

2018

Annual Report



TÜV NORD GROUP

Expertise for your Success

TÜV NORD GROUP at a glance

KEY FINANCIAL RATIOS 2018

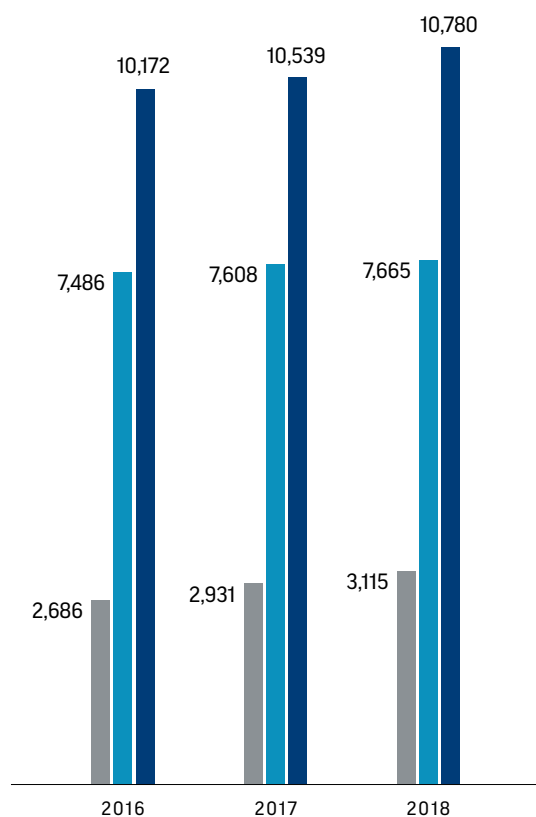
in € million

	2018	2017
EBIT*	80.2	77.5
EBT	80.5	76.6
Balance sheet total	924.0	888.4
Net financial position	21.9	32.9
Pension provision	507.2	484.9

* before special effects

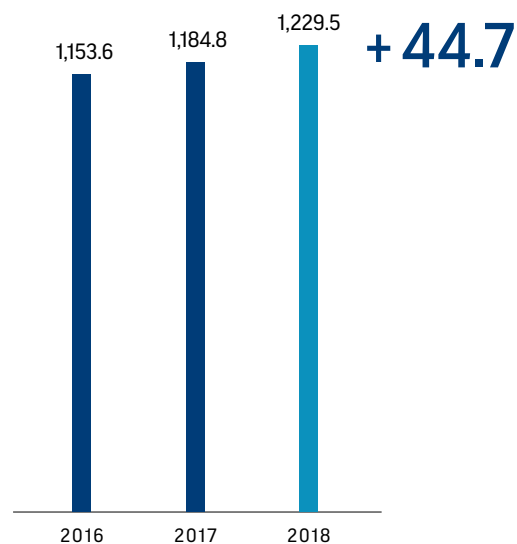
TREND IN WORKFORCE NUMBERS

■ International ■ Domestic ■ Total



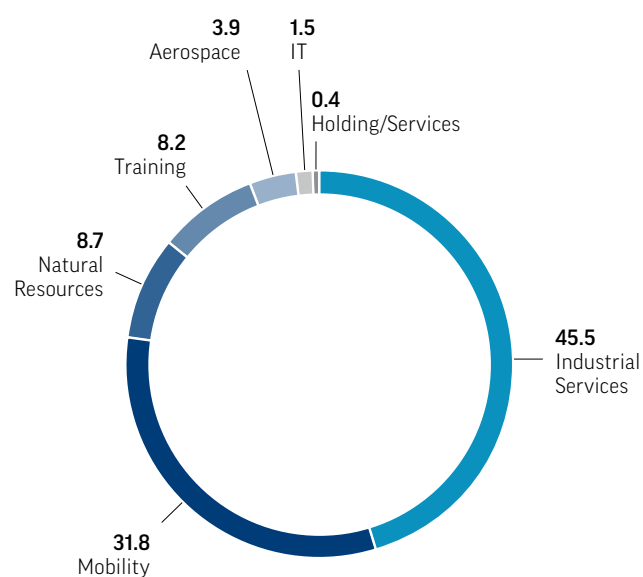
SALES TRENDS

in € million



SALES BY BUSINESS UNIT

in %



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Letter from the Chairman of the Board of Management



**Dear customers of the TÜV NORD GROUP,
Dear colleagues and partners,**

Exactly 150 years after our company was founded, we at TÜV NORD are witnessing, accompanying and co-creating the fundamental change in all areas of life and economic sectors that is being wrought by the digital transformation and the networking of the whole world. Over a period of fifteen decades, we have tested equipment, vehicles and products for mechanical and electrical safety. With digitalisation and the networking of things, IT security has become the third great field of knowledge and inspection to be fundamental to our work. Industrial robots, self-driving cars, hospitals, banks and the electricity grid need to function securely at all times and in all places and, at the same time, to be protected from cyber-criminals and hackers. We have developed customer-focused solutions for this new, extended responsibility to protect the products and processes of the Internet of Things:

- Worldwide IT certifications of Internet-enabled devices up to the highest levels of security and encryption for critical infrastructure and the large-scale data centres of industrial enterprises, utilities, banks, official bodies and ministries
- The inspection of the digital security mechanisms of digital identification systems, credit cards and health insurance cards
- A TrustCentre concept to protect digital user and driving data in vehicles that are at least partially autonomous

Our Group is also in the throes of transforming its own internal structures and processes. Using the methodology of the Digital Academy that we have developed in house, employees are undergoing a qualification programme aimed at the digital transformation and agile forms of development and cooperation. The Digital Academy has been so successful in the company that we are going to be offering this concept to customers as a standalone service as of 2019. Our magazine "Curiosity creates knowledge" offers a fascinating insight into the Digital Academy along with reports on our "Digital Minds" projects.

On the basis of our new mission statement, we also further refined our understanding of corporate responsibility (CR) in 2018 and are taking responsibility for the environment and society. To name just one example, we are already assessing the environmental impacts of our services and products from the development stage onwards. A CR roadmap brings together all our activities for the first time.

The TÜV NORD GROUP succeeded once more in boosting sales, earnings and other relevant financial ratios in 2018. The share of services offered abroad also increased once again.

In the name of the Supervisory Board, the Group Executive Committee and employee representatives, I offer my heartfelt thanks for your part in our successful collaboration and, especially, for the trust you have placed in the TÜV NORD GROUP. My special thanks go out to all our employees and partners world-wide who have been working with great dedication for our company and our customers. Our goal and our promise will remain what they have always been: to use our knowledge to contribute to the success of our customers.

Kind regards,



Dr Dirk Stenkamp
Chairman of the Board of Management

The Group Executive Committee



From left: **DIRK KRETZSCHMAR** IT business unit, **LUIS GÓMEZ** Aerospace business unit, **DR RALF JUNG** Industrial Services business unit, **HARTMUT ABELN** Mobility business unit, **JÜRGEN HIMMELSBACH** CFO, **DR DIRK STENKAMP** Chairman of the Board of Management and CEO, **HARALD REUTTER** Board Member Human Resources, **DR MAIK TIEDEMANN** Natural Resources business unit, **AXEL DRECKSCHMIDT** Training business unit.



Report from the Supervisory Board



In the year under review, the Supervisory Board once again continuously monitored the management activities of the Board of Management and regularly advised them in the management of the company. In the year under review, four regular meetings of the Supervisory Board took place, on 22 March, 12 June, 25 September and 4 December. In the meetings, the Supervisory Board heard reports from the Board of Management concerning the current situation of the Group and the major Group companies as well as significant business events and relevant changes. The Board of Management also delivered assessments of the opportunities and risks that might present themselves in the further course of the year.

At the meeting of 12 June, the Supervisory Board considered the customer-focused organisation of the Industrial Services business unit and the ongoing development of the Strategy 2020plus. At the meeting of 4 December, the budget for 2019 was discussed and approved; in addition, the Board of Management reported at this meeting on developments at the Essen site (Am Technologiepark).

The Board of Management informed the Supervisory Board regularly, promptly and comprehensively by word of mouth and in writing about all relevant issues of business development and the risk situation and about the situation and strategy of the Group, including the Group's main companies. There were also regular exchanges between the chairman of the Supervisory Board and his counterpart on the Board of Management. In this way, the Supervisory Board was kept abreast of intended corporate policy, corporate planning and ongoing business transactions.

In order to carry out its tasks and prepare its deliberations and decisions, the Supervisory Board set up two committees which effectively support the work of the plenum.

Three meetings and a conference call of the executive committee/ personnel committee took place in the year under review. The discussions focused primarily on the preparation of the plenary sessions and of the personnel and compensation decisions to be made by the Supervisory Board. Where necessary, the Supervisory Board was furnished with recommendations for decision-making.

In 2018 the Finance Committee met four times in advance of the Supervisory Board meetings and paid particular attention to the

annual financial statement, earnings trends, risk and opportunities management and the challenges with which the Group is confronted, particularly in respect of pension obligations, arising from the low-interest environment. In its meeting of 27 November, the Finance Committee addressed the plans for the 2019 fiscal year. Key findings were in each case reported on in the following Supervisory Board meetings.

The auditors appointed by the General Meeting of 22 March 2018, BDO AG from Essen, audited the annual financial statements of TÜV NORD AG and the consolidated financial statements, including the associated reports on the situation of the company and the Group, published by the Board of Management on 31 December 2018. The auditors issued an audit opinion that was without reservations. The auditors noted that the Board of Management had established an appropriate information and monitoring system whose design and management rendered it suitable for anticipating developments that might pose a risk to the continued existence of the company.

The financial statement documents and the audit reports for the 2018 fiscal year were discussed at length in the meeting of the Finance Committee on 2 April 2019 and the Supervisory Board meeting of 9 April 2019. The Board of Management and the auditors were present at the deliberations on the annual and consolidated financial statements. The auditors reported on the main findings of their audit and their findings concerning the internal control system and risk management. They also made themselves available to the Supervisory Board should the latter require additional information.

On the basis of its own audit of the annual and consolidated financial statements and the management reports and on the basis of the report and the recommendation of the Finance Committee, the Supervisory Board felt able to concur with the auditors' conclusions. No objections were raised. The Supervisory Board approved both the annual and the consolidated financial statements.

The period of office of the members of the Supervisory Board came to an end on 22 March 2018, and the Board was reconstituted by appointment of the Annual General Meeting and election by the staff. The newly reconstituted Supervisory Board met for the first time on 22 March 2018. Prof. Karl Friedrich Jakob was elected as chairman.

The Supervisory Board would like to thank all the employees worldwide, the company's managers, the Board of Management, the Group Executive Committee and the employee representatives for their dedicated and successful work in 2018.

The Supervisory Board



Prof. Dr. Karl Friedrich Jakob
Chairman

Hanover, April 2019

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Group Management Report

FUNDAMENTAL PRINCIPLES OF THE GROUP

Business activity

The TÜV NORD GROUP is a globally active technology group. Its workforce, which now numbers more than 10,000, has been the by-word for safety, independence and quality for 150 years. The employees test, inspect, certify, offer advice and qualify in accordance with many globally applicable technological standards. This allows the TÜV NORD GROUP to offer unparalleled holistic support and care to its various customer groups in this networked world. These include renowned global players and small and medium-sized enterprises with a regional and local focus, alongside organisations, institutions and consumers.

The TÜV NORD GROUP has divided its activities into six business units and the Holding/Services division and is active in the TICET (Testing, Inspection, Certification, Engineering, Training) market. Extensive consulting and training services are offered alongside the traditional testing business. The Group has a unique selling proposition in the sector as a whole, with services in the natural resources and aerospace fields.

- The certification, service and testing portfolio of the companies in the **Industrial Services** business unit includes specific individual tests and the management of complex security solutions.
- The **Mobility** business unit offers numerous services, such as vehicle and driving tests, vehicle assessments, solutions for used car management and development-related consulting for the automotive sector.
- The **Natural Resources** business unit offers engineering services in raw material exploration, mining, engineering, construction and infrastructure, product testing and building safety business fields as well as industrial testing and measurement technology.
- The core activities of the **Training** business unit are vocational education and training for specialists and managers, along with publicly funded training measures.
- The **Aerospace** business unit is involved in activities concerning the procurement, modification, testing and certification of electronic components for the aerospace industry.

- The **IT** business unit focuses on IT security assessment services for hardware and software according to the common criteria evaluation system as well as testing and certification services for IT infrastructures for the validation of the security and availability of data centres and cloud providers.

As of 31 December 2018, the Group with its management company TÜV NORD AG embraced a total of 84 fully consolidated companies, 39 of them domiciled in Germany and 45 abroad. The TÜV NORD AG consolidated financial statement includes all major companies in Germany and abroad in which TÜV NORD AG either directly or indirectly holds the majority of voting rights.

