The main sources of revenues are therefore service fees, interest and profits distributed by or transferred from the subsidiaries.

## **1.3 GOALS AND STRATEGIES**

Sustainable and profitable growth is the mid-term business development goal. The Group intends to achieve this on the one hand through organic growth, based for example on (further) development of new and existing products, or by entering into new geographical markets. On the other hand, the Group seeks opportunities for profitable acquisitions and aims to generate revenues by improving efficiency.

## **1.4 MANAGEMENT SYSTEM**

The Executive Board manages the Group's production and distribution companies. It sets the course for strategic development, makes important decisions with the managing directors, and monitors subsidiaries' achievement of targets.

The long-term business plan for the Group is drawn up for five financial years, and is updated annually on the basis of the prior-year's figures. The annual individual business plan is bottom-up and is based on the business plans for each business area prepared by the respective managing directors together with the Executive Board. Detailed targets are formulated with regard to predefined control parameters and key performance indicators for the individual production and distribution companies. These individual business plans take into account estimates regarding the development of the industry.

In the fourth quarter of each financial year, the Executive Board submits to the Supervisory Board a detailed Group annual budget for the following financial year. Ongoing monitoring of the budget size is carried out as part of central quarterly reporting.

The segment financial controllers generate reports for the business areas and monitor performance compared to the budget, with particular focus on the key performance indicators of revenues and annual result. The financial controllers report directly to the Group Executive Committee on a quarterly basis with a structured financial report on quantitative and qualitative developments in the reporting period.

The financial management of the Group is carried out largely at the segment level, with some differences in the implementation.

At regular meetings, the Executive Board gathers information about the market situation and sets the course in coordination with managing directors and segment heads. A comprehensive review of the annual business plan is carried out once a year.

## 1.5 RESEARCH & DEVELOPMENT

The total spending on research and development plus capitalised development costs and excluding depreciation and amortisation increased from €3.6 million to €3.8 million in 2018. Development expenses in the Isotope Products segment rose slightly to €0.4 million compared to the €0.3 million spent the previous year. In the Radiation Therapy segment expenses increased by €0.4 million to €1.7 million. This is due to increased expenses for the development of applicators. At €1.4 million, spending on research and development in the Radiopharma segment remained at the previous year's high level in 2018 (€1.8 million in the previous year), as the company continued the development work for existing product ranges, which started in 2017.

Sales of products that were added to the Group's portfolio over the past five years reached previous year's level of 30% (previous year: 30%). A significant portion of this is due to the acquisition of the Gamma-Service Group companies and the growth in revenue of the companies acquired in Brazil in 2015 and 2016. Sales generated by SagiNova® and the equipment division also accounted for a significant portion of the increase.

In the Radiopharma segment, the company addressed the consistently high demand for <sup>18</sup>F-based radiotracers for the diagnosis of various oncological and neurological issues in 2018, by completing several development projects on the cassette-based synthesis system Modular-Lab PharmTracer. This has further reinforced the position of the equipment division of the Radiopharma segment as an attractive provider of versatile technologies for routine clinical applications. In addition, the company continued to advance several small, international cooperation projects.

These included the optimisation of existing products with respect to functionality and procurement as well as the design and implementation of new applications for clinical studies. The results will be published in 2019 after the projects are completed.

In the technical area, the completion of "KitLab" was prepared well in advance to allow for a market launch in 2019 after all internal and external tests have been completed. The peristaltic pump technology used picks up on the trend of approved shake'n'bake and cold kit applications. The automation of the process offers the user an advantage over purely manual application, including a reduction in radiation exposure during production. In the area of radionuclide generators, the Group continued to lay emphasis on production expansion, which is expected to be completed in the second quarter of 2019.

In the year under review, the Radiation Therapy segment continued to work on additional indications for seed therapy. After CE approval for seeds for the treatment of brain tumours was obtained in 2017, work continues on the indication for the treatment of lung cancer. In the field of ophthalmic applicators, new business was done in the India distribution region. The Group further strengthened its business in Europe and expanded its unique position in the area of

ruthenium-106. The company revised the technical documentation and made investments in the production area. The further development of the planning systems allows the treating physician to plan and carry out the treatment of the patient with eye applicators even more safely. The efforts made in recent years to strengthen the afterloader business are now having a clear and lasting effect. The deliveries of afterloader systems increased for the second year in a row. Following a 20 % year-on-year increase in 2017, they increased by 41 % in 2018 compared to 2017. The main contributing factor was the increasingly broad approval of the system in the various markets.

In November, the first part of the online marketing system for therapy products was made available to customers. The segment is thus implementing the first building block of an agenda for the construction of a digital infrastructure that will enable customers to use all digital channels for communication and consumption, as they are already accustomed to in their private life.

In the area of tumour irradiation equipment, an online platform was launched at the end of the year, which offers customers easier access for repeat orders and complete systems. The aim of the platform is to accelerate the entire order process and expand the customer base.

The Isotope Products segment achieved several important research and development milestones during the year. A new beta secondary standard has been introduced that allows for precision calibration of beta dosimeters based on a national standard. A new generation of source designs was also completed with the xSPECT cross calibration project for Siemens Medical.

The segment continues to invest in R&D activities to improve production processes, efficiency and safety and to develop further product variations.

## 2. BUSINESS REPORT

### 2.1 BUSINESS DEVELOPMENT, FINANCIAL POSITION AND PERFORMANCE OF THE GROUP

#### 2.1.1 Business development of the Group

All segments contributed to the solid performance of the Group. The Isotope Products segment generated high revenue in the energy sector, while the Radiopharma segment saw buoyant demand for pharmaceutical products Radioisotopes setting new records. Also in the Radiation Therapy segment, revenue increased year-on-year in the area of HDR (high-dose rate) products. The acquisition of WOLF Medizintechnik GmbH (WOMED) brought about the much-desired growth in revenue.

As IFRS 5 requires a separate presentation of income and revenue from discontinued operations (as well as non-current assets held for sale), unless otherwise stated, the comparative period disclosures and notes focus only on continuing operations.

In 2018, the Eckert & Ziegler Group delivered record results again by growing its revenue by 22 % or € 30.1 million year-on-year to reach € 168.7 million. Isotope Products was the fastest growing segment among continuing operations, increasing its revenue by € 22.6 million or 25 % to € 112.3 million due to the consolidation of the Gamma-Service Group acquired at the end of May 2017 and the strong demand in the energy sector. Revenue in the Radiation Therapy segment increased by € 4.7 million or 18 % to € 30.6 million, driven by solid sales generated by HDR products and WOMED acquired in January 2018. The Radiopharma segment increased revenue by 18 % to € 31.5 million, mainly driven by pharmaceutical radioisotopes.

The strong euro had an adverse effect on foreign currency revenue and revenue growth in all segments, costing the Group € 4.4 million in revenue compared to the previous year. On a currency-adjusted basis, revenue would have increased by € 34.5 million or 25 %. Organic, real revenue growth, i.e. revenue adjusted for currency effects and acquisitions and disposals made in 2017 and 2018, amounted to € 25.6 million or 18 %.

The Group has thus met its revenue target of € 165 million set out in the forecasts for 2018.

#### Revenue growth in detail

The largest segment, Isotope Products, recorded an increase in revenue of € 22.6 million to € 112.3 million. In particular, the acquisition of the companies of the Gamma-Service Group in May 2017 contributed to an increase in revenue of € 6.7 million. While revenue in the other product areas such as raw isotopes, isotope technology components for industry and imaging processes and other only increased by around € 0.9 million, revenue generated by components for measurement technology and quality assurance increased by € 13.2 million. This was mainly driven by the energy sector, which, as expected, picked up again after a few subdued years. This effect is not expected to be repeated in the same magnitude. The remaining € 1.8 million in revenue growth are attributable to revenue generated by the Isotope Products segment with other segments of the Group.

In the area of waste disposal, necessary price increases led to a further reduction in the volume of low-active radioactive materials, but not to a drop in revenue. Overall, the revenue generated by disposal companies remained at the same level as in the previous year.

Revenue in the Radiation Therapy segment increased by € 4.7 million or 18 % compared to the previous year. This segment saw a strong increase in demand for HDR (high-dose rate) products, translating into a revenue increase of € 1.4 million, or 14 % compared to the previous year. Compared to 2017, the number of delivered units increased by 41 %, due to the improved economic situation in the target markets of South America, Africa and Asia.

However, the largest boost to growth was achieved through inorganic means, in this instance, the acquisition of WOMED, which was acquired in January 2018. This resulted in a revenue increase of € 2.2 million in 2018. A further € 1.1 million in revenue growth was contributed by business with other products from the seeds, eye applicators and other areas.

In the Radiopharma segment, revenue excluding discontinued operations increased from € 26.6 million to € 31.5 million, mainly driven by the Radiopharma segment, which recorded an increase in revenue of € 4.4 million compared with the previous year. The equipment division contributed € 0.5 million to the increase in revenue. The cyclotron division was sold in May 2017 and reported accordingly as a discontinued operation; it was therefore not included in the analysis of revenue growth.

With revenue of € 79.9 million (€ 73.1 million in the previous year), Europe remained the most important sales region in 2018. Expressed as a percentage of consolidated revenue, Europe accounted for 47.4 % of revenue, compared to 50.5 % in the previous year. While the Isotope Products segment is increasingly generating revenue outside Europe, primarily in the US, the Radiation Therapy segment is growing revenue in Europe. Europe is also the most important market for the Radiopharma segment. Germany remained the most important European market with € 29.9 million (previous year: € 30.0 million). The largest single national market for Eckert & Ziegler products in 2018 was once again the United States, where goods worth of € 56.2 million were sold, compared to € 44.9 million in the previous year. These sales are mainly invoiced in USD. Total USD revenue accounted for 47.3 % (previous year 46.7 %) of consolidated revenue. Compared with the previous year, the Group's foreign currency risk exposure increased slightly.

### 2.1.2 Earnings performance of the Group

At € 16.9 million, the consolidated profit from continuing operations in the year under review was € 4.9 million or 41 % higher than in the previous year. The share of earnings attributable to the shareholders of Eckert & Ziegler AG amounts to € 16.1 million, translating into earnings per share of € 3.12.

The main earnings driver was the 21.7 % or € 30.1 million increase in revenue on the back of solid demand in the energy sector and the pharmaceutical radioisotopes market. Due to a disproportionate increase in the cost of sales, the gross margin did not increase in line with revenue. It increased by 15.9 % or € 10.4 million.

In the year under review, the profit from discontinued operations amounted to € 0 million (previous year: € 3.1 million).

The expectations from the forecast report for the year 2018 were thus exceeded by far. In an ad hoc announcement dated 21 January 2019, the earnings forecast was raised to € 3.05 per share. This forecast was also met.

### 2.1.3 Development of the segments and the holding company

#### Isotope Products segment

The Isotope Products segment is the Group's largest and most profitable segment.

The segment's main product groups are:

1. Industrial components for metrology
2. Radiation sources for medical quality assurance
3. Calibration and measurement sources
4. Trade in raw isotopes and other products
5. Taking back radiation sources from customers and receiving low-level isotope technology waste, as well as projects relating to conditioning
6. Recycling of isotope-related materials
7. Plant engineering of isotope-related plants
8. Blood irradiation devices

Eckert & Ziegler has maintained a solid market position in its three most important product groups, with a significant share of global market volume, which in our estimation we were able to maintain and expand in the reporting period. This was reinforced by the acquisition of the Gamma-Service Group companies. Some niche markets in this area are recording growth. However, due to the low price of oil, the overall market declined slightly.

The fourth main product group makes use of Eckert & Ziegler's purchasing leverage to resell raw isotopes to third parties at a profit.

The industrial sources business achieved record sales in the Oil & Gas segment as trading conditions improved after a long recession. With the recruitment of a new experienced managing director for our Brazilian subsidiaries, we hope to provide sales and profitability with a much needed boost. The integration of the former Gamma-Service Group companies into the Isotope Products segment was completed.

While revenue rose sharply by more than 25.2% or € 22.6 million, the gross margin increased only by € 7.9 million or 21.7%. An increase in selling, administrative, and development costs of € 3.6 million for the Gamma-Service Group, which amounted to € 3.3 million, and the negative foreign currency effects resulted in an increase in the EBIT by only € 5.5 million despite extraordinary income of € 1.0 million from the intra-group sale of a business division. Nevertheless, this corresponds to a 55.2% increase compared to the previous year.

Interest expenses in the amount of € 0.3 million resulted almost exclusively from accrued interest on provisions. As a result of the US tax reform, the average tax rate for the segment fell to 19.4%, which means that, despite increased income, the total tax expense of € 2.9 million is only slightly higher than in the previous year, namely € 0.2 million. The segment generated a profit for the year of € 11.6 million, up € 4.8 million compared to the previous year.

### **Radiation Therapy segment**

The segment's main product groups are:

1. Implants for the treatment of prostate cancer "seeds"
2. Tumour irradiation equipment "afterloader"
3. Therapeutic accessories
4. Ophthalmological products
5. Other therapeutic products and plant engineering

As a provider of implants used to treat prostate cancer, Eckert & Ziegler benefits from the findings of long-term prostate cancer analyses, according to which the "wait and see" approach leads to statistically worse outcomes. Based on these results, more patients are undergoing curative treatment methods. The treatment methods with radioactive implants also benefit from this. The price pressure observed over previous years is subsiding.

Eckert & Ziegler only holds a minor global market share in this segment's second main product group, tumour irradiation equipment based on isotope technology and associated services. The main sales markets are in the emerging economies. Their lower overhead costs give Eckert & Ziegler's instruments a competitive edge over competing products. Cobalt emitters are used in most of Eckert & Ziegler's devices. Cobalt has a significantly longer half-life than iridium, which is used in competing devices. As a result, the radiation source of Eckert & Ziegler equipment does not need to be changed as often, which generates cost and logistics advantages, which are particularly beneficial in developing and emerging countries.

Several projects in South America and Africa were completed in cooperation with the International Atomic Energy Agency (IAEA). The division recorded a high level of incoming orders for SagiNova® systems, especially from Asia.



In 2018, Eckert & Ziegler BEBIG installed a system for the first time and handed it over for clinical use in the following countries:

- Dominican Republic
- Guatemala
- Nicaragua
- Nepal
- Paraguay

The segment was reorganised as part of the merger. The investments in the subsidiaries in Spain, France and the UK previously held by the segment management company Eckert und Ziegler BEBIG SA, based in Seneffe, Belgium, were transferred to Eckert und Ziegler BEBIG GmbH in Berlin, Germany. The customer base of Eckert und Ziegler BEBIG SA was also transferred to Eckert und Ziegler BEBIG GmbH, and it is now serviced directly from the production site in Berlin. The management hopes that this reorganisation will lead to higher efficiency and improvements for the customer. Following the delisting, the Group achieved savings in the administrative area.

With € 0.8 million, the Radiotherapy segment recorded a profit as in the previous year. While in the previous year the segment recorded an extraordinary income of € 0.7 million from the reversal of a provision, in 2018, it recorded extraordinary income of € 0.5 million from the derecognition of a liability.

The profit increased by € 0.6 million compared to the previous year. As mentioned above, this was driven by solid growth in revenue, which increased by € 4.7 million. Despite the € 4.7 million increase in revenue, the gross margin only rose by € 0.7 million.

The increased production costs are mainly due to the acquisition of WOMED, which amounted to € 2.3 million.

Selling and administrative expenses increased by € 1.1 million compared to the previous year, which was mainly due to higher personnel costs of € 0.7 million, caused by an increase in the number of employees. Depreciation and amortisation increased by € 0.2 million. As a result of the acquisition of WOMED, administrative costs increased by a further € 0.2 Million.

Development costs increased by € 0.4 million to € 1.7 million. € 0.1 million of this increase was attributable to the increase in the number of employees. Third-party certification services increased by € 0.2 million. Other expenses and income fell only slightly by € 0.1 million to € 1.2 million. While € 1.3 million was still recorded in 2017, mainly due to an investment revaluation effect and the derecognition of a receivable, in 2018, the company recognised income from the release of a liability related to a debtor warrant and the correction of another liability arising from a failed project. Exchange rate effects had a positive impact and amounted to € 0.2 million, representing an improvement of € 0.5 million compared to the previous year. Taxes and minority interests fell accordingly by € 0.2 million to € 0.7 million.

### **Radiopharma segment**

The segment's main product groups are:

1. Longer-lived radioisotopes for pharmaceutical applications
2. <sup>68</sup>Ge/<sup>68</sup>Ga GalliaPharm® generator
3. Radiosynthesis devices and consumables
4. Quality control equipment
5. Short-lived radiodiagnostics (until 5 May 2017)

The Radiopharma segment generated a profit of € 6.4 million, representing an increase of € 1.9 million or 43 % compared to the previous year. Due to the loss of sales commission of € 0.5 million, selling expenses fell slightly by € 0.2 million to € 2.6 million. Personnel costs developed in the opposite direction, rising by € 0.3 million.

At €4.5 million, administrative expenses were €0.5 million higher than in the previous year. This was caused by an increase in personnel costs, mainly due to severance payments arising from the change in segment management. Due to the continued expansion of the production plant, development costs again rose slightly by €0.1 million to €1.9 million. Other income and expenses increased by €0.2 million to €0.6 million. While in the previous year, the Group recorded extraordinary income of €0.2 million from customer projects, in 2018, it generated €0.3 million from reimbursements of costs incurred in connection with the sale of the cyclotron division last year. Another €0.3 million represents other operating income, which consists of several smaller items. Currency effects generated income of €0.1 million. Interest accrued was minimal and it fell by €0.2 million in the year under review. Tax expenses increased accordingly by €0.7 million to €2.7 million.

### Holding company

The holding company Eckert & Ziegler Strahlen- und Medizintechnik AG finances itself through services provided, such as accounting, personnel administration, IT and radiation protection; each of these is charged to the subsidiaries plus a profit surcharge. In addition, the holding company provides the subsidiaries with loans, when necessary, and generates interest income and receives income from profit transfers and distributions from the subsidiaries. The holding company generates a small revenue outside the Group, mainly by providing services to third parties. Revenue increased slightly by €0.4 million to €5.9 million. Administrative expenses increased by a total of €1.5 million, due to an increase in the number of employees and higher administrative expenses as a result of a merger.

Overall, the profit for the year under review decreased by €2.4 million to €-2.9 million.

### 2.1.4 Financial position of the Group

At €16.9 million, profit for the period was €1.8 million higher than in the previous year.

At €21.2 million, the cash flow from operating activities again reached a very good level, which, however, did not quite reach the very high level of the previous year.

While most items in the operating cash flow were largely within the normal fluctuation range, the decrease of €5.6 million was mainly due to changes in trade receivables. Trade receivables increased sharply in the year under review, mainly due to phasing effects as a consequence of strong sales growth. While in the previous year, the Group recorded a cash inflow of €2.4 million through the reduction of receivables, in the 2018 financial year, it recorded a cash outflow of €5.6 million.

Cash outflow from investing activities amounted to €10.7 million in the year under review, compared with a cash inflow of €5.1 million in the previous year. The cash inflow in the previous year was mainly due to the proceeds from the sale of the cyclotron division amounting to €12.3 million. This special effect was not repeated in 2018.

The Group spent €6.1 million on purchases of non-current assets in the period under review, compared with €4.2 million in the previous year.

€2.1 million was spent on acquisitions in the year under review (mainly related to the acquisition of WOLF Medizintechnik GmbH). In this context, the company made purchase price payments in the amount of €2.6 million and it accepted liquid funds in the amount of €0.5 million as consideration. In the previous year, the cash outflow for acquisitions amounted to €5.5 million (mainly related to the acquisition of Gamma-Service companies). The very good liquidity situation also allowed the Eckert & Ziegler Group to generate additional income by granting loans. A loan of €2.5 million was therefore granted to the main shareholder based on arm's length conditions.

The cash outflow from financing activities rose by €4.6 million to €14.6 million.

€ 1.7 million was used for the regular repayment of bank loans in the financial year under review, compared with € 5.5 million in the previous year. As at 31 December 2018, all bank loans (except for a very small residual amount) were repaid in full.

Eckert & Ziegler AG acquired a total of 250,000 of its own shares as part of two public buyback offers. The Group spent € 9.6 million on the acquisition of own shares, while raising € 1.1 million in cash from the sale of own shares.

The Annual General Meeting held in May 2018 resolved to increase the dividend to € 0.80 per share. The cash outflow for the dividend payment therefore increased from € 3.5 million in the previous year to € 4.1 million in the current year.

Cash and cash equivalents as at 31 December 2018 amounted to € 54.2 million. While this represents a decline of € 3.5 million compared to the end of 2017, this is still a very solid result, which together with the lack of bank debt makes the Eckert & Ziegler Group optimally prepared to tackle future projects.

### 2.1.5 Assets and liabilities of the Group

The balance sheet total at the end of 2018 was € 12 million or 6% higher than at the end of 2017 and now amounts to € 229.1 million (previous year: € 217.0 million).

On the asset side, goodwill increased by € 0.5 million. The increase is mainly due to exchange rate effects from the translation of financial statements of Group companies reporting in USD. The increase of € 0.6 million in intangible assets was mainly due to additions in connection with the acquisition of WOLF Medizintechnik GmbH, which was partially offset by scheduled amortisation.

Property, plant and equipment increased by € 3.1 million. Deferred tax assets increased by € 1.1 million. In total, non-current assets increased by € 5.7 million to € 106.9 million.

A similar increase can be observed in current assets, which increased by € 6.3 million to € 122.1 million, compared with € 115.8 million in 2017.

Cash and cash equivalents decreased by € 3.5 million compared to the end of 2017. Trade receivables increased by € 4.0 million, inventories by € 2.0 million, followed by other assets and income tax receivables, which both increased by € 1.9 million.

On the liabilities side, non-current liabilities increased by € 5.5 million to € 71.0 million. This was due to higher non-current provisions. By contrast, current liabilities remained largely unchanged. Non-current loan liabilities fell by € 1.6 million to € 0.1 million. Advance payments received also fell by € 1.7 million to € 4.1 million. By contrast, trade payables increased by € 2.0 million.

Equity increased by € 6.4 million to € 123.9 million, mainly due to the increase of € 13.6 million in revenue reserves. Other reserves, which also include unrealised actuarial gains or losses in addition to translation differences on equity of subsidiaries reporting in foreign currencies, increased by € 2.2 million to € -0.4 million. The item “own shares”, which decreased by € 5.5 million to € -5.5 million as at 31 December 2018, had the opposite effect. The company acquired a total of 250,000 own shares as part of two public buyback offers and resold 25,000 own shares. Of these transactions, € -8.7 million was recognised as “own shares” in equity. As part of the merger of Eckert & Ziegler BEBIG SA into Eckert & Ziegler AG, 84,358 shares were used to acquire the non-controlling interest. In this context, non-controlling interests were reduced by € 4.6 million, own shares increased by € 3.2 million and revenue reserves by € 1.4 million.

At 54%, the equity ratio remains unchanged compared to the previous year.

## 2.2 FINANCIAL POSITION AND PERFORMANCE OF ECKERT & ZIEGLER STRAHLEN- UND MEDIZINTECHNIK AG – NOTES BASED ON THE GERMAN COMMERCIAL CODE (HGB)

### Business development of the AG

During the 2018 financial year, there were profit and loss transfer agreements in force between Eckert & Ziegler AG and a direct subsidiary and the subsidiary's subsidiaries. The annual profit or loss generated by the other subsidiaries is not completely transferred to the parent company and the separate financial statements of Eckert & Ziegler AG therefore differ greatly from consolidated earnings.

In the 2018 financial year, Eckert & Ziegler AG received profit of € 4,456 thousand (previous year: € 4,715 thousand) as part of the profit and loss transfer agreement with its German subsidiary, Eckert & Ziegler Isotope Products Holdings GmbH.

### Earnings performance of the AG

Compared to the previous year, the main changes to the income statement are as follows:

- a) Revenue increased by € 458 thousand to € 6,012 thousand. This primarily relates to income from services and rents for affiliated companies. The increase was due to the greater scope of services and passed on charges.
- b) Other operating income decreased by € 1,495 thousand to € 340 thousand. In the previous year, this item included income of € 1,316 thousand arising in connection with the sale of the cyclotron division in April 2017.
- c) Personnel expenses increased by € 309 thousand to € 3,159 thousand. The Group's remuneration policy for board members is set out in the remuneration report.
- d) Depreciation and amortisation decreased as planned by € 184 thousand to € 239 thousand as planned.
- e) Eckert & Ziegler AG received a profit distribution of € 3,795 thousand from its subsidiary Eckert & Ziegler Radiopharma GmbH, compared to € 4,119 thousand in the previous year.
- f) Other operating expenses increased by € 1,372 thousand year-on-year to € 4,581 thousand, mainly due to an increase in rents and ancillary costs, which will continue to be charged accordingly, services received from Group companies as well as legal and consulting fees.
- g) Income from profit and loss transfer agreements increased by € 259 thousand to € 4,456 thousand. Interest expense decreased by € 115 thousand to € 124 thousand due to scheduled repayment.
- h) Taxes decreased in line with income by € 138 thousand to € 557 thousand.

The total profit for the 2018 financial year amounted to € 6,009 thousand..

### Financial position of the AG

Compared with the previous year, the balance sheet total of Eckert & Ziegler AG fell year-on-year by € 3,522 thousand to € 87,962 thousand.

The following material changes occurred in the 2018 financial year:

Other assets rose significantly from € 108 thousand to € 5,611 thousand, representing an increase of € 5,503 mainly due to income tax receivables from tax authorities (withholding tax) in the amount of € 2,733 thousand and a loan granted to Eckert Wagniskapital and Frühphasenfinanzierung GmbH in the amount of € 2,500 thousand.

Bank balances fell by € 9,216 thousand; € 9,625 thousand was used to purchase 250,000 own shares as part of two public buyback offers.

Equity amounted to € 82,160 thousand and thus decreased by € 6,672 thousand compared with the previous year, mainly due to the share buyback program.

Provisions amounted to € 2,212 thousand and remained largely flat compared to the previous year.

In contrast, liabilities increased by a total of € 2,972 thousand to € 3,466 thousand, mainly due to an increase in amounts owed to Eckert & Ziegler Radiopharma GmbH.

The company was granted credit lines of € 3,000 thousand of which € 2,941 thousand were available as at the balance sheet date.

Overall, the Executive Board continues to rate the company's economic situation as very good. The equity ratio was 93.4 %.

## 2.3 EMPLOYEES

As at 31 December 2018, Eckert & Ziegler employed a total of 788 people across the Group (2017: 764). The number of employees thus increased by 24 or 3.1 % year-on-year. Employees were mainly added in the Radiation Therapy segment (14 employees) due to acquisitions and the Isotope Products segment (11 employees) in preparation for production expansion.

Based on the definition set forth in the German Commercial Code (HGB), which reflects the average number of employees over the course of a year and excludes members of the Executive Board and managing directors, as well as trainees and interns, but includes part-time employees and employees with minimal working hours, the number of employees rose from 740 to 760.

Eckert & Ziegler Strahlen- und Medizintechnik AG employed 43 employees on average. This is one employee more than in the previous year.

At 17 %, the fluctuation rate, defined as the number of employees who left the company during the year under review, was above the previous year's level of 13 %, which is in line with the general trend. However, it is still far below the average fluctuation rate in Germany, which was around 32 % in 2018. As of 31 December 2018 the percentage of women working in the first management level below the Executive Board amounted to 33 % and 43 % in the second management level. These figures refer to the listed holding company of the group with around 40 employees. Only the holding company underlies the disclosure requirement in accordance with the law about woman in leadership positions "Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen" (§ 76 (4) AktG). A similar picture is shown within the whole Eckert & Ziegler Group, especially regarding to the second management level. The average age of the Group's workforce in the period under review was 45 with emphasis on the 50 to 55-year-old age group. Nearly half of all employees have at least a higher technical college qualification/bachelor's degree.

### Executive Board and Supervisory Board targets

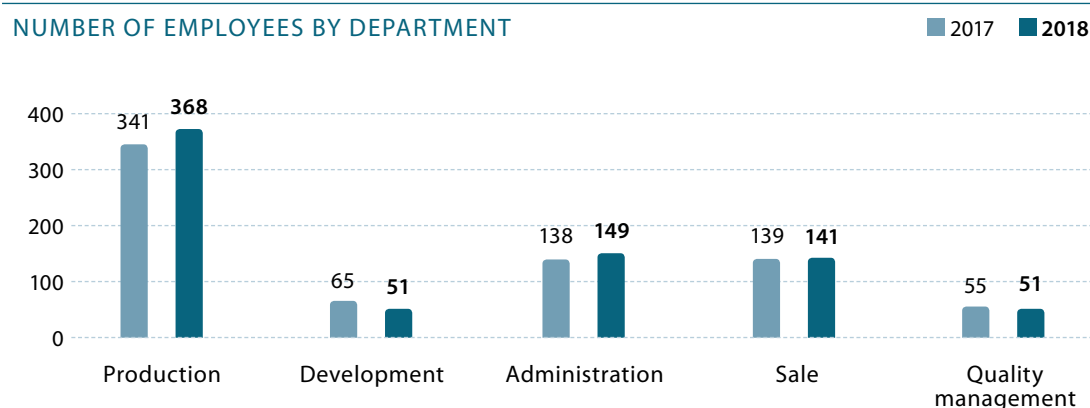
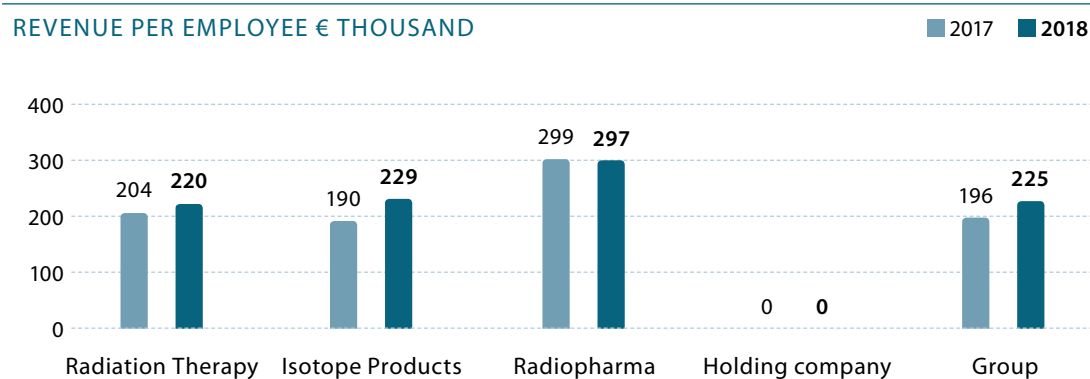
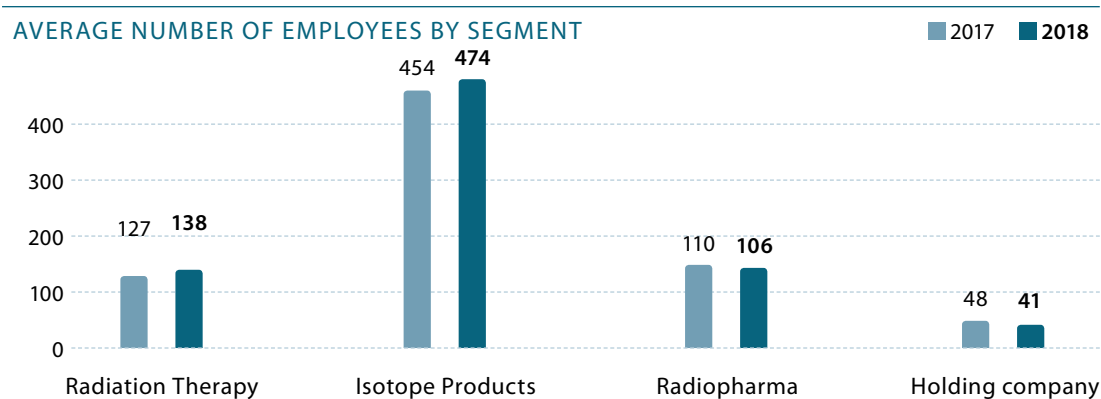
On 31 July 2017, the Supervisory Board resolved not to impose targets for the proportion of women on the Executive Board of Eckert & Ziegler AG. This decision was made because the Supervisory Board does not consider gender to be a relevant selection criterion, but rather pays attention purely to personal and professional suitability for the role. Accordingly, no numerical target was set (i.e. the quota is 0 %).

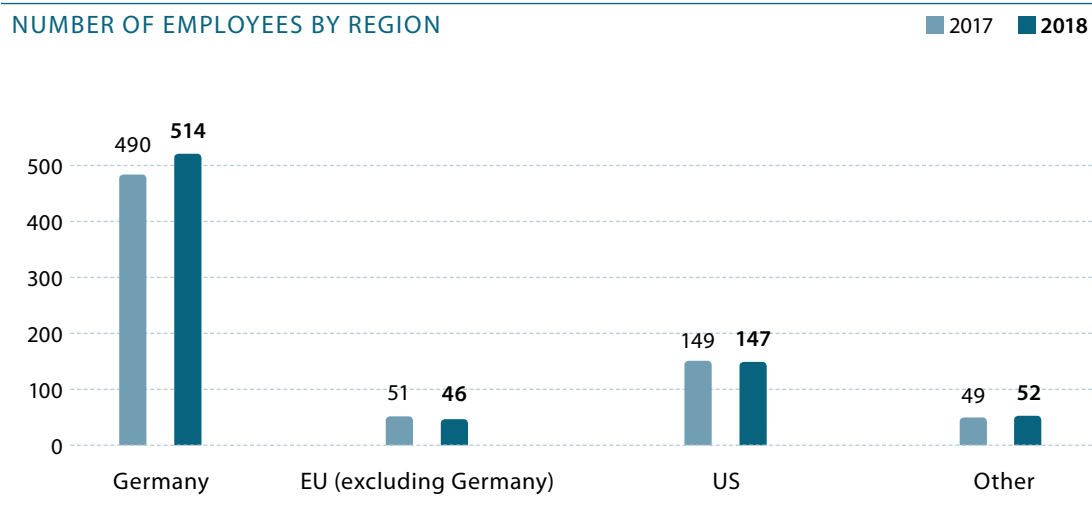
On the same date, the Supervisory Board resolved on a quota of 1/6 (representing approx. 17 %) for the Supervisory Board. The deadline for reaching the target was set at 30 June 2022. The company's Supervisory Board currently has one female member.

### Target figures at upper management levels

Since the Executive Board also does not seek to change the composition of senior management levels below the Executive Board in a way that is not based purely on personal and professional qualification for the office, the Executive Board further decided on 23 August 2017 not to impose a target for the proportion of women at senior management level (i.e. the quota is 0%). The first management level below the Executive Board was determined to be the group of department heads and, as the second management level below the Executive Board, the group of sub-department heads.

As at 31 December 2018, the percentage of women in the first and second level of management below the Executive Board is currently 33% and 43%, respectively. This information relates to the listed holding company with around 40 employees. Only the holding company is subject to a disclosure obligation under the "Act on the Equal Participation of Women and Men in Management Positions" (Article 76 (4) of the German Stock Corporation Act (AktG)). The Group as a whole has around 800 employees, and the situation at the second management level is similar.





Personnel expenses amounted to €54.5 million in the year under review (previous year: €48.3 million). This translates into average personnel expenses of around €71.8 thousand per employee in 2018, compared with around €65.4 thousand in the previous year. The increase in personnel expenses per employee is mainly due to the hiring of staff in preparation for the production expansion in the Radiopharma segment.

## 2.4 OVERALL STATEMENT ON THE ECONOMIC SITUATION

2018 was marked by strong growth in revenue and earnings in the Isotope Products and Radiopharma segments. As a result, earnings per share, net of extraordinary effects, in 2018 surpassed the €3 mark for the first time. The capital market is anticipating further growth, especially in the Radiopharma segment, and as a result, the company's market capitalisation has more than quintupled over the past three years reaching €450 million by the end of the year.

Furthermore, the Group was able to streamline its structure in 2018 by successfully merging the listed intermediate holding company Eckert & Ziegler Bebig SA with Eckert & Ziegler AG. The company was delisted in Belgium which resulted in savings in administrative work and costs. As a result, it will much faster and cheaper to make organisational changes in the Radiotherapy segment in the future.

The strong market positions of the respective segments are reflected in the radical improvement in balance sheet ratios. The equity ratio, the return on equity, the repayment period and similar parameters have always been well above the average for German listed companies. In 2018, the room to manoeuvre increased further. The Group is debt-free and has a net cash position of €55 million, allowing the management to continue focusing on the Group's strategic growth potential. Thus, it is able to actively seize on all the opportunities arising in its niche.

## 3. REPORT ON OPPORTUNITIES & RISKS

Eckert & Ziegler AG's shareholders need to be aware that the company is exposed to a wide range of opportunities and risks that may influence the company's business activities and share price. This report outlines the risks and opportunities and their potential impact on the Group as a whole. Furthermore, it describes the Group's risk management system and the hedging measures in place.

The Group's opportunities and risks indirectly affect the parent company, Eckert & Ziegler AG, through its shareholdings.

### 3.1 ORGANISATION OF RISK MANAGEMENT

The overall responsibility for risk management lies with the Executive Board. However, the operational responsibility – i.e., the early recognition, evaluation, management, and documentation of risks; the definition and implementation of suitable countermeasures; the corresponding communication – lies primarily with the respective segment management and the management of the subsidiaries. This level below the Executive Board bears responsibility for risk management in their area. In addition to the annual procedure for the structured recording of risks, operational management is required to monitor its area for a changing risk situation on an ongoing basis. Fundamental changes to the specific risk situation for the area must be reported immediately to segment management and the Executive Board. Changes to risks with fundamental financial implications must also be reported to Group accounting.

Eckert & Ziegler's technical and managerial staff are consulted as part of the aforementioned annual process of a structured risk inventory. They are asked to name new and existing opportunities and risks and classify them according to the probability of occurrence and their potential impact on the company. Preventative measures are taken, emergency plans are drafted if applicable, and regular evaluations are organized for these risks to the extent possible. These include but are not limited to monitoring the market and competitors, evaluating scientific literature, analysing customer complaints, and statistics on costs and sales. The assessment of the risks according to probability of occurrence and the potential extent of damages is reported to the Supervisory Board once a year.

As part of risk management, risks are classified into financial risks, legal risks, IT risks, accounting-related risks and risks of the internal control system, personnel risks, general risks arising from the production and from handling radioactivity, general commercial and strategic risks and development risks. The risk owners have been identified. In a risk matrix, the identified risks are presented in terms of their likelihood of occurrence and their potential financial impact on EBIT in the categories low/ medium/high/very high. Risks that threaten the continued existence of the company as a going concern are – where present – highlighted and reported separately. Risks are classified as follows:

Classification	Probability of occurrence within 24 months	Intensity
1 - Low	up to 10%	up to € 2 million
2 - Medium	10 to 25%	€ 2 to 5 million
3 - High	25 to 50%	€ 5 to 10 million
4 - Very high	More than 50%	over € 10 million



Overall, a risk-minimizing approach is chosen. Existing risks are consistently monitored and are minimized or hedged by means of ongoing process improvements. New product developments and acquisitions are tested for potential risks from the very start and are incorporated into the risk management system. Market developments are monitored, as are the activities of competitors, with the aim of being able to swiftly and promptly modify and implement the Group's own strategies.

The Supervisory Board – which is informed about and approves all key decisions, and which is regularly kept up to date on business developments – serves as an additional risk-hedging element.

### 3.2 ACCOUNTING-RELATED RISK MANAGEMENT AND INTERNAL CONTROL SYSTEM

Probability of occurrence: **low**/intensity: **low**

Accounting-related risk management comprises all organisational rules and measures for detecting and handling financial reporting risks. As regards Group accounting, the purpose of the internal control system is to ensure that financial reporting conveys a true and fair view of the financial performance and performance of the Eckert & Ziegler Group, while complying with all the relevant laws and standards.

The consolidated financial statements contain the separate financial statements of Eckert & Ziegler AG as well as a total of 32 single-entity financial statements of domestic and foreign subsidiaries. Due to the number of companies and the differing regional distribution of the subsidiaries, risks exist in relation to the goal of reliable accounting. These can manifest themselves in the form of delayed publication, false statements in the consolidated financial statements, or fraudulent manipulations.

Two key components ensure that risks are avoided or reduced at the Group: a system of directives and rules of procedure, and reporting for monitoring and informative purposes. Rules of procedure regulate the scope of action for the Supervisory Board, the Executive Board and the managing directors of all Group companies and the inclusion of different levels of hierarchy in the decision-making process. Individual directives which apply to all employees are available on the Group's intranet. Monitoring reports on the risk situation are provided to all those responsible in various degrees of detail at predefined intervals. The Supervisory Board is informed of the risks in an annual risk report.

The objective of the internal control system of the accounting and consolidation process is to minimize sources of error and to recognize errors quickly. A system was implemented which corresponds to the size of the Group. The following organisational regulations and processes have been implemented to ensure that the accounting complies with the applicable standards:

- All units of the Group are integrated in a defined management and reporting structure. The applicable principles, structural and procedural organisation and defined processes are documented and are constantly adjusted to meet current developments.
- The consolidated financial statements are prepared according to a schedule which is determined by the department responsible for the consolidated financial statements. The schedule defines all important activities and deadlines.
- The Group's accounting departments are centralized; in some cases they are transnationally organised. The involvement of external services providers in the closing process is generally limited to tax calculations for subsidiaries abroad. In minor exceptional cases, financial statements are prepared externally.
- New circumstances are agreed with the Group's headquarters. Changes to Group accounting are communicated directly to all employees and external service providers concerned.
- The reporting of the subsidiaries is conducted using standardised forms which are completed by the respective accounting departments for the monthly, quarterly and annual financial statements.

- All information flows to the segments' controlling department where it is monitored. Deviation analyses are carried out and discrepancies in terms of compliance with financial statement-relevant Group guidelines are examined and discussed with the respective subsidiary; if necessary, they are reported to the department responsible for the consolidated financial statements.
- Initial internal reconciliations and consolidations are carried out at segment level in the central controlling department. These include, among others, a reconciliation of receivables and liabilities among the Group companies.
- Monitoring in the scope of consolidation arises from the consolidation process. Reconciliation discrepancies in consolidation are communicated to the respective subsidiaries and rectified.
- Consolidation takes place with the help of a standardised consolidation program which is only applied by specifically trained and authorised employees.
- The internal tax department is involved in calculating items relevant for the financial statements that include taxes.
- Flat hierarchies, direct reporting channels and monthly interim financial statements enable the recognition of risks and early detection of errors.

Various items of the balance sheet are subject to discretion and thus are given special consideration in preparing the financial statements:

As a listed company, Eckert & Ziegler is required to adhere to IFRS accounting standards in accordance with Article 315a (1) of the German Commercial Code (HGB) as adopted by the EU. It must therefore calculate fair values for certain intangible assets as of the balance sheet dates. However, as there are no markets with reliable price information for many intangible assets, the fair values are usually based on estimates or forecasts with considerable uncertainties. As a result, there is in principle a risk in terms of the valuation of the intangible assets. Impairment tests are conducted annually if mandatory and when signs of impairment arise. Key assumptions are objectivised by recognised rating agencies and peer groups or by consulting external experts in order to ensure the reliability of the estimates and evaluations.

The amount of deferred taxes on loss carryforwards is also subject to discretion, as deferred tax assets are recognised on the basis of earnings forecasts.

Changes in procedures due to new IFRS regulations or the deterioration of planning assumptions on account of lower future income or changes to discounting rates could cast doubt on the recoverability of the intangible assets or deferred tax assets on loss carryforwards. This would result in non-cash impairment losses or write-downs.

Because the Eckert & Ziegler Group is active in manufacturing, it must maintain adequate inventories. However, it keeps inventories to a minimum in order to reduce costs and risks. Inventories are associated with impairment and inventory risks, which are limited by regular inventory and objective evaluation involving analysis of future market and sales opportunities.

Pension commitments result in actuarial valuation risks in Eckert & Ziegler's consolidated financial statements. External experts are commissioned to write actuarial reports to limit these risks.

The implemented processes, systems and controls sufficiently ensure that the (consolidated) accounting process complies with the International Financial Reporting Standards (IFRS), German Commercial Code (HGB) and other accounting-relevant regulations and laws and is therefore permitted.

### 3.3 FINANCIAL RISKS

Probability of occurrence: **medium**/intensity: **medium**

The Group considers itself currently in possession of sufficient funds to secure its status as a going concern and its further development. It also sees itself in a position to meet all payment obligations, even if a slight increase in the gearing ratio should become necessary in the upcoming financial years in order to secure growth through further acquisitions and finance the development of new products.

The existing loans were paid back on schedule. Third-party financing was applied for at banks for a number of different projects in 2018. The various loan offers contain favourable terms and conditions, indicating that the Group has a good credit rating. The Executive Board believes this is because of the Group's solid financing with a high equity ratio and the favourable prospects of the profitable operating units. In addition to the high equity ratio, solid balance sheet ratios further underpin the Group's creditworthiness as the non-current assets are more than covered by equity and non-current liabilities. Thanks to its strong equity, the company was able to implement a buyback programme.

With regard to interest rate risks from the valuation of non-current liabilities and assets, the Group estimates the probability of occurrence as medium and the impact very high. However, these are only valuation risks; they have no influence on the cash situation.

In addition to economic and technical development risks, Eckert & Ziegler is exposed to the vicissitudes of the market. These naturally result not only in income risks, but also liquidity risks, as the Group receives third-party financing for some of its acquisitions and issues guarantees for loans from subsidiaries. Even if management should react quickly and reduce costs or exit from a threatened business, the Group would remain exposed to problems here. The Executive Board ensures to the greatest extent possible that the risks from granting loans or guarantees remains limited to a justifiable extent in relation to the Group's total assets.

The avoidance of financial risks is monitored and managed by tools such as annual financial planning with adjustments during the year and careful analysis of deviations from the plan. This makes it possible to identify potential risks at an early stage and take appropriate countermeasures.

Due to the high proportion of sales in the U.S., there is a degree of dependence on the exchange rate of the US dollar. The impact of changes in the exchange rate is less than for conventional export business transactions, because the subsidiary in the US that is responsible for the majority of these sales also incurs its costs in US dollars. For German exports, sales in foreign currencies are hedged by forward contracts and simple put options as necessary. Although the probability of occurrence is very high, the intensity of the impact is low due to the conditions described.

The Group bears in particular a receivables default risk arising from its trade receivables, in particular for the numerous foreign transactions. Although the likelihood of occurrence is very high, the intensity of the impact is low due to guarantees via sureties.

Risk exposure is primarily influenced by the size of the clients and the country-specific rules and opportunities to handle reimbursements of medical services by public providers.

New customers are generally assigned a credit score, and first deliveries generally require advance payment. Deliveries to customers that are considered a permanent risk due to their size or location are hedged by advance payment or letters of credit. Thus, high receivables are secured with documentary transactions.

The risk is monitored by means of regular past due analyses of all trade receivables. A functioning dunning management system has been established.

In some cases Eckert & Ziegler Strahlen- und Medizintechnik AG has assumed guarantees for loans granted to subsidiaries. One loan which the company itself granted to a subsidiary is subordinated. This loan is not expected to be utilised, as the subsidiaries are expected to be able to meet their obligations.

An interest rate change in the WACC may lead to a change in the valuation of the shares in subsidiaries or goodwill at Group level. Changes in interest rates cannot be influenced by management; there is no liquidity risk associated with a possible deterioration in the valuation of the financial investments mentioned.

### 3.4 POLITICAL RISKS

Probability of occurrence: **medium**/intensity: **low**

The entry into the Brazilian market generates a risk from changes in the exchange rate of the Brazilian real. Political instability can lead to a further decline in the BRL rate, especially in Brazil. This can lead to currency losses on receivables. In addition, a decline in market share and sales can also be a consequence. This risk is mitigated by ongoing market analysis and corresponding adjustments of prices.

The Eckert & Ziegler Group includes two UK-based companies, each having significant economic position in this region. These economically relatively independent companies as well as the Group as a whole do not expect any significant effects from the forthcoming BREXIT.

### 3.5 LEGAL RISKS

Probability of occurrence: **low**/intensity: **medium**

The Group is susceptible to legal risks arising from lawsuits or legal proceedings by governments or government authorities in which it is either currently involved or that could arise in the future. The outcome of currently pending or future litigation is not foreseeable, so that court or official decisions or agreement on settlements may result in expenses that are not or not fully covered by insurance or provisions, but have no material impact on the earnings and financial position.

There are currently no lawsuits or court proceedings that could be expected to have a substantial negative influence on the consolidated result.

### 3.6 IT RISKS

Probability of occurrence: **low**/intensity: **low**

Eckert & Ziegler is exposed to the risk of IT system outages. Damages could result in loss of data and, in the worst-case scenario, could interrupt operations. As security measures, backups are regularly performed, antivirus software is used, and most servers are virtualised.

### 3.7 PERSONNEL RISKS

Probability of occurrence: **high**/intensity: **low**

In many business areas, Eckert & Ziegler depends on the specialized knowledge of its employees. The company depends on the knowledge and expertise of particularly highly qualified key individuals, especially when developing new business fields and in development and sales and distribution. In order to minimize the risk of losing talented employees,

the company strives to create a pleasant and supportive atmosphere, a modern and secure working environment, adequate remuneration, professional training and further education opportunities, and flexible working hours. Eckert & Ziegler is reliant on employees with specialist knowledge. In some cases, vacant positions cannot be filled immediately due to the lack of qualified personnel. Despite employee-friendly measures, Eckert & Ziegler cannot guarantee that these employees will remain with the company or display the necessary level of commitment.

### 3.8 PROCUREMENT RISKS

Probability of occurrence: **medium**/intensity: **medium**

The risk of delivery bottlenecks and production downtime arises if it is not possible to source all raw materials and indirect materials at the required time and in the necessary quantities. The Group could lose key suppliers, suppliers could experience capacity bottlenecks or political and organisational changes in the “supplier” countries could delay deliveries or make deliveries impossible. This risk can never be fully excluded. It can, however, be counteracted through warehousing and by establishing alternative sources of supply.

### 3.9 GENERAL RISKS FROM THE PRODUCTION AND HANDLING OF RADIOACTIVITY

Probability of occurrence: **medium**/intensity: **high**

Both radioactivity itself and its use in medical or medicinal products involve product liability risks. Eckert & Ziegler addresses these risks by adhering to strict quality criteria. The majority of sites are ISO-certified, and the functioning of the quality management systems is regularly checked by internal and external audits. In order to avoid accidents that could injure employees, cause damage to the environment, or prompt regulatory agencies to close down production facilities, employees regularly undergo training on occupational safety and radiation protection. Despite all these measures, it cannot be ruled out that events giving rise to liability could nevertheless occur and pose a threat to the company. As far as it is possible and feasible, appropriate insurance has been taken out to guard against liability risks.

Eckert & Ziegler is dependent on specialised service providers to ship products worldwide that are often transported as hazardous goods. It cannot be guaranteed that these offers are maintained in the existing form. Special official authorisation is necessary for the manufacturing and shipment of many products. Eckert & Ziegler is able to exert only indirect influence on the issuing or renewal of such authorisation. Given the rising threat of terror around the world, there is also the risk that the transportation of radioactive components will be more strictly regulated.

Those who handle radioactive materials require a licence. This licence is issued by the competent authority in the relevant German federal state. The licence for handling radioactive materials is issued under Article 7 of the German Radiation Protection Ordinance (StrlSchV). The licence is subject to compliance with extensive conditions listed in Article 9 StrlSchV, and there is a risk that these will not be complied with. The application for a licence or amendment to a licence must be accompanied by appropriate documents to document compliance with the aforementioned requirements. The licence can be withdrawn if certain regulations, in particular documentation regulations, are not complied with.

Eckert & Ziegler makes every effort to comply with all the relevant regulations and to implement any changes, orders and documentation requirements in a timely manner. Other authorisations, which are also mandatory for the business, are complied with and the relevant regulations and measures are introduced on time. While Eckert & Ziegler works closely with the approval authorities and also uses the help of local partners in regulatory matters, there is a risk that it may not be possible to implement certain requirements within the specified time limit. Eckert & Ziegler relies on options for the disposal of radioactive waste, which is created when taking back sources or during production. A closure or delayed opening of disposal facilities can lead to significant increases in costs. Efforts are made to reduce the impact of this risk to the greatest extent possible through internal recycling. However, this uncertainty cannot be completely eradicated.

There is also the risk that already classified radioactive waste may have to be disposed of differently than initially assumed due to new regulatory requirements. This may result in the actual costs exceeding the values stated in the provision.

The handling of radioactive substances requires approval from the relevant government authorities. It cannot be ruled out that production or handling in individual cases or at certain locations may become more expensive, restricted or even prevented due to changes in legal or regulatory conditions.

### 3.10 MARKET RISKS AND STRATEGIC RISKS

Probability of occurrence: **high**/intensity: **low**

As a specialist for a broad portfolio of isotope-based components, irradiation equipment, and radiopharmaceuticals, Eckert & Ziegler is better protected against slumps in the market than single-product companies. Although the various business segments are technologically close, they differ considerably in the product lifecycle as well as in the customer and market structures. This diversification generally reduces the risk that competitors will undermine the company's business foundation with new and better products. Nevertheless, it cannot be ruled out that improved processes and efforts by competitors might cause the loss of important markets, thereby endangering the company.

To counter this threat, Eckert & Ziegler actively seeks to develop new products and to identify and develop new business fields. However, there is the risk that such efforts will remain unsuccessful and that new business fields can only be developed too late, or inadequately, or not at all. Furthermore, it cannot be ruled out that competitors might have greater success with other products or market launch strategies.

In the medical divisions, the economic success of Eckert & Ziegler's products depends on cost reimbursement for the respective applications. A reduction or elimination of cost reimbursement would have dire consequences on sales and earnings. Capital goods are also sold in the segments. In this regard, there is a risk of public and private customers being limited by budgetary constraints.

### 3.11 RISKS POSED BY COST INCREASES DUE TO PRICE HIKES

Probability of occurrence: **high**/intensity: **high**

There is a general risk that suppliers will increase their list prices by 3 – 5 % annually. Price negotiations and strategic purchasing decisions (such as framework agreements, quantity discounts, etc.) can counteract these developments or improve predictability and provide cost certainty for a certain period of time.

There is a much higher risk from cost increases in the so-called contaminated radioactive waste sites. As a result of political decisions and changes in legal requirements as well as government capacities, the costs of disposal may rise, for example due to a reclassification of old waste, bottlenecks in acceptance and thus time delays or higher acceptance costs as a result of change to permanent disposal site conditions, which are passed on to the disposing companies; the provisions formed and calculated on the basis of the knowledge and assumptions available today may, therefore, not be sufficient to cover the actual disposal costs.

For this reason, the management places the highest priority on the processing and timely disposal of these contaminated sites.

### 3.12 MAIN CUSTOMER RISK

Probability of occurrence: **high**/intensity: **medium**

The Group's five largest customers account for around 18 % of operating revenue. In 2018, this was mainly due to the very healthy order pipeline in the energy sector, and the Group does not expect this to be repeated in 2019. In previous years, the 10 largest customers accounted for slightly less than 10 % of revenue. This means that Eckert & Ziegler's customer base is rather broadly diversified.

### 3.13 RESEARCH AND DEVELOPMENT RISKS

Probability of occurrence: **medium**/intensity: **medium**

The Eckert & Ziegler Group carries out its own research projects where possible. These projects mainly involve the further development of the company's own existing products in order to maintain or reduce the competitive situation compared to the competition and alternative application methods. These measures may prove unsuccessful as a result of faster market developments, incorrect targets or non-achievement of the development objectives. Through market observations and project management-related measures, an attempt is made to minimise the risks. At the same time, successfully completed development projects offer opportunities for disproportional organic growth.

### 3.14 RISKS DUE TO INSUFFICIENT INNOVATIONS IN THE RADIATION THERAPY SEGMENT

Probability of occurrence: **high**/intensity: **high**

In the Radiation Therapy segment, there is the risk that new innovations are lacking or inadequate and that no or insufficiently innovative products are being developed. This could lead to economic targets not being achieved.

As safeguards, the expansion of human resources for targeted innovation management is planned. The management takes countermeasures through innovation partnerships, the purchase of licences and flexible planning strategies.

### 3.15 RISKS RELATING TO FINANCIAL INSTRUMENTS

Financial instruments are only concluded to hedge the operating business, such as risks arising from changes in exchange and interest rates. As financial instruments are only used to hedge transactions where the volumes exceed a certain threshold, exchange rate and interest rate fluctuation therefore has a certain impact on the Group's earnings.

### 3.16 RISK DEVELOPMENT

Despite the growth in its range of products, there has been no increase in the risk profile for the Eckert & Ziegler Group that could threaten the existence of the company. There have been no material changes in risks.

### 3.17 OPPORTUNITY REPORT

Even in the most dynamic segment, Radiopharma, drug development takes typically at least 15 years from concept to approval. The Eckert & Ziegler Group has a strong position in this mature industry, which is characterised by many slowly growing niches. It has been able to expand these niches in recent years and is now stronger than ever. After all, the Group is almost debt-free and continues to maintain a record-level net cash position of over € 50 million. This allows the Group to be active in the pursuit of opportunities in its respective markets.

Competitors in the market have, in the past, only rarely been a problem. There is no evidence to suggest that the Group has been losing market share to more aggressive competitors on a larger scale in recent years. Declines in business volume have always hit competitors to the same or greater extent. For decades, the greatest challenge has been to identify and move into new business areas to replace areas where demand is waning. To this end, the Group spends considerable sums, which are not always accounted for as development costs. The purchase of companies and/or participations also serves the purpose of opening up new business areas for the Group.

At the moment, we pin great hopes on the Gamma-Service Group, which we intend to make more profitable, on Brazil, where significant progress has been made towards profitability, and the acquisitions of WOMED in the Therapy segment. On the other hand, the company expects organic growth in the classic sense mainly in the Radiopharma segment, which is investing heavily in the expansion of production capacities.

As the scale of the provisions shows, considerable opportunities are also associated with reducing and containing contaminated sites. Although they are generally classified as a risk due to the increasing regulatory density, this assessment need not necessarily apply. If the management finds innovative solutions, which can be used to reduce provisions, this could translate into considerable income. This assessment also applies to provisions for the dismantling of existing plants. The continued use of these facilities with the associated licences for the processing of radioisotopes, particularly as a result of the boom in the Radiopharma segment, opens up undreamt-of opportunities.



## 4. OUTLOOK

### 4.1 COMPARISON WITH THE PREVIOUS YEAR

The forecasts for the 2018 financial year put revenue at € 155.0 million, EBIT at around € 18.5 million and consolidated profit at € 11.6 million. With revenue of € 168.7 million, EBIT of € 23.4 million and profit of € 16.1 million (all based on continuing and discontinued operations together), the Group achieved or exceeded all the forecasts.

### 4.2 ECONOMIC ENVIRONMENT

The economy was generally positive in 2018. The global economy grew by approx. 3.0%, continuing the pattern of stability ten years after the financial crisis of 2008/2009. The US economy notched solid 3.0% growth. China's growth slowed four year in a row to 6.6%. In 2014, growth was still above 7%. The German economy grew by 1.8% compared to the previous year, while the Eurozone as a whole was expected to grow by around 2.0% in 2018. Overall, the growth of the Eurozone countries has further weakened.

At 1.6%, next year's forecasts for the Eurozone are down to their lowest level since 2014. Uncertainties revolve in particular around Brexit and the political situation in Italy. The economic growth in Germany is expected to slow down to 1.7%.

At 2.7%, growth forecasts for the global economy are somewhat higher overall. While emerging markets are expected to grow by 4.6%, i.e. at a similar pace as in 2018, the economic growth in industrialised countries is expected to slow down by 0.4% to 1.9% compared to the previous year. This is also the case in the US, where investments are expected to decline after the tax reform at the end of 2017 and growth is expected to slow down to 2.5%.

Eckert & Ziegler is only partially affected by economic fluctuations, as demand in the healthcare sector follows other patterns. Eckert & Ziegler's operating business, however, is also influenced by global economic developments. This is especially the case if major public-sector projects are cancelled due to government austerity measures or if plans are introduced to cut administrative expenditure in healthcare.

Other general conditions which are of importance to Eckert & Ziegler include the U.S. dollar/euro exchange rate. As the Isotope Products segment, which is based in the U.S., makes a significant contribution to the Group's earnings and liquidity, even minor changes in the exchange rate have a noticeable impact on the Group's income and expenses. As both revenues and expenses are denominated in USD, the impact on earnings is accordingly lower.

In 2018, the weighted average exchange rate was USD 1.18 per euro, well above the previous year's figure of USD 1.13 per €. At the time of the preparation of the consolidated financial statements, the exchange rate was around USD 1.15, which historically had a positive effect on key figures of Eckert & Ziegler (the exchange rate was similar in 2014).

The negative effect of these currency fluctuations was marginal. Forecasting the exchange rate for the remainder of 2019 is difficult and depends on a variety of factors, including budgetary developments and the geopolitical situation in Asia and the Middle East. The political situation in the southern European countries has stabilised. The US budget and trade deficit is not considered to be of significant importance. However, the trade policy tensions between the US, China and Europe are increasingly weighing on the global economy. The consensus among economists for the year-end 2019 exchange rate, which was last provided by Consensus Economics, Inc., was USD 1.25 per € and thus still within the range of recent years. If the exchange rate remains within this range, Eckert & Ziegler will be able to manage any fluctuation in the exchange rate and there will be no material impact on the Group.

The following forecasts are made on the basis of these assumptions:

### **4.3 FUTURE BUSINESS DEVELOPMENT IN THE ISOTOPE PRODUCTS SEGMENT**

The Isotope Products segment is characterized by stable sales and income but is limited in terms of its organic growth opportunities. The Group does not expect the revenue growth achieved in 2018 as a result of extraordinary growth in the energy sector to be repeated in 2019. The revenue forecast for 2019 is therefore slightly lower, reaching around €105.6 million. The EBIT is forecast to reach €13.2 million.

### **4.4 FUTURE BUSINESS DEVELOPMENT IN THE RADIATION THERAPY SEGMENT**

Revenue in the Radiation Therapy segment is expected to grow at a steady pace. Rising raw material prices and an economic recovery in the target markets of South America, Africa and Asia boosted revenue in 2018. Revenue is expected to remain stable in 2019, with the revenue and EBIT forecast to reach €30.4 million and €0.7 million, respectively.

### **4.5 FUTURE BUSINESS DEVELOPMENT IN THE RADIOPHARMA SEGMENT**

The positive development is expected to continue in all main product groups. Revenue in the Radiopharma segment is expected to grow to more than €43.6 million. The expansion of production is particularly noticeable here. The EBIT is expected to reach approximately €9.0 million.

### **4.6 FUTURE BUSINESS DEVELOPMENT IN THE HOLDING COMPANY**

In the Others segment, revenue is expected to remain stable with the EBIT forecast at around €-0.8 million.

### **4.7 FUTURE BUSINESS DEVELOPMENT IN THE GROUP**

Overall, revenue and EBIT are forecast to increase to €180.0 million and approx. 23.5 million in the 2019 financial year. The reason is the positive sales outlook in the Radiopharma segment. Revenue generated from oil well logging sources will not reach the levels achieved in 2018.

The consolidated profit is forecast to reach €18.3 million or €3.50 per share.

The forecasts assume an exchange rate not moving above USD 1.20 per euro.

## **4.8 FUTURE BUSINESS DEVELOPMENT OF ECKERT & ZIEGLER STRAHLEN- UND MEDIZINTECHNIK AG**

In the previous year, the holding company was expected to generate stable income for services and expenses, an operating loss of € 0.9 million and a profit of around € 5.8 million.

The holding company expects to increase revenue from services by approx. € 0.2 million in 2019, as recurring expenses are expected to increase by approx. € 0.2 million. The company is planned operationally with a loss. Dividend income and profit transfers are expected to reach € 6.7 million. In total, profit for the year is expected to come in around € 5.8 million in the 2018 financial year, supporting stable dividend payments to shareholders.

## 5. OTHER DISCLOSURES

### 5.1 NON-FINANCIAL GROUP REPORT (ARTICLE 315B OF THE COMMERCIAL CODE (HGB))

Eckert & Ziegler is committed to sustainably aligning its corporate activities with a balanced relationship between economic, social and ecological aspects. Only in this way we can ensure the long-term success of the company. For further information, please refer to our sustainability report on our website at [www.ezag.com](http://www.ezag.com) > *Investor Relations* > *Reports*.

### 5.2 REMUNERATION REPORT

#### 5.2.1 Key remuneration policy principles

The Executive Board remuneration structure is oriented toward providing an incentive for long-term successful company development. A key aspect of the remuneration policy is that it sets out both fixed remuneration components and variable remuneration components with a multi-year assessment basis. This combination ensures that remuneration of members of the Executive Board adequately reflects both positive and negative performance.

The area of responsibility and the individual performance of the respective members of the Executive Board are of particular importance when it comes to determining total remuneration and the split between various remuneration components. The financial position, success and future outlook of the company are also included in this evaluation. Ultimately, remuneration should be attractive and appropriate compared to competitors and within the context of the remuneration structure at Eckert & Ziegler, with regard to both the upper management level and the workforce.

The Supervisory Board determines the total remuneration of the individual members of the Executive Board as well as the remuneration structure for a period of several years and performs regular reviews. The aim is a remuneration structure that is geared towards sustainable company development. In accordance with the Act on the Appropriateness of Management Board Remuneration (VorstAG), the contracts with members of the Executive Board were amended with effect from the 2011 financial year, establishing a multi-year assessment basis for calculating variable remuneration components and limits. Moreover, an option was introduced to limit Executive Board remuneration to a reasonable amount if and for as long as the economic situation of the company deteriorates. Fixed compensation components are paid monthly as salary on a pro-rata basis. The members of the Executive Board also receive additional benefits in kind, which essentially consist of use of a company car, a telephone and insurance premiums. As a rule, these are equally available to all members of the Executive Board. The extent of fringe benefits, however, may vary depending on the individual member's situation. As part of the overall remuneration of the members of the Executive Board, these benefits are subject to taxes.

Profit-sharing bonuses are variable compensation components and are usually measured on a multi-year basis. This is based on a percentage of cumulative EBIT or net profit generated in the direct area of responsibility, observed over a defined period of multiple years. Partial payments are made annually after approval of the financial statements; final settlement will be made at the end of the defined period. It is also possible to agree on variable compensation elements that are based only on an annual evaluation of successes and thus are based either on the achievement of a specific objective or a share as a percentage of the annual profit or loss. The variable components are subject to upper limits in terms of amount.

No severance payments have been agreed on in the event of premature or regular termination of a member's term on the Executive Board. Non-competition clauses were agreed for two members of the Executive Board, which provide for a part of the fixed salary to be paid over a certain period of time as compensation for being bound by the non-competition obligation in the sector. There are no pension commitments in the event of a member leaving the company. However, the company granted occupational pension benefits to two active members of the Executive Board in the year under review in the form of a so-called reinsured support fund, which is financed by deferred compensation.

From 30 May 2018, members of the Supervisory Board receive a fixed annual remuneration of € 12,000 (until 30 May 2018, members received € 10,000). From 30 May 2018, the chair receives triple the amount and the deputy chair double the amount (until 30 May 2018, the chair and the deputy chair received double and one-and-a-half times this amount).

Where a member has not been on the board for a full financial year, the respective member receives remuneration on a pro rata basis.

In addition to the fixed annual remuneration, members of the Supervisory Board receive € 1,000 for each Supervisory Board meeting they participate in.

### 5.2.2 Total remuneration of the Executive Board

The following table shows the Executive Board remuneration granted and paid in the financial year and the previous year. As no member of the Executive Board was granted stock options or pension commitments, the remuneration granted equals the amounts paid.

Figures in €	Dr. Andreas Eckert				Dr. Harald Hasselmann				Dr. André Heß				Dr. Lutz Helmke			
	Chairman of the Executive Board EZAG				Member of the Executive Board responsible for the Therapy segment				Member of the Executive Board responsible for the Radiopharma segment				Member of the Executive Board responsible for the Radiopharma segment			
	Date appointed: 3 July 1997				Date appointed: 01 January 2017				Date appointed: 01 March 2008 Date left: 31/08/2018				Date appointed: 17 September 2018			
	2017	2018	Min	Max	2017	2018	Min	Max	2017	2018	Min	Max	2017	2018	Min	Max
Fixed remuneration	300,000	300,000	300,000	300,000	189,236	196,245	196,245	196,245	216,000	296,364	296,364	296,364	0	60,667	60,667	60,667
Additional benefits	34,961	35,255	35,255	35,255	34,294	34,294	34,294	34,294	33,095	23,434	23,434	23,434	0	10,883	10,883	10,883
<b>Total</b>	<b>334,961</b>	<b>335,255</b>	<b>335,255</b>	<b>335,255</b>	<b>223,531</b>	<b>230,539</b>	<b>230,539</b>	<b>230,539</b>	<b>249,095</b>	<b>319,798</b>	<b>319,798</b>	<b>319,798</b>	<b>0</b>	<b>71,550</b>	<b>71,550</b>	<b>71,550</b>
Inventor's compensation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-year variable remuneration	340,000	387,640	0	500,000	121,040	116,800	0	150,000	255,000	200,000	0	200,000	0	0	0	0
Bonus on Group EBIT (5 years)	340,000	387,640	0	500,000												
Bonus on group net profits excluding the Therapy segment (3 years)					100,000	100,000	0	100,000								
Bonus on net profits Therapy segment (3 years)					21,040	16,800	0	50,000								
Bonus on Group EBIT excluding the Radiopharma segment (3 years)									55,000	66,667	0	66,667	0	0	0	0
Bonus on EBIT for the Radiopharma segment (3 years)									200,000	133,333	0	133,333	0	0	0	0
<b>Total</b>	<b>340,000</b>	<b>387,640</b>	<b>0</b>	<b>500,000</b>	<b>121,040</b>	<b>116,800</b>	<b>0</b>	<b>150,000</b>	<b>255,000</b>	<b>200,000</b>	<b>0</b>	<b>200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Benefit expense	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total remuneration</b>	<b>674,961</b>	<b>722,895</b>	<b>335,255</b>	<b>835,255</b>	<b>344,571</b>	<b>347,339</b>	<b>230,539</b>	<b>380,539</b>	<b>504,095</b>	<b>519,798</b>	<b>319,798</b>	<b>519,798</b>	<b>0</b>	<b>71,550</b>	<b>71,550</b>	<b>71,550</b>

The fixed and variable remuneration of the Executive Board members, Dr Harald Hasselmann and Dr Lutz Helmke and Dr André Heß, is not included in the personnel expenses of the AG, as it is settled through subsidiaries.