ECONOMIC REPORT

General economic and sector-specific conditions

As 2019 gets underway, there are major uncertainties concerning future trends in the global economy. The global economic growth of 3.8% in 2018, which represented an improvement on the previous year (2017: 3.4%), was driven in particular by a global expansion of production which was sustained until the summer before significantly tailing off in the second half of the year. On the one hand, the withdrawal of international investors led to a deterioration in the financial conditions in the emerging economies; in Turkey and Argentina this development took on crisis proportions. On the other, development was also affected by ongoing trade disputes.

The differences in the economic dynamics between countries have grown since the beginning of 2018. While the US economy picked up speed due to the strong impetus delivered by tax cuts and additional expenditure by the individual states, and growth in India quickened, the economies of China and the Eurozone faltered. The slowdown was particularly evident in France and Italy.

The upturn in Germany continued in 2018 before tailing off significantly at the end of the year. One of the mainstays here was the domestic economy, which was positively influenced by strong job creation figures and low interest rates. At 1.5%, growth failed to match that of the previous year (2017: 2.2%), a development which was essentially down to a loss of dynamism in the export sector. Moreover, the economic picture was affected in the summer by major fluctuations in production and supply in the automotive sector.

associated with the introduction of the new WLTP testing procedure on 1 September 2018. Due to the huge importance of the automotive industry, this had a macroeconomic impact.

A study carried out by MARKETS & MARKETS estimated the worldwide market for TICET services in 2017 at 185 billion US dollars, and consistent growth is anticipated over the next few years. The key growth markets are in the Asia-Pacific region, particularly in China and the equally fast-growing regions of India and South-east Asia.

With a market volume of about 47 billion US dollars (of which Germany's share is approx. 30%), Europe continues to command a significant proportion of the global market (approx. 25%). However, comparatively low growth rates, due among other things to weak growth in the automotive market and the current skills shortage, require increased investments in innovation and the internationalisation of the business.

As a recognised technology service provider, the TÜV NORD GROUP is the global byword for security and trust. Independent engineers and IT security professionals provide excellent solutions for security and quality and an outstanding competitive position from which to meet the extra requirements imposed by digitalisation, global networking and ever shorter production cycles.

Business Trends

The TÜV NORD GROUP continued to grow in the 2018 reporting period in spite of the slowdown in the domestic economy and intense competition on the German TICET market. Notwithstanding the expenditure on future and growth projects, earnings improved slightly across the board.

The sales and earnings trends announced in the 2017 management report and the forecast for 2018 were slightly exceeded. With the exception of Training, all the business units contributed to the growth in sales. All the business units made a positive contribution to earnings as planned.

The planned further sales increases in the Industrial Services business unit were fully achieved abroad and, due to the intensity of the competition, partly realised on the domestic market. As a result of operative improvements abroad and, to some extent, cost reductions in Germany, earnings rose in the reporting period.

The strategy of market positioning throughout the whole of Germany and increases in turnover in the areas of periodic vehicle inspections, damage appraisals and valuations in the Mobility business unit was consistently pursued. The business unit has shown a pleasing growth rate and exceeded the plan in terms of both sales and the positive earnings trend. This positive state of affairs was mainly attributable to enhanced cooperation with partners and increases in sales.

The slight increase in sales and earnings expected for the Natural Resources business unit was achieved on the back of the improved order situation in geo- and systems engineering and the seismology business.

The Training business unit failed to achieve the planned increase in sales, essentially due to a decline in orders in the training voucher business. Earnings exceeded the plan and the previous year, driven in particular by the increase in turnover in the Academy business.

Sales in the Aerospace business unit were in line with the planned volume. The planned slight increase in earnings was achieved on the back of projects with a higher rate of return.

The IT business unit has grown steadily in line with the plan. The planned decline in earnings was due to start-up losses in the consulting business.

The number of full-time employees of the Group in 2018 almost reached the planned figure. The increase in the workforce is accounted for by recruitment in the course of the planned innovation and digitalisation projects and in internationalisation and growth projects, principally in the Industrial Services business unit.

The Group innovation projects decided upon in the context of Strategy 2020plus were continued as planned with the aim of developing new services.

The trends within the Group in the 2018 fiscal year in comparison with the previous year were as follows:

- Turnover increased by 3.8% from €1,184.8 million to €1,229.5 million. The rise in sales of €44.7 million was essentially due to the Mobility and Natural Resources business units.
- Before special items, earnings before interest and taxes (EBIT) rose by 3.5% from €77.5 million to €80.2 million. The increase of

€2.7 million can primarily be attributed to the positive development in earnings in the Industrial Services and the Mobility business units and to savings derived from a Group-wide efficiency project.

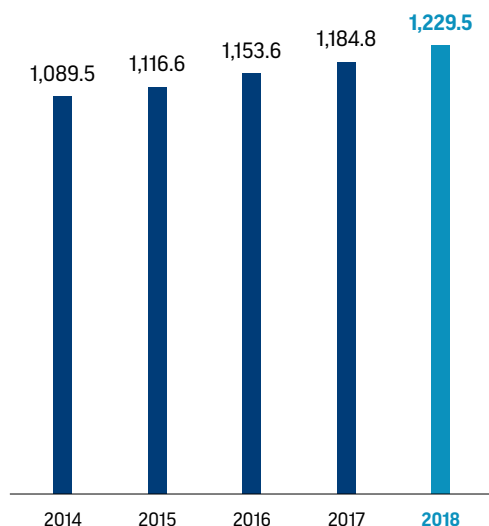
- The return on sales, measured by EBIT, was 6.5% as in the previous year.
- Earnings before tax (EBT) increased by €3.9 million to €80.5 million.
- The number of employees, converted to full-time equivalent, increased from 10,485 to an average of 10,735 in 2018. Productivity also increased.

Earnings

The 2018 fiscal year came to an end with a turnover of €1,229.5 million (2017: €1,184.8 million).

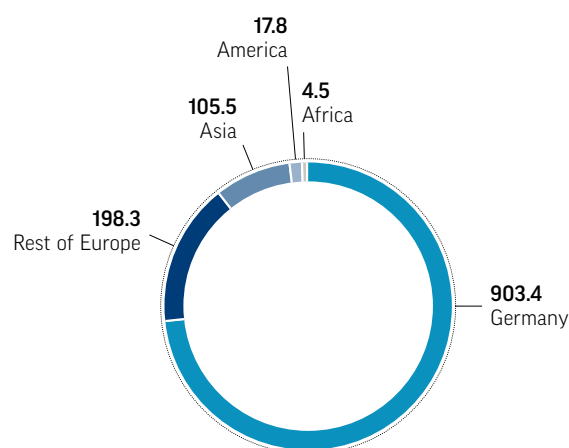
The following figure shows the trend of sales in the Group (€ million):

TREND OF SALES



The following figure shows the breakdown of sales by region (€ million):

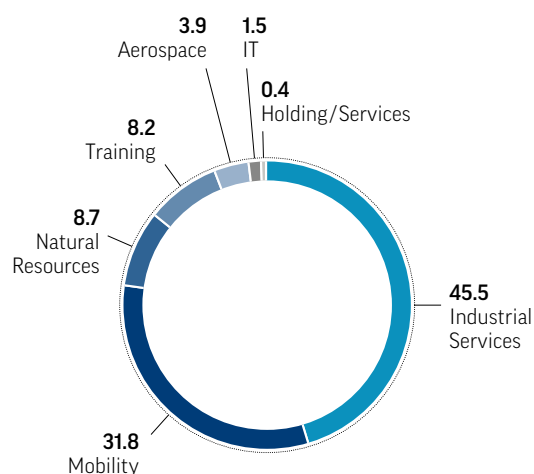
SALES BY REGION



The Group's domestic revenue in 2018 amounted to €903.4 million (2017: €872.2 million). Turnover from the international business amounted to €326.1 million (2017: €312.6 million) and achieved a share of 26.5%.

Broken down by business units and Holding/Services, the following overall picture emerged for the year 2018:

REVENUE BY BUSINESS UNIT



Due to the heterogeneous nature of their market presence, their various product spectra and their regional alignments, the individual business units developed very differently.

The Industrial Services business unit generated a turnover of €559.9 million (2017: €551.5 million), where the development of foreign business was especially positive. In Germany, sales of €361.0 million slightly surpassed the previous year's level (2017: €355.8 million). The increase in foreign sales to €198.9 million (2017: €195.8 million) was principally accounted for by the healthy development of the companies in China and India. The turnover of the Mobility business unit, at €390.5 million, was 6.6% higher than the figure of the previous year, €366.2 million. The increase in sales was primarily accounted for by transactions with cooperation partners and the realisation of higher sales for all the key services. In the Natural Resources business unit, a turnover of €106.5 million (2017: €96.0 million) was generated, the increase being mainly due to growth in geo- and system engineering and the seismology field. In the Training business unit, sales declined to €101.2 million (2017: €102.1 million) because of a fall in orders in the training voucher business. The sales of the Aerospace business unit, at €47.6 million, surpassed those of the previous year (2017: €45.8 million). The sales of the IT business unit increased to €18.6 million (2017: €17.4 million) due to higher project volumes in the IT security area.

Group expenses increased by 3.5% to €1,189.1 million during the year under review. The cost of materials reached a peak of €216.1 million in comparison to €198.4 million in the previous year. This is primarily attributable to higher costs for services bought in.

Personnel expense increased by 1.9% to €712.5 million.

Further information on expenses can be found in the Notes to the Consolidated Financial Statements, under No. 3, Consolidated Income Statement disclosures.

As in the previous year, all the business units contributed to the positive result of the Group. Earnings before tax (EBT) amounted to €80.5 million and were thus €3.8 million above the previous year's result of €76.6 million.

Net profit, at €51.2 million, exceeded that of the previous year by 7.0% (2017: €47.8 million).

Assets

The TÜV NORD Group balance sheet reveals a sound structure. Total assets increased to €924.0 million during the year under review, as against €888.4 million in 2017.

Non-current assets rose from €542.9 million to €548.2 million. This was primarily due to an increase in property, plant and equipment levels as a result of higher investment. The rate of coverage of non-current assets (equity plus pension provisions divided by non-current assets) amounts to 112.4% (2017: 107.9%).

Current assets, which make up 40.7% of total assets, are recognised at €375.8 million (2017: €345.5 million). The increase is due to a growth in receivables, which is essentially attributable to increased sales in the last quarter of 2018. Cash and cash equivalents decreased to €73.5 million (2017: €84.7 million).

The Group has additional hidden reserves, which primarily take the form of property ownership and investments.

Equity capital, at €108.7 million, is above the level of the previous year (2017: €101.2 million). The equity ratio amounts to 11.8% (2017: 11.4%). Due to the lowering of the discounting interest rate for pension obligations, actuarial losses in the Other equity positions amounting to €36.6 million in 2018 (2017: €33.6 million) were offset, thereby affecting the consolidated income statement.

In the 2018 fiscal year, €766.8 million (2017: €754.3 million) of plan assets were netted against pension provisions. The proportion of the provisions for current and future pension obligations that is not covered by plan assets amounted to €507.2 million (2017: €484.9 million). The cause of this increase was the significant reduction in the discount rate of pension provisions.

Reinsurance coverage of pension provisions increased by €9.9 million to €783.0 million. Through this allocation of funds, the degree of coverage adjusted for the effects of a change in the discount rate increased once again in comparison with the previous year.

Further information on the asset situation can be found in the Notes to the Consolidated Financial Statements, under No. 5, "Consolidated Balance Sheet disclosures".

Financial situation, cash flow

Notwithstanding the high amount of investment in, and expenditure on, innovations and digitalisation projects, the TÜV NORD Group still recorded a net positive financial position on 31 December 2018 and was thus not indebted as of the record date. The most important objectives of the conservative financial policy remain the further maintenance of the Group's good rating and the safeguarding of an adequate level of liquidity for the centralised financing of the subsidiary companies by the Group at a level that meets their needs. In addition, it is fundamental to the Group's financial strategy to ensure a broad measure of financial flexibility along with transparent risk and opportunity management.

The Deutsche Bundesbank, having investigated important financial metrics such as profitability, internal financing strength, liquidity and capital structure on the basis of audited financial statements, has for the twelfth year in succession awarded the TÜV NORD Group the accolade of eligibility for rediscount with the central bank. The Group thus belongs to the round of companies whose credit liabilities can be used by commercial banks as collateral with regard to the Deutsche Bundesbank. This guarantees the TÜV NORD GROUP a preferred position in terms of access to financial resources.