In individual cases, the variable remuneration may be lower or higher than the minimum or maximum amounts shown, because the adjustment of the caps is always cumulative over the term of the contract and the stated minimum and maximum amounts represent the annual average.

The disclosed variable remuneration for 2018 is based on the final financial statement figures and is paid in this amount in 2019. Due to the iteration problem, the provisions for bonuses contained in the balance sheet as at 31 December 2018 may differ slightly.

Pension provisions of € 437 thousand (previous year: € 432 thousand) relate to a former member of the Executive Board. The pension provisions under the German Commercial Code relating to a former member of the Executive Board have a value of € 383 thousand (previous year: € 375 thousand). Pension payments of € 32 thousand were made to this former Executive Board member in the 2018 financial year (2017: € 32 thousand).

### 5.2.3 Total remuneration of the Supervisory Board

In the 2018 financial year, the members of the Supervisory Board received fixed remuneration of €94 thousand (2017: €74 thousand) and attendance fees of €33 thousand (2017: €27 thousand). This translates into total expense of €127 thousand (2017: €101 thousand).

The individual members of the Supervisory Board received the following remuneration:

Name	Position for which remuneration was paid	Fixed compensation	Attendance allowances	Total
€ thousand				
Prof. Dr. Wolfgang Maennig	Chairman of the Supervisory Board	€ 29 thousand (2017: € 20 thousand)	€ 6 thousand (2017: € 4 thousand)	€ 35 thousand (2017: € 24 thousand)
Prof. Dr. Helmut Grothe	From 31 July 2017: Deputy Chairman, previously member of the Supervisory Boards	€ 20 thousand (2017: € 12 thousand)	€ 6 thousand (2017: € 5 thousand)	€ 26 thousand (2017: € 17 thousand)
Hans-Jörg Hinke	Member of the Supervisory Board	€ 11 thousand (2017: € 10 thousand)	€ 6 thousand (2017: € 5 thousand)	€ 17 thousand (2017: € 15 thousand)
Dr. Gudrun Erzgräber	Member of the Supervisory Board	€ 11 thousand (2017: € 10 thousand)	€ 5 thousand (2017: € 4 thousand)	€ 16 thousand (2017: € 14 thousand)
Prof. Dr. Detlev Ganten	Member of the Supervisory Board	€ 11 thousand (2017: € 10 thousand)	€ 4 thousand (2017: € 4 thousand)	€ 15 thousand (2017: € 14 thousand)
Albert Rupprecht	From 31 May 2017: Member of the Supervisory Board	€ 11 thousand (2017: € 6 thousand)	€ 6 thousand (2017: € 2 thousand)	€ 17 thousand (2017: € 8 thousand)
Prof. Dr. Nikolaus Fuchs	until 31 May 2017: Deputy Chairman of the Supervisory Board	€ 0 thousand (2017: € 6 thousand))	€ 0 thousand (2017: € 3 thousand)	€ 0 thousand (2017: € 9 thousand)

No remuneration or benefits were paid to Supervisory Board members for services, in particular consulting and brokerage services, rendered outside of their activities on the Supervisory Board in the period under review.

The Supervisory Board has not established any committees, in particular an audit committee or nomination committee. The need to form committees, in particular an audit committee or a nomination committee, is not considered to be a priority by the Supervisory Board due to the small number of Supervisory Board members and the company's specific circumstances. All the duties of these committees are therefore performed by the Supervisory Board as a whole.

## 5.3 INFORMATION REQUIRED UNDER TAKEOVER LAW

As at 31 December 2018, the company's share capital was €5,292,983 (previous year: €5,292,983), divided into 5,292,983 non-par value bearer shares. Each share represents one vote and is entitled to a share in profit. There are no shares with multiple, preferential or maximum voting rights.

The Executive Board is not aware of any restrictions concerning voting rights or the transfer of shares.

Under the German Securities Trading Act (WpHG), every investor who reaches, exceeds or falls short of certain amounts of voting rights in the company by way of acquisition, sale or any other action is required to notify the company and the German Federal Financial Supervisory Authority (BaFin). The lowest threshold for the disclosure of voting rights is 3%. Direct or indirect shareholdings in the capital of the company that exceed 10% of the voting rights were disclosed to the company as follows:

As at 31 December 2018, the Chairman of the Executive Board, Dr. Andreas Eckert, held 1,692,990 shares indirectly through Eckert Wagniskapital und Frühphasenfinanzierung GmbH, Panketal, Germany, and 12,001 shares directly,

representing a total of 32.2 % of the share capital of Eckert & Ziegler Strahlen- und Medizintechnik AG of 5,292,983 shares. As at 31 December 2018, the total holdings of the remaining members of the Group's Executive Board and Supervisory Board of shares issued by Eckert & Ziegler Strahlen- und Medizintechnik AG amounted to under 1 % of the share capital.

Shares with special rights that confer powers of control did not and do not exist.

The Executive Board manages the company and represents it in dealings with third parties. Article 84 AktG governs the appointment and dismissal of members of the Executive Board. The Supervisory Board appoints the members of the Executive Board for a maximum of five years. Repeat appointments or extensions of the term of office for a maximum of another five years are permissible. Such repeat appointments or extensions require another resolution by the Supervisory Board; this cannot be adopted earlier than one year prior to the expiry of the current term of office. The Supervisory Board can appoint a Member of the Executive Board to the position of Chairman of the Executive Board. The Supervisory Board can revoke an appointment to the Executive Board and the appointment of a Member of the Executive Board to Chairman of the Executive Board for good cause. Possible causes include serious breach of duty, the inability to properly manage a business and a vote of no confidence by the Annual General Meeting.

In accordance with Article 6 of the Articles of Association, the Executive Board consists of one or more members. The Supervisory Board determines the number of members of the Executive Board.

The Articles of Association contain general provisions on the form of the company. Pursuant to Article 179 AktG, any changes to articles of association are subject to approval by the Annual General Meeting requiring at least a majority of three-quarters of the share capital represented at the time the resolution is adopted.

The Executive Board is authorised to increase the share capital until 29 May 2023 with the consent of the Supervisory Board in the amount of up to €264,649 by issuing new no-par bearer shares in exchange for cash contributions and/or contributions in kind (authorised capital). The new shares shall, in principle, be offered to shareholders for subscription; they can also be acquired by one or several financial institutions or similar companies on the condition that they offer them to the shareholders for subscription.

With the consent of the Supervisory Board, the Executive Board can:

- exclude shareholders' subscription rights up to an amount not exceeding 10 % of the share capital existing at the time of the exercise of this authorisation, in order to issue the new shares against cash contributions at an issue price that is not significantly lower than the market price of the Company's already listed shares of the same class. Own shares of the company sold during the period of this authorisation under exclusion of shareholders' subscription rights in direct or analogous application of Article 186 (3) sentence 4 AktG will be counted towards this 10 % limit. Furthermore, when calculating the 10 % limit, shares issued or to be issued during the period of this authorisation to service convertible bonds and/or bonds with warrants must be taken into account, provided that the bonds were issued under exclusion of subscription rights in analogous application of Article 186 (3) sentence 4 AktG;
- exclude shareholders' subscription rights for the purpose of acquiring contributions in kind, in particular through the acquisition of companies or interests in companies or through the acquisition of other assets, including rights and claims, if the acquisition is in the company's best interest and should be completed in exchange for the issue of shares in company.
- exclude shareholders' subscription rights to the extent necessary to grant holders of convertible bonds and/or bonds with warrants issued by the company or its subsidiaries a subscription right to new shares to the extent to which they would be entitled after exercising their conversion or option rights;
- exclude shareholders' subscription rights to offer the new shares to employees of the company or its affiliated undertakings in return for cash contributions.
- exclude shareholders' subscription rights to compensate for fractional amounts.

The Executive Board is authorised, with the approval of the Supervisory Board, to determine further details pertaining to the implementation, the rights attached to the shares and terms of the issue, including the issue price. The Supervisory Board is authorised to amend the articles of association after the capital increase is completed and if the company does not issue shares up to the full amount of authorised capital by 29 May 2023, after the end of the authorisation period.

First, it shall be possible to exclude the preferential right for fractional amounts. This simplifies the procedure of issuing shares with preferential rights for shareholders. Fractional amounts may result from the respective issue volume and the need for a manageable subscription ratio. The value of such fractional amounts is usually low for individual shareholders, but, without exclusion, they make the issuing process considerably more complex. The potential dilution effect is negligible as only fractional amounts are eliminated. New shares excluded from preferential rights due to fractional amounts will be utilised in the best possible manner for the company. Excluding preferential rights is therefore a matter of practicality and simplifies the process of issuing new shares.

The subscription right is to be excluded if the new shares are issued in the event of cash capital increases in accordance with Article 186 (3) sentence 4 AktG at an amount that is not significantly lower than the stock exchange price. This authorisation enables the company to leverage market opportunities quickly and flexibly in various areas of business and cover resulting capital requirements at extremely short notice. The exclusion of preferential rights not only allows the company to take action more promptly, it also enables shares to be issued at a price close to the listed price, and so without the usual discount attached to shares issued under preferential rights. This results in higher issue proceeds and serves the interests of the company. In addition, such share issues can also be used to attract new groups of shareholders. The AktG does not stipulate any fixed limit for the discount. If the authorisation is exercised, the Executive Board – with the consent of the Supervisory Board – shall set the discount as low as possible in accordance with the prevailing market conditions at the time of share issue. A discount of between 3 % and a maximum of 5 % of the current listed price is usually considered an insignificant reduction. The volume of shares issued under the exclusion of preferential rights pursuant to Article 186 (3) Sentence 4 AktG may not exceed 10 % of the nominal capital, neither at the time the shares are issued nor at the time the authorisation is exercised. The sale of own shares shall count toward this limit, provided they are sold during the period in which this authorisation excluding preferential rights in accordance with Article 186 (3) Sentence 4 AktG applies. This requirement takes into account the shareholders' need for protection against the dilution of their stock in accordance with legal regulations. All shareholders have the fundamental opportunity to acquire on the stock market the shares necessary to maintain their shareholding ratio at terms that resemble their original terms as closely as possible. This ensures that the financial and voting rights of shareholders are adequately protected when shares are issued from the authorised capital under exclusion of subscription rights in accordance with Article 186 (3) sentence 4 AktG, while granting the company flexibility in the interest of all shareholders. In addition, preferential rights of shareholders shall be able to be excluded in the case of capital increases against contributions in kind. This allows the Executive Board to use shares in the company to acquire companies, parts of companies or company investments or other assets as it sees fit. Negotiations may focus on shares being used as a contribution instead of cash. The option of offering shares in the company as a contribution gives the company a competitive advantage when it comes to interesting acquisition targets and the possibility to take any opportunities to acquire companies, parts of companies, company investments or other assets that may arise without affecting liquidity. Offering shares as a contribution can also make sense in terms of maintaining an optimum financing structure. This does not put the company at a disadvantage, as a prerequisite for issuing shares against contributions in kind is that the value of the contribution in kind is appropriate in relation to the value of the shares. In determining the valuation relationship, the Executive Board will ensure that the interests of the company and its shareholders are suitably taken into consideration and an appropriate issue amount is determined for the new shares.

The Executive Board will carefully review each case in which it considers authorising a capital increase while excluding the preferential rights of shareholders. This will only take place if the Executive Board and the Supervisory Board considers it to be in the interests of the company and therefore its shareholders. The Executive Board will report on the utilisation of authorised capital at the next Annual General Meeting.



As at 31 December 2018, the company held 229,818 (2017: 4,818) own shares with a nominal value of € 230 thousand (2017: € 5 thousand), deducted from the subscribed open capital in the balance sheet. In the financial year under review, 250,000 own shares were acquired and 25,000 own shares were sold. As part of the merger, Eckert & Ziegler AG still has an obligation to transfer 84,358 own shares to the former minority shareholders of Eckert & Ziegler BEBIG SA. The company will use 84,358 own shares from the total of own shares (229,818 shares) as at 31 December 2018.

There are no material agreements subject to a change of control as the result of a takeover bid. Furthermore, there are also no compensation agreements with members of the Executive Board or employees, which would apply in the event of a takeover bid.

## 5.4 CORPORATE GOVERNANCE STATEMENT (ARTICLE 315D HGB)

The company has issued a corporate governance statement which is available on the website at [www.ezag.com](http://www.ezag.com) > *Investors* > *Corporate governance* > *Corporate governance statement*.

## 5.5 AFFILIATED COMPANY REPORT

An affiliated company report with the following declaration of the Executive Board was issued:

“We declare that EZAG received appropriate consideration for each of the transactions listed in the report on relationships with affiliated companies under the circumstances known to us at the time the transaction was entered into. No measures were taken or omitted at the request or in the interest of the controlling company or an associated company.”

## 5.6 INSURANCE OF LEGAL REPRESENTATIVES (BALANCE-SHEET OATH)

We assure to the best of our knowledge that, in accordance with the applicable accounting principles, the financial statements and the consolidated financial statements give a true and fair view of the financial position, the results of operations and the consolidated financial statements, including the business results and the position of the Company and the Group are presented in such a way as to give a true and fair view of the actual opportunities and risks of the expected development of the Company and the Group.

Berlin, 26 March 2019

Eckert & Ziegler Strahlen- und Medizintechnik AG  
Executive Board

Dr. Andreas Eckert

Dr. Harald Hasselmann

Dr. Lutz Helmke

# GROUP FINANCIAL INFORMATION

## CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENT _____	63
CONSOLIDATED COMPREHENSIVE INCOME _____	64
CONSOLIDATED BALANCE SHEET _____	65
CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY _____	66
CONSOLIDATED CASH FLOW STATEMENT _____	68

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENT FOR THE FINANCIAL YEAR 2018 \_\_\_\_\_ 69

BASIS, PRINCIPLES AND METHODS _____	69
NOTES TO THE CONSOLIDATED INCOME STATEMENT _____	85
NOTES TO THE CONSOLIDATED BALANCE SHEET _____	94
NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS _____	114
OTHER DISCLOSURES _____	115

## CONSOLIDATED STATEMENT OF CHANGES IN FIXED ASSETS \_\_\_\_\_ 124

## INDEPENDENT AUDITOR'S REPORT \_\_\_\_\_ 126

## INDIVIDUAL FINANCIAL STATEMENTS OF THE ECKERT & ZIEGLER AG

INCOME STATEMENT _____	134
BALANCE SHEET _____	135

# CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENT			
€ thousand	Notes	2017	2018
<b>Revenue</b>	5.	<b>138,631</b>	<b>168,709</b>
Cost of sales	6.	- 74,766	- 94,363
<b>Gross profit on sales</b>		<b>63,865</b>	<b>74,346</b>
Selling expenses	7.	- 20,028	- 23,298
General administrative expenses	8.	- 23,938	- 26,902
Other operating income	11.	3,784	3,497
Other operating expenses	12.	- 4,497	- 4,456
<b>Operating profit</b>		<b>19,186</b>	<b>23,187</b>
Share of profit of associated companies	13.	0	49
Exchange rate gains	14.	233	1,055
Exchange rate losses	14.	- 1,447	- 904
<b>Earnings before interest income and income taxes (EBIT)</b>		<b>17,972</b>	<b>23,387</b>
Interest income	15.	252	171
Interest expenses	15.	- 881	- 672
<b>Earnings before income tax (EBT)</b>		<b>17,343</b>	<b>22,886</b>
Income taxes	16.	- 5,320	- 5,997
<b>Consolidated earnings from continuing operations</b>		<b>12,023</b>	<b>16,889</b>
Profit or loss from discontinued operations		3,099	0
<b>Consolidated earnings from continuing and discontinued operations</b>		<b>15,122</b>	<b>16,889</b>
Profit (+)/loss (-) attributable to non-controlling interests	17.	421	756
<b>Earnings of Eckert &amp; Ziegler AG attributable to shareholders</b>		<b>14,701</b>	<b>16,133</b>
<b>Earnings per share from continuing and discontinued operations</b>	18.		
Undiluted (€ per share)		2.78	3.12
Diluted (€ per share)		2.78	3.12
<b>Earnings per share from continuing operations</b>	18.		
Undiluted (€ per share)		2.19	3.12
Diluted (€ per share)		2.19	3.12
Average shares in circulation (undiluted – in thousand units)		5,288	5,168
Average shares in circulation (diluted – in thousand units)		5,288	5,168

CONSOLIDATED COMPREHENSIVE INCOME			
€ thousand	Notes	2017	2018
<b>Consolidated earnings</b>		<b>15,122</b>	<b>16,889</b>
of which attributable to shareholders of Eckert & Ziegler AG		14,701	16,133
of which profit (+)/loss (-) attributable to non-controlling interests		421	756
<b>Items that will be reclassified to the income statement in the future under certain circumstances</b>			
Exchange rate differences from the translation of foreign business operations incurred during the financial year		- 4,041	1,953
Amount reposted to income statement		- 223	0
<b>Exchange rate differences resulting from the translation of foreign business</b>	28.	<b>- 4,264</b>	<b>1,953</b>
		<b>- 4,264</b>	<b>1,953</b>
<b>Items that will not be reclassified to the income statement in the future</b>			
Change in actuarial gains (+)/Losses (-) from defined benefit pension plans		302	421
<b>Revaluation of the defined benefit obligation</b>	28., 31.	<b>302</b>	<b>421</b>
<b>Deferred taxes</b>		<b>- 95</b>	<b>- 133</b>
		<b>207</b>	<b>288</b>
<b>Other comprehensive income after taxes</b>		<b>- 4,057</b>	<b>2,241</b>
<b>Consolidated comprehensive income</b>		<b>11,065</b>	<b>19,130</b>
<b>Comprehensive income attributable to:</b>			
Shareholders of Eckert & Ziegler AG		10,641	18,380
Non-controlling interests		424	750

CONSOLIDATED BALANCE SHEET			
€ thousand	Notes	As of Dec 31, 2017	As of Dec 31, 2018
<b>Assets</b>			
<b>Non-current assets</b>			
Goodwill	19.	41,333	41,828
Other intangible assets	19.	10,106	10,691
Property, plant and equipment	20.	33,829	36,931
Investments in associates or joint ventures	21.	3,202	3,523
Deferred tax assets	16.	8,841	9,921
Other non-current assets	22.	3,848	4,016
<b>Total non-current assets</b>		<b>101,159</b>	<b>106,910</b>
<b>Current assets</b>			
Cash and cash equivalents	23.	57,707	54,186
Trade receivables	24.	24,305	28,308
Inventories	25.	26,768	28,759
Income tax receivables	16.	1,598	3,541
Other current assets	26.	5,450	7,347
<b>Total current assets</b>		<b>115,828</b>	<b>122,141</b>
<b>Total assets</b>		<b>216,987</b>	<b>229,051</b>
<b>Equity and liabilities</b>			
<b>Equity</b>			
Subscribed capital	27.	5,293	5,293
Capital reserves		53,500	53,625
Retained earnings		56,208	69,626
Other reserves		- 2,633	- 386
Own shares		- 27	- 5,519
<b>Equity attributable to shareholders of Eckert &amp; Ziegler AG</b>		<b>112,341</b>	<b>122,639</b>
Minority interests	17.	5,176	1,238
<b>Total equity</b>		<b>117,517</b>	<b>123,877</b>
<b>Non-current liabilities</b>			
Non-current loan liabilities	28.	46	0
Deferred income from grants and other deferred income (non-current)	29.	3,152	3,503
Deferred tax liabilities	16.	2,306	2,252
Provisions for pensions	30.	11,675	11,368
Other non-current provisions	31.	45,499	51,581
Other non-current liabilities	32.	2,848	2,270
<b>Total non-current liabilities</b>		<b>65,526</b>	<b>70,974</b>
<b>Current liabilities</b>			
Loans and financial lease liabilities	28.	1,687	42
Trade payables		4,504	6,490
Advance payments received	25.	5,859	4,106
Deferred income from grants and other deferred income	29.	171	137
Income tax liabilities	16.	4,096	4,840
Other current provisions	31.	3,163	3,474
Other current liabilities	33.	14,464	15,111
<b>Total current liabilities</b>		<b>33,944</b>	<b>34,200</b>
<b>Total assets</b>		<b>216,987</b>	<b>229,051</b>

## CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY

Figures € thousand excluding the number of shares	Subscribed capital			
	Number	Nominal value	Capital reserve	Retained earnings
<b>Balance as at 01 January 2018</b>	<b>5,292,983</b>	<b>5,293</b>	<b>53,500</b>	<b>56,208</b>
Total of expenditures and income recognised directly in equity	0	0	0	0
Consolidated income	0	0	0	16,133
Consolidated comprehensive income	0	0	0	16,133
Dividends paid	0	0	0	- 4,131
Acquisition of own shares	0	0	0	0
Disposal of own shares	0	0	125	0
Acquisition of noncontrolling interests	0	0	0	1,416
<b>Balance as at 31 December 2018</b>	<b>5,292,983</b>	<b>5,293</b>	<b>53,625</b>	<b>69,626</b>

## CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY

Figures € thousand excluding the number of shares	Subscribed capital			
	Number	Nominal value	Capital reserve	Retained earnings
<b>Balance as at 01 January 2017</b>	<b>5,292,983</b>	<b>5,293</b>	<b>53,500</b>	<b>44,997</b>
Total of expenditures and income recognised directly in equity	0	0	0	0
Consolidated income	0	0	0	14,701
Consolidated comprehensive income	0	0	0	14,701
Dividends paid	0	0	0	- 3,490
Acquisition of noncontrolling interests	0	0	0	0
<b>Balance as at 31 December 2017</b>	<b>5,292,983</b>	<b>5,293</b>	<b>53,500</b>	<b>56,208</b>

Cumulative other equity items					
Unrealised profit from actuarial gains/ losses	Foreign currency translation differences	Own shares	Equity attributable to shareholders of Eckert & Ziegler AG	Minority interests	Group equity
<b>- 2,849</b>	<b>216</b>	<b>- 27</b>	<b>112,341</b>	<b>5,176</b>	<b>117,517</b>
288	1,959	0	2,247	- 6	2,241
0	0	0	16,133	756	16,889
288	1,959	0	18,380	750	19,130
0	0	0	- 4,131	- 66	- 4,197
0	0	- 9,648	- 9,648	0	- 9,648
0	0	950	1,075	0	1,075
0	0	3,206	4,622	- 4,622	0
<b>- 2,561</b>	<b>2,175</b>	<b>- 5,519</b>	<b>122,639</b>	<b>1,238</b>	<b>123,877</b>

Cumulative other equity items					
Unrealised profit from actuarial gains/ losses	Foreign currency translation differences	Own shares	Equity attributable to shareholders of Eckert & Ziegler AG	Minority interests	Group equity
<b>- 3,056</b>	<b>4,483</b>	<b>- 27</b>	<b>105,190</b>	<b>4,887</b>	<b>110,077</b>
207	- 4,267	0	- 4,060	3	- 4,057
0	0	0	14,701	421	15,122
207	- 4,267	0	10,641	424	11,065
0	0	0	- 3,490	- 155	- 3,645
0	0	0	0	20	20
<b>- 2,849</b>	<b>216</b>	<b>- 27</b>	<b>112,341</b>	<b>5,176</b>	<b>117,517</b>

CONSOLIDATED CASH FLOW STATEMENT			
€ thousand	Notes	2017	2018
<b>Cash flow from operating activities</b>	35.		
Consolidated earnings		15,122	16,889
Adjustments for			
Depreciation, amortization and impairments		8,645	8,574
Net interest income [interest expense (+)/income (-)]		629	501
Income tax expense		5,270	5,997
Income tax payments		- 6,057	- 7,331
Income not affecting payments from the writing back of deferred grants		- 136	- 201
Profit (-)/loss (+) from the disposal of non-current assets		70	159
Gains on the sale of entities consolidated at equity		- 4,710	-
Change in the non-current provisions, other current liabilities		1,310	1,138
Change in other non-current assets and receivables		- 154	- 348
Other events not affecting payments		1,365	- 323
Changes in the current assets and liabilities			
Receivables		2,353	- 5,629
Inventories		- 230	706
Change in other current assets		854	- 799
Change in current liabilities and provisions		2,496	1,877
<b>Cash flow from operating activities</b>		<b>26,827</b>	<b>21,210</b>
<b>Cash flow from investment activities</b>	36.		
Outflows for intangible assets and property, plant and equipment		- 4,160	- 6,123
Income from the sale of intangible assets and property, plant and equipment		843	27
Outflows for acquisitions (net of cash acquired)		- 5,454	- 2,101
Payments related to the granting of loans		-	- 2,500
Outflows for the acquisition of investments		- 500	-
Income from the sale of interests in consolidated companies		12,286	-
Income from the sale of at equity consolidated companies		2,098	-
<b>Cash outflow/inflow from investing activities</b>		<b>5,113</b>	<b>- 10,697</b>
<b>Cash flow from financing activities</b>	37.		
Paid dividends		- 3,490	- 4,131
Distribution of shares of third parties		- 155	- 66
Purchase of own shares		-	- 9,648
Sale of own shares		-	1,075
Inflows from the taking out of loans		178	-
Outflows from the redemption of loans		- 5,475	- 1,679
Outflows for the acquisition of non-controlling interests		- 575	-
Interest received		113	171
Interest paid		- 551	- 324
<b>Cash flow from financing activities</b>		<b>- 9,955</b>	<b>- 14,602</b>
Changes in cash and cash equivalents resulting from exchange rates		- 845	568
<b>Decrease/increase in cash and cash equivalents</b>		<b>21,140</b>	<b>- 3,521</b>
<b>Cash and cash equivalents at beginning of period</b>		<b>36,567</b>	<b>57,707</b>
<b>Cash and cash equivalents at the end of the period</b>		<b>57,707</b>	<b>54,186</b>



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENT FOR THE FINANCIAL YEAR 2018

The Executive Board approved the consolidated financial statements for submission to the Supervisory Board on 26 March 2019. The Supervisory Board is responsible for reviewing and approving the consolidated financial statements. After publication, the financial statements cannot be altered.

## BASIS, PRINCIPLES AND METHODS

### 1 | ORGANISATION AND DESCRIPTION OF BUSINESS ACTIVITIES

Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin, Germany (hereinafter referred to as “Eckert & Ziegler AG”) is a holding company with specialised subsidiaries worldwide engaged in the processing of radio isotopes and the development, production and sale of isotope technology components, radiation equipment, radiopharmaceuticals and related products. The Group’s products are primarily used in medical technology, particularly in cancer therapy, as well as in nuclear medical imaging and industrial measurement. In these areas, Eckert & Ziegler AG and its subsidiaries address the needs of radiation therapists, radio-oncologists, and nuclear medicine specialists, among others.

The Group operates in a market characterised by rapid technological progress, heavy research expenditure and constant new scientific discoveries. This market is regulated by German federal, state and local authorities. These regulatory authorities include the Regional Office for Health and Social Affairs Berlin (LAGeSo), the Technical Monitoring Agency (TUV Nord CERT GmbH, Essen), the Federal Institute for Drugs and Medical Devices (BfArM), and the corresponding foreign institutions, such as the US Food and Drug Administration (FDA) or the Nuclear Regulatory Commission (NRC). As a result, the Group is directly affected by changes in technology and in products used in cancer treatment and for nuclear medical imaging, by government regulations related to the industry in which Eckert & Ziegler AG operates, and by the general environment within the health care sector.

### 2 | ACCOUNTING PRINCIPLES

The consolidated financial statements of Eckert & Ziegler AG for the year ended 31 December 2018 were prepared in accordance with International Financial Reporting Standards (IFRS). The statements comply with all standards of the International Accounting Standards Board (IASB), London, as adopted by the EU on the reporting date, as well as the relevant interpretations of the International Financial Reporting Interpretations Committee (IFRIC) and the Standing Interpretations Committee (SIC), as well as the provisions of Article 315e (1) of the German Commercial Code (HGB), which applies in a supplementary manner. The consolidated financial statements give a true and fair view of the Group’s assets, liabilities, financial position and results.

The reporting currency is the euro. The amounts shown in the consolidated financial statements are rounded to the nearest thousand euros.

The financial statements of the Group’s subsidiaries were prepared as at the same reporting date as the consolidated financial statements; this reporting date corresponds to that of Eckert & Ziegler AG. The consolidated financial statements cover the reporting period from 1 January to 31 December 2018. The consolidated income statement was prepared in accordance with the cost of sales method. Other income was presented in the consolidated statement of comprehensive income.

The company is registered in the commercial register in Berlin-Charlottenburg under the number HRB 64997 B. The consolidated financial statements and the combined management report for the year ended 31 December 2018 are published in the electronic version of the German Federal Official Gazette (Bundesanzeiger).

### 3 | SIGNIFICANT ACCOUNTING POLICIES

**Accounting policies** – The assets and liabilities of the fully consolidated domestic and foreign subsidiaries were recognised using uniform accounting policies, which were also used to prepare comparative information for the previous year.

**Disclosure** – In the balance sheet, a distinction is made between non-current and current assets and liabilities as required by IAS 1.56 (Presentation of Financial Statements).

**Estimates and assumptions** – When preparing the consolidated financial statements in accordance with IFRS, it is necessary to make estimates and assumptions that affect the amount and disclosure of recognised assets and liabilities, revenues and expenses. Significant assumptions and estimates are made concerning useful lives, income achievable from intangible assets and property, plant, and equipment, the recoverability of receivables, the accounting and valuation of provisions, as well as the balance and recoverability of deferred tax assets. These assumptions and estimates are based on current knowledge. Actual amounts may differ from the originally expected estimates because conditions might develop differently than assumed. The sensitivity of book values with respect to the assumptions and estimates that underlie the calculation of the book values was evaluated by means of sensitivity analyses. Where changes in estimates would have a significant impact, disclosures are made in accordance with IAS 1.125.

**Judgments in applying accounting policies** – Non-current tangible and intangible assets are measured in the balance sheet at amortised cost. No use was made of the option to measure these assets at fair value.

**Goodwill** – Goodwill represents the difference between the total purchase price for a company or business operation and the fair value of the acquired net assets. Goodwill is not amortised. In accordance with IAS 36, it is tested for impairment annually or more frequently if there is indication that the goodwill might be impaired, and where this is the case, it is written down to the recoverable amount.

Other **intangible assets** – Customer relationships, capitalised development costs, patents, technologies, restraints on competition, software, licenses and, similar rights are disclosed under other intangible assets. Development costs are capitalised as intangible assets if the capitalisation criteria for self-constructed intangible assets are all fulfilled in accordance with IAS 38. Capitalised development costs consist of all directly attributable costs, which are incurred from the date when all capitalisation criteria have been met. After successful completion of the development project, capitalised development costs are amortised over the planned economic life of the product. Amortisation of capitalised development costs is reported under cost of sales. Research costs, along with development costs not eligible for capitalisation, are expensed as incurred.

Intangible assets are capitalised at historical cost and, provided that these are intangible assets with finite useful lives, are amortised over their respective useful lives. Intangible assets are amortised over the following estimated useful lives:

	Self-constructed	Acquired
Customer relations	–	8 – 15 years
Capitalized development costs	3 – 10 years	–
Patents, permits, trademarks, etc.	6 – 20 years	10 years
Other	3 – 5 years	3 – 5 years

Intangible assets with indefinite useful lives are reviewed on an annual basis to determine whether the asset continues to have an indefinite useful life.

**Property, plant, and equipment** – Property, plant, and equipment is measured at historical cost less accumulated depreciation and impairment. The cost of self-constructed equipment includes all direct costs and attributable production overheads, and to the extent that the requirements of IAS 23 apply, financing costs. Where applicable, the historical cost includes the estimated cost of dismantling and disposing the asset and restoring the site. Self-constructed assets mainly relate to production lines. Depreciation is calculated on a straight-line basis. The depreciation period is determined based on the estimated useful life. The following useful lives are assumed:

Buildings	25 to 45 years
Leasehold improvements	10 to 15 years
Technical equipment and machinery	4 to 10 years
Operating and office equipment	3 to 13 years
Land plots	are not depreciated on a scheduled basis

When assets are scrapped or sold, the historical cost of the assets and the related accumulated depreciation and impairment are derecognised and any gains or losses from the disposal are recognised through profit or loss.

A significant portion of the Group's depreciable assets is used to manufacture products. The Executive Board assesses the recoverability of these assets by taking into account triggering events in the business environment. The Executive Board does not anticipate any deterioration in usability as at 31 December 2018. However, it is possible for the assessments of the Executive Board regarding the ability to use and exploit the Group's depreciable assets to change, even in the short term, due to technology developments or changes in the regulatory environment.

**Impairment of intangible assets and property, plant and equipment** – Impairment of intangible assets and property, plant and equipment is recognised if, due to certain events or changed circumstances, the carrying amount of the assets exceeds the recoverable amount of these assets. The recoverable amount is the higher of fair value minus sales costs and value in use. Acquired goodwill and intangible assets with an indefinite useful life are tested for value impairment at least once a year.

Write-ups are carried out when the recoverable value exceeds the book value of the asset. The asset is at the maximum written up to the amount that would have existed if the previous value impairment had not been carried out. Impaired goodwill is not written up.

In order to carry out the impairment test, acquired goodwill is allocated to those cash-generating units (CGU) that are expected to benefit from the synergies of the Group and the business acquisitions. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets. The CGUs in the Radiation Therapy and Isotope Products segments each correspond to the segment. In the Radiopharma segment, two cash-generating units (cyclotron and equipment divisions) were identified by 2017. The cyclotron division was sold in the 2017 financial year, and as a result, the Radiopharma segment only has one cash-generating unit.

The Executive Board considers amounts that exceed 10 % of the Group's total goodwill to be material. The CGUs of the Isotope Products and Radiation Therapy segments meet this criterion.

The recoverability of goodwill is tested by determining the value in use based on estimated future cash flows, which are derived from the medium-term planning for the segments. The medium-term planning horizon is five years. Cash flows after the detailed planning phase are extrapolated based on a growth rate of 0 % – 1 %, which does not exceed the expected average growth of the market or industry.

The discount rates are determined based on the weighted average cost of capital (WACC) for the respective CGU. There is uncertainty with respect to estimates used in the following assumptions used in the calculation:

**Medium-term planning:**

The medium-term planning is based on historical empirical values and takes into account segment-specific market growth expectations.

**Discount rate:**

The discount rates were determined based on the average weighted cost of capital that is customary for the industry.

**Growth rates:**

The growth rates are based on published industry-related market research.

**Inventories** – Inventories include raw materials and consumables, work in progress and finished goods and merchandise. Inventories are stated at the lower of historical cost and net realisable value as at the balance sheet date. In addition to direct costs, production costs include appropriate portions of the necessary material and production overheads as well as production-related depreciation, production-related administrative and social costs. Financing costs are not recognised as part of production costs due to the short-term nature of the production process. Where necessary, the average cost method is applied in order to simplify valuation.

Value impairments for obsolete or excess inventories are made on the basis of an inventory analysis and future sales forecasts.

**Receivables** – Receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial recognition, receivables are measured at amortised cost less impairment. Gains or losses are recognised in the consolidated result if the receivables are impaired.

**Financial assets** – Financial assets are measured at fair value on acquisition. After initial recognition, financial assets are measured at amortised cost using the effective interest method less impairment.

**Derivative financial instruments** – Derivative financial instruments such as swaps are only used for hedging purposes. They are measured in the consolidated balance sheet at fair value, with changes in value recognised in profit or loss, as the valuation unit is not recognised due to the lack of comprehensive documentation requirements.

**Restricted assets** – Restricted assets relate to amounts paid into a fund established to ensure compliance with future remediation obligations for contaminated sites.

Certain other assets are also subject to availability restrictions because, under the German law governing early employee retirement credits [Altersteilzeitgesetz], they must be protected against the risk of insolvency.

Please refer to the notes in the Sections “Cash and cash equivalents”, “Other non-current assets”, and “Loans and financial leasing liabilities”.

**Cash and cash equivalents** – The Group considers all cash and demand deposits, as well as cash equivalents that can be converted into cash at short notice and are not subject to any significant fluctuations in value (highly liquid assets) with a maturity of up to three months, to be liquid assets reported under cash and cash equivalents. The nominal value of these funds is regarded as their fair value due to their short-term nature.

**Financial liabilities** – Financial liabilities include in particular trade payables, amounts owed to financial institutions, and other financial liabilities. After initial recognition, financial liabilities are measured at amortised cost using the effective interest method.

**Pension provisions** – Pension liabilities are measured using the projected unit credit method in accordance with IAS 19 (Employee Benefits). Under the projected unit credit method, future salary and pension developments are taken into account in measuring the obligation. In order to standardise Group procedures, actuarial gains and losses have been recognised in other comprehensive income under consideration of deferred taxes without affecting profit or loss and disclosed in full in the pension provisions since 1 January 2009.

**Provisions** – Provisions are recognised whenever a present obligation arises from past events. Provisions are recognised when it is more likely than not that an obligation has been incurred and the amount of the obligation can be reliably estimated. The amounts recognised as provisions represent the best possible estimate of the expenditures required to settle the current obligation as at the reporting date. Provisions relating to periods of more than 12 months are discounted.

**Provisions for restoration and asset retirement obligations** – Under IAS 16, costs of dismantling and removing assets and restoring the site are part of historical cost insofar as provisions for these costs have to be recognised in accordance with IAS 37.

Provisions for restoration obligations are based on statutory and civil obligations to decontaminate assets and buildings contaminated with radioactivity, to determine by measurement that they are free from contamination and to make them accessible and usable again without danger once the assets are removed from service. Accordingly, the estimate of costs includes labour costs for the demolition of the systems, costs for the preparation of waste so that it can be decontaminated, costs for the cleaning of rooms, and the disposal of waste by experts, as well as the costs for the disposal and decontamination of radioactive waste. Provisions relating to periods of more than 12 months are discounted. The interest rate to be applied is an interest rate before taxes, which reflects the risks pertaining to the debt. The accrued interest on the provision is recognised under interest expense.

Under IAS 37, provisions for restoration obligations are stated at settlement value. Provisions are recognised at the present value of the expenses expected as at the reporting date. The calculation of the restoration obligations is based on various assumptions that are derived from estimates. These include estimates of the number of workdays required, daily rates and anticipated material costs. The amount of the provision allows for expected cost increases until the restoration work is carried out. The amount of the obligation is reviewed as at each reporting date. In the event of changes to the amount, property, plant and equipment and provisions are adjusted accordingly.

In addition, radioactive waste arising from ongoing production and radioactive waste accepted from third parties is recorded and valued at the expected cost of disposal or processing. These expenses are reported within cost of sales.

**Leasing** – All lease contracts are operating leases. Leasing costs are expensed in the respective financial year.

**Revenue recognition** – Under IFRS 15, revenue is recognised when the control of goods or services is transferred to the customer. This means that the customer has the ability to direct the use of the transferred goods or services and obtain substantially all the remaining benefits. Revenues are recognised when there is an enforceable right to receive payment from the customer. Revenue corresponds to the contractually agreed transaction price.

If the agreed transaction price includes variable components, the “expected value” or a “most likely amount” method is used to calculate the amount of consideration.

The period between the payment by the customer and the transfer of goods or services to the customer is one year or less. For this reason, no financing component is included in the transaction price. Where the contract has multiple identifiable performance obligations, the transaction price will be divided between the individual performance obligations based on the individual selling prices. As a rule, goods and services are sold at individual selling prices. Revenues from contracts with customers are recognised both over time and at a point in time. Temporal differences between performance and the receipt of payment may give rise to contractual assets or liabilities.

**Revenue from the sale of goods:** Revenue from the sale of goods is recognised at the time of delivery, because control is transferred to the customer at this point in time. Payment is due upon delivery.

**Revenue from rendering services:** Revenue from rendering services is recognised over the period in which the services are rendered (on a straight-line basis, e.g. rent or licence income, or depending on the stage of completion in the case of long-term construction contracts). Where an invoice is issued, the right to payment arises after the provision of a service. In the case of long-term contracts, advance payments and payments are generally agreed with customers based on the progress of the project. Advance payments establish contractual liabilities.

**Warranties:** As a rule, the company only accepts warranty obligations if required to do so by law or where such obligations are customary in the industry.

**Advertising** – Advertising and other sales-related costs are recognised through profit or loss when incurred.

**Research and development** – Research expenses are recognised as an expense under other operating expenses in the period in which they are incurred. Development costs are capitalised in accordance with IAS 38 (Intangible Assets) if certain cumulative conditions are met. Amortisation of capitalised development costs is reported under cost of sales. Development costs that cannot be capitalised are recorded as expenses when incurred and reported under other operating expenses.

**Income taxes** – Income tax expense represents the sum of current tax expense and deferred taxes. Current or deferred taxes are recognised in the consolidated income statement unless they relate to items recognised directly in equity in other comprehensive income. Current tax expense is determined on the basis of taxable income for the year. The Group’s liabilities for current taxes are calculated based on the tax rates that are currently applicable or will be in the near future. Deferred tax assets and liabilities are recognised in accordance with IAS 12 in order to reflect the future tax effects arising from the temporary differences between the carrying amount of assets and liabilities reported in the consolidated financial statements and the relevant amounts in the tax accounts. In addition, deferred tax assets are recognised as losses carried forward. Deferred tax assets and liabilities are measured based on the statutory tax rates applicable to taxable income in the years when these temporary differences are expected to reverse. The effects of changes in tax rates on deferred tax assets and liabilities are recognised in the income statement in the financial year in which the changes to the law were adopted. Deferred tax assets are only recognised if it is likely that these asset values will be recovered. Deferred tax assets and liabilities are reported on a net basis if the relevant requirements of IAS 12 are met. Under IAS 12, deferred taxes are classified as non-current assets or liabilities and are not discounted.

Current income taxes are calculated based on the respective national taxable income for the year and national tax regulations.

**Investment subsidies and other grants** – Grants are only recognised in accordance with IAS 20.7 when the company meets the conditions for obtaining the grant. Funds that the Group receives from public or private sources for investment or development projects are recognised as deferred income at the time of receipt. Grants for expenses are set off against the subsidised expenses in the financial year in which they are incurred. The deferred grants in the consolidated financial statements were granted for the purchase of property, plant and equipment, and for development costs. They are released through profit and loss over the useful lives of the respective property, plant and equipment or intangible assets.

**Earnings per share** – The profit or loss per share is calculated by dividing the consolidated profit attributable to the shareholders of Eckert & Ziegler AG by the average number of shares outstanding during the financial year. Diluted earnings per share reflect the potential dilution that would occur if all options to acquire shares were exercised at a price below the average share price during the period. It is calculated by dividing the portion of consolidated net income/loss attributable to the shareholders of Eckert & Ziegler by the sum of the average number of shares in circulation during the financial year, plus the dilutive shares arising from the exercise of all outstanding options (calculated by applying the treasury stock method).

#### NEW FINANCIAL REPORTING STANDARDS

The consolidated financial statements comply with all IASB, IFRIC, and SIC standards adopted by the EU as at the reporting date.

#### Accounting standards applied for the first time in the current financial year:

The new or amended standards and interpretations listed below were first applied in the 2018 financial year.

Standard	Description	Mandatory for financial years beginning on or after	EU endorsement
IFRS 9	Financial Instruments	1.1.2018	22.11.2016
IFRS 15	Revenue from contracts with customers, including amendments to IFRS 15	1.1.2018	29.10.2016
Amendments to IAS 40	Transfers of Investment Property	1.1.2018	14.3.2018
Amendments to IFRS 2	Classification and Measurement of Share-based Payment Transactions	1.1.2018	26.2.2018
Amendments to IFRS 4	Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts	1.1.2018	3.11.2017
Clarifications to IFRS 15	Revenue from Contracts with Customers	1.1.2018	31.10.2017
Annual Improvements to IFRS (AIP)	2014 – 2016 cycle	1.1.2018	7.2.2018
IFRIC 22	Foreign Currency Transactions and Advance Payments	1.1.2018	28.3.2018

### IFRS 9 Financial Instruments

IFRS 9 Financial Instruments includes requirements for recognition and measurement, derecognition and general hedge accounting. The IASB published the final version of the standard as part of the completion of various phases of its extensive financial instruments project on 24 July 2014 and it was adopted by the EU on 22 November 2016. This means that the accounting treatment of financial instruments under IFRS 9 replaces IAS 39 Financial Instruments: Recognition and Measurement. The published version of IFRS 9 supersedes all previous versions. The main requirements of the final version of IFRS 9 can be summarised as follows:

- While the requirements of IFRS 9 with respect to the scope of application, recognition and derecognition remain largely unchanged compared to the previous standard, IAS 39 Financial Instruments: Recognition and Measurement,
- IFRS 9 does provide for a brand new classification and measurement model for financial assets.
- In future, the subsequent measurement of financial assets will be based on three categories with different measurement standards and different recognition of changes in value. Categorisation is based both on the instrument's contractually agreed cash flows as well as on the business model in which the instrument is held. Depending on the nature of these conditions, they are measured at amortised cost using the effective interest method (AC category), at fair value, with changes recognised in other comprehensive income (FVTOCI category), or at fair value, with changes recognised in profit or loss (FVTPL category). In principle, these are therefore compulsory categories. The company is also entitled to make use of certain options.
- In terms of financial liabilities, existing provision were largely adopted in IFRS 9. The only major new feature relates to financial liabilities in the fair value option. For these, fair value fluctuations are to be recognised in other comprehensive income due to a change in the reporting entity's own default risk.
- IFRS 9 provides for three stages, which determine the amount of the losses and interest revenue to be recognised. Under this system, expected losses will be recognised upon incurrence in the amount of the cash value of an expected 12-month loss (stage 1). If there is a significant rise in the default risk, risk provisioning is to be increased to the amount of the expected losses for the entire residual term (stage 2). Where there is an objective indication of impairment, the interest revenue is calculated on the net carrying amount (carrying amount less risk provision) (stage 3).
- The revised rules for the accounting of general hedges continue to include the three types of hedge accounting, which are also available in IAS 39. However, the requirements of IFRS 9 provide more opportunities for the application of hedge accounting and allow the reporting entity to better reflect its risk management activities in the financial statements. The main changes relate to the extended scope of the underlying and hedging transactions as well as new rules on the effectiveness of hedging relationships, in particular the elimination of the previous 80 – 125 % corridor.
- In addition to comprehensive transition rules, IFRS 9 imposes extensive disclosure requirements both in the course of transition and for ongoing application. New features compared to IFRS 7 Financial Instruments: Disclosures mainly refer to value impairment regulations.

Application of IFRS 9 will have no material effect on the presentation of the Group's financial assets and financial liabilities.

### IFRS 15 Revenue from Contracts with Customers

The IASB published IFRS 15 on 11 September 2015. The standard was adopted by the EU on 22 September 2016. It must be applied to all financial years beginning on or after 01 January 2018. IFRS 15 specifies how and when an IFRS reporter will recognise revenue. It also requires reporters to provide users of financial statements with more informative, relevant disclosures.

All contracts with customers are within the scope of IFRS 15, subject to these specific exceptions:

- lease contracts within the scope of IAS 17 Leases;
- financial instruments and other contractual rights or obligations within the scope of IFRS 9 Financial Instruments, IFRS 10 Consolidated Financial Statements, IFRS 11 Joint Arrangements, IAS 27 Separate Financial Statements and IAS 28 Investments in Associates and Joint Ventures;
- insurance contracts within the scope of IFRS 4 Insurance Contracts; and
- non-monetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers.



In contrast to previous regulations, the new standard provides for a single, principles-based five-step model to be applied to all contracts with customers. In this five-step model, the first step is to identify the contract with the customer (step 1). Step 2 focuses on identifying the performance obligations in the contract. Next (step 3), the transaction price is determined, with explicit provisions governing treatment of variable considerations, financing components, payments to customers and exchange transactions. Once the transaction price has been determined, it is allocated to the performance obligations in the contract (step 4). This process is based on the standalone selling prices of the individual performance obligations. The final step (step 5) involves the recognition of revenue when (or as) the entity satisfies a performance obligation. The prerequisite for this is the transfer of the authority to dispose of the goods or services to the customer.

Upon conclusion of a contract, entities need to determine in accordance with IFRS 15 whether the revenue arising from the contract should be recognised at a point in time or over time. The first step is to clarify using certain criteria whether the authority to dispose of the performance obligation is transferred over a period of time. If this is not the case, the revenue must be recognised at a point in time when control has been transferred to the customer. Indicators include legal transfer of ownership, the transfer of significant opportunities and risks or formal acceptance. However, if control is transferred over a period of time, revenue may be recognised over that period only if the stage of completion can be measured reliably using an input or output method. Aside from general revenue recognition principles, the standard also includes detailed implementation guidelines on subjects such as sales with a right of return, customer options for additional goods or services, principal versus agent consideration and bill-and-hold arrangements. New guidelines on the costs of fulfilling and obtaining a contract have also been added to the standard, as well as guidelines on the question of when these costs are to be capitalised. Costs that do not fulfil the specified criteria shall be recognised as an expense when incurred.

Lastly, the standard also contains new, more detailed provisions in relation to disclosures that must be made on revenue in the financial statements of an IFRS reporter. These include qualitative and quantitative disclosures on the following points:

- its contracts with customers.
- the significant judgments, and changes in the judgments, made in applying the revenue guidance to those contracts.
- any assets recognised from the costs to obtain or fulfil a contract with a customer.

The first-time application of IFRS 15 did not have a material impact on the consolidated financial statements.

#### Amendments to IAS 40 Transfers of investment property

The amendment to IAS 40 concerns clarification on reclassifications between inventory and investment property as adopted by the EU. The amendments revise IAS 40.57 and require evidence of the change in use for the reclassification. A change in the intentions of the management with respect to the use of the property does not qualify as evidence of a change in use.

There are no such circumstances in the Group and the amendments to IAS 40, therefore, had no impact on the consolidated financial statements.

#### Amendments to IFRS 2 Classification and Measurement of Share-based Payment Transactions

The amendments to IFRS 2 include clarifications to the illustrative examples:

- According to the new regulation, market conditions and non-vesting conditions are to be taken into account in the fair value. Service conditions and other performance conditions must be taken into account in the quantity structure. (Consideration of vesting conditions) – classification of share-based payments providing for a net settlement for withheld taxes: If an entity reduces the number of equity instruments to be otherwise delivered because it is required to withhold and pay taxes on behalf of employees, and if such net settlement is foreseen in the contract, then the total remuneration will be recognised as equity-settled share-based payment transactions.
- The equity-settled share-based payment transactions will be recognised at its pro rata fair value at the date of the change as an increase in equity. Differences from the derecognition of the liability are recognised through profit or loss.

The consolidated financial statements for the year ended 31 December 2018 do not include any share-based payment transactions. The application of the amendments to IAS 2 had no impact on the consolidated financial statements.

#### Amendments to IFRS 4 Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts

On 12 September 2016, the IASB published amendments to IFRS 4 Insurance Contracts relating to the first-time adoption of IFRS 9 Financial Instruments. The standard was adopted by the EU on 3 November 2017. It must be applied to all financial years beginning on or after 1 January 2018.

There are no such circumstances in the Group, and the amendments to IFRS 4 therefore had no effect on the consolidated financial statements.

#### Clarification to IFRS 15 Revenue from Contracts with Customers

The Clarifications to IFRS 15 Revenue from Contracts with Customers address three of the five topics identified by the Revenue Transition Resource Group (TRG) (identifying performance obligations, principal versus agent considerations, and licensing). The IASB concluded that it was not necessary to amend the standard with respect to collectability or measuring non-cash consideration.

As a result, the first-time adoption of IFRS 15 is not expected to have a significant impact on the consolidated financial statements.

#### Annual improvements to IFRS standards (2014 – 2016 cycle)

The annual improvements to IFRS contain amendments to three standards in total. The amendments are shown in the following table:

Standard	Type of amendment	Details of amendment
IFRS 1 First-time adoption of IFRSs	Deletion of short-term exemptions for IFRS first-time adopters	Deletion of short-term exemptions in paragraphs E3 to E7 of IFRS 1, because they are no longer applicable.
IFRS 12 Information on shares in other companies	Relationship between disclosure requirements in IFRS 12 and IFRS 5	Clarifying the scope of the standard by specifying that the disclosure requirements in IFRS 12 also apply to participations that fall within the scope of IFRS 5. The only exceptions are those given in paragraphs B10-B16 of IFRS 12.
IAS 28 Investment in Associates and Joint Ventures	Valuation at the level of individual investments	Clarification that the option to measure an investment in an associate or joint venture held by a venture capital company or other qualifying entity at fair value through the recognition of changes in the income statement is available, at initial recognition for each equity investment on a single-share basis. A clarification has also been made in IAS 28.36A, according to which, when applying the equity method to shares in an investment company, the valuation applied at the level of the investment entity may be maintained at fair value. This option can also be exercised individually for each participation.

The application of the annual improvements to the IFRS (2014 – 2016 cycle) had no significant impact on the consolidated financial statements.

## IFRIC 22 Foreign Currency Transactions and Advance Payments

IFRIC 22 addresses an application question with respect to IAS 21 The Effects of Changes in Foreign Exchange Rates.

It clarifies the date at which the exchange rate for the translation of transactions in foreign currencies containing advance payments received or made is to be determined. The exchange rate for the asset, income or expense resulting from a transaction is then determined by reference to the date on which a non-monetary asset or liability is recognised for the first time for consideration given or received in advance.

As a result, the first-time adoption of IFRS 22 did not have a significant impact on the consolidated financial statements.

## Standards and interpretations which have been published but the adoption of which is not yet mandatory

The following IFRS adopted by the EU were issued by 31 December 2018, but their application is not mandatory until later reporting periods unless an entity opts for early adoption. The company did not opt for early adoption in these consolidated financial statements.

Standard	Description	Mandatory for financial years beginning on or after	Date of application EU:	Potential impact on future financial statements
Amendments to IFRS 9	Financial assets with prepayment features with negative compensation	1.1.2019	1.1.2019	None
IFRS 16	Leases	1.1.2019	1.1.2019	see the comments below
IFRIC 23	Uncertainty over Income Tax Treatments	1.1.2019	1.1.2019	marginal

## IFRS 16 Leases

The IASB published IFRS 16 on 13 January 2016. The standard was adopted by the EU on 3 November 2017. It must be applied to all financial years beginning on or after 1 January 2019. IFRS 16 regulates the recognition, measurement, presentation and disclosure requirements of leases in the financial statements of companies that are accounted for under IFRS.

IFRS 16 contains a comprehensive model for identifying lease agreements and accounting for lessors and lessees.

IFRS 16 essentially applies to all lease agreements: A lease within the meaning of the standard exists when the lessee is contractually granted by the lessor the right to control an identified asset for a specified period and the lessee in return receives consideration from the lessor.

The previous distinction between rental leasing and finance leasing is eliminated for lessees. Instead, the lessee has to account for the right of use of a leased asset (so-called "right-of-use asset" or RoU asset) and a corresponding lease liability for all leases in the future. Exceptions to this are only short-term leases and leases for low-value assets. The amount of the RoU asset at the time of acquisition is equal to the amount of the lease liability plus any initial direct costs of the lessee. In subsequent periods, the RoU asset is valued at amortised cost (with two exceptions). The lease liability is measured as the present value of the lease payments which are paid during the term of the lease. Subsequently, the book value of the lease liability is compounded using the interest rate used for discounting and reduced by the lease payments made. Changes in lease payments lead to a revaluation of the lease liability.

For lessors, on the other hand, the accounting principle known from IAS 17 Leases, with a distinction between finance leases and rental leases, remains the same. The list of criteria for the assessment of a finance lease was adopted unchanged from IAS 17.

In addition, the disclosure requirements for lessees and lessors in IFRS 16 have increased considerably in comparison with IAS 17. The objective of the disclosure requirements is to provide information to users of the financial statements so that they can gain a better understanding of the effects of leases on the asset, financial and earnings position.

Effective 1 January 2019, the Group has adopted the new standard IFRS 16 Leases, which has a material impact on the presentation of the financial position and performance of the Group.

The cumulative earnings effects from first-time adoption are recognised directly in equity. Previous year's figures were not adjusted.

The introduction of IFRS 16 in the Group requires extensive analyses and measures (including the use of new software solutions), which have not yet been completed at this time. The following presentation of the effects of the application of IFRS 16 is therefore for the most part still based on estimates which are subject to a high level of uncertainty:

IMPACT ON BALANCE SHEET (INCREASE/(DECREASE)) AS AT 31 DECEMBER 2018:	
	€ thousand
<b>Assets (rights of use)</b>	
Property, plant and equipment	17,028
<b>Liabilities</b>	
leasing liabilities	17,028
<b>Net effect on equity</b>	<b>0</b>

EFFECTS ON THE INCOME STATEMENT (INCREASE / (DECREASE)) FOR 2019:	
	€ thousand
Depreciation charge (increase)	- 3,374
Operating leasing costs (decrease)	3,702
Operating profit (EBIT) (increase)	328
Financing costs (increase)	- 580
Income tax expense (decrease)	76
<b>Annual profit (decrease)</b>	<b>- 176</b>

The application of IFRS 16 will improve the Group's operating income (EBIT) and increase the interest expense and the same time. This is due to the change in the accounting treatment of expenses from leases previously classified as operating leases under IAS 17. Overall, the net profit will decrease.

RECONCILIATION	
	1 January 2019
Obligations under operating leases as at 31 December 2018	14,507
Minimum lease payments (nominal amount) for liabilities from finance leases as at 31 December 2018	0
Exemption for short-term leases	- 77
Exception for low-value asset leases	- 350
Other	5,504
<b>Gross lease liabilities as at 01 January 2019</b>	<b>19,585</b>
Discounting	- 2,557
<b>Leasing liabilities as at 01 January 2019</b>	<b>17,028</b>
Present value of liabilities from finance leases as at 31 December 2018	0
<b>Additional leasing liabilities due to the first-time application of IFRS 16 effective 1 January 2019</b>	<b>17,028</b>

In the case of finance leases with the Group as lessee, assets and liabilities were recognised prior to the mandatory application of IFRS 16. In these cases, as well as leases in which the Group is the lessor, the application of IFRS 16 will not have a material impact on the consolidated financial statements.

### IFRIC 23 Uncertainty over Income Tax Treatments

The interpretation clarifies the requirements for the recognition and measurement of uncertain income tax items. In making assumptions and estimates, an entity shall assess whether it is probable that tax jurisdiction will accept the income tax treatment. ECKERT & ZIEGLER AG is currently examining the effects of the application of the interpretation on the consolidated financial statements, but expects only minor effects as the Group has already implemented the interpretation.

The following standards, as well as interpretations and amendments to existing standards, which have also been published by the IASB, do not yet have to be applied to the consolidated financial statements for the year ended 31 December 2018. The application of the provisions assumes that they have been endorsed by the EU as part of the IFRS endorsement procedure.

Amendments/standard/ interpretation	Date of publication	Date of adoption by the EU	Application date (EU)
IFRS 17 Insurance contracts	18 May 2017	The European Commission has resolved to forgo the takeover procedure for this interim standard and instead to await the finalised standard.	
Amendments to IAS 28 Long-term investments in associates and joint ventures	11 October 2017	8 February 2019	1 January 2019
Amendments to IAS 19 Plan amendment, curtailment or settlement	7 February 2018	13 March 2019	1 January 2019
Annual Improvements to IFRS (AIP) 2015-2017 cycle	12 December 2017	Q1 2019 *	1 January 2019
Amendments to references to the conceptual framework in IFRS standards	29 March 2018	2019 *	1 January 2020
Amendment to IFRS 3 Business Combinations: Definition of a business	22 October 2018	2019 *	1 January 2020
Amendments to IAS 1 and IAS 8 Definition of essential	31 October 2018	2019 *	1 January 2020

\* Estimated date

### CONSOLIDATION PRINCIPLES

Capital consolidation is carried out using the acquisition method in accordance with IFRS 3 and IFRS 10. Initial consolidation takes place at the time of acquisition, i.e. when control over the acquired company is obtained. Control is obtained by the company when it can exercise the authority to dispose of the associated company, is exposed to fluctuating yields on its investment and is able to influence the amount of yields based on its authority to dispose. The acquired assets and liabilities and contingent liabilities are measured at their fair values at the time of acquisition. The acquisition cost of the acquired shares is subsequently offset against the pro rata revalued equity of the subsidiary. Any resulting positive difference is reported as goodwill under intangible assets, while a negative difference is recognised immediately after review through profit or loss in the income statement.

All material assets and liabilities, income and expenses, and inter-company results between affiliated companies are eliminated in the course of consolidation. Joint ventures and associates are included in the consolidated financial statements using the equity method. Earnings allocated to non-controlling interests are disclosed separately in the result for the period.

The gain or loss and all elements of other comprehensive income are allocated to the shareholders of Eckert & Ziegler AG and the non-controlling interests. This is done even when it results in a negative balance for the non-controlling shareholders.

Inclusion in the consolidated financial statements ends when the company ceases to have control of the subsidiary. The results of the subsidiaries acquired or disposed of in the course of the year were included in the consolidated income statement and other comprehensive income according to the date of acquisition or disposal.

## SCOPE OF CONSOLIDATION

The companies included in the 2018 consolidated financial statements are:

	Voting rights
until 30 September 2018 Eckert & Ziegler BEBIG SA, Seneffe, Belgium ***	84.2 %
Eckert & Ziegler BEBIG GmbH, Berlin *	100 %
Eckert & Ziegler BEBIG Projekte UG (haftungsbeschränkt), Berlin *	100 %
Eckert & Ziegler Iberia S.L., Madrid, Spain *	100 %
Eckert & Ziegler BEBIG SARL, Paris, France *	100 %
Eckert & Ziegler BEBIG Ltd., Didcot, United Kingdom *	100 %
Mick Radio-Nuclear Instruments Inc., Mt. Vernon (New York), USA *	100 %
Eckert & Ziegler BEBIG Serviços De Consultoria Em Produtos De Radioterapia Ltda., Fortaleza, Brazil	100 %
Eckert & Ziegler BEBIG India Pvt. Ltd., New Delhi, India *	100 %
From 1 January 2018: WOLF-Medizintechnik GmbH, St. Gangloff *	100 %
Chemotrade Chemiehandelsgesellschaft mbH, Düsseldorf	100 %
Eckert & Ziegler Isotope Products GmbH, Berlin *	100 %
Eckert & Ziegler Cesio s.r.o., Prague, Czech Republic *	88.9 %
Eckert & Ziegler Isotope Products Inc., Valencia, USA **	100 %
Eckert & Ziegler Analytics Inc., Atlanta, USA *	100 %
Eckert & Ziegler Nuclitec GmbH, Braunschweig	100 %
Eckert & Ziegler Isotope Products SARL, Les Ulis, France *	100 %
Eckert & Ziegler Brasil Participações Ltda., Sao Paulo, Brasil	100 %
Eckert & Ziegler Brasil Comercial Ltda., Sao Paulo, Brasil	100 %
Eckert & Ziegler Brasil Logística Ltda., Sao Jose do Rio Preto, Brasil *	100 %
Gamma-Service Recycling GmbH, Leipzig *	100 %
Gamma-Service Medical GmbH, Leipzig *	100 %
GSG International GmbH, Freienbach, Switzerland *	100 %
Isotope Technologies Dresden GmbH, Dresden *	100 %
ISOTREND spol s.r.o., Prague, Czech Republic *	100 %
IPS International Processing Services GmbH, Leipzig *	50 %
Eckert & Ziegler Radiopharma GmbH, Berlin	100 %
Eckert & Ziegler Eurotope GmbH, Berlin *	100 %
Eckert & Ziegler Radiopharma Inc., Hopkinton, USA *	100 %
Eckert & Ziegler Umweltdienste GmbH, Braunschweig	100 %
Eckert & Ziegler Environmental Services Ltd., Didcot, United Kingdom *	100 %

\* Indirect holding

\*\* Eckert & Ziegler Isotope Products Inc. has made a commitment to its bank to comply with certain financial covenants.

The payment of a dividend by Eckert & Ziegler Isotope Products Inc. to Eckert & Ziegler AG is only possible if this does not breach these covenants.

\*\*\* Eckert & Ziegler AG held until 30 September 2018 84.2% of the voting rights of Eckert & Ziegler BEBIG SA, representing 80.8% of dividend-bearing shares. Eckert & Ziegler BEBIG SA was merged with Eckert & Ziegler AG effective 1 October 2018. The merger was registered in the commercial register Berlin-Charlottenburg on 18 February 2019.

## CHANGES TO THE SCOPE OF CONSOLIDATION

The following shares in companies were acquired and changes made to the basis of consolidation in the 2018 financial year (acquisitions are presented in Note 39):

- On 19 December 2017, Eckert & Ziegler BEBIG GmbH signed an agreement to acquire WOLF-Medizintechnik GmbH (WOMED) in Thuringia effective 1 January 2018. The company, based in St. Gangloff, Thuringia, is a manufacturer of X-ray therapy equipment for the treatment of superficial skin tumours and joint diseases.

- The shareholders of Eckert & Ziegler Strahlen- und Medizintechnik AG and Eckert & Ziegler BEBIG SA resolved at extraordinary general meetings held on 20 and 21 December 2018 to merge Eckert & Ziegler BEBIG SA with Eckert & Ziegler Strahlen- und Medizintechnik AG effective 1 October 2018. The merger was registered in the commercial register Berlin-Charlottenburg on 18 February 2019. As a result, no non-controlling interests in Eckert & Ziegler BEBIG SA are reported in these consolidated financial statements for the year ended 31 December 2018.

The following shares in companies were acquired and changes made to the basis of consolidation in the 2017 financial year (acquisitions are presented in Note 39):

- Eckert & Ziegler BEBIG Inc., Mt. Vernon, USA, ceased trading in the 2017 financial year. The company was dissolved effective 30 April 2017 and, therefore, deconsolidated from the financial statements of the Group.
- On 5 May 2017, Eckert & Ziegler Radiopharma GmbH sold its entire “cyclotron division” (mainly relates to shares in Eckert & Ziegler EURO-PET Berlin GMBH, BSM Diagnostica Gesellschaft m.b.H., Eckert & Ziegler f-con Deutschland GmbH, Eckert & Ziegler EURO-PET Köln/ Bonn GmbH and Eckert & Ziegler EURO-PET Warszawa sp.z o.o.) to Alliance Medical Ltd. and resolved to sell shares in Curasight ApS. In the 2017 consolidated financial statements, income, expenses and cash flows attributable to this segment are therefore reported as discontinued operations pursuant to IFRS 5; the previous year’s figures (2016) have been adjusted accordingly. In the 2017 consolidated financial statements, income, expenses and cash flows attributable to this segment are therefore reported as discontinued operations pursuant to IFRS 5; the previous year’s figures (2016) have been adjusted accordingly. The companies were deconsolidated from the financial statements of the Group effective 5 May 2017.
- On 31 May 2017, Eckert & Ziegler Isotope Products Holdings GmbH acquired all shares in the following companies (as well as the investments held by these companies in ISOTREND spol.s.o, IPS International Processing Services GmbH and Nuclear Control & Consulting GmbH):
  - Gamma-Service Recycling GmbH, Leipzig, Germany
  - Gamma-Service Medical GmbH, Leipzig, Germany
  - Isotope Technologies Dresden GmbH, Dresden, Germany
  - GSG International GmbH, Freienbach, Switzerland
- OOO “Eckert & Ziegler BEBIG”, Moscow, Russia, ceased trading in the 2017 financial year. The company was dissolved effective 31 October 2017 and, therefore, deconsolidated from the financial statements of the Group.

## INTERESTS IN JOINT VENTURES

A joint venture is based on a contractual agreement in which the Group and other contracting parties undertake a business venture under common leadership; this is the case if the strategic financial and business policies pursued in the joint venture require the consent of all parties. Interests in joint ventures are accounted for in the balance sheet in accordance with the equity method. The consolidated income statement includes the Group’s share of the income and expenses, as well as changes in the equity of investments measured using the equity method. If the Group’s share in the loss of the joint venture exceeds the interest measured at equity, this interest will be written down to zero. Further losses are not recognised unless the Group has a contractual obligation or has made payments for the benefit of the joint venture. Unrealised gains or losses from transactions by Group companies with the joint venture are eliminated against the carrying amount of the investment in the joint venture (maximum loss up to the carrying amount of the investment).

## 4 | CURRENCY TRANSLATION

The financial statements of subsidiaries prepared in foreign currencies and included in the Group consolidation are converted into euros in accordance with IAS 21. As the subsidiaries conduct their business affairs autonomously from a financial, economic and organisational standpoint, the functional currency of the consolidated companies corresponds to their respective national currency. Assets and liabilities are translated at middle rates on the reporting date. Items in the income statement and the statement of cash flows are converted at the weighted average annual exchange rate. Equity components are translated at historical exchange rates at initial recognition. Resulting currency translation differences are recognised in a separate item in equity and under non-controlling interests without affecting profit or loss until the subsidiary is disposed of. Upon the disposal of the subsidiary, all accumulated currency translation differences are reclassified to the consolidated income statement.