The cash flow (see "Consolidated Cash Flow Statement") amounted to €65.9 million and was essentially applied to investments in intangible assets and in property, plant and equipment, and to the reinsurance of pension liabilities. Capital expenditure excluding corporate acquisitions amounted to €57.6 million in the year under review as against €43.0 million in 2017. Of this, €51.8 million was invested by the German companies, and €5.8 million abroad. The focus was on the construction of real estate in Hamburg, physical investment in testing equipment, vehicle fleets and computer hardware and software. No material capital expenditure obligations existed as of the reporting date. The Group spent a total of €2.2 million (2017: €6.7 million) on the acquisition of companies and equity holdings during the year under review. All projects were assessed by value creation criteria; every potential acquisition or capital investment project was scrutinised and analysed both with regard to the return it would bring and also from the point of view of its impact on the consolidated balance sheet.

The Group's net financial position amounted to €21.9 million at the end of the year under review, a figure which, due to the high investments, was below that of the previous year (2017: €32.9 million).

The existing syndicated loan for the Group in the amount of €100.0 million had not been used as of 31 December 2018.

In 2018 the Group was in the position to meet its payment obligations at all times.

Overall situation

In view of the macroeconomic situation, the TÜV NORD GROUP is satisfied with the way the year under review progressed. However, notwithstanding the very good operating profit of the Group, every effort continues to be made to optimise the company's position in terms of its earnings, assets and finances. TÜV NORD GROUP assumes that the earnings, asset and financial positions will remain stable in the future.

NON-FINANCIAL PERFORMANCE INDICATORS

Innovation report

The TÜV NORD GROUP is in the throes of the digital transformation. This is having a significant impact on its business. The growth in networking in our digital world presents new opportunities and challenges. The Group needs a vibrant and purposeful culture of innovation, the targeted promotion of innovation and an established and active innovation management as the basis of its success if these opportunities are to be exploited and the challenges mastered. Digitalisation and innovation are therefore key drivers for the growth of the TÜV NORD GROUP.

The know-how of the TÜV NORD employees and its global presence form the ideal basis for the digital transformation and the Group's innovation process, both of which are needed to underpin the success of TÜV NORD GROUP's customers in the digital age. For this purpose, the TÜV NORD GROUP is also involved in universities and cooperates with research institutions. In addition, employees of the TÜV NORD GROUP are to be found in all relevant committees for the domestic and international development of industry-specific regulations.

The necessary culture change is being actively promoted from within the company by the work of the Digital Academy. This successful programme is in its second year and has met with a great deal of interest, including from beyond the TÜV NORD GROUP. Just under

20 digitisation projects have already emerged from the Digital Academy and are either being implemented or have already been completed. Employees from all the business units have been trained as digital experts and successfully re-integrated into the operational business. Due to the project's success and the demand for its services, the TÜV GROUP GROUP will continue to offer the Digital Academy to its customers in 2019.

Projects implemented by the individual business units in the reporting period included the following:

In the field of additive manufacture (3-D printing), a project to determine the properties of metal powder was carried out in the **Industrial Services** business unit. There were also new findings concerning the approval of pressure vessels produced using additive technology. The "remote services" topic continued to dominate in 2018. With the active marketing and expansion of its Digital Monitoring System, the Industrial Services business unit is now able to offer its customers continuous systems monitoring around the clock. At the beginning of 2019, TÜV NORD Systems won the German Excellence Award in the "Digital Services B2B" category for this innovative approach. In the remote audit field, trials were carried out to make it possible to provide optimal conditions to the customers at lower cost.

In the **Mobility** business unit, the holistic development of official services is taking place in working groups or companies set up for that purpose. Vehicle data in car dealerships and workshops will in the future be automatically transferred and recorded by scanners and voice recognition systems. As a result, the digitalisation project will provide a streamlined process with greater transparency for the customer. With the introduction of the TÜV NORD real-time damage report in 2018, TÜV NORD has digitalised the damage reports business and is positioning itself as a first mover in the vehicle valuation market. The remote technology in use means that the service can now be speedily accessed throughout Germany. Within the framework of defined sub-projects and intensive committee work on the subject of automated and networked driving, TÜV NORD is developing test requirements and working on requirements for security and safety. TÜV NORD is participating in the development of guidelines for type tests and test procedures with the aim of approving such vehicles for road use and is also involved in the development of test fields for automated driving functions.

The digitalisation trend is also continuing in the **Training** business unit, and the importance of continuing education and lifelong

learning is increasing. The focus is on blended learning – a hybrid of face-to-face learning and self-study – as well as on the development of the proJobTraining learning platform. Furthermore, simulation-based training using Virtual or Augmented Reality goggles for trainee professional drivers and train drivers is now also being introduced.

The **Natural Resources** business unit carried out many different research and development projects in 2018. Many such projects are focused on the fields of geotechnical engineering, energy distribution and energy storage, new concepts for extraction and use in mining, nuclear waste repositories, guarantees of origin for raw materials, intelligent sensor networks, model engineering and process control in mining. Particularly worthy of note is the already very successful participation of DMT in the Knowledge and Innovation Community EIT Raw Materials research and development consortium of the European Institute of Innovation & Technology and many other platforms, including mFUND, the modernity fund of the Ministry of Transport and Digital Infrastructure (BMVI), and EU Interreg and RFCS (Research Fund for Coal and Steel). Project funds just short of €2 million were raised in 2018 in the context of R&D subsidisation.

The project for a specialised information, ordering and service platform is still being implemented in the **Aerospace** business unit. In this Big Data project, key technical data are being made available to customers and partners. Over 1,100 users are already registered. Another innovation project is the development of a virtual laboratory that will allow customers to observe test processes and help design them in real time. On top of that, the companies of the business unit are also working in power technologies for semiconductors for high reliability, automotive and other industrial applications. Furthermore, the companies are developing photonics technologies to be used in quantum computing and quantum communications, both of which technologies are considered pillars of the next technological revolution.

The **IT** business unit is specifically examining the disruptive potential of new technologies, such as Blockchain and Artificial Intelligence (AI), for the purpose of identifying new business fields. TÜV IT is a member of the Working Committee for Artificial Intelligence of the German Institute for Standardisation (DIN) with its twin aims of influencing the development of norms and standards in the AI field and pioneering related services. Although the Internet of Things is increasingly gaining in significance in the context of digitalisation and networking, too little attention has thus far been paid to security aspects in the manufacture of IT products and systems. The IT business unit is therefore actively participating in

the creation of protection profiles, security concepts and technical guidelines in the area of the Internet of Things that will form the basis of future, innovative services.

Employees

The compatibility of work and family life is an important issue in the TÜV NORD GROUP. Its family-conscious personnel policy is reflected, among other things, in flexible working hours, holiday activities for children and possible avenues for offering advice on particular challenges, such as those faced by employees in the care of family members. The TÜV NORD AG and many of its subsidiaries have been certified according to the "berufundfamilie" ("work and family") audit since 2009. The re-audit of this certificate was successfully completed in the 2018 reporting period. The TÜV NORD GROUP was for the first time audited as a whole, and the individual certificates issued to the various companies were thus combined into one single certificate for the Group.

The Gender Balance Programme launched in 2017 also continued in 2018. In the 2017 reporting period, initial measures were implemented with the aim of removing obstacles from employee career paths and providing equal opportunities for women and men in the technical professions. Other measures included those to balance the numbers of all sexes in the TÜV NORD GROUP workforce and at managerial levels. Further sub-projects were implemented in 2018. For example, a talent relationship management approach was created. The external talent pool to be integrated into this is being established with an equal share of candidates of all sexes matching the company's target group. The inclusion of gender and language as a foundational element in the corporate wording underscores the intention to use gender-neutral language in all corporate communications from now on. In 2019, the aims and objectives of the Gender Balance Programme will be pursued as before as part of a new diversity project.

A gender balance will also contribute to the attractiveness of the TÜV NORD GROUP as an employer. The Group aspires to be equally attractive to good applicants of all sexes. The Group is an interesting and attractive employer, in particular for engineering and natural science graduates. According to the UNIVERSUM study, the TÜV NORD GROUP is one of the "TOP 100 employers" for young professionals and students. The TÜV NORD GROUP was also singled out by Kununu for a similar accolade, that of "Top Company". As an employer, the TÜV NORD GROUP is, moreover,

the byword for open and authentic public communication. Since 2012 the Group has been the proud bearer of the Kununu "Open Company" seal of quality, which is confirmation of the implementation of this guiding principle.

With the aim of engaging with and promoting these values, a global employee survey was once again carried out in 2017. This led to the identification and implementation of some specific improvement measures in the 2018 reporting period. The objective of the new employee survey was to review the success of the measures undertaken as a result of its predecessor in 2014. It also included new questions, concerning, for example, the issues of innovation and digitalisation. The 6,593 employees who took part in the employee survey amounted to 63.5% of the total workforce, a significant increase on 2014 (57.2%). When it came to the most important parameter – the Commitment Index, which expresses the strength of employee bonds with the company – the high level of commitment achieved in the previous survey was successfully maintained.

As of 31 December 2018, the domestic and foreign companies of the TÜV NORD GROUP employed an average of 10,735 staff (converted to full-time equivalent) in comparison to 10,485 in the previous year.

Including the experts provided by the associations, the average number of full-time employees was 10,780 (2017: 10,539). On the sampling date of 31 December 2018, the absolute number of employees was 13,693. The proportion of women working in the Group is approximately 28%.

7,665 of the employees work in Germany. The number of employees abroad increased in 2018 to 3,115. The largest business unit is Industrial Services, with 5,768 employees in Germany and abroad, followed by the Mobility business unit with 2,660 employees.

With its dual system of vocational training in tandem with dual courses with integrated training and practice, the Group offers attractive opportunities for school-leavers and young professionals. This has been rewarded with success: In 2018, a trainee was awarded the accolade of the state's best IT specialist in system integration.

Roughly 40 new recruits are currently preparing themselves for their future positions of responsibility in the TÜV NORD GROUP in the context of their dual studies. In the 2018 reporting period,

the focus was on the recruitment of six new members of staff in (applied) information technology. Various models of the training and this dual curriculum are being offered at many sites in the Group.

With the aid of inter-regional partnerships with academic institutes, the TÜV NORD GROUP has been sponsoring students from Germany and abroad since 2008. The partners include the Leibniz University of Hanover, the University of Hanover, the Hamburg University of Applied Sciences and the Technical University of Braunschweig.

Since 2014, the TÜV NORD GROUP has been sponsoring school students. With the START scholarship we made it possible for a grant recipient from a migrant background to prepare properly for her higher school-leaving exam.

It is the know-how and technical expertise of the staff that form the basis for the long-term success of the TÜV NORD GROUP. For this to be maintained, a comprehensive portfolio of measures for the training and development of staff and managers alike is indispensable. Over the next few years, preparation for the digital transformation will be at the heart of the training measures, involving the staff in shaping this change process in order to exploit the existing opportunities and value-creation options.

In 2018, €8.0 million was spent on internal and external training events (2017: €7.0 million). The promotion programmes to prepare staff for management tasks were further developed and adapted to the needs of the individual target groups. A major goal of these programmes was to enhance the networking of managers from different business units and international companies. For instance, the new international middle-management programme with 30 participants from 13 countries was carried out for the first time to very positive acclaim; this programme incorporated alternative learning forms such as e-learning and blended learning. A mentoring programme was also introduced in which managers from the Group were recruited to offer support and advice to promising young executives over a period of twelve months. The focus here is on the targeted transfer of professional and personal experience and knowledge in a protected and non-hierarchical relationship.

The TÜV NORD GROUP offers its staff a wide range of health-promoting options in the context of its occupational health management policy. The measures are free of charge to the employees, who can make use of them in accordance with their individual needs

and interests. Various sporting activities are also offered at many of the sites.

The safety of the employees is a major concern for the Board of Management. Due to the large number of cross-border activities carried out in the TÜV NORD GROUP, a concept was developed to improve on the previous travel risk management policy. The aim is to offer preventive measures and automated information processes to prepare members of staff as thoroughly as possible for foreign trips in respect of health and safety issues and to continue to support such employees when they are away from home. The concept was implemented in two companies in the 2018 reporting period and is still being trialled. The expansion of this concept to cover the whole Group is envisaged.

The average length of service in TÜV NORD GROUP, at over ten years, is higher than the comparable figures from the competitor companies. This shows just how important it is for the Group to have a culture that strengthens the bonds of loyalty between the employees and their companies.

The Board of Management would like to thank all the staff and company managers, both at home and abroad, for their commitment. The success achieved in the year under review would have been impossible without their dedication to their work. Their thanks also go out to the employee representatives for their trusting and constructive cooperation.