When shares in a subsidiary are disposed of with no loss of control, the proportion of the currency translation differences applicable to the shares that are sold is allocated to the non-controlling interests effective on the date of disposal.

In preparing the individual financial statements of each subsidiary, transactions denominated in currencies other than the functional currency of the Group company are converted at the exchange rate in effect on the transaction date. Monetary items are measured at the average exchange rate on each reporting date. Non-monetary items denominated in foreign currencies measured at historical cost are converted at the exchange rate prevailing at the time of initial recognition. Any resulting currency gains and losses as at the reporting date are recognised in profit and loss in the income statement.

The following exchange rates were used for the currency translation:

Country	Currency	31 December 2018	31 December 2017	Average rate 2018	Average rate 2017
USA	USD	1.1450	1.1993	1.1811	1.1297
CZ	CZK	25.7240	25.5350	25.6469	26.3254
GB	GBP	0.8945	0.8872	0.8847	0.8767
RU	RUB	79.7153	69.3920	74.0387	65.9581
BR	BRL	4.4440	3.9729	4.3078	3.6050
IN	INR	79.7298	76.6055	80.7232	73.5412
CH	CHF	1.1269	1.1702	1.1548	1.1119

## 5 | COMPARABILITY OF THE CONSOLIDATED FINANCIAL STATEMENTS WITH THE PREVIOUS YEAR

The first-time inclusion of companies newly acquired in the 2018 financial year in the consolidated financial statements for 2018 partly had no material impact on the financial position and performance of the Group.



# NOTES TO THE CONSOLIDATED INCOME STATEMENT

The following statements always refer to continuing operations, unless explicitly stated otherwise.

## 6 | REVENUE

The Group generates revenue mainly through the sale of goods and, to a minor extent, the provision of services. Revenue is recognised both at a point in time and over a period of time.

Revenue increased from € 138,631 thousand to € 168,709 thousand in the 2018 financial year.

The increase of € 30,078 thousand in 2018 results from the first-time consolidation of WOLF-Medizintechnik GmbH in the amount of € 8,939 thousand and the base effect from the newly acquired companies belonging to the Isotope Product segment effective 01 June 2017. The remainder of € 21,139 thousand is attributable to organic growth.

Revenue is broken down as follows:

€ thousand	2018	2017
Revenue from the sale of goods	150,974	131,564
Revenue from rendering services	15,046	5,853
Revenue from construction contracts	2,689	1,214
<b>Total</b>	<b>168,709</b>	<b>138,631</b>

In the 2018 financial year, the Group applied the new standard IFRS 15 “Revenue from Contracts with Customers” for the first time. The vast majority of the Group’s revenue is not based on multi-element contracts, but rather based on a simple process: “Price negotiation – order – delivery or provision of the service – invoicing – payment”. In this area, the application of the new IFRS 15 standard did not result in any changes, as revenue is recognised upon transfer of economic ownership i.e. when goods are sold or services rendered.

In the Radiation Therapy and Isotope Products segment, a comparatively small proportion of the Group’s revenue is recognised based on multi-element contracts. In accordance with the new standard, these contracts were subjected to a more detailed analysis.

Without exception, the projects in the Radiotherapy segment are structured in such a way that all performance obligations of the company in the contract are priced separately at the regular individual selling price. The respective performance is also invoiced separately only after the company has met its obligations under the contract (i.e. delivered the product or provided the agreed services) and the revenue is recognised upon transfer of economic ownership.

In the Isotope Products segment, one company in the Group operates in the field of plant engineering and construction. These plant engineering and construction projects are typically based on contracts with customers, which govern the provision of services over a certain period of time. The analysis of these contracts has shown that, even under the application of the new standard IFRS 15, the revenue should be recognised using the POC method.

In the 2018 and 2017 financial years, the Group generated revenue from such contracts in accordance with the POC method amounting to € 2,689 thousand (2017: € 1,214 thousand). The cost-to-cost method was applied to determine the degree of completion.

€ thousand	2018	2017
Revenue	2,689	1,214
Contract costs	- 2,400	- 1,054
Profit	289	160
<b>Construction contracts in progress as at the balance sheet date:</b>		
Costs incurred and profits reported	1,166	1,054
Advance payments received	- 1,066	- 872
Gross amount due from customers for contract work	260	372
Gross amount due to customers for contract work	0	0

The remaining performance obligations under contracts with customers mainly relate to contracts with an expected original term of no more than one year.

In the year under review, longer-term contracts for plant engineering and construction projects, which have not been fully implemented by the end of the year, generated revenue of €635 thousand. Of the remaining performance obligations, agreed transaction prices amount to €4,377 thousand, which are expected to be realised during the 2019 financial year.

For the breakdown of sales revenues by geographic segments and business areas, please see segment reporting.

## 7 | COST OF SALES

Alongside the cost of materials, personnel costs and depreciation and amortisation directly attributable to revenue, cost of sales also includes pro rata material and personnel overheads and income from the reversal of deferred items. The cost of materials was €46,035 thousand in 2018 and €33,335 thousand in 2017.

## 8 | SELLING EXPENSES

Selling expenses are broken down as follows:

€ thousand	2018	2017
Personnel costs and related personnel expenses	10,491	8,646
Delivery costs	5,570	4,022
Commissions	1,229	757
Depreciation and amortisation	1,169	1,193
Advertising	1,139	1,246
Miscellaneous	3,700	4,164
<b>Total</b>	<b>23,298</b>	<b>20,028</b>

## 9 | GENERAL ADMINISTRATIVE COSTS

General administrative costs include:

€ thousand	2018	2017
Personnel costs and related personnel expenses	13,979	11,405
Rent and Additional Costs	3,050	2,706
Consultancy costs	2,729	1,393
Insurance, contributions, fees, purchased services	2,604	2,131
Depreciation and amortisation	2,194	2,765
Communication costs	482	473
IR costs	228	296
Miscellaneous	1,636	2,769
<b>Total</b>	<b>26,902</b>	<b>23,938</b>

## 10 | EMPLOYEE BENEFITS AND NUMBER OF EMPLOYEES

The items on the Income Statements include personnel expenses of € 54,366 thousand (2017: € 46,946 thousand).

Personnel costs in the 2018 and 2017 financial years comprise the following:

€ thousand	2018	2017
Wages and salaries	45,676	39,280
Social security and other pension costs	8,690	7,666
– of which pension costs	453	306

The Group companies had an average of 760 employees in 2018 (2017: 731). They worked in the following departments:

€ thousand	2018	2017
Manufacturing	368	338
R&D plant construction	51	64
Administration	149	136
Sales and distribution	141	138
Quality management	51	55
<b>Total</b>	<b>760</b>	<b>731</b>

The employees in German and other European subsidiaries belong to government retirement plans, which are managed by government agencies. The companies must pay a certain portion of the employee's salary cost to the retirement plans in order to fund these benefits. The Group's only obligation regarding these retirement plans is the payment of these fixed amounts.

The American subsidiaries maintain defined-contribution pension plans for all eligible employees of those companies. The assets pertaining to these plans are held in trust separate from those of the Group.

Expenses totalling €3,127 thousand (2017: €2,847 thousand) are included in the income statement for Group contributions that are due to the disclosed pension plans. As at 31 December 2018 and 2017, all contributions due were paid into the pension plans.

Information on the total remuneration of current and former members of the Executive Board as well as current members of the Supervisory Board is provided in Note 44.

## 11 | AMORTISATION AND IMPAIRMENT

Amortisation and impairment on intangible assets are included in the following items in the income statement:

€ thousand	2018		2017	
	Depreciation and amortisation	Impairment	Depreciation and amortisation	Impairment
Cost of sales	1,563	0	1,151	0
Selling expenses	765	0	755	0
General administrative expenses	748	0	1,167	0
Other operating expenses	57	0	82	0
From discontinued operations	0	0	22	0
<b>Total</b>	<b>3,133</b>	<b>0</b>	<b>3,177</b>	<b>0</b>

Depreciation and impairment of property, plant and equipment are included in the following items in the income statement:

€ thousand	2018		2017	
	Depreciation and amortisation	Impairment	Depreciation and amortisation	Impairment
Cost of sales	3,353	130	2,989	0
Selling expenses	404	0	438	0
General administrative expenses	1,446	0	1,598	0
Other operating expenses	108	0	93	0
From discontinued operations	0	0	350	0
<b>Total</b>	<b>5,311</b>	<b>130</b>	<b>5,468</b>	<b>0</b>

**11 | OTHER OPERATING INCOME**

In the 2018 financial year, other operating income fell by €287 thousand year-on-year to €3,497 thousand (2017: €3,784 thousand).

In 2018, other operating income mainly comprised income from claims for damages resulting from breaches of contract or successful litigation in the amount of €1,140 thousand (2017: €471 thousand), income from the revaluation of earn-out and other liabilities in the amount of €813 thousand (2017: €851 thousand), income for development services on behalf of customers in the amount of €310 thousand (2017: €211 thousand) and income from reimbursement of costs amounting to €293 thousand (2017: €360 thousand).

Other operating income also includes income from the valuation of financial instruments in the amount of €101 thousand (2017: €250 thousand), income from impaired receivables in the amount of €105 thousand (2017: €252 thousand) as well as income from the sale of fixed assets in the amount of €27 thousand (2017: €24 thousand).

This item also includes grants received and other income.

In the previous year, this item included income from revaluation of an investment in NBT, which was written down in previous years in the amount of €676 thousand.

**12 | OTHER OPERATING EXPENSES**

Other operating expenses fell by €41 thousand to €4,456 thousand compared to the previous year (2017: €4,497 thousand). In addition to research and development costs of €3,807 thousand (2017: €3,321 thousand), this item mainly includes losses from the disposal of non-current assets of €186 thousand (2017: €94 thousand) and value adjustments on receivables of €160 thousand (2017: €383 thousand).

This item furthermore includes expenses for the adjustment of earn-out liabilities amounting to €91 thousand (2017: €247 thousand) and expenses for potential third-party claims for damages of €50 thousand (2017: €250 thousand).

Research and development costs in other operating expenses consist of:

- directly attributable personnel and material costs associated with the research and development areas that cannot be capitalised.
- amortisation in the research and development areas for acquired property, plant and equipment as well as intangible assets and the corresponding reversal of deferred items relating to assets used for research purposes.
- impairment of self-constructed intangible assets capitalised in previous years as well as the corresponding reversal of deferred items.
- other directly attributable expenses in the research and development areas.
- a pro rata share of the overheads of the research and development areas.

Research and development costs of €3,807 thousand (2017: €3,321 thousand) include amortisation and impairment of €165 thousand (2017: €175 thousand), personnel expenses of €2,621 thousand (2017: €2,539 thousand), materials and contracted services of €453 thousand (2017: €414 thousand) and other expenses of €568 thousand (2017: €193 thousand).

**13 | RESULTS FROM INVESTMENTS MEASURED AT-EQUITY**

The investments of the Group measured at equity include an investment in Americium Consortium LLC, Wilmington (Delaware), an investment in the joint venture ZAO “NanoBrachyTech” and an investment in Nuclear Control & Consulting GmbH.

In the 2018 financial year, these investments generated income of €58 thousand (2017: €0 thousand) and expense of €29 thousand (2017: €0 thousand).

#### 14 | FOREIGN EXCHANGE GAINS/LOSSES

Foreign exchange gains in the amount of € 1,055 thousand (2017: € 233 thousand) and foreign exchange losses in the amount of € 904 thousand (2017: € 1,447 thousand) resulting from the measurement of receivables and liabilities denominated in foreign currencies.

#### 15 | INTEREST INCOME

Interest income on financial assets measured at amortised cost amounted to € 171 thousand in the 2018 financial year (2017: € 252 thousand), while interest expenses amounted to € 672 thousand (2017: € 881 thousand).

Interest expenses include € 348 thousand (2017: € 330 thousand) of non-cash interest expenses (including accrued interest).

#### 16 | INCOME TAXES

The parent company's tax rate for corporate tax, the solidarity surcharge and trade tax used as the Group tax rate for the calculation of tax expense in the 2018 and 2017 financial years was 30.175 %. The Group tax rate consists of the following:

	2018	2017
Trade tax base amount	3.5 %	3.5 %
Trade tax assessment rate	410 %	410 %
Corporation tax	15 %	15 %
Solidarity surcharge on corporation tax	5.5 %	5.5 %

The income tax expense [expense(+)/income(-)] for the financial years ended 31 December 2018 and 2017, respectively, is composed as follows:

€ thousand	2018	2017
Earnings before taxes:		
Germany	- 596	6,365
Foreign subsidiaries	23,482	10,978
	<b>22,886</b>	<b>17,343</b>

€ thousand	2018	2017
Current taxes:		
Germany	3,625	3,218
Foreign subsidiaries	4,546	3,642
	<b>8,171</b>	<b>6,860</b>

Current taxes in 2018 include € 546 thousand (expense) from previous years (2017: € - 389 thousand).

€ thousand	2018	2017
Deferred taxes:		
Germany	- 4,325	- 1,617
Foreign subsidiaries	2,151	77
	- 2,174	- 1,540
<b>Total taxes:</b>	<b>5,997</b>	<b>5,320</b>

The reconciliation of the Group's income tax expense, determined based on the marginal tax rates applicable in Germany, to the Group's reported tax expense is as follows:

€ thousand	2018	2017
Basis for determining the tax expense (earnings before taxes)	22,886	17,343
Expected tax expense based on Group tax rate	6,906	5,233
Tax rate differences at subsidiaries	- 1,783	324
Taxes for previous years	546	- 389
Taxes on non-deductible expenses	321	314
Taxes on tax-exempt income	- 286	- 356
Deferred taxes on the capitalisation of previously unrecognised losses carried forward	0	- 1,313
Adjustments to deferred tax assets and liabilities arising from temporary differences	0	- 527
Impairment of deferred tax assets on losses carried forward	303	1,863
Use of previously non-capitalised deferred taxes on losses carried forward	- 325	- 620
Non-capitalised deferred taxes on tax losses in the current financial year	356	656
Miscellaneous	- 41	135
<b>Effective tax expense</b>	<b>5,997</b>	<b>5,320</b>

The following tax rates were used by the parent company as at 31 December 2018 to calculate deferred taxes, which remained unchanged compared to the previous year: 15 % corporation tax, 5.5 % solidarity surcharge on corporation tax and 14.35 % trade tax. For foreign companies, the prevailing local tax rates have been applied when calculating deferred taxes.

Deferred taxes are based on the differences between the amounts reported in the consolidated financial statements for assets and liabilities and the corresponding amounts included in the tax accounts of the respective individual Group companies. In addition, they apply to any tax losses carried forward. Deferred tax assets and liabilities were offset in the balance sheet to the extent permitted under IAS 12.

Deferred tax expenses of € 4,130 thousand (2017: € 2,643 thousand) and deferred tax income of € 1,645 thousand (2017: € 1,569 thousand) relate to changes in tax losses carried forward in the reporting period, while temporary differences include deferred tax income of € 4,659 thousand (2017: deferred tax income of € 2,741 thousand).

A total of € 3,060 thousand (2017: € 5,545 thousand) in deferred taxes on tax losses carried forward is capitalised. Losses carried forward mainly relate to losses carried forward by the German companies of the Eckert & Ziegler Group amounting to € 2,758 thousand. The losses in Belgium, Brazil and Germany can be carried forward indefinitely. Losses carried forward of € 123 thousand relate to the loss carried forward by the Czech company ISOTREND spol s.r.o. (Gamma Service Group) acquired in 2017, where the carry forward is limited to 5 years. Of a total of € 3,060 thousand in deferred tax assets on losses carried forward, € 2,937 thousand (2017: € 1,267 thousand) relates to companies that recorded a tax loss in 2018, but are expected to generate profits as planned in the future.

In the 2018 financial year, € 1,189 thousand in losses carried forward were used (2017: € 620 thousand) for which no deferred tax assets were recognised for losses carried forward as at 31 December of the previous year. As at 31 December 2018, the Group recorded losses carried forward of € 9,494 thousand (2017: € 12,125 thousand), for which no deferred tax assets were recognised. Due to the different tax systems and tax regulations in individual countries, we believe that the disclosure of a total amount of existing tax loss carry-forwards only provides limited informational value. For this reason, the amount of deferred tax assets that would be attributable to these tax losses carried forward is also shown below. The amount of deferred tax assets on these losses carried forward that was not recognised in the balance sheet for the year ended 31 December 2018 is € 2,482 thousand (2017: € 3,510 thousand).

Both in Belgium and in the US, tax rates were reduced effective 1 January 2018 as part of tax reforms. Due to the resulting necessary revaluation of deferred tax assets and liabilities of companies located in these countries, total tax expenses of € 1,132 thousand were recorded in 2017.

Changes in deferred taxes for temporary differences arising from currency translation amounted to €68 thousand (2017: €158 thousand).

In the reporting year, deferred tax expenses of €133 thousand (2017: deferred tax expenses of €95 thousand) relating to actuarial gains and losses from the valuation of pension provisions were recognised directly in equity.

No deferred tax liabilities were recognised for temporary differences from retained earnings of subsidiaries in the amount of €41,332 thousand (2017: €28,538 thousand), as Eckert & Ziegler AG is in a position to control the timing of the reversal, and the temporary differences will not be reversed in the foreseeable future.

The deferred tax assets and liabilities attributable to individual items in the balance sheet are presented in the following overview:

€ thousand	Deferred tax assets		Deferred tax liabilities	
	2018	2017	2018	2017
Tax loss carryforwards	3,060	5,545	0	0
Non-current assets	1,562	107	5,170	6,108
Receivables	32	17	324	314
Liabilities	951	661	0	0
Inventories	171	269	0	0
Provisions	7,130	6,085	0	0
Miscellaneous	399	299	142	26
<b>Subtotal</b>	<b>13,305</b>	<b>12,983</b>	<b>5,636</b>	<b>6,448</b>
Balance	- 3,384	- 4,142	- 3,384	- 4,142
<b>Balance based on the consolidated balance sheet</b>	<b>9,921</b>	<b>8,841</b>	<b>2,252</b>	<b>2,306</b>

## 17 | NON-CONTROLLING INTERESTS

The consolidated result after tax includes profit shares attributable to non-controlling interests in the amount of €756 thousand (2017: €421 thousand).

The following table includes details on the not wholly-owned subsidiaries of the Group in which the Group currently holds non-controlling interests or where the Group held such interests until 30 September 2018 as in the case of Eckert & Ziegler BEBIG SA.

Name of the subsidiary	Registered office	Participating interest of non-controlling interests		Profit or loss (-) attributable to non-controlling interests		Accumulated non-controlling interests	
		31.12.2018	31.12.2017	2018 € thousand	2017 € thousand	31.12.2018 € thousand	31.12.2017 € thousand
Subgroup							
Eckert & Ziegler BEBIG SA	Seneffe, Belgium	0.0%	15.8%	146	227	0	4,476
Eckert & Ziegler CESIO s.r.o	Prague, Czech Republic	11.1%	11.1%	622	199	1,234	685
IPS International Processing Services GmbH	Leipzig	50.0%	50.0%	- 11	- 5	4	15

The Eckert & Ziegler BEBIG SA subgroup included until 30 September 2018 Eckert & Ziegler BEBIG SA and the following wholly-owned subsidiaries:

- Eckert & Ziegler BEBIG GmbH, Berlin
- Eckert & Ziegler BEBIG Projekte UG (haftungsbeschränkt), Berlin
- Eckert & Ziegler Iberia SLU, Madrid, Spain
- Eckert & Ziegler BEBIG SARL, Paris, France
- Eckert & Ziegler BEBIG Ltd., Didcot, United Kingdom
- Mick Radio-Nuclear Instruments Inc., Mt. Vernon (New York), USA

- Eckert & Ziegler BEBIG Serviços De Consultoria Em Produtos De Radioterapia Ltda., Fortaleza, Brasil
- Eckert & Ziegler BEBIG India Pvt. Ltd., New Delhi, India
- WOLF-Medizintechnik GmbH, St. Gangloff

The subgroup also included the 15 % stake of Eckert & Ziegler BEBIG SA in the joint venture ZAO NanoBrachyTech, Dubna, Russia and the 20 % stake of Eckert & Ziegler BEBIG GmbH in the OOO Ritverc, St. Petersburg, Russia.

The summarised financial information of the subsidiaries in which the Group holds significant non-controlling interests, or held such interests until 30 September 2018, is presented below. The summarised financial information contains figures before intra-group eliminations.

<b>ECKERT &amp; ZIEGLER BEBIG SA SUBGROUP</b>		
€ thousand	<b>30.09.2018</b>	31.12.2017
Current assets	16,492	17,938
Non-current assets	31,748	29,931
Current liabilities	- 4,424	- 5,910
Non-current liabilities	- 9,562	- 9,021
Equity attributable to shareholders of Eckert & Ziegler AG	29,633	28,462
Equity attributable to non-controlling interests	4,621	4,476
<b>Income Statement</b>		
€ thousand	<b>2018</b>	2017
Revenue	21,060	25,894
Costs	- 20,299	- 24,805
<b>Annual profit/loss</b>	<b>761</b>	<b>1,089</b>
Annual profit/loss attributable to shareholders of Eckert & Ziegler AG	615	862
Annual profit/loss attributable to non-controlling interests	146	227
<b>Total annual profit/loss</b>	<b>761</b>	<b>1,089</b>
Other net income attributable to shareholders of Eckert & Ziegler AG	0	0
Other net income attributable to non-controlling interests	0	0
<b>Total other net income</b>	<b>0</b>	<b>0</b>
Comprehensive income attributable to shareholders of Eckert & Ziegler AG	615	862
Comprehensive income attributable to non-controlling interests	146	227
<b>Total comprehensive result</b>	<b>761</b>	<b>1,089</b>
<b>Dividends</b>		
€ thousand	<b>31.12.2018</b>	31.12.2017
Dividends paid to non-controlling interests	0	0

<b>ECKERT &amp; ZIEGLER CESIO s.r.o.</b>		
€ thousand	<b>31.12.2018</b>	31.12.2017
Current assets	11,993	6,443
Non-current assets	976	940
Current liabilities	- 907	- 295
Non-current liabilities	- 357	- 335
Equity attributable to shareholders of Eckert & Ziegler AG	10,471	6,068
Equity attributable to non-controlling interests	1,234	685



€ thousand	2018	2017
Revenue	13,750	5,470
Costs	- 8,148	- 3,668
<b>Profit for the year</b>	<b>5,602</b>	<b>1,802</b>
Net profit for the year attributable to shareholders of Eckert & Ziegler AG	4,980	1,603
Net profit for the year attributable to non-controlling interests	622	199
<b>Total net profit for the year</b>	<b>5,602</b>	<b>1,802</b>
Other net income attributable to shareholders of Eckert & Ziegler AG	- 55	27
Other net income attributable to non-controlling interests	- 6	3
<b>Total other net income</b>	<b>- 61</b>	<b>30</b>
Comprehensive income attributable to shareholders of Eckert & Ziegler AG	4,925	1,630
Comprehensive income attributable to non-controlling interests	616	202
<b>Total comprehensive result</b>	<b>5,541</b>	<b>1,832</b>
€ thousand	<b>31.12.2018</b>	31.12.2017
Dividends paid to non-controlling interests	66	155

## 18 | EARNINGS PER SHARE

Earnings per share were calculated as follows:

€ thousand	As at the end of the year	
	2018	2017
Numerator for calculation of the profit and the diluted and undiluted earnings per share – earnings share of the shareholders of Eckert & Ziegler AG	16,133	14,701
Denominator for calculation of undiluted earnings per share – weighted average of the number of shares (in thousands)	5,168	5,288
Denominator for calculation of diluted earnings per share – weighted average of the number of shares (in thousands)	5,168	5,288
Undiluted earnings per share (in €)	3.12	2.78
Diluted earnings per share (in €)	3.12	2.78

€ thousand	As at the end of the year	
	2018	2017
Numerator for calculation of the profit and the diluted and undiluted earnings per share – earnings share of the shareholders of Eckert & Ziegler AG	16,133	11,602
Denominator for calculation of undiluted earnings per share – weighted average of the number of shares (in thousands)	5,168	5,288
Denominator for calculation of diluted earnings per share – weighted average of the number of shares (in thousands)	5,168	5,288
Undiluted earnings per share (in €)	3.12	2.19
Diluted earnings per share (in €)	3.12	2.19

# NOTES TO THE CONSOLIDATED BALANCE SHEET

## 19 | INTANGIBLE ASSETS

Intangible assets include goodwill, customer relationships, non-compete obligations, patents and technologies, licences and software, capitalised development costs and other intangible assets.

### a) Non-amortised intangible assets

Intangible assets that are not amortised relate exclusively to goodwill.

Goodwill evolved as follows in the 2018 and 2017 financial years:

€ thousand	2018	2017
As at 01 January	41,333	40,422
Additions	0	3,650
Disposals	- 205	- 454
Currency translation differences	700	- 2,285
<b>As at 31 December</b>	<b>41,828</b>	<b>41,333</b>

The increase in goodwill of € 700 thousand is due to currency translation differences (2017: decrease of € 2,285 thousand), as a significant portion of goodwill is attributable to companies in the Isotope Products segment and the Radiotherapy segment, which keep accounts in US dollars.

The decline of € 205 thousand relates to the Isotope Products segment and the acquisition of the Gamma-Service Group in 2017. The purchase price allocation for the acquisition of the Gamma Service companies was laid down provisionally in the 2017 financial year, which led to an increase in goodwill of € 3,650 thousand. After the purchase price allocation was finalised in the 2018 financial year, this addition was reduced by € 205 thousand.

Specifically, goodwill is broken down among the business fields as follows:

€ thousand	Goodwill 2018	Goodwill 2017
Radiation therapy	16,999	16,839
Isotope products	22,411	22,141
Radiopharma (equipment division)	2,418	2,353
<b>As at 31 December</b>	<b>41,828</b>	<b>41,333</b>

Capitalised goodwill was tested for impairment in accordance with IAS 36 in the 2018 financial year. The goodwill was allocated to the relevant cash-generating units (CGU). These represent the lowest levels at which goodwill and assets are monitored for corporate management purposes. A CGU was identified for each of the Radiation Therapy and Isotope Products segments. In the Radiopharma segment, two cash-generating units (cyclotron and equipment divisions) were identified by 2017. Since the sale of the cyclotron division on May 5, 2017, there is also only one CGU in the Radiopharma segment.

The value in use of the cash-generating units is derived from the discounted future cash flows that were determined based on the current five-year budgets. For the subsequent period, the cash flows were calculated using a growth rate between 0 % and 1 % (previous year: 0 % – 1 %). The discount rate before tax was 9.7 % (2017: 8.4 %) for the Radiation Therapy segment, 8.0 % (2017: 8.0 %) for the Isotope Products segment and 9.0 % (2017: 8.2 %) for the Radiopharma segment.

The impairment tests as at 31 December 2018 did not determine any need to recognise impairment based on the respective recoverable amounts. No need for impairment was identified as at 31 December 2017.

The outcome of the impairment test for the goodwill of the Isotope Products segment was that there are no conceivable potential changes to the primary assumptions that could result in the carrying amount of the goodwill exceeding the recoverable amount. No scenario analysis was conducted for the goodwill in the equipment division as the respective values in the Group are not considered to be significant.

For the impairment test of the goodwill of the Radiation Therapy segment, a scenario analysis was performed that led to the following results:

	Basic scenario	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Change compared to the base scenario						
Change in revenues	0%	-5%	-10%	0%	0%	-10%
Change in cost of sales	0%	-4%	-8%	0%	0%	-8%
Change in WACC	0%	0%	0%	+2%	+4%	+3%
Cumulative revenues over 5 years	100%	95%	90%	100%	100%	90%
Cumulative EBIT over 5 years	100%	53%	6%	100%	100%	6%
Cumulative FCF over 5 years	100%	67%	35%	100%	100%	35%
Calculated goodwill	100%	68%	36%	85%	59%	23%
Calculated goodwill (EZAG share) in relation to book value	> 1.0	0.81	0.43	1.02	0.70	0.28
Impairment need	No	Yes	Yes	No	Yes	Yes
Impairment in € thousand	0	3,558	10,700	0	5,572	13,456

Future cash flows are, to a significant extent, dependent on realisable revenue, as the Radiation Therapy segment CGU has a high percentage of fixed costs. Consequently, the results of the value impairment test are strongly influenced by changes in forecast revenue growth. In the base scenario, the Company assumes in its planning average annual sales growth of 2.9% in light of the sales revenue generated in 2018. This growth rate corresponds to the average annual revenue growth achieved in the past in the Radiotherapy segment. The following scenario analysis shows how goodwill would evolve if the company failed to meet its revenue growth targets.

	Basic scenario	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Change compared to the base scenario						
Average annual revenue growth	2.9%	2.5%	2%	1.5%	1%	0.5%
Resulting revenue/EBIT ratio in 2023	11%	11%	10%	10%	10%	9%
Impairment need	No	No	No	No	No	No
Impairment in € thousand	0	0	0	0	0	0

b) Amortised intangible assets for the financial years ended 31 December 2018 and 2017, respectively, comprise the following:

(1) Acquired intangible assets

	2018 € thousand	remaining depreciation period	2017 € thousand
Customer contracts	2,392	1 – 8 years	3,436
Licences/software/permits	3,442	1 – 14 years	3,200
Patents/technology	2,871	1 – 7 years	586
<b>As at 31 December</b>	<b>8,705</b>		<b>7,222</b>

## (2) Self-constructed intangible assets

	2018 € thousand	remaining depreciation period	2017 € thousand
Technology	1,239	2 – 5 years	2,097
Permits	747	11 years	785
Patents	0	1 year	2
<b>As at 31 December</b>	<b>1,986</b>		<b>2,884</b>

Intangible assets were amortised using the straight-line method. They are allocated to the cost of sales, distribution costs, general administrative costs and other operating expenses on the income statement according to the functional area of the respective intangible assets (also see the explanations under Note 11).

The changes in intangible assets from 01 January to 31 December 2018 are shown in the statement of changes in assets enclosed to the notes to the consolidated financial statements.

**20 | PROPERTY, PLANT AND EQUIPMENT**

Changes in property, plant and equipment from 01 January 2018 to 31 December 2018 are shown in the statement of changes in assets.

Additions in the 2018 financial year mainly relate to ongoing replacement investments, as well as the expansion and modernisation of existing production facilities. Self-produced production facilities were capitalised in the 2018 financial year totalling € 2,388 thousand (2017: € 1,197 thousand).

The Group concluded a long-term lease contract in connection with an administration and production building erected by the company in Berlin on third-party property, which will run until 31 December 2024 after it exercised the renewal option in previous years.

**21 | INVESTMENTS IN ASSOCIATES AND JOINT VENTURES**

Since 2009, BEBIG S.A. holds a 15 % interest in the Russian ZAO “NanoBrachyTech” (NBT). In previous years, the management of BEBIG S.A. had no information on the financial position of NBT, and NBT was experiencing repeated payment difficulties in the repayment of a loan issued to it. Taking into account these circumstances and the general risks associated with the Russian market, the shares in NBT had to be written down in 2010 from the original acquisition costs of € 1,027 thousand to € 0.

In May 2015, NBT acquired 35 % of the shares in Russian Corporation of Nanotechnologies (RUSNANO), with NBT valued at RUB 457 million (€ 8,299 thousand) at the time of the sale. Over the last two years, NBT was again making regular interest and principal payments. Taking into account these new findings, the shares in NBT were revalued as at 31 December 2017. The valuation of € 1,245 thousand for the shares of BEBIG S.A. was based on the above-mentioned acquisition of 35 % of the shares of the Russian Corporation of Nanotechnologies (RUSNANO) completed on 24 May 2015. At the exchange rate of 31 December 2017, the translated amount would be € 977 thousand. As at 31 December 2016, NBT had equity of RUB 313 million (€ 4,878 thousand), of which RUB 47 million were attributable to BEBIG S.A. This represents an amount of € 676 thousand, when translated at the exchange rate as at 31 December 2017. As a result, the shares in NBT were revalued accordingly as at 31 December 2017. The interest measured at equity as at 31 December 2018 amounted to € 676 thousand (2017: € 676 thousand) (for further details, see Note 14).

In December 2013, Eckert & Ziegler Isotope Products Inc. signed an agreement with an American partner to establish a joint venture: Americium Consortium LLC. Both partners each hold 50 % of the shares in the joint venture, each of which may appoint one member of the joint venture’s management and key decisions must be made unanimously. As laid down in IAS 28, the company exercises significant influence over the joint venture and is therefore required to report the interests in the consolidated financial statements using the equity method. The acquisition cost of the shares was € 2,493 thousand. The Group’s share in the loss generated by Americium Consortium LLC in the 2018 financial year amounted to € 1 thousand (2017: € 0 thousand). The interest measured at equity as at 31 December 2018 amounted to € 2,847 thousand (2017: € 2,526 thousand) (for further details, see Note 14).

The following tables show the summarised financial information on key interests measured at equity. The summarised financial information corresponds to the amounts in the company's financial statements prepared in accordance with IFRS (restated by the Group for accounting purposes using the equity method):

a) ZAO "NanoBrachyTech"

€ thousand	31.12.18	31.12.17
Current assets	116	313
Non-current assets	3,996	4,580
Current liabilities	- 5	- 6
Non-current liabilities	0	0

The assets and liabilities listed above include the following amounts:

€ thousand	31.12.18	31.12.17
Cash and cash equivalents	62	37
Current financial liabilities (not including trade payables, other liabilities and provisions)	0	0
Non-current financial liabilities (not including trade payables, other liabilities and provisions)	0	0

€ thousand	2018	2017
Revenue	0	0
Net profit for the year from continuing operations	293	451
Income after tax of discontinued operations	0	0
Profit for the year	293	451
Other comprehensive result	0	0
<b>Total comprehensive result</b>	<b>293</b>	<b>451</b>
Dividends received from the joint venture	56	0

The net profit for the year listed above includes the following amounts:

€ thousand	2018	2017
Depreciation and amortisation	0	0
Interest income	0	0
Interest expense	0	- 12
Income tax expense or income	10	114

Reconciliation of the summary financial information presented to the carrying amount of the investment in ZAO "NanoBrachyTech" in the consolidated financial statements

€ thousand	2018	2017
Net assets of the joint venture	4,107	4,887
Group shareholding	15 %	15 %
unrecognised valuation differences	60	- 57
<b>Book value of the Group interest in the joint venture</b>	<b>676</b>	<b>676</b>

## b) Joint venture Americium Consortium LLC

€ thousand	31.12.18	31.12.17
Current assets	2,152	2
Non-current assets	5,286	5,049
Current liabilities	-2,146	0
Non-current liabilities	0	0

The assets and liabilities listed above include the following amounts:

€ thousand	31.12.18	31.12.17
Cash and cash equivalents	2,152	4
Current financial liabilities (not including trade payables, other liabilities and provisions)	-2,146	0
Non-current financial liabilities (not including trade payables, other liabilities and provisions)	0	0

€ thousand	2018	2017
Revenue	0	0
Net profit for the year from continuing operations	2	2
Income after tax of discontinued operations	0	0
Profit for the year	2	2
Other comprehensive result	0	0
<b>Total comprehensive result</b>	<b>2</b>	<b>2</b>
Dividends received from the joint venture	0	0

The net profit for the year listed above includes the following amounts:

€ thousand	2018	2017
Depreciation and amortisation	0	0
Interest income	0	0
Interest expense	0	0
Income tax expense or income	0	0

Reconciliation of the summary financial information presented to the carrying amount of the investment in Joint Venture Americium Consortium LLC in the consolidated financial statements

€ thousand	2018	2017
Net assets of the joint venture	5,292	5,051
Group shareholding	50%	50%
<b>Book value of the Group interest in the joint venture</b>	<b>2,646</b>	<b>2,526</b>

In subsequent years, the joint venture will need millions in financial funding to settle existing commodity purchasing contracts required for the production activities of some Eckert & Ziegler companies. This funding will be provided by selling the commodities to Group companies.

## 22 | OTHER LONG-TERM ASSETS

In addition to the purchase price received in cash, selling the shares in OctreoPharm Sciences GmbH in the 2015 financial year resulted in additional receivables. These consist on the one hand of an agreed security deposit and, on the other hand, additional receivables for which the amount and timing depend on reaching certain future milestones. In the previous year, the Group received the security deposit payments in full, and the milestone-dependent receivables continue to be reported under other non-current assets in the amount of €2,183 thousand (2017: €2,183 thousand).

Other non-current assets also include a loan granted by Eckert & Ziegler AG to ELSA Eckert Life Science Accelerator GmbH (ELSA) in the amount of € 1,015 thousand (2017: € 753 thousand). The loan can be used by ELSA up to a maximum amount of € 2,500 thousand, has a term of 4 years and bears interest at the 3-month EURIBOR plus 50 basis points.

In addition, the item includes the asset value of various reinsurance policies in the amount of € 389 thousand (2017: € 332 thousand), deposits paid in the amount of € 150 thousand (2017: € 145 thousand) and other non-current receivables of € 231 thousand (2017: € 338 thousand) resulting from a contractual agreement with a customer to convert trade receivables into non-current receivables.

## 23 | CASH AND CASH EQUIVALENTS

The cash and cash equivalents of € 54,186 thousand (2017: € 57,707 thousand) comprise cash at bank and in hand with maturities – calculated from the date of acquisition – of no more than three months. The cash and cash equivalents shown in the consolidated statement of cash flows correspond to the balance sheet item cash and cash equivalents.

## 24 | TRADE ACCOUNTS RECEIVABLE

Current trade receivables are amounts owed by customers for goods sold or services rendered in the ordinary course of business and comprise the following items in the financial years ended 31 December 2018 and 2017, respectively:

€ thousand	2018	2017
Trade accounts receivable	29,082	25,040
less allowances	- 774	- 735
<b>As at 31 December</b>	<b>28,308</b>	<b>24,305</b>

## 25 | INVENTORIES AND ADVANCE PAYMENTS RECEIVED

Inventories as at 31 December 2018 and 2017 comprise the following:

€ thousand	2018	2017
Raw materials and consumables	19,436	16,654
Finished goods	5,897	6,540
Unfinished goods and services	4,857	4,820
	<b>30,190</b>	<b>28,014</b>
less impairment	- 1,431	- 1,246
<b>As at 31 December</b>	<b>28,759</b>	<b>26,768</b>

The raw materials and consumable mainly relate to nuclides and components required for the production of finished products.

Work in progress includes contract assets in the amount of € 260 thousand (2017: € 372 thousand) accrued using the POC method as defined by IFRS 15,116 (see also Note 5).

The value impairments recognised based on comparing the net realisable value to the carrying amount increased by € 185 thousand (2017: € 372 thousand).

In connection with contracts with customers, Group companies receive advance payments, which are recognised as current liabilities. These are contract liabilities within the meaning of IFRS 15.116. These are performance obligations that will be transformed into revenue in the following year.

## 26 | OTHER CURRENT ASSETS

Other current assets of € 7,347 thousand (2017: € 5,450 thousand) relate to VAT receivables from tax authorities of € 1,044 thousand as at 31 December 2018 (2017: € 1,412 thousand) as well as accrued expenses, advance payments and other receivables in the amount of € 3,737 thousand (2017: € 2,528 thousand).

Also included are loan receivables (including interest) amounting to € 2,566 thousand (2017: € 450 thousand), which will become due next year.

In the previous year, other current assets also included claims for recourse amounting to € 550 thousand and trust assets amounting to € 500 thousand.

## 27 | EQUITY

The development of equity allocated to the shareholders of Eckert & Ziegler AG and the non-controlling interests is shown in the consolidated statement of equity.

In accordance with the resolution of the Annual General Meeting held on 30 May 2018, the retained earnings in accordance with the provisions of the German Commercial Code of Eckert & Ziegler AG as at 31 December 2017 in the amount of € 8,923 thousand were used to distribute a dividend of € 0.80 per dividend-bearing share (€ 4,131 thousand). The remaining amount was allocated to other revenue reserves (€ 4,792 thousand).

The share capital of Eckert & Ziegler AG as at 31 December 2018 amounted to € 5,292,983. It is divided into 5,292,983 non-par value bearer shares and it is fully paid up. The number of shares in circulation (excluding own shares) as at 31 December 2018 was 5,063,165.

Under the German Stock Corporation Act, any potential dividend to be distributed to shareholders must be based on retained earnings as shown in the financial statements of Eckert & Ziegler AG prepared in accordance with provisions of the German Commercial Code. A proposal has been made to the Annual General Meeting to pay the shareholders a dividend of € 6,177 thousand (€ 1.20 per share) from the retained earnings of Eckert & Ziegler AG in the amount of € 6,359 thousand reported in accordance with the provisions of the German Commercial Code for the 2018 financial year.

As part of the merger, Eckert & Ziegler AG still has an obligation to transfer 84,358 own shares to the former minority shareholders of Eckert & Ziegler BEBIG SA. The company will use 84,358 own shares from the total of own shares (229,818 shares) as at 31 December 2018. When calculating the above dividend amount, it has already been taken into account that these shares, which still have to be transferred, will also be entitled to dividends at the time of dividend distribution.

### Conditional capital

The share capital of the company will not be conditionally increased.

### Authorised capital

On 30 May 2018, the Annual General Meeting adopted a resolution which authorised the Executive Board, subject to the approval of the Supervisory Board, to increase the company's share capital by 29 May 2023, on one or more occasions, up to € 264,649 in total by issuing new no-par bearer shares in exchange for cash contributions and/or contributions in kind (authorised capital).

As a rule, shareholders are to be given the right to subscribe to the new shares. The new shares can also be acquired by one or more financial institutions, which are then obliged to offer the shares to shareholders for subscription (indirect subscription right). With the consent of the Supervisory Board, the Executive Board can:

- exclude shareholders' subscription rights up to an amount not exceeding 10 % of the share capital existing at the time of the exercise of this authorisation, in order to issue the new shares against cash contributions at an issue price that is not significantly lower than the market price of the Company's already listed shares of the same class. Own shares of the company sold during the period of this authorisation under exclusion of shareholders' subscription rights in direct or analogous application of Article 186 (3) sentence 4 of the German Stock Corporation Act (AktG) will be counted towards this 10 % limit. Furthermore, when calculating the 10 % limit, shares issued or to be issued during the period of this authorisation to service convertible bonds and/or bonds with warrants must be taken into account, provided that the bonds were issued under exclusion of subscription rights in analogous application of Article 186 (3) sentence 4 AktG;
- exclude shareholders' subscription rights for the purpose of acquiring contributions in kind, in particular through the acquisition of companies or interests in companies or through the acquisition of other assets, including rights and claims, if the acquisition is in the company's best interest and should be completed in exchange for the issue of shares in company.



- exclude shareholders' subscription rights to the extent necessary to grant holders of convertible bonds and/or bonds with warrants issued by the company or its subsidiaries a subscription right to new shares to the extent to which they would be entitled after exercising their conversion or option rights;
- exclude shareholders' subscription rights to offer the new shares to employees of the company or its affiliated undertakings in return for cash contributions.
- exclude shareholders' subscription rights to compensate for fractional amounts.

### Notification regarding changes to voting share percentage

In 2018, the Group was required to disclose the following events in accordance with the German Securities Trading Act (WpHG):

Loys AG, Oldenburg, Germany notified us on 30 July 2018, pursuant to Article 21 (1) WpHG that its voting right share in Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin, Germany fell below the threshold of 3 % of voting rights on 25 July 2018 and amounted to 2.961 % on that day (this corresponds to 156,702 voting rights).

Loys AG, Oldenburg, Germany notified us on 12 April 2018, pursuant to Article 21 (1) WpHG that its voting right share in Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin, Germany exceeded the threshold of 3 % of voting rights on 03 April 2018 and amounted to 3.31 % on that day (this corresponds to 175,367 voting rights).

In 2017, the Group was required to disclose the following events in accordance with the German Securities Trading Act (WpHG):

Axxion S.A., Grevenmacher, Luxemburg notified us on 07 June 2017 pursuant to Article 21 (1) WpHG that its voting right share in Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin, Germany fell below the threshold of 3 % of voting rights on 06 June 2017 and amounted to 2.97 % on that day (this corresponds to 157,000 voting rights).

Axxion S.A., Grevenmacher, Luxemburg notified us on 02 June 2017 pursuant to Article 21 (1) WpHG that its voting right share in Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin, Germany exceeded the threshold of 3 % of voting rights on 30 May 2017 and amounted to 3.10 % on that day (this corresponds to 164,113 voting rights).

Loys AG, Oldenburg, Germany notified us on 19 January 2017, pursuant to Article 21 (1) WpHG that its voting right share in Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin, Germany fell below the threshold of 3 % of voting rights on 13 January 2017 and amounted to 2.73 % on that day (this corresponds to 144,677 voting rights). Of these, 2.73 % (144,677 voting rights) is attributable to the company pursuant to Article 22 (1) Sentence 1 No. 6 WpHG.

### Reserves

Capital reserves include the amount above par value (capital surplus) that was received by issuing shares, minus the issuing costs (after tax).

Furthermore, capital reserves include the amounts recognised in connection with share-based payments (IFRS 2). No expense from the issue of share options was recognised in the capital reserves in the reporting year as in the previous years.

Retained earnings consist of undistributed previous-period earnings of consolidated Group companies. In addition, revenue reserves include adjustments resulting from the first-time adoption of IFRS.

Other reserves also include exchange rate differences in the amount of € 2,175 thousand resulting from the translation of financial statements of foreign subsidiaries (2017: € 216 thousand). The movements in 2018 and 2017 are mainly related to US and Brazilian subsidiaries. In addition, other reserves include the unrealised actuarial gains/losses (after tax) from defined benefit plans to be recognised in other comprehensive income in the amount of € - 2,561 thousand (2017: € - 2,849 thousand).

## Own shares

By resolution of the Annual General Meeting held on 30 May 2018, the Executive Board is authorised until 29 May 2023 to acquire own shares up to a total of 10 % of the share capital existing at the time the resolution is adopted or – should this be lower – upon exercise of the authorisation. The acquired shares, together with other own shares held by the company or attributable to it pursuant to Articles 71d and 71e AktG, may not at any time account for more than 10 % of the respective share capital. The authorisation may be exercised in whole or in part, on one or more occasions, in pursuit of one or more purposes by the company or the Group companies, or by third parties on their behalf. The Executive Board is authorised to use shares of the company acquired based on this authorisation for all purposes permitted by law. In particular, the Executive Board may sell them through the stock exchange or an offer made to all shareholders. The uses include but are not limited to the following purposes:

- The shares may be redeemed without the redemption or its implementation requiring another resolution of the Annual General Meeting. They may also be redeemed in a simplified procedure without a capital reduction by adjusting the proportionate arithmetical amount of the remaining no-par value shares in the company's share capital. The cancellation may be limited to part of the acquired shares. The authorisation to redeem shares can be exercised multiple times. If the redemption is carried out using the simplified procedure, the Executive Board is authorised to amend the number of no-par value shares in the articles of association.
- The shares may also be sold in other ways than through the stock exchange or by an offer to all shareholders if the shares are sold for cash at a price that is not significantly below the arithmetic mean of the XETRA closing prices of the company's shares on the Frankfurt Stock Exchange on the last five trading days preceding the sale. In this case, the number of shares to be sold issued in accordance with Article 186 (3) sentence 4 AktG (excluding subscription rights in exchange for cash contributions close to the market price) may not exceed 10 % of the share capital, either at the time the resolution is passed or at the time the authorisation is exercised. Shares issued or sold in direct or analogous application of Article 186 (3) sentence 4 AktG during the period of this authorisation up to this point in time shall be counted towards this limit. This also covers shares issued from authorised capital during the period of this authorisation under exclusion of subscription rights in accordance with Article 186 (3) sentence 4 AktG.
- The shares may be issued against contributions in kind, in particular also in connection with the acquisition of companies, parts of companies or equity interests in companies and mergers of companies as well as the acquisition of other assets for the purpose of expanding business activities.
- The shares may be issued to employees of the company and affiliated undertakings as well as to members of the management of affiliated undertakings and used to service rights or obligations to acquire shares in the company granted to employees of the Company and affiliated undertakings as well as members of the management of affiliated companies. The shares may also be granted to members of the Supervisory Board as part of the remuneration, to the extent legally permissible in individual cases.

Own shares may be used to fulfil obligations of the company arising from conversion rights or conversion obligations arising from convertible bonds issued by the company.

In the 2018 financial year, Eckert & Ziegler AG acquired 250,000 of its own shares at a purchase price of €9,648 thousand as part of two public share buyback offers. 25,000 own shares were sold for a total of €1,075 thousand. There were no transactions involving own shares in the previous year.

As at 31 December 2018, the company held 229,818 own shares (2017: 4,818 shares), of which 84,358 were dedicated to the merger of Eckert & Ziegler BEBIG SA into Eckert & Ziegler AG. From a mathematical point of view, the number of own shares as at 31 December 2018 represented 4.3 % (2017: 0.1 %) of the company's share capital. The average number of shares outstanding in the 2018 financial year was 5,168,026 (2017: 5,288,165).

## 28 | LOAN AND LEASING LIABILITIES

Loans and leasing liabilities for the financial years ended 31 December 2018 and 2017, respectively, comprise the following:

€ thousand	2018	2017
Loan liabilities to financial institutions	42	1,731
Leasing liabilities	0	2
<b>Loan liabilities as at 31 December, total</b>	<b>42</b>	<b>1,733</b>
– of which current	42	1,687
– of which non-current	0	46

In September 2013, Eckert & Ziegler BEBIG GmbH took out a loan of €6,500 thousand to finance the acquisitions completed in November. The loan had a term until 30 September 2018 and was being repaid in quarterly instalments of €465 thousand since the second quarter of 2015.

A loan of USD 2,500 thousand was taken out from Commerzbank AG in June 2011. The loan had a term until 30 June 2018 and was repayable in quarterly instalments of USD 125 thousand beginning on 30 September 2013.

Due to regular repayments, the loan liabilities were almost completely repaid in the 2018 financial year, save a small residual amount, and as a result, the Group had virtually no financial liabilities as at 31 December 2018. The Group did not take out any new loans in the 2018 financial year.

In total, the Group has credit line commitments amounting to €22,024 thousand. As at 31 December 2018, these commitments totalled €9,605 thousand for guarantees.

As at 31 December 2018 and 2017, the contractually agreed residual maturities of loan liabilities are as follows:

€ thousand	2018	2017
Residual term up to 1 year	42	1,687
Residual term >1 to 5 years	0	46
Residual term over 5 years	0	0
<b>Loan liabilities as at 31 December, total</b>	<b>42</b>	<b>1,733</b>

## 29 | DEFERRED INCOME FROM GRANTS AND OTHER DEFERRED INCOME

The deferred income from grants item as at 31 December comprises the following:

€ thousand	2018	2017
deferred grants and other current deferred income	137	171
deferred non-current grants	3,503	3,152
<b>As at 31 December</b>	<b>3,640</b>	<b>3,323</b>

## 30 | PROVISIONS FOR PENSIONS

Pension obligations were calculated in accordance with IAS 19 (revised) using the projected unit credit (PUC) method, and recognised at the present value of the pension entitlements earned on the measurement date, including expected future pension and salary increases. The actuarial valuation of the plan assets and the present value of the defined benefit obligation was carried out as at 31 December 2018 by Longial AG and Allianz Lebensversicherung AG, respectively (as in the previous year).

The most important assumptions underlying the actuarial valuation are:

%	<b>31.12.2018</b>	31.12.2017
Discount rate(s)	1.7 bis 2.15	1.85 bis 2.05
Expected return on plan assets	1.75	1.75
Expected percentage salary increases	0.00 bis 2.50	0.00 bis 2.50
Expected percentage pension increases	0.00 bis 1.50	0.00 bis 1.50
Expected percentage inflation	2.00	2.00

As at 31 December of the respective financial year, the following amounts were calculated using actuarial methods:

€ thousand	<b>2018</b>	2017
Present value of defined benefit pension obligations	11,538	11,843
Plan assets measured at fair value	- 170	- 168
<b>Pension provisions as at 31 December</b>	<b>11,368</b>	<b>11,675</b>

The amount recognised for pension provisions developed as follows:

€ thousand	<b>2018</b>	2017
Pension provisions as at 01 January	11,675	11,802
Expenses for pension obligations	418	436
Actuarial gains (-)/losses (+) *	- 421	- 302
Disbursements from plan assets	0	0
Return on plan assets	- 3	- 3
Pension payments	- 301	- 258
<b>Pension provisions as at 31 December</b>	<b>11,368</b>	<b>11,675</b>

\* before deferred taxes

The following amounts were recognised in the income statement of the respective financial year:

€ thousand	<b>2018</b>	2017
Service cost	201	219
Interest expense	217	217
Expected return on plan assets	- 3	- 3
<b>Total recognised amounts</b>	<b>415</b>	<b>433</b>

The following amounts were recognised in other comprehensive income in the respective financial year:

€ thousand	<b>2018</b>	2017
accumulated actuarial gains (-)/losses (+) on 1 January *	4,176	4,478
Addition/disposal *	- 421	- 302
<b>accumulated actuarial gains (-)/losses (+) on 31 December *</b>	<b>3,755</b>	<b>4,176</b>

\* before deferred taxes

The plan assets consist of a reinsurance policy financed exclusively from employer contributions. The changes in the fair value of plan assets in the current financial year are as follows:

€ thousand	<b>2018</b>	2017
Opening balance of plan assets measured at fair value	168	166
Expected return on plan assets	3	3
Actuarial loss	- 1	- 1
Disbursements from plan assets	0	0
<b>Closing balance of plan assets measured at fair value</b>	<b>170</b>	<b>168</b>

Pension payments of € 327 thousand are expected for the 2019 financial year.

The present value of the defined benefit pension obligations and the fair value of the plan assets developed as follows:

€ thousand	2018	2017	2016	2015	2014
Defined benefit obligation	- 11,538	- 11,843	- 11,968	- 10,665	- 11,263
Plan assets	170	168	166	171	169
<b>Net obligation</b>	<b>- 11,368</b>	<b>- 11,675</b>	<b>- 11,802</b>	<b>- 10,494</b>	<b>- 11,094</b>

A key actuarial assumption used to determine pension provisions is the discount rate. The following sensitivity analysis was carried out on the basis of reasonable potential change in the discount rate as at the balance sheet date, with the remaining assumptions remaining unchanged.

	Defined benefit obligation	
	Tsd. Euro	%
current assumption	11,368	
Discount rate - 0.25 %	12,038	5.9
Discount rate + 0.25 %	11,067	- 2.6

Furthermore, there is a pension plan for a former member of the Executive Board, which was designed as an employee-funded defined contribution plan (deferred compensation). The amount of deferred compensation for this pension plan amounted to € 10 thousand in the 2018 financial year (2017: € 10 thousand). The pension commitment is secured by means of a congruently reinsured provident fund.

### 31 | OTHER PROVISIONS

The following table provides an overview of the changes in other provisions during the 2018 and 2017 financial years.

€ thousand	2018	2017
Provisions for restoration obligations (non-current)	22,772	18,841
Other provisions (non-current)	28,809	26,658
Other non-current provisions as at 31 December	51,581	45,499
Other provisions (current)	3,474	3,163
<b>Other current provisions as at 31 December</b>	<b>3,474</b>	<b>3,163</b>

Provisions for restoration obligations include expected expenses for the dismantling and disposal of production facilities and reversing leasehold improvements. They evolved as follows in the 2018 and 2017 financial years:

€ thousand	2018	2017
Provisions as at 01 January	18,841	18,188
Additions	3,619	2,655
Disposals	0	- 1,684
Compounding	187	177
Utilisation	0	- 183
Currency translation	125	- 312
<b>Provisions as at 31 December</b>	<b>22,772</b>	<b>18,841</b>

In accordance with IFRIC 1, the discount rates appropriate to the maturities of the provisions for restoration obligations were adjusted in line with developments on the capital markets in the 2018 financial year. The adjusted interest rates range from - 0.3 % to 2.7 %. If the previous year's interest rates of - 1.6 % to 2.9 % had been maintained, this would have raised the provision by € 181 thousand (2017: decreased the provision by € 195 thousand). The Group expects to make restoration payments in the 2019 to 2040 financial years.

In some locations, amounts are paid into a fund the use of which is restricted to future restoration. These payments are shown under the item “Other non-current assets” and amounted to € 199 thousand (2017: € 85 thousand).

Other non-current provisions as at 31 December 2018 mainly consist of provisions for the obligation to process own and accepted third-party radioactive residues and take-back obligations for sold radiation sources in the amount of € 24,678 thousand (2017: € 22,380 thousand). Provisions are formed according to the expected external costs for disposal and are regularly reviewed and updated. Cost calculation is based on empirical values and past costs for disposal. The extrapolation of historic costs for the future includes the following uncertainties associated with estimates:

- uncertainty relating to future valuation of underlying disposal channels, the degree of usability and related external costs.
- inability to take potential amendments in legal and/or regulatory requirements affecting both internal expenses as well as external disposal costs into account.
- valuation risks related to the recognition of flat rates of inflation and determined discount rates.

Other non-current provisions also include € 1,931 thousand (2017: € 2,225 thousand) for long-term services still to be provided to fulfil a contract, obligations from the sale of shares amounting to € 850 thousand (2017: € 850 thousand), personnel-related provisions amounting to € 830 thousand (2017: € 546 thousand), provisions for release measurement and dismantling of € 280 thousand (2017: € 404 thousand) and archiving provisions amounting to € 240 thousand (2017: € 243 thousand).

The other current assets provisions in the amount of € 3,474 thousand (2017: € 3,163 thousand) are for the current portion of the disposal of radioactive residual materials.

### 32 | OTHER NON-CURRENT LIABILITIES

Other non-current liabilities mainly include non-current liabilities from a licence agreement concluded in the 2013 financial year amounting to € 1,957 thousand (2017: € 1,957 thousand) and earn-out and other long-term liabilities amounting to € 194 thousand (2017: € 71 thousand).

The item other long-term liabilities also includes an interest rate swap in the amount of € 119 thousand (2017: € 220 thousand). This is a derivative that was recognised as a financial liability at fair value through profit or loss in accordance with IAS 39.9. Further information on derivative financial instruments can be found in the explanations under Note 35.

In the previous year, this item also included non-current amounts owed to a former minority shareholder arising from the acquisition of shares amounting to € 600 thousand. As these liabilities mature in 2019, they are reported under other current liabilities in the financial statements for the year ended 31 December 2018.

### 33 | OTHER CURRENT LIABILITIES

The item other current liabilities as at 31 December comprises the following:

€ thousand	2018	2017
Liabilities from wages and salaries	8,055	7,385
Amounts owed to social security	494	656
Amounts owed to financial authorities	681	1,837
Liabilities from other accrued expenses	4,498	2,762
Amounts owed to former minority shareholders	600	0
Other liabilities	783	1,824
<b>As at 31 December</b>	<b>15,111</b>	<b>14,464</b>

As at 31 December 2017, the other liabilities include an earn-out liability from a company acquisition in the amount of € 22 thousand (2017: € 437 thousand).

### 34 | ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS

This section provides an overview of the importance of financial instruments for Eckert & Ziegler AG and provides additional information about balance sheet items that include financial instruments.

#### Overview of financial assets and liabilities

The following table shows the carrying amounts and fair values for all categories of financial assets and liabilities in accordance with IFRS 9 and IAS 39 (previous year):

Balance sheet item	Classification category under IFRS 9*	Classification category under IAS 39*	31.12.2018 Carrying amount	31.12.2018 Fair value	31.12.2017 Carrying amount	31.12.2017 Fair value
<b>ASSETS</b>						
Other non-current assets	AC	LaR	3,495	3,495	3,274	3,274
Cash and cash equivalents	AC	LaR	54,186	54,186	57,707	57,707
Trade receivables	AC	LaR	28,308	28,308	24,305	24,305
Other current assets	AC	LaR	2,981	2,981	2,723	2,723
			<b>88,970</b>	<b>88,970</b>	<b>88,009</b>	<b>88,009</b>
of which totals by classification category:	AC	LaR	88,970	88,970	88,009	88,009
<b>EQUITY AND LIABILITIES</b>						
Loans and financial lease liabilities	AC	FLAC	0	0	46	46
Other non-current liabilities	AC	FLAC	2,151	2,151	2,628	2,628
Derivative financial liabilities in other non-current liabilities	FVTPL	FLHfT	119	119	220	220
Loans and financial lease liabilities	AC	FLAC	42	42	1,687	1,687
Trade payables	AC	FLAC	6,490	6,490	4,504	4,504
Other current liabilities	AC	FLAC	5,881	5,881	4,586	4,586
			<b>14,683</b>	<b>14,683</b>	<b>13,671</b>	<b>13,671</b>
of which totals by classification category:	AC	FLAC	14,564	14,564	13,451	13,451
	FVTPL	FLHfT	119	119	220	220

\* Abbreviations:

LaR: Loans and receivables

FLAC: Financial liabilities measured at amortized cost

FLHfT: Financial liabilities held for trading

AC: Measurement at amortised cost

AC: Measurement at amortised cost

Derivative financial liabilities include interest rate swaps recognised at fair value through profit or loss. Market prices, at which the swaps can be redeemed at all times, are determined for these swaps.

The fair value of cash and cash equivalents, of current receivables, of trade payables as well as of other current liabilities from trade payables and other receivables corresponds approximately with the book value. The primary reason for this is the short maturity of such instruments.

The Group calculates the fair value of amounts owed to financial institutions and other financial debts with a fixed interest rate (which deviates from the market interest rate) by discounting the expected future cash flows using the interest rate applicable to similar financial debts with similar residual maturities.

Since the term of the loan obligations is predominantly short term, discounting has only a marginal effect.

Non-current receivables and liabilities are recognised at their discounted value insofar as they are not interest-bearing.

Financial assets and liabilities measured at fair value are classified into the following measurement hierarchy:

€ thousand	Stage 1	Stage 2	Stage 3	Total
<b>Financial liabilities, measured at fair value</b>				
Derivative financial instruments	0	0	- 119	- 119
<b>As at 31 December 2018</b>	<b>0</b>	<b>0</b>	<b>- 119</b>	<b>- 119</b>

€ thousand	Stage 1	Stage 2	Stage 3	Total
<b>Financial liabilities, measured at fair value</b>				
Derivative financial instruments	0	0	- 220	- 220
<b>As at 31 December 2017</b>	<b>0</b>	<b>0</b>	<b>- 220</b>	<b>- 220</b>

**Stage 1:** The market values for these assets and liabilities are determined based on quoted, unadjusted prices on active markets.

**Stage 2:** The market values for these assets and liabilities are determined based on parameters for which quoted prices, derived either directly or indirectly, are available on an active market.

**Stage 3:** The market values for these assets and liabilities are determined based on parameters for which no observable market data is available.

The net gains and losses recognised in accordance with IFRS 9 and IAS 39 (previous year) categories are shown in the following table:

Classification category under IFRS 9 (previous year: under IAS 39) € thousand	2018	2017
<b>Financial assets measured at amortised cost (loans and receivables in the previous year)</b>		
Interest income	171	252
Impairments (-)/Reversals (+)	- 39	- 200
Foreign exchange gains (+)/Foreign exchange losses (-)	1,055	233
	<b>1,187</b>	<b>285</b>
<b>Financial liabilities measured at amortised cost</b>		
Interest expense	- 214	- 330
Foreign exchange gains (+)/Foreign exchange losses (-)	- 904	- 1,447
	<b>- 1,118</b>	<b>- 1,777</b>
<b>Derivative financial instruments measured at fair value through profit or loss (previous year: financial liabilities held for trading)</b>		
Interest expense	- 110	- 225
Impairments (-)/Reversals (+)	101	250
	<b>- 9</b>	<b>25</b>



## Risk analysis

The Group is exposed to financial credit, default, liquidity and market risks in the course of business operations. Market risks relate in particular to interest and foreign exchange risk.

## Credit risk

Credit risk or default risk is the risk that a customer or contracting party of Eckert & Ziegler Group cannot meet its contractual obligations. The result of this is, firstly, the risk of value impairments on financial instruments due to issues of credit rating and, secondly, the risk of partial or complete loss of contractually agreed payments.

The Group is mainly exposed to credit and default risk based on its trade receivables. Risk is primarily influenced by the size of the customer as well as regional rules and practices for processing the reimbursement of medical services by public authorities.

Fundamentally, a rating is obtained for new customers and initial deliveries are made against advance payments as a matter of principle. Deliveries to customers that are considered a permanent risk due to their size or location are secured by advance payments or letters of credit. Credit and default risk is monitored within the scope of Group-wide risk management by means of the regular analysis of overdue trade receivables.

## Risk exposure

The maximum default risk corresponds to the carrying amount of the trade receivables as at the balance sheet date in the amount of € 28,308 thousand (2017: € 24,305 thousand).

With the exception of trade receivables, the balance sheet does not contain any overdue or impaired financial assets. The Group assesses the risk of loss from these other financial assets as very low.

As at the reporting date, a geographic breakdown of the maximum credit exposure with respect to current trade receivables is as follows:

€ thousand	2018	2017
Europe	15,702	15,914
North America	7,983	5,383
Other	4,623	3,008
<b>As at 31 December 2017</b>	<b>28,308</b>	<b>24,305</b>

Eckert & Ziegler AG uses the simplified approach in accordance with IFRS 9 to measure the expected credit losses. Accordingly, all other financial assets measured at amortised cost are measured using the expected credit losses over the term. The expected loss rates for trade receivables are based on the payment profiles of customers and the relevant historical defaults. Historical loss ratios are adjusted to reflect current and forward-looking information about external market parameters, internal factors, and specific information that affects the ability of customers to settle their claims.

On this basis, the allowance for trade receivables as at 31 December 2018 and 01 January 2018 (upon adoption of IFRS 9) was determined as follows:

	Expected loss ratio	Gross amount 2018 € thousand	Impairment € thousand	Gross amount 31.12.2017 € thousand	Impairment € thousand
Not yet due receivables	0%	19,575	0	17,688	0
Past due 1 to 90 days	0%	6,843	0	6,275	0
Past due more than 90 days	0% – 100%	2,664	774	1,077	735
		29,082	774	25,040	735
<b>Net value</b>		<b>28,308</b>		<b>24,305</b>	

The overdue but unimpaired receivables relate primarily to amounts owed by doctors' practices and foreign clinics.

The development of value adjustments on trade receivables is shown below:

€ thousand	2018	2017
As of January 1.1	735	1.025
Net additions	39	200
Additions from the acquisition of consolidated companies	0	112
Utilisation	0	-602
<b>As at 31 December 2017</b>	<b>774</b>	<b>735</b>

The adjustment of the valuation allowances to IFRS 9 as at 01 January 2018 did not result in any material changes.

### Liquidity risk

The liquidity risk is the risk that the Group will not be able to meet its financial obligations on time. The aim and function of liquidity management is to ensure that adequate amounts of borrowed funds and equity capital are always available.

As part of the Group's financial planning, a liquidity forecast is prepared, from which it is possible to identify in advance the need for borrowed funds, among other things.

In principle, the Group generates its financial funding from its operating business. As at 31 December 2018, Eckert & Ziegler AG and its subsidiaries also had access to credit lines amounting to € 22,024 thousand (2017: € 21,603 thousand). Of this amount, € 12,418 thousand was freely available as at 31 December 2018, and € 9,606 thousand was utilised for sureties and guarantees.

At € 42 thousand, the short-term amounts owed to financial institutions recorded in the consolidated balance sheet as at the balance sheet date are very low. In 2018 and 2017, the company applied to banks for debt financing or submitted by banks for a number of different projects. The various loan offers contain favourable terms and conditions, which leads to the conclusion that the Group has a good credit rating. The Executive Board believes this is because of the Group's solid financing with a high equity ratio and the favourable prospects of the profitable operating units. In addition to the high equity ratio, solid balance sheet ratios further underpin the Group's creditworthiness as the non-current assets are more than covered by equity and non-current liabilities.

Based on its access to third-party financing and its forecast for liquidity needs, the Group has adequate financial funds at the present time to secure its existence and further development. The Group also believes to be in the position to meet all of its financial obligations, even if a slight increase in the debt-to-equity ratio were to prove necessary in the coming financial years to support growth through further acquisitions and to finance the development of new products.

### Risk exposure

The contractually agreed due dates for financial liabilities, including interest payments, are shown below:

ANALYSIS OF THE CONTRACTUALLY AGREED DUE DATES		31 December 2018				
		Carrying amount	Fair value	Cash outflow		
€ thousand			Total	up to 1 year	1 to 5 years	over 5 years
Loan liabilities	fixed interest	42	42	42	0	0
Loan liabilities	variable interest	0	0	0	0	0
Trade payables	non-interest bearing	6,490	6,490	6,490	0	0
Other liabilities	non-interest bearing	17,262	17,179	15,111	2,151	0
Derivative financial Liabilities	variable interest	119	119	119	0	0
<b>As at 31.12 December</b>		<b>23,913</b>	<b>23,830</b>	<b>21,762</b>	<b>2,151</b>	<b>0</b>

ANALYSIS OF THE CONTRACTUALLY AGREED DUE DATES				31 December 2017		
		Carrying amount	Fair value	Cash outflow		
€ thousand			Total	up to 1 year	1 to 5 years	over 5 years
Loan liabilities	fixed interest	1,733	1,791	1,735	56	0
Loan liabilities	variable interest	0	0	0	0	0
Trade payables	non-interest bearing	4,504	4,504	4,504	0	0
Other liabilities	non-interest bearing	21,055	20,903	19,392	1,663	0
Derivative financial Liabilities	variable interest	220	220	220	0	0
<b>As at 31.12 December</b>		<b>27,512</b>	<b>27,418</b>	<b>25,851</b>	<b>1,719</b>	<b>0</b>

Cash outflows for liabilities bearing interest at variable rates are based on an interest rate of 3,5 % in 2018.

### Foreign exchange risks

The Group's international business activity exposes it to foreign exchange risks resulting from the influence of exchange rate fluctuations on transactions as well as assets and liabilities denominated in a foreign currency (transaction risks).