REPORT ON EXPECTED DEVELOPMENTS, OPPORTUNITIES AND RISKS

Report on expected developments

The leading German economic research institutes expect significantly weaker growth in the global economy as a whole in 2019. This forecast is due in particular to the ongoing trade dispute between the United States and China and declining growth in the latter. Likewise, after growth of 1.9% in the Eurozone in 2018, significantly lower rates of growth are also predicted here for the next two years. Brexit represents the biggest short-term economic risk, as it is currently difficult to gauge the negative economic impact of the UK's departure from the EU. According to the current forecasts of leading German economic research institutes, the heavily export-dependent German economy will also grow significantly more

slowly than in previous years. Growth forecasts for 2019 are expected to average out at 1.5%; by way of contrast, in forecasts made at the end of 2017, real GDP was expected to rise by just under 2% in 2019. A slowdown in the domestic economy, caused among other things by a growing skills shortage, could also inhibit growth.

A further growth driver in the dynamic global TICET market in addition to the harmonisation of standards and guidelines is the introduction of new legal frameworks and standards. Growth is being further stimulated by rising consumer demand in the emerging markets. The increasing number of product recalls and the rise of piracy and plagiarism are leading to a growing demand for testing services and certificates. In contrast, relatively low growth rates on the domestic and European markets, high levels of competitive pressure and the existing skills shortage may have a negative impact on the growth of the European market participants.

For the 2019 reporting period, the TÜV NORD GROUP thus expects a moderate increase in sales with a rate of growth slightly in excess of the level achieved in 2018. This does not take into account possible effects from the acquisition and sale of companies. The major growth drivers are the Mobility, Natural Resources and IT business units.

The TÜV NORD GROUP anticipates as before that all the business units will continue to contribute positively to earnings. A positive operative result is anticipated for the Group as a whole, albeit one which, due to high levels of expenditure on future projects, will be slightly below the operative level of the 2018 reporting period.

For the **Industrial Services** business unit, moderate organic sales growth is expected in the classic business fields, both in Germany and abroad. In international business, the China and India regions are likely to make a particular contribution to the increase in sales. In 2019 reporting period, the costs of digitalisation and internationalisation projects will continue to have a dampening effect on earnings, with the consequence that an operative result on a par with that of 2018 is anticipated.

For the **Mobility** business unit, the growth trend in sales and earnings is expected to continue. This is mainly due to the expansion of the partner organisation as well as the digitalisation and further development of services e.g. in the damage report and valuation fields.

The **Natural Resources** business unit expects the investment climate in the international commodity markets to stabilise. Moderate growth in revenue and earnings is anticipated, especially in the Industrial Engineering segment. At the same time, the business unit is striving to reduce its dependence on the commodities markets by shifting business activities into international markets. To this end, the intention is to develop new products and services in the context of innovation projects.

The **Training** business unit expects sales and earnings to decline in 2019, mainly due to the closure as planned of the training and education system for the mining industry. Moreover, a slight decline in the Academy business is likely. In 2019, the lucrative seminar business spurred by the General Data Protection Regulation (GDPR) will tail off.

The **Aerospace** business unit does not anticipate an increase in sales and earnings for 2019. The planned expansion of engineering services will be counterbalanced by a decline in the components business, due in particular to a reduction in the number of contracts being awarded by the ESA.

The **IT** business unit is planning significant sales increases, particularly in the IT security field. However, the relatively high start-up costs mean that earnings in 2019 will remain at the level of the previous year.

The planned increases in turnover in the Group go hand in hand with a scheduled increase in the number of employees for 2019. The Group will focus on the productivity of its staff, taking into account growth opportunities on both domestic and foreign markets. The increase in the workforce is accounted for by recruitment in the course of planned innovation, digitalisation, internationalisation and growth projects, principally in the Industrial Services, Mobility and IT business units.

The innovation projects identified in the context of the Strategy 2020plus should contribute to the organic growth of the Group in the long term. These projects will continue in 2019 with the aim of developing new services. In their innovation projects, all the business units are engaging with global megatrends such as Industry 4.0, the Internet of Things, critical infrastructure and connected cars, with the aim of adopting these developments in innovative and profitable business models.

Risk and opportunity management system

Its international presence means that the TÜV NORD GROUP is exposed to a wide range of risks but also well-positioned to take advantage of opportunities. The risk and opportunity management system is therefore an important element of corporate governance. Early identification and forward-looking management form the basis of a systematic risk and opportunity management policy.

Regular analyses of market and competition data (market intelligence) are an important element in the risk and opportunity management system. Market potentials are continuously monitored to identify overall economic and sector-specific opportunities in good time. At the same time, the TÜV NORD GROUP is concentrating simultaneously on established markets in the industrialised nations and growth markets in the emerging economies. The recording and management of risks to the future development of business activities takes place in the context of the risk management system. The strategy of the existing risk management system consists in the systematic identification, evaluation, aggregation, monitoring and notification of the existing risks across the Group and implementation of the corresponding measures for risk reduction or elimination in all the companies in which the TÜV NORD GROUP holds a majority stake. These risks are identified by the end of each quarter in all the business units in a standardised, IT-based, periodic process. As no single instrument is capable of identifying all the risks, the risk management system provides for a combination of different instruments and methods for risk identification. The identified risks are analysed and evaluated, taking into account the potential levels of damage and likelihood of occurrence, so that countermeasures for risk mitigation or elimination can be coordinated or developed to complement existing measures. On the basis of the risks that continue to exist after the implementation of countermeasures, a report is sent to the risk management department of the TÜV NORD GROUP. Key risks that might jeopardise the very existence of the Group are reported immediately as ad-hoc notifications outside the regular reporting schedule.

The risk management system is so structured as to ensure that the individual risks and their impact on the Group are determined in order to accurately map the risk situation of the Group.

Where necessary, financial provision is made for individual risks. Furthermore, the Group has a centralised insurance management system, which uses appropriate insurance contracts to limit the possible financial impact of risks to a defined excess.

The Group Executive Committee, the Board of Management and the Supervisory Board are kept informed at regular intervals of the current risk situation of the Group. They discuss at length the causes of the risk situation and any measures taken in response to it. Additionally, the effectiveness of the risk management system is verified by the corporate audit department and external auditors. The results of these audits are also reported to the Board of Management and the Supervisory Board.

Risks and opportunities for TÜV NORD GROUP

With its diversified services, the Group is subject to a wide range of risks but well-positioned to take advantage of a whole raft of opportunities. None of these have significantly changed in a year-on-year comparison.

In the 2018 reporting period, no risks were identified which might either individually or collectively endanger the survival of the Group or substantially impair its asset, financial and earnings position. As far as can be seen at present, there are no risks in the foreseeable future which might jeopardise the survival of the Group.

Interest rate risks can arise in connection with pension obligations. The plan assets intended to finance the pension obligations are managed in a fiduciary capacity by the TÜV NORD PENSION TRUST e.V., which was founded in 2008. Changes to the actuarial interest rates in the valuation of pension obligations can have an impact on the cash value of the discounted pension obligations and thus influence the equity capital and overall earnings.

The Group is not exposed to any material price, credit loss or liquidity risks, or to risks arising from fluctuations in cash flow. The Group's financial assets are invested in such a way that, as far as can be seen at present, no material risks exist.

Digitalisation and global networking – with all their manifestations such as Industry 4.0 and autonomous driving – are both an opportunity for, and a challenge to, the TÜV NORD GROUP.

The individual business units report the following risks and opportunities in their business activities:

The **Industrial Services** business unit expects its business to continue to develop positively in the coming years. The business unit is exposed to risks, above all in its core European market. Intense price

competition in tandem with equally intense competition with regard to the recruiting of staff, especially engineers, may have a negative impact on the achievement of its objectives. Digitalisation offers the opportunity both to mitigate the skill shortage threat posed by demographic developments and to slim down processes. However, there is a real risk in Germany that regulations will be amended with the effect that previously mandatory tests will no longer be required and/or other specialist companies will be granted permission to conduct tests alongside the experts currently charged with the responsibility for doing so. Opportunities for the expansion of business activities lie in offering new services and in the expansion of existing services: for example, the Group's market presence in the fields of wind energy, railway technology, food and medical devices is being geared to international markets. To realise these opportunities, we set in train the implementation of an organisational structure that focuses even more single-mindedly on the customers. Using this structure, all the companies within the business unit will from January 2019 be controlled using a standardised process. In addition, the sales activities of the business units are being intensified. Alongside the emphasis on the acquisition of major national and international projects, a strong focus is being placed on the expansion of cross-selling activities.

As a result of the amendment of the Atomic Energy Act in 2011, the nuclear business is confronted with the medium- to long-term risk of declining orders in Germany. Opportunities are presented by activities in the domestic decommissioning and waste management market and, in the long term, in connection with final nuclear waste disposal. The integration of German and international companies into the new customer-focused organisational structure in the nuclear field is opening up new possibilities for participation in tenders on international markets.

In the certification business, changes to the statutory base make it impossible to rule out the possibility that individual services will become obsolete or be cut back. However, due to the high level of diversification and the heterogeneity of the customer structure, this risk is manageable. The risk remains that accreditation bodies will impose drastic sanctions, up to and including the revocation of accreditation for certain areas, in the event of violations of the rules by individual employees of the certification company. In the Industrial Services business unit, a centralised accreditation management system is being installed to minimise the risks through targeted redundancies and internal auditing. Opportunities will arise through process optimisation and investments in the areas of

digitalisation alongside energy management, social standards and consumer protection.

For the **Mobility** business unit, the previous premises and conditions remain largely unchanged. The development of the business is thus expected to be stable in the coming years. The customer-group-oriented strategy of the Mobility business unit fundamentally revolves around the recognition of sector-specific risks and changes in market conditions in the segments and regions in the context of market and competition analyses.

The process of concentration in the car dealership market requires the Group to offer services throughout Germany. This trend is being countered with increasing success by the establishment of a national market presence in the form of franchise partners.

The Group is courting the staff of its competitors just as assiduously as it is new customers, although this strategy gives rise to a risk that top performers will be lost. Targeted measures are being implemented to find suitable applicants for vacant positions and to enhance the loyalty to the company of top performers.

The risk remains that the lack of evidence of calibration of the test equipment in car dealerships and workshops will make it impossible to carry out testing activities on site. The ongoing expansion of capacities for calibration services on the market will contribute to the solution of this temporary challenge. To meet the demands of the market, the Mobility business unit has implemented the construction of DAkkS-accredited calibration laboratories. TÜV NORD's own equipment at technical inspection centres is gradually being calibrated by TÜV NORD employees when the due date for calibration arrives. There are thus no risks associated with the Group's own equipment.

No discernible risks to the Mobility business unit have arisen out of the exhaust emissions scandal that was uncovered in the 2015 reporting period. Neither a slump in sales nor a loss of reputation have been identified. The scandal has impacted on the type approval process in the form of changes to testing and measurement procedures and the increased use of appropriate measuring technology. Measures were successfully taken to ensure the implementation of exhaust gas type testing in accordance with the WLTP standard. As of 2018, tailpipe emissions measurements will be made mandatory once again for all vehicles to ensure the maximum effectiveness of the periodic exhaust emissions tests.

Technological developments in the automotive sector are resulting in changes in the requirements on data protection and data security. The increasing complexity of equipment and vehicles requires that the existing tests be supplemented by the testing of software for security management purposes. The Group sees opportunities to expand business activities in the manufacturing business in the form of the further development of methods to test systems installed in vehicles. The offer of vehicle valuations in growing second-hand car markets around the world presents further opportunities. Penetration of the market will be facilitated here by the use of new technologies and the development of targeted collaboration.

The expectation in the **Natural Resources** business unit is of an improvement in the investment climate in both the international commodities and infrastructure and plant construction markets and of an increase in demand for services related to commodities. The business unit's project business is subject to special complexity risks as well as to risks that arise from increasing competitive pressure. New services and products to compensate for the loss of sales in the German coal-mining industry are being developed in the framework of the innovation projects. Opportunities are arising from the increasing demand in the engineering, exploration and plant and product testing fields in Germany. The infrastructure and plant construction and exploration markets in India also offer growth opportunities.

For the companies of the **Training** business unit, falling unemployment could give rise to risks in the coming years, as it may lead to a substantial reduction in the number of contracts for training measures financed from public funds. The companies are mitigating the risk of regionally uneven reductions in order volumes with temporary training sites and the approval of new qualification measures to allow them to respond flexibly to needs as they emerge. Nursing and healthcare are two areas which will in the future offer increasing opportunities, as the need for caregivers is increasing due to demographic trends. The training centres for healthcare and nursing offer initial and retraining measures alongside training and qualifications in geriatric care in the form of state registered seminars for care of the elderly. The greatest risk is currently to be found in the shortage of registered course heads in the field of healthcare and nursing. Constant training and information requirements are to be expected as a result of technical developments or changes to rules and regulations, especially in the TÜV-specific areas.