The main foreign currency transactions in the Eckert & Ziegler Group are related to the US dollar as a result of loan repayments and dividend payments of the US-based subsidiaries and the export business of the German subsidiaries. This effect is only partially offset by the operating activity of some subsidiaries that buy components and goods mainly in US dollars and then sell final products mainly in euros.

If necessary, export transactions in foreign currencies are hedged using foreign currency options and forward transactions. There were no open positions under currency swaps and options as at the balance sheet date.

### Risk exposure

As at the reporting date, the Group's exposure to transaction risk was as follows:

Foreign currency exposure expressed in € thousand	31.12.2018					31.12.2017				
	USD	GBP	CHF	CZK	BRL	USD	GBP	CHF	CZK	BRL
Cash and cash equivalents	21,681	67	795	399	109	13,955	57	0	277	187
Trade receivables	9,235	417	0	0	976	4,751	650	0	178	993
Trade payables	- 2,609	- 74	- 1	- 97	- 287	- 815	- 47	0	- 97	- 626
<b>Balance sheet exposure</b>	<b>28,307</b>	<b>410</b>	<b>794</b>	<b>302</b>	<b>798</b>	<b>17,891</b>	<b>660</b>	<b>0</b>	<b>358</b>	<b>554</b>

Balance sheet exposure equates to net exposure, as no currency swaps existed at the respective reporting dates.

### Sensitivity analysis

Assuming all other assumptions remain unchanged, a 10 % appreciation of the euro against the following currencies would lead to the following increases (decreases) in the overall result as at the balance sheet date:

Effect € thousand	31.12.2018					31.12.2017				
	USD	GBP	CHF	CZK	BRL	USD	GBP	CHF	CZK	BRL
Total comprehensive result	- 562	18	108	- 430	133	- 1,775	- 69	0	- 50	- 164

A 10 % depreciation of the euro against the currencies listed above would have the opposite effect on the currencies as at the balance sheet date.

The foreign exchange rates listed under Note 5 were used as the basis for the sensitivity analysis.

### Interest rate risk

The Group's interest rate risk exposure due to fluctuations in market interest rates is low for financial assets and liabilities with medium- to long-term maturities since the assets and liabilities only bear variable interest to a minor extent.

No hedging is undertaken if a change in interest rates does not result in a cash flow impact for an item.

In February 2011, an interest rate swap was concluded to limit the interest rate risk on variable rate financing loans. This swap has a maturity of 10 years; a reference amount of € 8,000 thousand was hedged, which is reduced at the end of each quarter by € 250 thousand starting from 31 December 2013. Eckert & Ziegler AG pays fixed interest of 3.21 % on a quarterly basis on the respective reference amount and receives in return variable amounts equivalent to the three-month EURIBOR interest rate on the respective reference amount.

The fair value of the swap transaction still outstanding as at the balance sheet date is € 119 thousand (2017: € 220 thousand) and it is recognised in the balance sheet under other non-current liabilities. The fair value was communicated to the Group by the bank with which the swap transaction was concluded. Accordingly, to determine the actual cash value of the interest rate swaps, all payments to be made by the customer or by the bank are calculated from the measurement day until the end of the contract; then they are discounted based on the current yield curve, added together and then netted. The discounting of the variable interest payments (EURIBOR) was carried out based on the forward interest rates for the current yield curve with the corresponding maturity. The ensuing balances then represent a positive and a negative cash value for the counterparties from the existing contractual relationship.

### Risk exposure

The Group has the following interest-bearing financial assets and liabilities as at the balance sheet date:

€ thousand	2018	2017
Interest-bearing financial assets	3,515	753
– of which variable-interest	1,015	753
– of which fixed-interest	2,500	0
Interest-bearing financial liabilities	42	1,733
– of which variable-interest	0	0
– of which fixed-interest	42	1,733

### Sensitivity of the cash flows for variable-interest financial instruments

An increase in the market interest rate by 100 basis points on the reporting date – keeping all other assumptions the same – would have led to the increase (decrease) in the net profit or loss for the period:

Effect € thousand	2018		2017	
	+ 100 basis points	– 100 basis points	+ 100 basis points	– 100 basis points
Result from variable-interest financial instruments	39	– 39	60	– 60

### Capital management

Eckert & Ziegler AG (parent company) is subject to minimum capitalisation in accordance with Article 92 AktG in accordance with German stock corporation and commercial law regulations. Accordingly, an Extraordinary General Meeting must be called if the sum of the parent company's equity under commercial law falls below 50 % of the subscribed capital. This did not occur in the 2018 and 2017 financial years.

The Group pursues a conservative investment and borrowing policy geared towards flexibility and maintains a well-balanced investment and financing portfolio. The Group is not subject to any external capital requirements. Ensuring the Group's liquidity and creditworthiness, including guaranteed access to the capital market at all times, and effectively increasing the company value are the main objectives of financial management.

Measures to achieve these goals include optimising the capital structure, the dividend policy, acquisitions, and, if necessary, equity measures. Capital requirements and capital procurement should be coordinated in a manner that takes requirements in terms of earnings, liquidity, security, and autonomy into appropriate consideration. The Group's overall strategy remains unchanged from 2017.

# NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

Cash and cash equivalents reported in the consolidated statement of cash flows include cash and cash equivalents reported on the balance sheet, comprising cash in hand, cheques, cash at bank and all highly liquid assets with a remaining term of no more than three months from the date of acquisition.

The consolidated statement of cash flows shows how the cash and cash equivalents of the Eckert & Ziegler Group have changed during the financial year as a result of cash inflows and outflows. In accordance with IAS 7 (Cash Flow Statements), cash flows in the consolidated statement of cash flows have been divided into cash flows from operating, investing and financing activities.

Changes in the balance sheet items examined for the development of the consolidated statement of cash flows are adjusted for the non-cash effects of currency translation and changes to the basis of consolidation. Furthermore, investing and financing transactions that have not impacted liquid funds are not included in the cash flow statement. Because of the adjustments mentioned above, the changes in the respective balance sheet items reported on the consolidated statement of cash flows cannot be compared directly to the corresponding values on the published consolidated balance sheet.

## 35 | OPERATING ACTIVITIES

Cash inflows and outflows are determined indirectly, starting with the consolidated net income. The profit (or loss) after tax is adjusted for non-cash expenses and supplemented by changes in assets and liabilities.

The cash inflow from operating activities in the previous year included € – 1,023 thousand from discontinued operations.

## 36 | INVESTING ACTIVITIES

Cash flows from investing activities are derived from actual transactions. They include cash flows related to the acquisition, production and sale of intangible assets and property, plant and equipment not included in cash and cash equivalents.

Cash flow from investing activities in the previous year included € 12,286 thousand in cash inflows from the sale of shares in consolidated companies and € 17 thousand in cash outflows from the purchase of fixed assets attributable to discontinued operations.

## 37 | FINANCING ACTIVITIES

Cash flows from financing activities are determined based on actual transactions and include not only the borrowing and repayment of loans and other financial liabilities, but also cash flows between the Group and its shareholders, such as dividend payments.

Paid and received interest is also reported as cash flow from financing activities in accordance with the option defined under IAS 7.33.

Cash flow from financing activities in 2017 included payments of € 575 thousand for the acquisition of equity instruments of subsidiaries, payments of € 375 thousand for the repayment of loans, proceeds of € 535 thousand from borrowings and interest payments of € 49 thousand attributable to discontinued operations.

# OTHER DISCLOSURES

## 38 | COMPANY ACQUISITIONS AND DISPOSALS

### Acquisition of WOLF-Medizintechnik GmbH in the 2018 financial year

Effective 01 January 2018, Eckert & Ziegler BEBIG GmbH acquired all shares in the Thuringian company WOLF-Medizintechnik GmbH (WOMED), St. Gangloff, Germany. With the acquisition of WOMED as an established manufacturer of X-ray therapy devices for the treatment of superficial skin tumours and joint diseases, the Radiation Therapy segment has expanded its product portfolio, strengthening its market position, especially in Europe. In addition to WOMED's existing revenues, additional revenues and profits are expected from the expansion of the product portfolio. This is also the introduction of a device for intraoperative irradiation.

The purchase price for the shares amounted to € 3,522 thousand. The purchase price consisted of fixed amounts due in the short term totalling € 3,130 thousand and earn-out components totalling € 392 thousand. The payment of the earn-out components depends, both in terms of amount and timing, on the achievement of certain contractually agreed revenue targets.

In the 2018 financial year, the costs incurred in connection with the acquisition were recognised as an expense under general administrative expenses.

The acquisition was included in the consolidated financial statements in accordance with the acquisition method. The purchase price was distributed across the acquired assets and assumed debt on the basis of the estimated fair value at the time of the acquisition. The distribution of the purchase price on the basis of estimated fair values of assets and debt was carried out as follows:

€ thousand	Carrying amount at acquisition date	Revaluation	Fair value at acquisition date
Intangible assets	0	2,831	2,831
Property, plant and equipment	149		149
Inventories	1,082		1,082
Receivables	4		4
Other assets	479		479
Cash at bank and in hand	546		546
Liabilities	- 444		- 444
Deferred taxes	- 276	- 849	- 1,125
<b>Net assets</b>	<b>1,540</b>	<b>1,982</b>	<b>3,522</b>
Purchase price	- 3,522		- 3,522
<b>Goodwill</b>			<b>0</b>

With the acquisition of WOMED, cash and cash equivalents amounting to € 546 thousand were taken over, so that the net cash flow from the company acquisition amounted to € - 2,584 thousand (of which € - 500 thousand was already paid). In the 2018 financial year, revenue of € 2,220 thousand and results of € - 173 thousand were generated.

### Acquisition of Gamma-Service Recycling GmbH, Gamma-Service Medical GmbH, Isotope Technologies Dresden GmbH and GSG International GmbH in the 2017 financial year

Eckart & Ziegler Isotope Products GmbH acquired all shares in the following companies (and their subsidiaries ISOTREND spol. s.r.o, IPS International Processing Services GmbH and Nuclear Control & Consulting GmbH) by a notarised contract dated 31 May 2017:

- Gamma-Service Recycling GmbH, Leipzig, Germany
- Gamma-Service Medical GmbH, Leipzig, Germany
- Isotope Technologies Dresden GmbH, Dresden, Germany
- GSG International GmbH, Freienbach, Switzerland

The purchase price amounted to €7,817 thousand and was paid in cash. The costs of €105 thousand incurred in connection with the acquisition were recognised as an expense under general administrative expenses in the 2017 financial year. The main reason for the acquisition of the companies was to acquire existing customer relationships. Thanks to the acquisition, the Isotope Products segment has gained further market share and therefore further strengthened its market position.

The acquisition was included in the consolidated financial statements in accordance with the acquisition method. The purchase price was provisionally allocated in 2017 to the acquired assets and liabilities on the basis of the estimated fair values as at the date of the acquisition. The preliminary purchase price allocation resulted in goodwill of €3,650 thousand. This goodwill is not deductible for tax purposes. The distribution of the purchase price on the basis of estimated fair values of assets and debt was carried out as follows:

€ thousand	Carrying amount at acquisition date	Revaluation	Fair value at acquisition date
Intangible assets	164	1,566	1,730
Property, plant and equipment	6,526	585	7,111
Receivables	2,689	11,463	14,152
Other assets	14,710	- 5,851	8,859
Cash at bank and in hand	2,459		2,459
Liabilities	- 29,541		- 29,541
Deferred taxes	- 12	- 591	- 603
<b>Net assets</b>	<b>- 3,005</b>	<b>7,172</b>	<b>4,167</b>
Purchase price	- 7,817		- 7,817
<b>Goodwill</b>			<b>- 3,650</b>

With the acquisition of the above-mentioned companies, cash and cash equivalents amounting to €2,459 thousand were taken over, so that the net cash flow in 2017 from the acquisition amounted to €- 5,358 thousand. Since the date of first-time consolidation, revenues of €10,861 thousand and a loss of €307 thousand have been recognised in the 2017 consolidated financial statements. If the companies had been included in the consolidated financial statements since 1 January 2017, this would have increased consolidated revenue and losses by €5,241 thousand and €342 thousand, respectively.

In 2018, the purchase price allocation was finalised. Investments measured at equity increased by €205 thousand, and accordingly goodwill decreased by €205 thousand to €3,445 thousand.

### 39 | LEASES

#### Financial obligations as lessee

The Group has concluded almost exclusively operating leases for equipment, vehicles, land and buildings that do not require capitalisation. Rent and lease expenses for operating leases in the financial years ended 31 December 2018 and 2017 amounted to €4,386 thousand and €3,798 thousand respectively.

The future minimum lease payments from non-cancellable non-capitalisable leases (operating lease) as at 31 December 2018, are as follows:

€ thousand	Rent and leasing agreements
as at the end of each year (31 December)	
2019	3,702
2020	2,938
2021	1,953
2022	1,476
2023	1,062
after	3,376
<b>Minimum rent or lease payments total</b>	<b>14,507</b>



There are no conditional rental payments in the period under review or in the future. Furthermore, the agreements contain no restrictions or obligations.

### Leases as lessor

As a lessor, the Group has entered into agreements with customers under which medical equipment is leased to customers and revenue is generated from service agreements. The equipment has no material value for the Group at the end of the agreed lease term, meaning that the assets are fully depreciated over the originally agreed lease term. As in the previous year, no value adjustments were required on the receivables from these leases in the 2018 financial year. The following table provides an overview of the Group's leases as lessor (amounts in € thousands).

Value of leased assets		Present value of future minimum lease payments			Other Information	
Total acquisition costs	Carrying amount as at 31 December 2018	2019	2020–2023	after 2023	Unearned finance income	Realised income 2018
276	159	70	86	0	6	5

## 40 | OTHER FINANCIAL OBLIGATIONS AND CONTINGENT LIABILITIES AND RECEIVABLES

Pursuant to the contract with the landlord of a production building, the landlord shall cover the costs of building removal (decontamination) up to a contractually agreed amount when production ends. The remaining amount shall be borne by the tenant. The operator of the facility generally bears the decontamination obligation in accordance with legal regulations. Currently, the company assumes that the landlord will meet its contractual obligation. If the previous operator/landlord fails to meet its contractual obligations, the company would be responsible for having the decontamination carried out, which would have a significant impact on the company's profitability and financial position, at least temporarily.

## 41 | SEGMENT REPORTING

The Group applied "IFRS 8 Operating Segments" effective 1 January 2009. In accordance with IFRS 8, operating segments must be separately identified based on the Group's internal management reporting. These internal segments are those that are regularly reviewed by the Group's main decision-makers with regard to decisions about the distribution of resources to this segment and the assessment of its financial performance.

The Eckert & Ziegler Group has organised its activities into three operational reporting units. The individual segments offer different products and are also organisationally separated by the location. The applicable reporting principles of the individual segments are consistent with the reporting principles described in the summary of the fundamental accounting and valuation principles (Note 3). The segment reporting is not consolidated. This corresponds to the information used by the Executive Board in its regular management reporting. Transactions between the segments are processed at market prices.

The Isotope Products segment manufactures and distributes standards and radiation sources for medical and industrial purposes. Standards are radioisotopes for calibration purposes. They are generally sold to scientific institutions. Industrial radiation sources are found in various measuring equipment for industrial facilities and other measuring devices, for example, safety equipment at airports and in crude oil exploration. They are sold to the manufacturers or operators of systems. The medical radiation sources include radioactive sources for the calibration of gamma cameras. The production sites for this segment are located in North America and Europe. Worldwide sales and distribution also takes place from these locations. Following the acquisition of Nuclitec, the largest competitor, at the start of 2009, Eckert & Ziegler has been the global market leader in many products and applications. In addition to other services such as the transport of radioactive substances, the segment also retrieves, processes and conditions low-level radioactive isotope technology waste from hospitals and other facilities. With the acquisition of the companies of the Gamma-Service Group in May 2017, the segment's product portfolio was once again expanded to include isotope-technical plant construction and the construction of so-called blood irradiation equipment as well as further services related to the recycling of isotope technology waste. This means that the Isotope Products segment offers the entire range of services relating to radiation sources for medical and industrial purposes.

The **Radiation Therapy** segment targets its products at radiation therapists, a group of doctors that is specialised in treating cancer through irradiation. Its two most important products are small radioactive implants for treating prostate cancer based on iodine-125 (so-called “seeds”) and tumour irradiation equipment based on cobalt-60 or iridium-192 (so-called “afterloaders”). The product range is rounded off by eye applicators based on ruthenium-106 and iodine-125 for the treatment of uveal melanoma (eye cancer). With the takeover of WOLF Medizintechnik GmbH in January 2018, the radiotherapy product portfolio was expanded to include X-ray therapy devices for the treatment of superficial skin tumours and joint diseases. Production is concentrated in Germany and the USA, whereas the products are sold worldwide.

The products of the **Radiopharma** segment, with head office in Berlin, Braunschweig, Germany and Hopkinton, MA, USA, comprise the approved 68Ge/68Ga generator, laboratory equipment, including radiosynthesis devices and the associated consumables, as well as devices for the required quality control. The segment also produces long-lived radioisotopes for pharmaceutical applications (especially yttrium-90 as an approved drug Yttriga). This substance has a number of uses, such as in the production of radioactive embolic agents for the treatment of liver tumours. The segment’s products are sold worldwide.

The items of the holding company Eckert & Ziegler Strahlen- und Medizintechnik are included under “Holding”.

#### SEGMENT REPORTING

€ thousand	Isotope Products		Radiation therapy		Radiopharma		Holding		Elimination		Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Sales to external customers	106,829	86,106	30,351	25,858	31,517	26,649	12	18	0	0	168,709	138,631
Sales to other segments	5,473	3,590	266	36	0	0	5,880	5,430	-11,619	-9,056	0	0
<b>Total segment sales</b>	<b>112,302</b>	<b>89,696</b>	<b>30,617</b>	<b>25,894</b>	<b>31,517</b>	<b>26,649</b>	<b>5,892</b>	<b>5,448</b>	<b>-11,619</b>	<b>-9,056</b>	<b>168,709</b>	<b>138,631</b>
Segment profit/loss before interest and income taxes (EBIT)	15,634	9,925	1,471	1,900	9,115	6,647	-2,833	-429	0	-71	23,387	17,972
Interest expenses and income	-300	-180	-119	-173	-24	-197	-55	-88	-3	9	-501	-629
Income tax	-3,150	-2,767	-524	-638	-2,672	-1,960	25	45	324	0	-5,997	-5,320
Result from discontinued operations, net	0	0	0	0	0	3,099	0	0	0	0	0	3,099
Profit/loss before minority interests	12,184	6,978	828	1,089	6,419	7,589	-2,863	-472	321	-62	16,889	15,122

#### SEGMENT REPORTING

€ thousand	Isotope Products		Radiation therapy		Radiopharma		Holding		Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Segmental assets	146,378	134,351	48,821	47,886	34,218	31,137	104,130	107,616	333,547	320,990
Elimination of intersegmental shares, equity investments and receivables									-104,496	-104,003
<b>Consolidated total assets</b>									<b>229,051</b>	<b>216,987</b>
Segmental liabilities	-84,481	-82,887	-14,924	-14,944	-16,878	-15,879	-6,046	-2,607	-122,329	-116,317
Elimination of intersegmental liabilities									17,155	16,847
<b>Consolidated liabilities</b>									<b>-105,174</b>	<b>-99,470</b>
Investments (excluding acquisitions)	3,540	2,459	1,513	-191	2,129	895	124	153	7,306	3,316
Depreciation	-4,181	-3,913	-3,104	-2,369	-1,009	-1,494	-150	-423	-8,444	-8,199
Other material non-cash income (+)/expenses (-)	-3,311	-203	-248	-651	384	3,119	3,173	845	-2	3,110

#### INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT BROKEN DOWN BY REGION

€ thousand	2018	2017
Germany	54,554	51,561
USA	27,812	25,806
Belgium	3,160	3,912
Other	3,924	3,989
<b>Total</b>	<b>89,450</b>	<b>85,268</b>

EXTERNAL SALES BY GEOGRAPHIC REGION				
	2018		2017	
	€ million	%	€ million	%
Europe	79.9	47	66.9	48
North America	57.5	34	46.3	33
Asia/Pacific	16.8	10	14.8	11
Other	14.5	9	10.6	8
<b>Total</b>	<b>168.7</b>	<b>100</b>	<b>138.6</b>	<b>100</b>

The classification by geographical regions is based on the headquarters of the recipient of the service. Revenues in North America relate almost exclusively to the USA.

## 42 | RELATED PARTIES AND COMPANIES

In accordance with IAS 24, transactions must be disclosed if they involve parties or companies that control Eckert & Ziegler AG or are controlled by Eckert & Ziegler AG. Transactions between the company and its subsidiaries, which are related parties, were eliminated on consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties are disclosed below. Transactions between Eckert & Ziegler AG and related parties are made on terms equivalent to those that prevail with unrelated third parties.

### a) Members of the management in key positions

#### Executive Board

- **Dr. Andreas Eckert** (Chairman of the Executive Board, 2018 and 2017, responsible for the Group strategy, finance and capital market communication, was well as the Isotope Products and Other segments), Wandlitz, businessman – *Positions on other boards: Chairman of the Board of Directors of Eckert & Ziegler Isotope Products Inc. (IPL), Valencia, USA, Chairman of the Board of Directors of Eckert & Ziegler BEBIG SA, Seneffe (Belgium); until May 2017: Chairman of the Supervisory Board of Berlin Partner für Wirtschaft und Technologie GmbH*
- **Dr. Harald Hasselmann** (Member of the Executive Board, 2018 and 2017, responsible for the Radiation Therapy segment and from September 2018, for Human Resources), Berlin, businessman – *Positions on other boards: Member of the Board of Directors of Eckert & Ziegler BEBIG SA, Seneffe (Belgium)*
- **Dr. Lutz Helmke** (Member of the Executive Board, from 17 September 2018, responsible for the Radiopharma segment), Berlin, PhD in radiochemistry – *Positions on other boards: Member of the Board of Directors of Curasight ApS, Copenhagen (Denmark)*
- **Dr. André Heß** (member of the Executive Board until 31 August 2018, responsible for Human Resources and the Radiopharma segment), Berlin, graduate chemist and industrial engineer – *Positions on other boards: (until 31 August 2018): Member of the Board of Directors of Eckert & Ziegler Isotope Products Inc. (IPL), Valencia, USA, Member of the Board of Directors of Eckert & Ziegler BEBIG SA, Seneffe (Belgium), Member of the Board of Curasight ApS, Copenhagen (Denmark)*

#### Other key members of the management team

- **Dr. Gunnar Mann** (2018 and 2017, responsible for radiation protection, information technology and infrastructure)
- **Frank Yeager** (2018 and 2017, President of Eckert & Ziegler Isotope Products Inc.)
- **Joseph Hathcock** (2018 and 2017, Vice-president of Eckert & Ziegler Isotope Products Inc.)
- **Ivan Simmer** (2018 and 2017, Managing Director and minority shareholder of Eckert & Ziegler Cesio s.r.o.)
- **Axel Schmidt** (until 05 May 2017: Managing Director and minority shareholder of Eckert & Ziegler f-con Deutschland GmbH)

#### Supervisory Board

In the 2018 financial year, the Supervisory Board comprised the following members:

- **Prof. Dr. Wolfgang Maennig** (chairman), Berlin, Germany, university professor – *On other supervisory boards: None*
- **Prof. Dr. Helmut Grothe**, (deputy chairman), Wandlitz, Germany, lawyer, university professor at the Free University of Berlin – *On other supervisory boards: None*

- **Prof. Dr. Detlev Ganten**, Berlin, Germany, president of the World Health Summit, chairman of the Board of Trustees of the Max Planck Institute for Colloids and Interfaces (MPI-KG) and Molecular Plant Physiology (MPI-MP), Potsdam – *On other supervisory boards: None*
- **Albert Rupprecht**, Waldthurn, Germany, economics graduate, member of the German Bundestag – *In anderen Kontrollgremien: keine*
- until 31 December 2018: **Hans-Jörg Hinke**, Berlin, Germany, managing partner of CARISMA Wohnbauten GmbH – *On other supervisory boards: None*
- until 31 December 2018: **Dr. Gudrun Erzgräber**, Birkenwerder, Germany, physicist – *On other supervisory boards: None*

#### b) Joint ventures in which the Group is a partner company

In June 2009, Eckert & Ziegler BEBIG SA contributed intangible assets to the joint venture ZAO “NanoBrachyTech” and received 15 % of the shares in the joint venture company. Eckert & Ziegler BEBIG SA supplies weak radioactive implants to OOO BEBIG, a wholly-owned subsidiary of the joint venture. The revenue of OOO BEBIG was € 1,376 thousand in the 2018 financial year (2017: € 1,508 thousand). In addition, Eckert & Ziegler BEBIG SA received repayments of € 460 thousand (2017: € 460 thousand) and interest payments of € 7 thousand (2017: € 22 thousand) in the 2018 financial year in connection with a loan arising from the conversion of receivables. The loan bears an interest of 2.5 % p. a. As of 31 December 2017, the outstanding liabilities of Eckert & Ziegler BEBIG GmbH against OOO BEBIG amounted to € – 40 thousand (2017: receivables in the amount of € 466 thousand).

#### c) Other related parties and companies

- Eckert Wagniskapital und Frühphasenfinanzierung GmbH (EWK), which holds 32.2 % of the shares in Eckert & Ziegler AG, and whose sole shareholder, Dr Andreas Eckert, is the Chairman of the Executive Board of Eckert & Ziegler AG.
- Eckert Beteiligungen 2 GmbH (EB2), which is a wholly-owned subsidiary of Eckert Wagniskapital und Frühphasenfinanzierung GmbH.
- ELSA Eckert Life Science Accelerator GmbH (ELSA), which is a wholly-owned subsidiary of Eckert Wagniskapital und Frühphasenfinanzierung GmbH.
- ELSA 2 Beteiligungen GmbH (ELSA2), which is a wholly-owned subsidiary of Eckert Wagniskapital und Frühphasenfinanzierung GmbH.

In 2018 and 2017, the following transactions were conducted with related parties; all transactions were conducted at arm’s length.

In 2012, EZAG granted Eckert Wagniskapital und Frühphasenfinanzierung GmbH a loan of € 1,500 thousand. In 2013, Eckert Wagniskapital und Frühphasenfinanzierung GmbH transferred the contractual relationship to ELSA Eckert Life Science Accelerator GmbH within the scope of the spin-off; this means that the loan agreement described above is now between EZAG and ELSA Eckert Life Science Accelerator GmbH (hereinafter referred to as “ELSA”). The loan bore an interest at the three-month EURIBOR plus 50 base points. The loan was fully repaid in 2017.

EZAG also granted Eckert Wagniskapital und Frühphasenfinanzierung GmbH a loan of € 400 thousand, of which € 368 thousand was drawn down. The loan bears interest at 3.25% and was fully repaid as at 31 December 2017.

In October 2017, Eckert & Ziegler AG concluded a new loan and share option agreement with ELSA. The contract has a term of 4 years and a total volume of up to € 2,500 thousand. The loan bears interest according to the three-month EURIBOR plus 50 base points. As at 31 December 2018, € 1,015 thousand (2017: € 753 thousand) was paid out to ELSA under the contract.

In October 2012, Eckert & Ziegler AG, Eckert & Ziegler BEBIG GmbH, Eckert & Ziegler Radiopharma GmbH and Eckert & Ziegler Europe GmbH concluded a long-term lease with Eckert Beteiligungen 2 GmbH. With effect from 1 January 2018, Eckert & Ziegler AG entered into the leases of other three companies with Eckert Beteiligungen 2 GmbH as general tenant. In the 2018 financial year, rent and related charges amounted € 829 thousand (2017: € 826 thousand).

In connection with the termination of the executive board contract with Dr André Heß, a member who left the Executive Board effective 31 August 2018, an amount of € 276 thousand was set aside in addition to the executive board remuneration set out in the above table.

Provisions of € 437 thousand (2017: € 432 thousand; calculated in accordance with IFRS) have been recognised for pension commitments to a former member of the Executive Board. Pension payments of € 32 thousand were made to this former Executive Board member in the 2018 financial year (2017: € 32 thousand).

€ thousand	2018	2017
Amounts owed by related parties and companies	3,581	1,219
Amounts owed to related parties and companies	40	0

### 43 | INFORMATION ON THE REMUNERATION OF BOARD MEMBERS

The Group's remuneration system for the compensation of board members is explained in the Remuneration Report in the Group Management Report.

#### Executive Board remuneration:

In the 2018 financial year, the total remuneration of the members of the Executive Board amounted to € 1,662 thousand (2017: € 1,524 thousand). This corresponds to a 9% increase over the previous year. Of this total remuneration, € 957 thousand (2017: € 808 thousand) was attributed to fixed salary components and € 705 thousand (2017: € 716 thousand) to variable salary components.

Remuneration granted and paid to Executive Board members is shown in the table below. As no member of the Executive Board was granted stock options or pension commitments, the remuneration granted equals the amounts paid.

Figures in €	Dr. Andreas Eckert				Dr. Harald Hasselmann				Dr. André Heß				Dr. Lutz Helmke			
	Chairman of the Executive Board EZAG				Member of the Executive Board responsible for the Therapy segment				Member of the Executive Board responsible for the Radiopharma segment				Member of the Executive Board responsible for the Radiopharma segment			
	Date appointed: 3 July 1997				Date appointed: 01 January 2017				Date appointed: 01 March 2008 Date left: 31/08/2018				Date appointed: 17 September 2018			
	2017	2018	Min	Max	2017	2018	Min	Max	2017	2018	Min	Max	2017	2018	Min	Max
Fixed remuneration	300,000	300,000	300,000	300,000	189,236	196,245	196,245	196,245	216,000	296,364	296,364	296,364	0	60,667	60,667	60,667
Additional benefits	34,961	35,255	35,255	35,255	34,294	34,294	34,294	34,294	33,095	23,434	23,434	23,434	0	10,883	10,883	10,883
<b>Total</b>	<b>334,961</b>	<b>335,255</b>	<b>335,255</b>	<b>335,255</b>	<b>223,531</b>	<b>230,539</b>	<b>230,539</b>	<b>230,539</b>	<b>249,095</b>	<b>319,798</b>	<b>319,798</b>	<b>319,798</b>	<b>0</b>	<b>71,550</b>	<b>71,550</b>	<b>71,550</b>
Inventor's compensation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-year variable remuneration	340,000	387,640	0	500,000	121,040	116,800	0	150,000	255,000	200,000	0	200,000	0	0	0	0
Bonus on Group EBIT (5 years)	340,000	387,640	0	500,000												
Bonus on group net profits excluding the Therapy segment (3 years)					100,000	100,000	0	100,000								
Bonus on net profits Therapy segment (3 years)					21,040	16,800	0	50,000								
Bonus on Group EBIT excluding the Radiopharma segment (3 years)									55,000	66,667	0	66,667	0	0	0	0
Bonus on EBIT for the Radiopharma segment (3 years)									200,000	133,333	0	133,333	0	0	0	0
<b>Total</b>	<b>340,000</b>	<b>387,640</b>	<b>0</b>	<b>500,000</b>	<b>121,040</b>	<b>116,800</b>	<b>0</b>	<b>150,000</b>	<b>255,000</b>	<b>200,000</b>	<b>0</b>	<b>200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Benefit expense	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total remuneration</b>	<b>674,961</b>	<b>722,895</b>	<b>335,255</b>	<b>835,255</b>	<b>344,571</b>	<b>347,339</b>	<b>230,539</b>	<b>380,539</b>	<b>504,095</b>	<b>519,798</b>	<b>319,798</b>	<b>519,798</b>	<b>0</b>	<b>71,550</b>	<b>71,550</b>	<b>71,550</b>

- 1) The fixed and variable remuneration of the Executive Board members, Dr Harald Hasselmann and Dr Lutz Helmke, and the former Executive Board member, Dr André Heß, is not included in the personnel expenses of the AG, as it is settled through subsidiaries.
- 2) \* In individual cases, the variable remuneration may be lower or higher than the minimum or maximum amounts shown, because the adjustment of the caps is always cumulative over the term of the contract and the stated minimum and maximum amounts represent the annual average.

The disclosed variable remuneration for 2018 is based on the final financial statement figures and is paid in this amount in 2019. Due to the iteration problem, the provisions for bonuses contained in the balance sheet as at 31 December 2018 may differ slightly.

In connection with the termination of the executive board contract with Dr André Heß, a member who left the Executive Board effective 31 August 2018, an amount of € 276 thousand was set aside in addition to the executive board remuneration set out in the above table.

Provisions of €437 thousand (2017: €432 thousand; calculated in accordance with IFRS) have been recognised for pension commitments to a former member of the Executive Board. Pension payments of € 32 thousand were made to this former Executive Board member in the 2018 financial year (2017: € 32 thousand).

### Supervisory Board remuneration:

In the 2018 financial year, the members of the Supervisory Board received fixed remuneration of € 94 thousand (2017: € 74 thousand) and attendance fees of € 33 thousand (2017: € 27 thousand). This corresponds to a total expense of € 137 thousand (2017: € 101 thousand).

The individual members of the Supervisory Board received the following remuneration:

Name	Position for which remuneration was paid	Fixed compensation	Attendance allowances	Total
€ thousand				
Prof. Dr. Wolfgang Maennig	Chairman of the Supervisory Board	€ 29 thousand (2017: € 20 thousand)	€ 6 thousand (2017: € 4 thousand)	€ 35 thousand (2017: € 24 thousand)
Prof. Dr. Helmut Grothe	From 31 July 2017: Deputy Chairman, previously member of the Supervisory Boards	€ 20 thousand (2017: € 12 thousand)	€ 6 thousand (2017: € 5 thousand)	€ 26 thousand (2017: € 17 thousand)
Hans-Jörg Hinke	Member of the Supervisory Board	€ 11 thousand (2017: € 10 thousand)	€ 6 thousand (2017: € 5 thousand)	€ 17 thousand (2017: € 15 thousand)
Dr. Gudrun Erzgräber	Member of the Supervisory Board	€ 11 thousand (2017: € 10 thousand)	€ 5 thousand (2017: € 4 thousand)	€ 16 thousand (2017: € 14 thousand)
Prof. Dr. Detlev Ganten	Member of the Supervisory Board	€ 11 thousand (2017: € 10 thousand)	€ 4 thousand (2017: € 4 thousand)	€ 15 thousand (2017: € 14 thousand)
Albert Rupprecht	From 31 May 2017: Member of the Supervisory Board	€ 11 thousand (2017: € 6 thousand)	€ 6 thousand (2017: € 2 thousand)	€ 17 thousand (2017: € 8 thousand)
Prof. Dr. Nikolaus Fuchs	until 31 May 2017: Deputy Chairman of the Supervisory Board	€ 0 thousand (2017: € 6 thousand))	€ 0 thousand (2017: € 3 thousand)	€ 0 thousand (2017: € 9 thousand)

No remuneration or benefits were paid to Supervisory Board members for services, in particular consulting or intermediary services, rendered outside of their activities on the Supervisory Board in the year under review.