The companies of the **Aerospace** business unit are partially dependent upon successful partnership with the electronic component

manufacturers. In the market for satellite construction there is a risk that the component manufacturers may enter into direct business relationships with the builders of satellites or systems, which could affect part of the business. A specialised information, ordering and service platform has been developed to minimise the potential negative impact. The idea behind the project is to improve the partnership with the component manufacturers and at the same time to create a marketing platform for customers. Prospects for business expansion are also offered by increased growth in Europe and other emerging markets as well as the expansion of existing services and their marketing for other high reliability sectors.

Particular risks for the companies in the **IT** business unit arise from the ever intensifying shortage of IT security experts. Competition for the services of qualified specialists will continue in the coming year. As there are very few trained IT security specialists on the market, further investment will be required in the search for employees with potential and their subsequent training and retention.

Risks to the IT business unit might also arise through the burgeoning market for private IT security seals. Consumers cannot distinguish these seals from official rules which are based on approved standards. Neither the depth of the testing nor the testing methods themselves are discernible for the consumer. These seals are being awarded by unqualified providers of IT security seals despite deficiencies in the performance of the tests. Successful cyber-attacks on these inadequately tested products with their putative "TÜV guarantee" might have a negative impact on the perception of IT security seals or the reputation of the TÜV brand. It is thus imperative to play a positive role in the development of appropriate quality seals and to establish an appropriate testing regime which can meet the demands of an increasingly networked environment. Numerous opportunities for the IT business unit may arise from the increasing investment of companies in information and cyber-security.

Further opportunities may also arise from the draft bill for the creation of a central European authority for cybersecurity, which is represented by the European Agency for Network and Information Security (ENISA). The IT business unit has been liaising intensively with ENISA for some time and aspires to closer collaboration with it in the future. As far as is currently known, ENISA is to be granted sovereign authority over IT security in Europe as well as over the testing procedures, with the exception of high security, which will remain in the domain of the nation states. National procedures

will thus remain in place. The principle of conformity assessment will expand the evaluation business field in which TÜViT has specialised. The number and complexity of the products to be certified could increase significantly due to changing security requirements.

CORPORATE GOVERNANCE

For the effective implementation of corporate governance, the TÜV NORD GROUP takes its guidance from the requirements imposed by the German Corporate Governance Codex on capital-market-orientated companies. The governance structure is thus consistently aligned with the globally recognised Three Lines of Defence (TLöD) governance model and is the byword for responsible management and control with the aim of long-term value creation. With its three connected lines of defence, of which the first is operative management, the second risk management, controlling, law, compliance etc., and the third internal auditing, the TÜV NORD GROUP guarantees the lawfulness of all its business processes and organisational structures along with the efficiency and effectiveness of its established internal control system (ICS).

The Compliance Management System (CMS) of the TÜV NORD GROUP, which was established over 10 years ago and has been awarded multiple certifications, is an essential element of corporate governance as stipulated by TLöD. Taken together with the realignment of the Group's mission statement and values, these strategies are a means of effectively preventing potential risks and averting damage to the TÜV NORD GROUP. The central CMS in TÜV NORD AG, with its Compliance point of contact which coordinates compliance issues and tasks, has a key role to play here. This central Compliance point of contact is available to all employees. Appropriately conceived and clearly formulated policies and regulations, accessible to all staff at all times via the Intranet, are fundamental factors when it comes to ensuring good corporate governance. The adoption of a corporate philosophy and a binding code of conduct have given employees a concrete framework of guidelines for their actions, thus reinforcing good business practices in compliance with the law. The corporate philosophy and code of conduct are regularly reviewed and updated. Information events and training sessions are organised to enhance staff awareness of the significance of compliance; this is because TÜV NORD aspires to a preventive compliance approach and a corporate culture in which heightened awareness among the staff precludes the possibility of breaches of the rules.

The key principles of the TÜV NORD compliance strategy are adherence to applicable law, respect for ethical values and sustainable action. Compliance is also an important assessment criterion in the selection of its suppliers and business partners and is guaranteed by a Compliance Code for suppliers and business partners which forms the basis of existing and future business relationships. By signing the agreement on the Compliance Code, the suppliers of the Group undertake to act in the spirit of the TÜV NORD compliance standards. These include the basic requirements of human rights, equal opportunities and non-discrimination, environmental protection, product and occupational safety, the observance of the law and the extirpation of corruption.

Members of staff, business partners and customers have a further opportunity in the form of an ombudsman system, bound by principles of confidentiality and anonymity, to communicate compliance issues or draw the Group's attention to breaches of the compliance regulations of the TÜV NORD GROUP. A renowned lawyer, appointed as an external point of contact for all employees, customers and business partners, gathers information on any violations of the law or policy to which he is alerted.

Compliance with the corporate governance rules and regulations is continually monitored by the internal audit department through its risk-orientated audit planning. The quality management system implemented by the Group's internal audit department aims to guarantee the efficiency and effectiveness of its auditing work. The effectiveness of the established processes is regularly confirmed by an external and voluntary audit in accordance with the DIIR (German Institute of Internal Auditing) standard.

The CMS has been tested by external auditors on the basis of the IDW auditing standard PS 980. The audit report deemed the implementation and orientation of the CMS to be appropriate. The verdict of the audit confirms with sufficient confidence that the compliance management system is suitable for both the identification of risks of major violations of the rules and the prevention of such violations in the first place.

Awareness and sensitivity concerning compliance at corporate management level and among the employees have been deemed exemplary across the Group over a sustained period. Regular compliance queries submitted by the employees and the recommendations for conduct issued in reply in advance of active business transactions are effective and efficient measures for the

prevention of damage. Risk-based process controls, such as, for instance, a compliance check for business partners, systematically reduce potential compliance risks. The tracking, sanctioning, evaluation and documentation of breaches of compliance represent an integral part of the continuous improvement process. In addition to the continuous supply of up-to-date information, the Group's point of contact for compliance presents a compliance report to the Board of Management and to the Group Executive Committee. These measures will further strengthen the tried-and-tested compliance structures and permanently reinforce awareness of the mandatory nature of TÜV NORD compliance in the Group's day-to-day business.

STATEMENT ON CORPORATE GOVERNANCE

Findings on the promotion of the participation of women in leadership positions according to Article 76 (4) and Article 111 (5) German Stock Corporation Act

The TÜV NORD GROUP pursues a strategy of diversity and is striving to increase the percentage of women in managerial positions¹.

The Supervisory Board resolved back in 2017 that it was not seeking to increase the number of women in the Board of Management and the Supervisory Board for the period ending on 30 June 2022. Should any subsequent appointments become necessary, women will, as always, be offered the same opportunities as men in both bodies.

The targets were either met or exceeded by 30 June 2017. For the first and second tiers of management below the Board of Management, the target of 30% was met. For both targets, the deadline set for implementation was 30 June 2022.

For the other affected companies in the Group, the targets for the proportion of women in the Supervisory Board, the Board of Management and the next two tiers of management and implementation deadlines were set on time.

FURTHER INFORMATION

TÜV NORD AG is deemed to be directly dependent within the meaning of Sec. 17 of the Stock Corporations Act (Aktiengesetz – AktG) upon TÜV Nord Holding GmbH & Co. KG of Hamburg and TÜV HSA Holding GmbH & Co. KG of Hanover, and indirectly dependent upon TÜV Nord e.V. and TÜV Hannover/Sachsen-Anhalt e.V. For the period from 1 January to 31 December 2018 and in respect of relevant special transactions during the 2018 fiscal year, the Board of Management of TÜV NORD AG has drawn up a report pursuant to Sec. 312 of the AktG regarding relations between the company on the one hand and TÜV Nord Holding GmbH & Co. KG, TÜV HSA Holding GmbH & Co. KG, TÜV Nord e.V., TÜV Hannover/Sachsen-Anhalt e.V. and the affiliated companies on the other.

This report ends with the following declaration:

“We hereby declare that, in respect of every legal transaction with affiliates, TÜV NORD AG received consideration that was appropriate in the light of the circumstances known to us at the time when such transactions were performed.

Beyond the activities reported on herein, there were no further reportable transactions, measures or omissions.”

Hanover, 28 February 2019

TÜV NORD AG
The Board of Management

1) Pursuant to the act on the equal participation of women and men in managerial positions in the private and public sectors, certain companies in Germany are committed to setting targets for the proportion of women on their supervisory boards, executive boards and in the following two management tiers and to set a date for the achievement of these targets. The TÜV NORD GROUP pursues a strategy of diversity and is striving to increase the percentage of women in managerial positions.

Consolidated Income Statement

€k	Note	2018	2017
Revenue	3.1.	1,229,470	1,184,755
Change in inventories of finished goods and work in progress		0	-1,462
Other internally generated additions to assets		69	776
Other operating income	3.2.	39,376	41,106
Cost of materials	3.3.	-216,122	-198,406
Personnel expense	3.4.		
a) Wages and salaries		-580,389	-565,942
b) Social security contributions, post-employment and welfare benefits		-132,137	-133,548
Depreciation, amortisation and impairment losses	3.5.	-34,329	-34,468
Other operating expense	3.6.	-226,125	-216,889
Operating profit		79,814	75,922
Income from investments consolidated at equity		671	729
Income from other equity investments		385	125
Interest income		956	2,198
Interest expense		-981	-2,194
Other financial items		-364	-143
Financial items	3.7.	666	715
EBT (earnings before tax)		80,480	76,637
Taxes on income	3.8.	-29,286	-28,806
Consolidated earnings after tax		51,195	47,831
The consolidated earnings after tax are attributable to			
owners of TÜV NORD AG		48,019	44,017
non-controlling interests		3,176	3,814

Statement of Comprehensive Income

€k	2018	2017
Consolidated earnings after tax	51,195	47,831
Items that will not be reclassified subsequently to the Income Statement		
Actuarial gains and losses		
Changes from unrealized gains and losses ¹⁾	-51,020	-47,894
Taxes	14,390	14,271
	-36,630	-33,623
Interests from subordinated registered debenture	-2,063	-2,063
Changes in the fair value of financial investments in equity instruments recognised at fair value that do not affect net income	6	0
Share in other comprehensive income of at equity consolidated investments	-111	0
Total items that will not be reclassified subsequently to the Income Statement	-38,798	-35,686
Items that will be reclassified subsequently to the Income Statement		
Financial assets available for sale		
Changes from unrealized gains and losses	0	-47
Currency translation		
Changes from unrealized gains and losses	-465	-2,799
Share in other comprehensive income of at equity consolidated investments		
Changes from unrealized gains and losses	153	0
Total items that will be reclassified subsequently to the Income Statement	-312	-2,846
Other comprehensive income	-39,110	-38,532
Total comprehensive income	12,085	9,299
The total comprehensive income is attributable to		
owners of TÜV NORD AG	9,598	6,737
non-controlling interests	2,487	2,562

1) Including non-controlling interests amounting to €-700k (2015: €-928k).