The Supervisory Board has not established any committees, in particular an audit committee or nomination committee. The need to form committees, in particular an audit committee or a nomination committee, is not considered to be a priority by the Supervisory Board due to the small number of Supervisory Board members and the company's specific circumstances. All the duties of these committees are therefore performed by the Supervisory Board as a whole.

### 44 | EVENTS AFTER THE REPORTING PERIOD

The merger of Eckert & Ziegler BEBIG SA into Eckert & Ziegler Strahlen- und Medizintechnik AG was entered into the commercial register Berlin-Charlottenburg on 18 February 2019.

Otherwise, there were no other events of particular significance that could have a material impact on the Group's financial position and performance.

#### **45 | OTHER INCOME/EXPENSES**

Other income/expenses and income from discontinued operations include non-current income from the sale of fixed assets in the amount of € 27 thousand (2017: € 24 thousand) and non-current expense from losses on the sale of fixed assets in the amount of € 186 thousand (2017: € 94 thousand).

#### **46 | TOTAL FEE OF THE GROUP AUDITOR**

In the financial year under review, the total fee paid for the services of the Group auditor was € 346 thousand (2017: € 324 thousand), of which € 341 thousand (2017: € 304 thousand) was spent on the audit of the annual accounts and consolidated financial statements of Eckert & Ziegler AG and its various subsidiaries, € 2 thousand (2017: € 8 thousand) on tax consulting services and € 3 thousand (2017: € 14 thousand) on other services.

#### **47 | STATEMENT OF COMPLIANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE IN ACCORDANCE WITH ARTICLE 161 AKTG (COMPLIANCE STATEMENT)**

The statement of compliance with the German Corporate Governance Code required in accordance with Article 161 AktG was issued by the Executive Board and the Supervisory Board and made available to shareholders on the company's website at [www.ezag.com](http://www.ezag.com) for an unlimited period.

Berlin, 26 March 2019

Eckert & Ziegler Strahlen- und Medizintechnik AG  
Executive Board

Dr. Andreas Eckert

Dr. Harald Hasselmann

Dr. Lutz Helmke

# CONSOLIDATED STATEMENT OF CHANGES IN FIXED ASSETS

## STATEMENT OF CHANGES IN FIXED ASSETS AS AT 31 DECEMBER 2018 (CONSOLIDATED STATEMENT OF CHANGES IN FIXED ASSETS)

€ thousand	Historical cost						Balance 31.12.2018
	Balance 31.12.2017	Additions from company acquisitions	Additions	Disposals	Reclassifi- cations	Currency translation	
<b>FIXED ASSETS</b>							
<b>I. Intangible assets</b>							
1. Goodwill	47,358	0	0	205	0	750	47,903
2. Acquired intangible assets	26,789	2,831	845	3,570	106	290	27,291
3. Internally generated intangible assets	9,587	0	93	0	0	0	9,680
4. Payments on account	106	0	0	0	-106	0	0
	<b>83,840</b>	<b>2,831</b>	<b>938</b>	<b>3,775</b>	<b>0</b>	<b>1,040</b>	<b>84,874</b>
<b>II. Property, plant and equipment</b>							
1. Land and buildings	20,710	34	296	0	0	433	21,473
2. Technical plant and machinery	49,228	29	3,463	463	353	436	53,046
3. Other fixtures and fittings, tools and equipment	14,269	85	1,141	415	0	29	15,109
4. Assets under construction	2,481	0	3,371	38	-353	17	5,478
	<b>86,688</b>	<b>148</b>	<b>8,271</b>	<b>916</b>	<b>0</b>	<b>915</b>	<b>95,106</b>
	<b>170,528</b>	<b>2,979</b>	<b>9,209</b>	<b>4,691</b>	<b>0</b>	<b>1,955</b>	<b>179,980</b>



Depreciation and amortisation					Net carrying amount		
<b>Balance 31.12.2017</b>	Additions	Impair- ment	Disposals	Currency translation	<b>Balance 31.12.2018</b>	<b>Balance 31.12.2018</b>	<b>Balance 31.12.2017</b>
6,025	0	0	0	50	6,075	41,828	41,333
19,674	2,141	0	3,545	316	18,586	8,705	7,115
6,702	992	0	0	0	7,694	1,986	2,885
0	0	0	0	0	0	0	106
<b>32,401</b>	<b>3,133</b>	<b>0</b>	<b>3,545</b>	<b>366</b>	<b>32,355</b>	<b>52,519</b>	<b>51,439</b>
9,642	879	0	0	229	10,750	10,723	11,068
32,692	3,025	130	351	329	35,825	17,221	16,536
10,525	1,407	0	374	42	11,600	3,509	3,744
0	0	0	0	0	0	5,478	2,481
<b>52,859</b>	<b>5,311</b>	<b>130</b>	<b>725</b>	<b>600</b>	<b>58,175</b>	<b>36,931</b>	<b>33,829</b>
<b>85,260</b>	<b>8,444</b>	<b>130</b>	<b>4,270</b>	<b>966</b>	<b>90,530</b>	<b>89,450</b>	<b>85,269</b>

# INDEPENDENT AUDITOR'S REPORT

To Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin

## NOTE ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT

### AUDIT OPINIONS

We have audited the consolidated financial statements of Eckert & Ziegler Strahlen- und Medizintechnik AG, Berlin and its subsidiaries (the Group) – consisting of the consolidated balance sheet as at 31 December 2018, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity, and the consolidated cash flow statement for the financial year from 01 January 2018 to 31 December 2018 and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report of Eckert & Ziegler Strahlen- und Medizintechnik AG for the financial year from 01 January 2018 to 31 December 2018. In accordance with German statutory provisions, we have not audited the components of the combined management report referred to in “Other information”.

In our opinion, based on the findings of our audit, the attached

- consolidated financial statements comply with IFRS in all material respects, as they are applicable in the EU, and with the German statutory provisions applicable pursuant to Article 315e (1) of the German Commercial Code (HGB) in compliance with these provisions, and provide a true and fair view of the Group's financial position as at 31 December 2018 and of its performance for the financial year from 01 January 2018 to 31 December 2018; and
- the accompanying combined management report conveys a true and fair view of the situation of the Group. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements, and accurately depicts the opportunities and risks of future development. Our audit opinion on the combined management report does not extend to the content of the components referred to as “Other Information” in the combined management report.

In accordance with Article 322 (3) sentence 1 HGB, we declare that no objections were raised by our audit concerning the proper preparation of the consolidated financial statements and the combined management report.

### BASIS FOR THE AUDIT OPINIONS

We conducted our audit of the consolidated financial statements and the combined management report pursuant to Article 317 HGB and Regulation (EU) No. 537/2014 (hereinafter referred to as “EU Audit Regulation”) in accordance with generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors (IDW). Our responsibilities under these rules and policies are further described in the section entitled “**Responsibility of the auditor for the audit of the consolidated financial statements and the combined management report**” of our report. We are in accordance with European and German commercial and professional regulations, independently of the Group companies, and have fulfilled our other German professional obligations in accordance with these requirements.

In addition, in accordance with Article 10 (2) (f) of EU Audit Regulation, we declare that we have not performed any prohibited non-audit services as laid down in Article 5 (1) of EU Audit Regulation.

We believe that the audit evidence we obtained is sufficient and appropriate to form the basis for our opinion on the consolidated financial statements and the combined management report.

### **PARTICULARLY IMPORTANT AUDIT CIRCUMSTANCES IN THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS**

Particularly important audit circumstances are those matters that, in our best judgment, were the most significant in our audit of the consolidated financial statements for the financial year from 1 January 2018 to 31 December 2018. These matters were taken into account in the context of our audit of the consolidated financial statements as a whole and in preparing our opinion on the audit; we will not provide a separate opinion on these matters.

We have identified the following matters as particularly important audit circumstances:

- Impairment of goodwill
- Valuation of provisions for restoration obligations and provisions for disposal obligations

#### **1. IMPAIRMENT OF GOODWILL**

##### **Facts of the matter**

In the consolidated financial statements of Eckert & Ziegler Strahlen- und Medizintechnik AG as at 31 December 2018, goodwill in the amount of €41.8 million (18% of total assets) is reported under “non-current assets”.

Goodwill is allocated to the smallest identifiable cash-generating units and tested for impairment annually and, if necessary, in addition on an ad hoc basis.

The assessment of the recoverability of goodwill requires a large number of discretionary decisions by the legal representatives. The basis for assessing whether there are indications of impairment of these assets and for determining the fair values are the future cash flows resulting from the budget statements prepared by the legal representatives and approved by the Supervisory Board for the respective cash-generating units. These budget statements are based on expectations regarding future market development as well as sales and margin developments. The fair values of the cash-generating units are determined using discounted cash flow models and are dependent not only on the assessment of the legal representatives with regard to future cash inflows, but also on the respective discount rates used.

Due to the uncertainty associated with the discretionary decisions and assessments of the legal representatives and the amount of the goodwill, its recoverability was a particularly important audit circumstance in our audit.

The information provided by Eckert & Ziegler Strahlen- und Medizintechnik AG on goodwill can be found in Note 19 of the notes to the consolidated financial statements.

##### **Auditor's response and findings**

As part of our audit, we assessed the appropriateness of the key assumptions and discretionary parameters as well as the method of calculating the impairment tests, involving our valuation specialists in so doing. We gained an understanding of the planning system and of the planning process, as well as the essential assumptions made by the legal representatives in their planning. We have reconciled the forecast of future cash flows over the forecast period with the multi-year plan approved by the Supervisory Board to check the accuracy of the forecasts based on an analysis of deviations between target and actual figures in the past and in the current financial year.

We reconstructed the assumptions underlying the forecasts and the growth rates used to forecast cash flows beyond the forecast period by comparing them with past performance and current industry-specific market expectations. In addition, we critically examined the discount rates used based on the average cost of capital of a peer group. Our audit also included the sensitivity analyses carried out by Eckert & Ziegler Strahlen- und Medizintechnik AG. With regard to the effects of possible changes in the cost of capital and the assumed growth rates, we also conducted our own sensitivity analyses.

As a result, we were able to check the intrinsic value of the goodwill reported in the consolidated financial statements.

## 2. VALUATION OF PROVISIONS FOR RESTORATION OBLIGATIONS AND PROVISIONS FOR DISPOSAL OBLIGATIONS

### Facts of the matter

In the consolidated financial statements of Eckert & Ziegler Strahlen- und Medizintechnik AG as at 31 December 2018 the item "Other non-current provisions" of € 51.6 million includes € 22.8 million of provisions for restoration obligations. In addition, € 28.8 million of the provisions for the obligation to process own and third-party radioactive waste as well as take-back obligations for sold radiation sources (hereinafter referred to as "provisions for disposal obligations") are shown under "Other non-current provisions" and € 3.5 million of these provision are recognised under "Other current provisions".

Subsidiaries of Eckert & Ziegler Strahlen- und Medizintechnik AG produce isotope technology components, radiation equipment and radiopharmaceuticals in their own and rented buildings. The production facilities and buildings are contaminated accordingly. Provisions for restoration obligations have to be formed against the backdrop of existing obligations to restore the state prior to decontamination.

In the production process of subsidiaries of Eckert & Ziegler Strahlen- und Medizintechnik AG, radioactive residues are produced and, in addition, subsidiaries of Eckert & Ziegler Strahlen- und Medizintechnik AG accept radioactive residual materials from third parties for disposal. Provisions have to be set up for the disposal obligations.

Under IAS 37, provisions for restoration and disposal obligations must be measured based on the best possible estimate of the expenses associated with the obligation as at the balance sheet date. All risks and uncertainties must be taken into account. In accordance with IAS 37.45, non-current provisions are discounted to the present value of the expenses as at the balance sheet date.

Determining the restoration or disposal obligations is based on various assumptions based on estimates that mainly concern the following parameters:

- time of occurrence of the costs of decontamination or disposal (including time of disposal of the residues),
- development of statutory regulations, e.g. limit values and required measures concerning the handling of radioactive substances (including prediction of the disposal methods),
- development of the costs of decontamination or disposal,
- discount factor.

Due to the uncertainty associated with the assumptions and estimates of the legal representatives, the valuation of provisions for restoration or disposal obligations in the course of our audit was a particularly important audit circumstance.

The information provided by Eckert & Ziegler Strahlen- und Medizintechnik AG on other provisions is contained in Note 32 of the notes to the consolidated financial statements.

### Auditor's response and findings

To assess the provisions for restoration obligations, we have assessed the approach taken by the legal representatives to determine the measures to be taken (e.g. cleaning). In order to identify the probable date of the dismantling, we have assessed, inter alia, the rental periods as per the existing leases and coordinated it with the underlying timetable. We have reviewed the scope of the measures and the dismantling obligations as well as the imputed costs assumed by the legal representatives for the valuation. To this end, we deliberately coordinated the selection of the areas and machines with the production areas and equipment and assessed the imputed costs by comparing the estimated costs with the current costs.

To assess the provisions for disposal obligations, we first obtained an understanding of the process of systematic quantitative recording and forward projection of radioactive wastes. As part of a sample inventory, we reviewed the inventories, obtaining third-party confirmations for stocks held at third parties with a deliberate selection process. We compared these stocks with the inventory of radioactive residues. In a next step, we gained an understanding of the planning system and of the planning process as well as of the essential assumptions and expectations made by the legal representatives in the planning with regard to the disposal methods, the associated costs, and the planned disposal times. We reviewed the plans for the years following the balance sheet date by analysing and assessing the planning parameters in detail and mathematically reconstructing the cash value calculated by the client using the discounted cash flow method. For this purpose, we correlated the cost developments and delivery times planned by the legal representatives to our understanding of the existing disposal options. We had the assumptions of the company's expert presented to us in detail and substantiated. We also used an analysis of deviation from planned targets in the past to determine whether costs were properly assessed in the past. To assess the discount rate, we consulted our valuation specialists who reconstructed the discount rate used.

As a result, we were able to check whether the valuation of the provisions for dismantling and disposal obligations shown in the consolidated financial statements is adequate.

### OTHER INFORMATION

The legal representatives are responsible for the other information. Other information includes:

- the separately published non-financial consolidated statements referred to in Section 5.1 of the combined management report
- the separately published consolidated corporate governance statement referred to in Section 5.4 of the combined management report
- the other parts of the annual report, with the exception of the audited consolidated financial statements and the combined management report and our auditor's report,
- the corporate governance report in accordance with No. 3.10 of the German Corporate Governance Code and
- the insurance pursuant to Article 297 (2) sentence 4 HGB on the consolidated financial statements and the insurance pursuant to Article 315 (1) sentence 5 HGB on the combined management report.

Our audit opinions on the consolidated financial statements and the combined management report do not extend to the other information, and accordingly we provide neither an opinion nor any other form of audit conclusion on it.

In connection with our audit of the consolidated financial statements, we are responsible for reading the other information and assessing whether the other information

- is materially inconsistent with the consolidated financial statements, the combined management report or our audit findings, or
- otherwise materially misrepresented.

## **RESPONSIBILITY OF THE LEGAL REPRESENTATIVES AND THE SUPERVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT**

The legal representatives are responsible for the preparation of consolidated financial statements that comply with the IFRS, as applicable in the EU, as well as the applicable German statutory provisions in addition pursuant to Article 315e (1) HGB, in all material respects, and are responsible that in compliance with these regulations the consolidated financial statements reflect a true and fair view of the financial position and performance of the Group. In addition, the legal representatives are responsible for the internal controls that they have determined to be necessary to enable the preparation of consolidated financial statements and that are free from material misrepresentations, whether intentional or unintentional.

When preparing the consolidated financial statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. They are also responsible for disclosing, where applicable, matters related to the viability of the business as a going concern. In addition, they are responsible for preparing the financial statements on a going concern basis, unless there is the intention to liquidate the Group or discontinue operations, or there is no realistic alternative.

In addition, the legal representatives are responsible for preparing the combined management report, which collectively conveys an accurate picture of the Group's position, is in all material respects consistent with the consolidated financial statements, complies with German legal requirements, and accurately reflects the opportunities and risks of future development. Furthermore, the legal representatives are responsible for the precautions and measures (systems) that they have deemed necessary to enable the preparation of a combined management report in accordance with the applicable German statutory provisions and to provide sufficient suitable evidence for the statements in the combined management report.

The Supervisory Board is responsible for overseeing the Group's accounting process for preparing the consolidated financial statements and the combined management report.

## **RESPONSIBILITY OF THE ANNUAL AUDITOR FOR THE EXAMINATION OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT**

Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report overall gives a true and fair view of the Group's state of affairs, it is consistent in all material respects with the consolidated annual financial statements, complies with the statutory provisions and accurately presents the opportunities and risks of the Group's future development, and to issue an auditor's report that includes our audit opinion on the consolidated financial statements and the combined management report.

Reasonable assurance is a high level of assurance, but not a guarantee, that an audit conducted in accordance with Article 317 HGB and the EU Audit Regulation in compliance with the German generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence economic decisions made on the basis of these consolidated financial statements and the combined management report.

As part of an audit, we exercise professional judgement and maintain professional scepticism. In addition, we identify and assess the risks of material misrepresentations – whether intentional or unintentional – in the consolidated financial statements and the combined management report, plan and perform procedures in response to those risks, and obtain audit evidence that is sufficient and appropriate to form the basis of our opinion.

- The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of the internal control system relevant to the audit of the consolidated annual financial statements and of arrangements and measures relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- We evaluate the appropriateness of accounting policies used and the reasonableness of the accounting estimates and related disclosures made by the statutory representatives.
- We draw conclusions on the appropriateness of the statutory representatives' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's continuing viability as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements and the combined management report or, if such disclosures are inadequate, to modify our audit opinion. We draw our conclusions based on audit evidence obtained up to the date of our auditors' report. However, future events or circumstances may lead the Group to being unable to continue its business activities.
- We evaluate the overall presentation, structure and content of the consolidated financial statements including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that gives a true and fair view of the financial position and performance in accordance with IFRS as adopted in the EU and the German generally accepted accounting principles in accordance with Article 315e (1) HGB, which apply in a supplementary manner.
- We obtain sufficient appropriate audit evidence for the accounting information of the companies or business activities within the Group in order to submit audit opinions on the consolidated financial statements and the combined management report. We are responsible for the guidance, supervision and execution of the audit of the consolidated financial statements. We bear sole responsibility for our audit opinions.
- We assess the consistency of the combined management report with the consolidated financial statements, its compliance with the law, and the picture it conveys of the Group's position.
- We perform audit procedures on the forward-looking statements presented by the legal representatives in the combined management report. On the basis of sufficient and appropriate audit evidence, we evaluate, in particular, the significant assumptions underlying the forward-looking statements of the legal representatives and assess the proper derivation of the forward-looking statements from these assumptions. We do not issue an independent opinion on the forward-looking statements or the underlying assumptions. There is a significant unavoidable risk that future events will differ materially from the forward-looking statements.

Among other things, we discuss with those responsible for supervision the planned scope and timing of the audit, as well as significant audit findings, including any shortcomings in the internal control system that we identify during our audit.

We provide a statement to those responsible for supervision to the effect that we have complied with the relevant requirements for independence and discuss with them all relationships and other issues that can reasonably be expected to affect our independence and the protective measures taken for this purpose.

From the matters we discussed with those responsible for supervision, we determine those matters that were most significant in the audit of the consolidated financial statements for the current period and are therefore the particularly important audit circumstances. We describe these matters in the audit report, unless laws or other legal provisions exclude public disclosure of the matters.

## **OTHER STATUTORY AND LEGAL REQUIREMENTS**

### **OTHER INFORMATION IN ACCORDANCE WITH ARTICLE 10 EU AUDIT REGULATION**

We were elected as annual auditor by the Annual General Meeting held on 30 May 2018. We were appointed by the Supervisory Board on 22 January 2019. We have been auditing the consolidated financial statements of Eckert & Ziegler Strahlen- und Medizintechnik AG continuously since the 2014 financial year.

We declare that audit opinions contained in this Auditor's Report are consistent with the additional report to the audit committee in accordance with Article 11 of EU Audit Regulation (audit report).

## **RESPONSIBLE AUDITOR**

The auditor responsible for the audit is Alexey Nekhin.

Berlin, 26 March 2019

BDO AG  
Wirtschaftsprüfungsgesellschaft

Weisner  
Auditor

Nekhin  
Auditor





# INDIVIDUAL FINANCIAL STATEMENTS OF THE ECKERT & ZIEGLER AG

## INCOME STATEMENT FOR THE PERIOD FROM JANUARY 1 TO DECEMBER 31, 2018

	2017 € thousand	2018 € thousand
1. Revenues	5,554	6,012
2. Other operating income	1,835	340
	<b>7,389</b>	<b>6,352</b>
3. Staff costs		
a) Wages and salaries	-2,506	-2,813
b) Social security contributions and expenditure on pensions and old-age support of which for pensions: € 29 thousand (previous year: € 18 thousand)	-344	-346
	-2,850	-3,159
4. Depreciations on intangible assets of the fixed assets and property, facilities and equipment	-423	-239
5. Other operating expenses	-3,209	-4,581
6. Income from profit-transfer agreements	4,715	4,456
7. Income from investments	4,119	3,795
of which from affiliated companies € 3,795 thousand (previous year € 4,119 thousand)		
8. Income from other investments and loans forming part of financial assets	28	0
of which from affiliated companies € 0 thousand (previous year € 28 thousand)		
9. Other interest and similar income	88	66
of which from affiliated companies € 0 thousand (previous year € 86 thousand)		
10. Interest payable and similar expenses	-239	-124
of which from affiliates: € 0 thousand (previous year: € 0 thousand)		
11. Taxes from income and revenue	-695	-557
<b>12. Profit after tax =</b>		
13. Annual net profit	8,923	6,009
14. Profit carried forward from the previous year	0	0
15. Transfer to profit reserves	0	8,800
16. Acquisition of own shares	0	-8,450
17. Unappropriated profits	8,923	6,359
18. Dividend	-4,131	-6,177
19. Adjustment to retained earnings	-4,792	-182
<b>20. Profit carried forward for the following year</b>	<b>0</b>	<b>0</b>

BALANCE SHEET AS OF DECEMBER 31, 2019	Dec. 31, 2017 € thousand	Dec. 31, 2018 € thousand
<b>Assets</b>		
<b>A. Fixed assets</b>		
I. Intangible assets		
Purchased industrial property rights and similar rights and values as well as licenses to such rights and values	758	674
II. Property, facilities and equipment		
1. Real properties, rights equivalent to real property and buildings	25	22
2. Other facilities and equipment, fixtures and fittings	356	327
	<b>381</b>	<b>349</b>
III. Financial investments		
1. Shares in affiliates	73,750	73,750
2. Loans to affiliates	0	206
3. Other loans	753	1,015
	<b>74,503</b>	<b>74,971</b>
	<b>75,642</b>	<b>75,994</b>
<b>B. Current assets</b>		
I. Receivables and other assets		
1. Receivables due from affiliates	4,715	4,514
2. Other assets	108	5,611
	<b>4,823</b>	<b>10,125</b>
II. Cash at banks		
	10,914	1,698
	<b>15,737</b>	<b>11,823</b>
<b>C. Prepaid and deferred expenses</b>		
	105	145
	<b>91,484</b>	<b>87,962</b>
<b>Liabilities and Shareholders' Equity</b>		
<b>A. Holders' equity</b>		
I. Subscribed capital		
Nominal amount of the contingent capital: € 0 thousand (previous year: 1,875 thousand)	5,293	5,293
minus nominal amount of own shares	5	230
	<b>5,288</b>	<b>5,063</b>
II. Capital reserves		
thereof for own shares: € 2,414 thousand (previous year: € 2,289 thousand)	51,395	51,520
III. Retained earnings		
Other retained earnings: € 8,472 thousand (previous year: € 22 thousand)	23,226	19,218
IV. Net profit for the year		
	8,923	6,359
	<b>88,832</b>	<b>82,160</b>
<b>B. Special reserves for contributions to fixed assets</b>		
	131	112
<b>C. Provisions</b>		
1. Provisions for pensions and similar obligations	377	386
2. Tax accruals	490	352
3. Other provisions	1,149	1,474
	<b>2,016</b>	<b>2,212</b>
<b>D. Liabilities</b>		
1. Trade liabilities	96	157
2. Liabilities toward affiliates	350	3,266
(including trade liabilities of € 277 thousand; previous year: € 106 thousand)		
3. Other liabilities	48	43
(including tax liabilities of € 39 thousand; previous year: € 43 thousand)		
(including liabilities related to social security of: € 2 thousand; previous year: € 3 thousand)	494	3,466
<b>E. Prepaid and deferred expenses</b>		
	11	12
	<b>91,484</b>	<b>87,962</b>

# GLOSSARY

## A

**Afterloader** for afterloading therapy: Short-term radiation in cancer treatment in which a mostly wire-bonded radioactive source is propelled electrically for a brief period into the target tumor area by means of a tube-like catheter or by cannulas. Several sessions are usually necessary

## B

**Brachytherapy** Contact treatment mainly in the form of irradiation with a minimal distance between the source of radiation and the tissue which is to be irradiated

## C

**Calibrated-reference emitters** Radioactive sources used as a reference standard for measuring instruments

**Carrier molecule** A carrier molecule is a molecule that carries the radiolabeled substance (e. g. radioactive <sup>68</sup>Ga) to the targeted area

**Calibration** Referencing of measuring instruments to specified standards

**Contrast medium** Medicinal product which improves the representation of structures and functions of the body in imaging processes

## E

**Eye applicator** Anatomically formed radiation source for radiotherapy for eye tumors

**Emitter** here: device that transmits radioactive rays. Sometimes also referred to as “source”

## I

**IFRS** Abbreviation for International Financial Reporting Standards. International accounting standards according to which these consolidated financial statements were prepared

**Implants** Natural or synthetic elements implanted in the body (here they are synonymous with seeds)

**Implantation** Placement or insertion of foreign materials into an organism

**Isotope** Chemical element having the same atomic number but different atomic weight. Isotopes can be stable or can disintegrate when subject to ionizing radiation (radioactive isotopes)

**Iodine-125** Radioisotope of iodine. Low-energy photon radiation is used therapeutically

## M

**Modular-Lab** Synthesis device for the production of radioactive diagnostics

**Myocardial scintigraphy** Nuclear medicine imaging test to investigate the blood supply to the heart

## N

**NASM** North American Scientific, Inc. (Nasdaq: NASM). Former competitor whose industrial sources business was acquired by Eckert & Ziegler in 2008

**Neuroendocrine tumors (NET)** Benign or malignant tumors that develop from hormone-producing (endocrine) cells

**Nuclear Imaging** Image processing for nuclear medical purposes

**Nuclear medicine** Medical area concerned with the diagnostic and therapeutic use of open, usually ephemeral radionuclides

## O

**Oncology** Medical area which deals with the origin and treatment of malignant tumors

**Ophthalmology** Science of the eye and eye diseases

## P

**Permanent implants** Implants intended to remain in the organism/body permanently

**Planning software** Special software to support the planning of brachytherapy treatment

**Positron** Elementary particle with the mass of an electron, but with positive charge

**Positron emission tomography (PET)** Imaging process of nuclear medicine that produces sectional images of living organisms, in which it makes the distribution of low level radioactive marked substances (radiopharmakon, PET-Tracer) visible by using photons created by positron decay

**Prostate** Chestnut-size organ situated around the neck of the male urethra

**R**

**Radioactivity** Property of unstable nuclides emitting spontaneously or through disintegration of the atomic nuclei alpha and beta rays or electromagnetic waves (gamma rays)

**Radiodiagnostics** Radioactive substances which are used to diagnose illnesses. See also Radiopharmaceuticals

**Radioisotope** See Radionuclide

**Radiolabeled peptides** Peptides are small, protein-like structures. The peptides in radiolabeled peptides act as carriers for radioactive particles (e.g. yttrium-90)

**Radionuclide** See Isotope

**Radiopharmaceuticals** Substances and medications which, based on radioactive nuclides, are effective and are used in diagnosis and therapy in nuclear medicine

**Raw isotope** Radioactive starting substance for producing radiation sources

**S**

**SagiNova®** afterloader, uses the afterloading technique where the radiation source (in the afterloader) is positioned in the immediate vicinity of the tumor via remote control and with the assistance of applicators. This allows the tumor to be irradiated without damaging the surrounding healthy tissue

**Seed** Small metal pins containing radioisotopes for interstitial radiation therapy

**Synthesis modules** here: components of the modular equipment system of the product Modular-Lab for automated synthesis of radiopharmaceuticals and radioactive chemicals

**T**

**Tracer** A radiochemical tracer is a radiolabeled substance that is absorbed into the metabolism after it enters the body and can be used for a wide range of analyses

**Tumor irradiation device** See Afterloader

**Y**

**Yttrium-90** radioactive isotope used with the internal radiotherapy among others for treating chronic-inflamed joint diseases (radiosynoviorthosis) or for cancer treatment. For the transport to the tumor the yttrium-90 is either coupled to active chemical ingredients or laden on little balls (see radio embolizers)

# FINANCIAL CALENDAR

May 7, 2019	Quarterly Report I/2019
May 15, 2019	Spring Conference in Frankfurt/Main
May 29, 2019	Annual General Meeting in Berlin
August 13, 2019	Quarterly Report II/2019
November 12, 2019	Quarterly Report III/2019
November 2019	German Equity Forum in Frankfurt/Main

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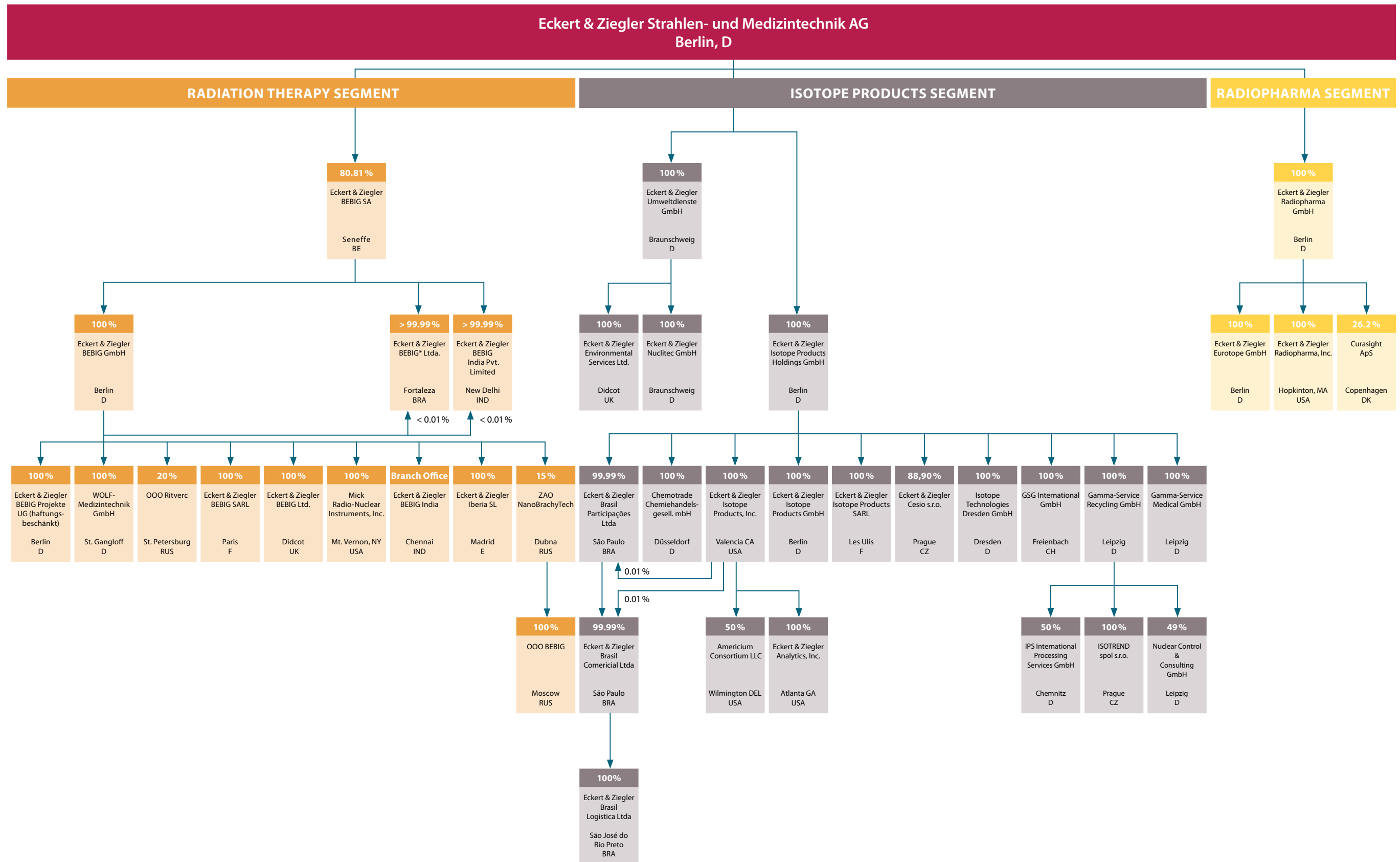
**KEY DATA ECKERT & ZIEGLER**

based on continuing operations

		Change	2015	2016	2017	2018
<b>Sales and Earnings</b>						
Sales	€ thousand	+ 16%	140,046	137,955	144,844	168,709
EBITDA	€ thousand	+ 8%	25,574	23,725	29,744	31,720
Depreciations	€ thousand	- 1%	8,764	8,737	8,645	8,574
EBIT	€ thousand	+ 11%	16,810	14,988	21,099	23,387
EBIT margin	%	- 8%	12%	11%	15%	14%
Tax rate	%	- 17%	33%	30%	31%	26%
Net profit for the year after taxes and minorities	€ thousand	+ 10%	10,718	9,550	14,701	16,133
Earnings per share	€	+ 12%	2.03	1.81	2.78	3.12
<b>Cash Flow</b>						
Cash flow from operating activities	€ thousand	- 22%	16,230	19,832	26,851	21,210
Liquid assets as of 31 December	€ thousand	- 6%	31,466	36,567	57,707	54,186
<b>Balance</b>						
Shareholders' equity	€ thousand	+ 5%	104,668	110,077	117,517	123,877
Total assets	€ thousand	+ 6%	196,676	199,465	216,987	229,051
Equity ratio	%		53%	55%	54%	54%
Net liquidity (liquidity minus debts)	€ thousand	- 3%	15,938	24,909	55,974	54,186
<b>Employees</b>						
Average number of employees	People	+ 6%	672	638	740	788
Number of employees as of 31 December	People	+ 3%	692	668	764	788
<b>Key figures share</b>						
Average number of shares in circulation	Item in thousand	- 2%	5,293	5,293	5,293	5,168
Book value per share as of 31 December	€	+ 12%	18.86	19.87	21.22	23.7
Dividend*	€	+ 50%	0.60	0.66	0.80	1.20

\*Dividend to be proposed to the Annual General Meeting by the Group

# CORPORATE STRUCTURE (DECEMBER 31, 2018)





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