Consolidated Balance Sheet

ASSETS			
€k	Note	31.12.2018	31.12.2017
A. Non-Current Assets			
Intangible assets	5.1.	94,192	93,802
Property, plant and equipment	5.2.	236,289	226,429
At equity consolidated investments	5.3.	6,471	6,262
Other financial assets	5.4.	27,189	35,339
Trade and other receivables	5.6.	143	158
Other assets	5.7.	5,050	4,160
Deferred tax assets	3.8.	178,851	176,730
Total Non-Current Assets		548,185	542,880
B. Current Assets			
Inventories	5.5.	3,394	53,477
Trade and other receivables	5.6.	265,363	181,178
Other assets	5.7.	15,541	12,149
Current tax assets		10,209	9,545
Cash and cash equivalents	5.8.	73,512	84,708
Total Current Assets		368,019	341,057
C. Assets Held For Sale	5.9.	7,813	4,460
Total Assets		924,017	888,397

EQUITY AND LIABILITIES			
€k	Note	31.12.2018	31.12.2017
A. Equity			
Subscribed capital	5.10.	10,000	10,000
Capital reserves	5.10.	114,413	114,413
Subordinated registered debenture	5.10.	50,000	50,000
Retained earnings	5.10.	220,916	171,135
Other equity items	5.10.	-297,159	-254,631
Non-controlling interests	5.10.	10,557	10,263
Total Equity		108,727	101,180
B. Non-Current Liabilities and Provisions			
Provisions for pensions and other post-employment benefits	5.11.	507,195	484,851
Other provisions	5.12.	35,682	37,867
Financial liabilities	5.13.	456	567
Trade and other payables	5.13.	8,545	8,524
Deferred tax liabilities	3.8.	9,407	9,763
Total Non-Current Liabilities and Provisions		561,285	541,572
C. Current Liabilities and Provisions			
Provisions	5.12.	51,071	50,801
Financial liabilities	5.13.	263	330
Trade and other payables	5.13.	191,488	184,822
Current tax liabilities		11,183	9,692
Total Current Liabilities and Provisions		254,005	245,645
Total Equity and Liabilities		924,017	888,397

Consolidated Cash Flow Statement

€k	Note	2018	2017
Consolidated earnings after tax		51,195	47,831
Adjustments to take account of non-cash transactions			
Depreciation of property, plant and equipment and amortisation of intangible assets		34,329	34,468
Amortisation of financial assets		364	143
Pension expense		-19,948	-17,202
Cash flow		65,940	65,240
Appropriation of profits of at equity consolidated investments		-471	-529
Interest income/expense		25	-4
Changes in deferred tax assets and liabilities recognised as income or expense		5,253	2,108
Loss/Gain on disposal of intangible assets and property, plant and equipment		-2,451	-1,290
Changes in inventories, receivables and other assets		-24,288	-13,694
Changes in payables, other provisions and other liabilities		31,041	29,823
Income taxes paid		-19,534	-25,152
Cash flow from operating activities	6.	55,515	56,502
Receipts from disposals of property, plant and equipment		5,340	5,519
Receipts from disposals of other financial assets		39,571	35,844
Payments for investments in intangible assets		-2,244	-1,825
Payments for investments in property, plant and equipment		-55,369	-41,187
Payments for investments in other financial assets		-49,064	-54,426
Cash flow from investing activities	6.	-61,766	-56,075
Interest received		569	1,902
Dividends to owners and non-controlling shareholders		-2,590	-1,887
Payments for the amortisation of loans		-246	-1,107
Interest paid		-2,693	-3,801
Cash flow from financing activities	6.	-4,960	-4,893
Net change in cash and cash equivalents through payments made and received		-11,211	-4,466
Net change in cash and cash equivalents through changes in exchange rates and in the basis of consolidation		15	-2,522
Cash and cash equivalents at the beginning of the period		84,708	91,696
Cash and cash equivalents at the end of the period		73,512	84,708
Supplementary information:			
Receipts from dividends included in cash flow from operating activities		585	326

Statement of Changes in Consolidated Equity

€k	Subscribed capital	Capital reserves	Subordinated registered debenture	Retained earnings	
Carrying amounts as of 1 January 2017	10,000	114,413	50,000	127,820	
Comprehensive income	0	0	0	44,017	
Dividend payment	0	0	0	0	
Changes in basis of consolidation	0	0	0	-452	
Other changes	0	0	0	-250	
Carrying amounts as of 31 December 2017	10,000	114,413	50,000	171,135	
Adjustments IFRS 9, IFRS 15	0	0	0	4,505	
Carrying amounts as of 1 January 2018	10,000	114,413	50,000	175,640	
Comprehensive income	0	0	0	48,019	
Dividend payment	0	0	0	-1,238	
Changes in basis of consolidation	0	0	0	-1,057	
Other changes	0	0	0	-448	
Carrying amounts as of 31 December 2018	10,000	114,413	50,000	220,916	

Further information on equity can be found in the Notes 5.10.

Accumulated Other Comprehensive Income

	Currency translation differences	Financial Instruments at fair value through OCI	Actuarial gains and losses	Interests from subordinated registered debenture	Share of TÜV NORD AG's owners	Non-controlling interests	Consolidated equity
	-819	-1	-209,962	-1,868	89,583	11,245	100,828
	-2,187	-47	-32,983	-2,063	6,737	2,562	9,299
	0	0	0	0	0	-1,887	-1,887
	0	0	0	0	-452	-1,657	-2,109
	0	0	-4,701	0	-4,951	0	-4,951
	-3,006	-48	-247,646	-3,931	90,917	10,263	101,180
	0	0	0	0	4,505	0	4,505
	-3,006	-48	-247,646	-3,931	95,422	10,263	105,685
	-118	6	-36,246	-2,063	9,598	2,487	12,085
	0	0	0	0	-1,238	-1,352	-2,590
	0	0	0	0	-1,057	-841	-1,898
	0	0	-4,107	0	-4,555	0	-4,555
	-3,124	-42	-287,999	-5,994	98,170	10,557	108,727

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Notes to the Consolidated Financial Statements

1. GENERAL PRINCIPLES

1.1. Corporate information

The TÜV NORD Group is one of the biggest technical service providers in Germany, offering a broad range of testing, certification, engineering, consulting and training services for its customers in its Industrial Services, Mobility, Natural Resources, Training, Aerospace and IT business units in all the world's major countries.

TÜV NORD AG, with its registered office in Hanover, Germany, is the parent company of the Group, registered with the Commercial Registry of Hanover Local Court under no. HRB 200158.

The Board of Management of TÜV NORD AG completed the preparation of the Consolidated Financial Statements as of 31 December 2018 and the Group Management Report for the 2018 fiscal year on 28 February 2019 and approved them for submission to the Supervisory Board.

1.2. Basis of presentation

Taking advantage of the right of election pursuant to Art. 315e (3) of the German Commercial Code (HGB), TÜV NORD AG prepared its Consolidated Financial Statements as of 31 December 2018 in accordance with International Financial Reporting Standards (IFRS), while at the same time complying with the German supplementary provisions pursuant to Art. 315e (1) of the HGB. All the International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) adopted by the International Accounting Standards Board (IASB) up to 31 December 2018 and all the pronouncements of the International Financial Reporting Standards Interpretations

Committee (IFRS IC) have been applied in relation to the 2018 fiscal year, to the extent that such standards had received the endorsement of the Commission of the European Union up to the time of publication of the Consolidated Financial Statements and that their application is mandatory. The use of the two-statement approach shows a breakdown of the expense recognised in equity and income (Statement of Comprehensive Income) in addition to the Profit and Loss Account, the Balance Sheet and the Cash Flow Statement.

In order to achieve equivalence with consolidated financial statements prepared in accordance with the HGB, all statutory requirements of disclosure and explanation going beyond the IASB requirements have been complied with, in particular the preparation of a Group Management Report.

The Consolidated Financial Statements are presented in euros and on the basis of original cost (costs of purchase or production), with the exception of certain financial instruments which are recognised at fair value.

Unless otherwise indicated, the amounts are stated in thousands of euros (€k). The use of rounded-off values and percentage may result in differences due to financial rounding. For the sake of clarity and to make the financial statements more readily understandable, certain individual items are aggregated in the Balance Sheet and the Income Statement but disclosed and explained separately in the notes.

The Consolidated Financial Statements are based on the consolidated accounts. Separate financial statements of subsidiary companies prepared in their local currencies are translated into euros.

The reporting periods of the TÜV NORD Group and of all consolidated subsidiaries end on 31 December of each successive calendar year.

1.3. Accounting standards applied for the first time in the year under review

The IASB has issued the following standards, amendments, clarifications and interpretations to existing standards, which have received endorsement from the EU, i.e. have been adopted into European law, and whose application is mandatory in respect of the 2018 fiscal year:

EFFECTIVE APPLICATION

Standard / Interpretation	Mandatory application
IFRS 9 "Financial Instruments"	Reporting periods beginning on or after 1.1.2018
IFRS 15 "Revenue from Contracts with Customers" including amendments to IFRS 15 "Effective date of IFRS 15"	Reporting periods beginning on or after 1.1.2018
Amendments to IAS 40 "Transfers of Investment Property"	Reporting periods beginning on or after 1.1.2018
Amendments to IFRS 2 "Classification and Measurement of Share-based Payment Transactions"	Reporting periods beginning on or after 1.1.2018
Amendments to IFRS 4 "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts"	Reporting periods beginning on or after 1.1.2018
Clarifications to IFRS 15 "Revenue from Contracts with Customers"	Reporting periods beginning on or after 1.1.2018
Annual Improvements to IFRS Standards (Cycle 2014–2016)	Reporting periods beginning on or after 1.1.2018/1.1.2017
IFRIC 22 "Foreign Currency Transactions and Advance Consideration"	Reporting periods beginning on or after 1.1.2018

IFRS 9 includes revised guidelines for the classification and measurement of financial assets and changes to the rules on the impairment of financial assets, as well as revised regulations concerning the accounting of hedging relationships. The regulations must be applied by law to reporting periods beginning on or after 1 January 2018. The TÜV NORD Group has been applied IFRS 9 for the first time for 2018. For more information on the effects, see 2.5.

In May 2014, the IASB published the new IFRS 15 standard entitled "Revenue from contracts with customers". The new standard

brings together a variety of rules previously contained in various standards and interpretations. A five-stage model governs when and to what extent revenues from contracts with customers are to be recorded. Upon the conclusion of a contract, the information to be determined includes, among other things, whether the resulting revenues are to be recorded with reference to a point in time or a period. The application of IFRS 15 became mandatory to reporting periods beginning on or after 1 January 2018. The TÜV NORD Group applied IFRS 15 for the first time in 2018 without material impact on the consolidated financial statements.

All further accounting standards whose application is mandatory as of the 2018 fiscal year have been applied by TÜV NORD AG; this has not, however, had any material impact on the presentation of the financial statements.

1.4. Newly issued accounting standards not yet applied

The following standards, amendments and interpretations to existing standards issued by the IASB have already been adopted into European law by the EU, but their application is not yet mandatory for the year under review. The company has not elected to apply this provision in advance of its becoming mandatory.

NO ELECTIVE APPLICATION IN ADVANCE

Standard / Interpretation	Mandatory application
IFRIC 23 "Uncertainty over Income Tax Treatments"	Reporting periods beginning on or after 1.1.2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	Reporting periods beginning on or after 1.1.2019
IFRS 16 "Leases"	Reporting periods beginning on or after 1.1.2019

In January 2016, the IASB published the new IFRS 16 standard entitled "Leases", which supersedes the previous leasing standard IAS 17. The new standard must be applied by law to reporting periods beginning on or after 1 January 2019. Earlier application is permitted provided that IFRS 15 is also applied. The Group will accordingly apply IFRS 16 for the first time to the reporting period beginning on 1 January 2019.

The new standard envisages a unified accounting model for the lessee: Leases are to be recorded on the balance sheet as rights of use and, correspondingly, as a liability. Exempted from this obligation, where the voting rights to that effect are exercised, are low-value assets and leases with a term of less than 12 months. IFRS 16 does not essentially differ from IAS 17 when it comes to lessor accounting. For lessors, the distinction between finance and operating leases must continue to be made as before.

The TÜV NORD Group primarily enters into leases as an operating lessee. The application of IFRS 16 gives rise to the following effects on the presentation of the net asset, financial and earnings position of the Group: With regard to the minimum lease payments under Other Financial Commitments from Operating Leases, the initial application of the standard will lead to an increase in non-current assets by virtue of the inclusion in the balance sheet of rights of use. The financial liabilities will increase by virtue of the inclusion of the corresponding liabilities. Moreover, the nature of the expenses from these leases will change because, in IFRS 16, the previous linear expenses for operating leases are replaced by the depreciation of the rights of use and the interest paid on the liabilities. In addition, according to IFRS 16, the repayment portion of the lease payments must be shown as part of the cash flow from financing activities, with the effect that the cash flow from operating activities will improve.

The Group is currently in the process of implementing the new standard. At the balance sheet date, the Group had obligations from operating leases amounting to approximately €100 million. The Group does not anticipate any impact of the new regulations on earnings after tax in the 2019 reporting period and expects EBIT to improve by approx. €1 million in the same period. Cash flow from operating activities is expected to increase by approximately €20 million, while cash flow from financing activities is expected to decrease by the same amount.

TÜV NORD AG is of the opinion that the application of the further standards, which were issued before the reporting date but whose application is not yet mandatory, will have no material consequences for its financial position or financial performance.

The following standards and amendments to existing standards issued by the IASB or the IFRS IC have not yet received EU endorsement, with the effect that their application is not yet admissible:

APPLICATION IN ADVANCE INADMISSIBLE

Standard / Interpretation	Mandatory application
IFRS 17 "Insurance Contracts"	Reporting periods beginning on or after 1.1.2021
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	Reporting periods beginning on or after 1.1.2019
Annual Improvements to IFRS Standards (Cycle 2015–2017)	Reporting periods beginning on or after 1.1.2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	Reporting periods beginning on or after 1.1.2019
Amendments to References to the Conceptual Framework in IFRS Standards	Reporting periods beginning on or after 1.1.2020
Amendments to IFRS 3 "Definition of Material"	Reporting periods beginning on or after 1.1.2020
Amendments to IAS 1 and IAS 8 "Definition of Material"	Reporting periods beginning on or after 1.1.2020

TÜV NORD AG is of the opinion that the application of these standards will have no material consequences for its financial position or financial performance.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

2.1. Basis of consolidation

In addition to TÜV NORD AG, the Consolidated Financial Statements cover 38 (2017: 38) domestic and 45 (2017: 45) foreign companies in which TÜV NORD AG directly or indirectly holds a majority of the voting power, or over whose financial and operating policies it otherwise exerts control and is thus in a position to obtain benefits from their activities. In determining the situation with regard to control, potential voting rights which are currently exercisable or convertible are also taken into consideration.

In the 2018 fiscal year the removal from the list of fully consolidated subsidiaries resulted from the merger of a subsidiary with another fully consolidated Group company. As a result of its increased importance, a non-consolidated company have been consolidated for the first time.

In addition, five companies (see under 5.3) are accounted for by the equity method.

Not included in the consolidation are companies which are of only minor significance for a true and fair view of the financial position, financial performance and earnings of the Group. This waiver of consolidation has the effect of reducing group revenue by 0.9% (2017: 0.6%) and of a change of consolidated earnings before tax (EBT) of -2.5% (2017: 0.1%).

A list of shareholdings has been prepared in which TÜV NORD Group's affiliates and other equity investments are listed, showing the proportion of the capital held. A list of all the Group's shareholdings is published in the Federal Gazette as part of the Notes to the Consolidated Financial Statements.

2.2. Consolidation policy

The annual financial statements of the subsidiaries included in consolidation are prepared in accordance with TÜV NORD AG's accounting and valuation methods, which are applied uniformly throughout the Group.

Capital consolidation is effected using the purchase method, pursuant to IFRS 3, Business Combinations. Using the purchase method to account for business combinations assumes that, at the time of initial consolidation, all the assets, liabilities and contingent liabilities of the company acquired and any intangible assets to be recognised in addition are measured at fair value. Any difference amounts between the cost of acquiring the interest in the company and the acquirer's pro-rata share in the reassessed equity at the time of acquisition are allocated to the appropriate balance sheet items of the subsidiary up to the amount of their fair value. Any remaining positive difference is recognised as goodwill. If a negative difference arises, it is recognised as an expense in profit and loss for the reporting period during which the business combination takes place. Goodwill is tested for impairment at least once a year.

The earnings of subsidiary companies acquired or disposed of in the course of the fiscal year are included in the Consolidated Income Statement from the point in time when control was acquired or up to the effective time of disposal.

Significant associates and joint ventures are accounted for using the equity method. An associate is a business entity upon which the Group can exert significant influence through participation in financial and operating policy decisions, but over which it cannot exercise control. In general, such significant influence may be presumed if the Group holds 20% or more of the voting power. The pro rata earnings from such equity holdings are recognised under the item Income from investments in associates. Should any such equity investments be subject to long-term impairment, impairment losses are recognised. Where a Group company undertakes transactions with an associate, any resulting unrealised gains or losses are eliminated pro rata to the Group's interest in the associate or joint venture.

Receivables and payables between companies included in consolidation are netted. Profits and losses arising out of intercompany transfers of assets that are to be recognised in the Consolidated Financial Statements are eliminated unless they are immaterial. Revenue and other income between consolidated companies are offset against the corresponding expenses.

During the process of consolidation, income tax effects are taken into account and deferred taxes recognised where appropriate.

Shares in the equity of subsidiaries that are held by parties outside the Group are recognised separately within equity capital. The proportions of the earnings of subsidiary companies attributable to outside shareholders (non-controlling interests) are stated separately in the Income Statement.

2.3. Currency translation

Translation into the presentation currency

The annual financial statements of any foreign Group company whose functional currency is not the euro are translated into the Group presentation currency, i.e. euro, in accordance with the functional currency concept. In general, the functional currencies of the foreign subsidiaries are their respective local currencies.

Assets and liabilities of foreign subsidiaries are translated at the exchange rate prevailing as of the balance sheet date. Equity is translated at historical rates of exchange. Expense and income are translated into euro at average rates for the year. Differences

arising out of currency translation are recognised in Other comprehensive income. Such a translation difference recognised in comprehensive income is posted to profit and loss only if the company concerned is deconsolidated.

Translation into the functional currency

Foreign currency transactions are translated into the functional currency at the exchange rate prevailing at the time of the transaction. Gains and losses resulting from the fulfilment of such transactions and from the translation as of the reporting date of monetary assets and liabilities denominated in foreign currencies are recognised in the Income Statement.

The following exchange rates are among those used for the translation of the currencies of countries that are not members of the European Monetary Union:

CURRENCY TRANSLATION

Currency	ISO Code	Exchange rate as of the reporting date		Annual average rate	
		31.12.2018	31.12.2017	2018	2017
Brazilian real	BRL	4.4440	3.9729	4.3087	3.6041
British pound sterling	GBP	0.8945	0.8872	0.8847	0.8761
Bulgarian lev	BGN	1.9558	1.9558	1.9558	1.9558
Canadian dollar	CAD	1.5605	1.5039	1.5302	1.4644
Chinese renminbi yuan	CNY	7.8751	7.8044	7.8074	7.6264
Croatian kuna	HRK	7.4125	7.4400	7.4181	7.4644
Czech koruna	CZK	25.7240	25.5350	25.6432	26.3272
Danish krone	DKK	7.4669	7.4449	7.4532	7.4387
Egyptian pound	EGP	20.4040	21.2314	20.9776	20.1086
Hong Kong dollar	HKD	8.9675	9.3720	9.2599	8.8012
Indian rupee	INR	79.7296	76.6055	80.7278	73.4981
Indonesian rupiah	IDR	16,501.6502	16,233.7662	16,806.7227	15,105.7402
Korean won	KRW	1,277.9226	1,279.6069	1,299.2581	1,275.8357
Malaysian ringgit	MYR	4.7317	4.8536	4.7642	4.8501
Polish zloty	PLN	4.3014	4.1770	4.2606	4.2563
South African rand	ZAR	16.4594	14.8054	15.6134	15.0434
Swedish krone	SEK	10.2543	9.8435	10.2564	9.6367
Thai baht	THB	37.0520	39.1210	38.1631	38.2785
Turkish lira	TRY	6.0588	4.5465	5.6987	4.1215
US dollar	USD	1.1450	1.1993	1.1815	1.1293

2.4. Use of estimates

The preparation of IFRS financial statements requires management to make certain estimates and assumptions which have an impact on the carrying amounts of assets and liabilities, the disclosure of contingent assets and liabilities existing as of the reporting date, and the income and expense recognised for the fiscal year. In compiling the Consolidated Financial Statements, estimates had to be made in particular with regard to the valuation of employee benefits under IAS 19, the impairment testing of goodwill, provisions from the human resources and social sector, the provision for threatened losses from pending transactions and the deferred tax assets relating to loss carryforwards.

Employee benefits relate essentially to obligations arising out of defined benefit pension commitments, which are determined on the basis of actuarial parameters. These require assumptions to be made about future wage and salary increases, trends in pension levels and the discount rate.

Changes in the parameters for determining defined benefit obligations and plan assets do not, however, affect consolidated earnings for the current year, since any actuarial gains or losses are recognised in Other comprehensive income.

Goodwill is subjected to an annual impairment test on the basis of the smallest cash-generating unit to which goodwill has been allocated and the management's approved three-year operating plan.

Recognition and measurement of the provisions from the human resources and social sector and the provision for threatened losses are based on estimates of the probability of a future outflow of resources and on the basis of experience values and of the circumstances known at the reporting date. To this extent, the actual outflow of resources may vary from the amount of the provision.

Deferred tax assets relating to loss carryforwards are accounted for on the basis of estimates of the extent to which the tax advantages can be realised in future, i.e. whether adequate taxable income or reduced tax expense is to be expected. The actual tax situation in future periods and thus the actual extent to which loss carryforwards can be utilised may vary from the estimate made at the time when the deferred taxes were recognised.

2.5. Change in accounting methods

The first-time application of IFRS 9 and IFRS 15 had an impact on the consolidated financial statements. As set forth below, IFRS 9 and IFRS 15 were applied according to the provisions in these standards without the retroactive adjustment of comparative disclosures.

BALANCE SHEET (EXTRACT)

€k	31.12. 2017	IFRS 9	IFRS 15	1.1.2018 retroactively adjusted
Current Assets				
Inventories	53,477	0	-50,424	3,053
Trade receivables and other receivables	181,178	-400	57,451	238,229
Deferred tax assets	176,730	128	0	176,858
Equity				
Retained earnings	171,135	-272	4,777	175,640
Deferred tax liabilities	9,763	0	2,250	12,013

IFRS 15 lays down a comprehensive framework to determine whether, to what extent and at what time revenue is recognised. It replaces existing guidelines for the recording of revenues, including IAS 18 Revenues, IAS 11 Construction contracts and IFRIC 13 Customer loyalty programmes. The services provided by the TÜV NORD Group are almost exclusively period-related and, accordingly, the Group has no unfinished and finished products under Inventories; instead, contract assets are recorded under Trade receivables and other receivables. Revenue recognition according to performance progress gives rise to an increase in retained earnings to €4,777k and deferred tax liabilities of €2,250k.

Historical default rates and future-oriented conditions are considered for the determination of the value adjustments for receivables from goods and services. The expected loan defaults increased by €400k with retroactive effect to 1 January 2018 in accordance with the simplified procedure pursuant to IFRS 9.

2.6. Accounting policies

Accounting is undertaken in accordance with the following principles:

Revenue realisation

The first-time use of IFRS 15 was made retroactive with modifications. Revenue essentially consists of earnings from services and, pursuant to IFRS 15, is recognised in the period in which it was generated. In the consolidated balance sheet, the amounts recognised as inventories prior to the application of IFRS 15 as supplies are identified as contract assets. No significant changes to the consolidate income statement occurred as a result.

Revenue realisation for longer-term contracts, which was previously carried out according to the percentage-of-completion method (PoC method), is also recognised according to the IFRS 15 guidelines for contractual obligations fulfilled over a certain period. No significant changes to the consolidate income statement occurred in this respect. In the consolidated balance sheet, amounts recognised under the PoC method as receivables from partly fulfilled service contracts are recognised pursuant to IFRS 15 as contract assets.

The degree of completion or progress per contract to be applied is thereby calculated by the ratio of accrued costs to the calculated total costs (the cost-to-cost method).

The assessment of whether the TÜV NORD Group is acting as principal or agent is evaluated on the basis of the revised IFRS 15 indicators in relation to the present contracts in the business units. This does not result in any change in the reporting period due to the treatment of the entire revenues as principal (gross statement of sales and additional statement of sales costs).

Intangible assets

Intangible assets encompass intangible assets acquired for consideration and internally generated intangible assets and goodwill.

Intangible assets acquired for consideration, e.g. software and accreditations, are valued at historical cost. This position also includes items identified during purchase price allocations, e.g. customer relations.

Internally generated intangible assets, e.g. software or research and development costs, are recognised at production cost where to do so meets the recognition criteria of IAS 38.

Intangible assets with a certain useful life are subject to amortisation by the straight-line method over a period of generally between 3 and 15 years, depending on the expected future economic benefits. The useful life is subject to annual review and, if necessary, adjusted in accordance with future expectations. If there is any indication of impairment or if the recoverable amount is less than the amortised cost, an impairment loss must be recognised.

If the reasons for recognising such an impairment loss cease to apply, the impairment loss is reversed, where the resulting enhanced carrying amount may not exceed the amortised cost arrived at by normal amortisation.

Goodwill arising out of a business combination is recognised from the time when control is obtained over the company acquired (the acquisition date). It arises whenever the cost of acquiring the business exceeds the netted fair value of the identifiable assets, debts and contingent debts at the acquisition date. Goodwill is not subject to amortisation; instead, it is subjected to an impairment test at least once a year and, should any triggering events occur, more frequently. The impairment test is carried out on the basis of cash-generating units, the recoverable amount of a cash-generating unit being compared with its carrying amount. Under IAS 36, an impairment loss is recognised if the carrying amount of a cash-generating unit to which goodwill has been allocated exceeds its recoverable amount. Impairment losses on goodwill, once recognised, may not be subsequently reversed.

The cash generating units correspond to the international business units Industrial Services, Mobility, Natural Resources, Training, Aerospace and IT and the Group unit Holding/Services.

The recoverable amount is the higher of the cash-generating unit's fair value less costs to sell and its value in use. The recoverable amount of a cash-generating unit is calculated by determining its value in use, using the discounted cash flow method on the basis of the three-year plan approved by management. In determining

value in use certain assumptions have to be made, relating essentially to the rate at which operating profit will grow over the planning period, the cost of capital as well as the expected sustained growth rate after the end of the three-year plan. The cost of capital is determined on the basis of the weighted average cost of capital (WACC).

Property, plant and equipment

Assets falling into the category of property, plant and equipment are recognised at depreciated costs (purchase or construction costs). Construction costs include not only direct costs but also attributable overheads.

The revaluation model as per IAS 16.31 is not applied. As a result, under current market conditions the carrying amounts of TÜV NORD Group's real estate include hidden reserves.

Property, plant and equipment are normally depreciated by the straight-line method, unless, in exceptional cases, some other depreciation method appears more appropriate. Depreciation is based on the following useful lives:

USEFUL LIVES OF PROPERTY, PLANT AND EQUIPMENT

	years
Office buildings	30-50
Test facilities	20-30
Machinery	5-12
Furniture, fixtures and office equipment	3-20

Under IAS 36, "Impairment of assets", property, plant and equipment are subject to impairment if the recoverable amount (see also under "Intangible assets") of the asset concerned has fallen below its carrying amount. If the reasons for recognising such an impairment loss cease to apply, the impairment loss is reversed, but only to the extent that the enhanced carrying amount does not exceed the asset's depreciated cost. Such a reversal of an impairment loss is recognised as income.

Leases

Leases are classified as either operating or finance leases. Under IAS 17, leases under which all the substantial risks and rewards

incidental to ownership of an asset are transferred to TÜV NORD Group are to be classified as finance leases; other leases are operating leases.

In the case of finance leases, the leased item is recognised from the time of its first use at the lower of fair value and the present value of the minimum lease payments and depreciated by the straight-line method over either its estimated economic life or the term of the lease, whichever is the shorter. The corresponding liability to the lessor is recognised in the balance sheet as a liability from a finance lease and amortised over the subsequent period using the effective interest rate method. In the case of operating leases, the net lease payments are recognised in the income statement over the term of the lease.

At equity consolidated investments

Associates and joint ventures are initially recognised at cost at the time of their acquisition, and in subsequent accounting periods in accordance with the proportion of the equity held, using the equity method. The carrying amounts are increased or decreased annually by the amount of the earnings attributable pro rata, the dividends distributed or other changes in equity. Under IAS 28.33, accounting using the equity method is carried out on the basis of the financial statements for the previous reporting period. Any goodwill is reviewed in connection with the impairment testing of the investment in the associate or joint venture. Goodwill is not subject to amortisation.

Other financial assets

The item Other financial assets covers above all investments in non-consolidated affiliates, other equity investments, loans, securities and claims arising out of the reinsurance of pension obligations.

The financial instruments are categorised on the basis of the analysis of business model and payment flow conditions provided for in IFRS 9. The following categories are relevant for the TÜV NORD Group:

- Financial assets/liabilities accounted for at amortised cost
- Financial assets/liabilities accounted for at fair value which affect net income
- Equity instruments accounted for at fair value that do not affect net income

In principle, the TÜV NORD Group accounts for all the equity instruments it holds at fair value. Dividends from such instruments are however still recognised in profit or loss under other income where the right to receive payments is established.

Loans granted fall into the category "Accounted for at amortised cost".

Claims arising out of reinsurance fund shares that do not form part of the plan assets are accounted for at fair value in accordance with IAS 19 on the basis of the information provided by the reinsurance provider. A price reporting on an active market does not exist for employer's pension liability insurance policies.

Inventories

Inventories encompass exclusively raw materials, auxiliary materials, operating materials and advance payments, which are accounted for at amortised cost after the initial application of IFRS 15. The finished and unfinished products accounted for in the previous year are recognised pursuant to IFRS 15 as contract assets under Trade and other receivables, Other assets.

Trade and other receivables, Other assets

Receivables include the company's trade receivables, other receivables and other assets. Impairments are determined based on expected loan defaults pursuant to IFRS 9. For trade receivables, loan defaults that are expected over the total period are recognised according to the simplified procedure. Non-current receivables bearing no, or only low, interest are discounted at a rate appropriate to the risk, to the extent that the interest effect is material. The amount discounted is recognised pro rata under interest income until the receivable becomes due.

The receivables and other assets also include contract assets which are recognised in accordance with IFRS 15. The contract assets primarily relate to claims of the Group for consideration for services which have been completely provided but not yet invoiced as of the record date. The contract assets are reclassified as trade receivables if the rights to them are held without reservation. This typically happens when the Group issues an invoice to the customer.

Cash and cash equivalents

Cash and cash equivalents include freely disposable cash in hand, cheques and bank credit balances with a term of up to three months. These are recognised at nominal value.

Deferred tax assets and liabilities

Deferred tax assets and liabilities are recognised for all temporary differences between the carrying amounts of assets and liabilities in the IFRS balance sheet and their tax bases and also for consolidation measures recognised through profit or loss. They are as far as is permissible set off against one another in the balance sheet. Deferred tax assets are recognised to the extent that it is probable that there will be taxable income against which the deductible temporary difference can be offset. Deferred tax assets also include claims for reductions in amounts of tax payable arising out of the expected utilisation of existing loss carryforwards in subsequent years, to the extent that their realisation within a period of 5 years is sufficiently certain. Deferred tax assets and liabilities are also recognised where temporary differences arise in connection with business combinations (corporate acquisitions), with the exception of temporary differences relating to goodwill.

Deferred taxes are determined on the basis of the rates of taxation that apply or are expected to apply under current law in the individual countries at the time of realisation. Tax rates that will be applicable in future years are used for calculation purposes to the extent that they have already been fixed in law or that the legislative process is practically complete.

Changes in deferred tax assets and liabilities in the balance sheet generally lead to tax expense or income in the income statement, unless they relate to items recognised in comprehensive income; in this case the deferred taxes are also recognised in comprehensive income.

Deferred taxes are not recognised at the reporting date in respect of temporary differences in connection with investments in subsidiaries, associates or joint ventures (outside basis differences). It is not possible to make any reasonable estimate of the amounts of these unrecognised deferred tax liabilities.

For the calculation of domestic deferred taxes, a tax rate of 32.0%, unchanged from the previous year, has been applied.

Assets held for sale

Assets held for sale are shown separately in the balance sheet if they can be sold in their existing condition and it is probable that they will be. When assets are first classified as "held for sale", they are revalued at the lower of carrying amount and fair value less costs

to sell. Impairment losses resulting from the first-time classification of the assets as being "held for sale" and any later impairments (or reversals of impairments) are recognised as expense (or income) in the Income Statement. Assets held for sale are not subjected to amortisation.

Provisions for pensions and other post-employment benefits

Post-employment benefit plans are classified as either defined benefit or defined contribution plans, depending on the economic substance of the plan as derived from its principal terms and conditions. Plans are classified as defined benefit plans if the actuarial or investment risk is incurred by the employer. Post-employment benefit commitments that cannot be unambiguously classified as defined benefit plans are regarded as defined contribution plans.

The requisite level of pension provisions in respect of defined benefit obligations is determined by actuarial valuation using the projected unit credit method. This valuation is carried out by actuaries as of every balance sheet date. Actuarial gains and losses arising are accounted for directly in equity without passing through the Income Statement and are recognised in the Group Statement of Comprehensive Income.

Through the transfer of claims to reinsurance to TÜV NORD PENSION TRUST e.V. of Hanover, plan assets have been formed which serve to secure the pension obligations.

The service cost included in pension expense and the included net interest expense are recognised under "Personnel expense".

Payment obligations under defined contribution pension plans (the statutory pension funds) are recognised in the income statement for the period concerned.

Other provisions

Other provisions are formed if a present legal or constructive obligation exists towards third parties as a result of a past event, in respect of which it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the provision required. The measurement of the provisions is carried out using the best estimate of the amount required to settle the obligation, which is not set off against any possible claims for recourse. Non-current provisions are discounted if the interest effect is material.

Trade and other payables

Interest-bearing payables to banks are accounted for at the amount disbursed less directly attributable transaction costs. Financing costs are distributed as expense over the term, increasing the carrying amount of the liability in subsequent periods. Trade and other payables are recognised at fair value. Non-current liabilities that are not subject to interest are discounted using the effective interest method if the interest effect is material. Liabilities arising out of finance leases are recognised at the lower of the fair value of the leased item and the present value of the lease payments. In subsequent years, the lease payments are apportioned between the reduction of the outstanding liability and the finance charge; pursuant to IAS 17.25, this is done in such a way as to produce a constant rate of interest on the remaining balance of the liability.

Contingent liabilities

Contingent liabilities are possible obligations that might arise from past events and whose existence will be confirmed by future events not within the control of the TÜV NORD Group. They may also be existing obligations that cannot be recognised because an outflow of resources is improbable or the amount of the obligation cannot be estimated with sufficient reliability. Such contingent liabilities are recognised at the level of liability existing at the reporting date.

3. CONSOLIDATED INCOME STATEMENT DISCLOSURES

3.1. Revenue

Revenue is broken down between the six business units and Holding/Services as follows:

REVENUES

€k	2018	2017
Industrial Services	559,935	551,515
Mobility	390,453	366,178
Natural Resources	106,478	95,991
Training	101,199	102,083
Aerospace	47,620	45,845
IT	18,551	17,432
Holding/Services	5,234	5,711
Total	1,229,470	1,184,755

Revenue amounting to €903,373k (2017: €872,166k) was generated in Germany, €198,243k (2017: €190,727k) in the rest of Europe and €127,854k (2017: €121,862k) in the rest of the world.

The revenue consists almost entirely of earnings from services which are realised in the same period pursuant to IFRS 15. Revenue includes €84,013k relating to partly fulfilled contracts to render services, which were recognised as contract assets as of the reporting date. The increase in Trade and other receivables, Other assets in year-on-year comparison is attributable in particular to the first-time application of IFRS 15.

3.2. Other operating income

Other operating income amounting to €39,376k (2017: €41,106k) is made up essentially of the following components: income from the reversal of provisions €10,783k (2017: €8,346k), income from disposal of tangible assets €3,236k (2017: €1,957k), canteen takings €2,281k (2017: €2,236k), income from the reversal of impairment losses on trade receivables €497k (2017: €1,629k), income from tenancy agreements €334k (2017: €581k), income from the reversal of a negative difference recognised as an expense €192k (2017: €148k) and income from ancillary services €123k (2017: €72k).

3.3. Cost of materials

COST OF MATERIALS

€k	2018	2017
Cost of raw materials and supplies	40,614	31,755
Cost of services bought in	175,508	166,651
Total	216,122	198,406

3.4. Personnel expense

PERSONNEL EXPENSE

€k	2018	2017
Wages and salaries	580,389	565,942
Social security contributions	102,087	101,763
Post-employment benefit expense	26,385	28,533
Other employee benefits	3,665	3,252
Total	712,526	699,490

On average over the year, the consolidated companies had 10,735 employees (2017: 10,485) (expressed as full-time equivalents). Including the experts provided by the associations, the average number of full-time employees was 10,780 (2017: 10,539). 7,665 employees work in Germany. The number of employees abroad increased in 2018 to 3,115. The Group's employees are for the most part salaried staff.

3.5. Depreciation, amortisation and impairment losses

DEPRECIATION, AMORTISATION AND IMPAIRMENT LOSSES

€k	2018	2017
Depreciation and amortisation of assets	34,329	32,895
Impairment losses	0	1,573
Total	34,329	34,468

3.6. Other operating expenses

Other operating expenses €226,125k (2017: €216,889k) principally relate to occupancy expenses €63,462k (2017: €60,593k), travelling expenses €43,231k (2017: €42,491k), operating and administrative expenses €22,203k (2017: €21,379k), advertising and communication expenses €19,611k (2017: €17,959k), other services €17,760k (2017: €18,672k), legal and consultancy fees €7,779k (2017: €7,745k) and donations and contributions €2,250k (2017: €2,246k). Value adjustments on doubtful trade receivables amounting to €3,091k (2017: €1,874k) are also included, as are other taxes in the amount of €2,578k (2017: €2,827k).

3.7. Financial items

FINANCIAL ITEMS

€k	2018	2017
Income from at equity consolidated investments	671	729
Income from other equity investments	385	125
Amortisation of other financial investments and securities	-365	-143
Financial items (excluding interest)	691	712
Other interest and similar income	956	2,198
Interest and similar expense	-981	-2,194
Net interest income/expense	-25	4
Financial items (including interest)	666	715

3.8. Taxes on income

The Group's tax expense is as follows:

TAXES ON INCOME

€k	2018	2017
Current tax expense	-24,033	-26,698
Deferred tax expense	-5,253	-2,108
Total	-29,286	-28,806

The deferred taxes result from the formation or reversal of tax accruals in profit or loss during the fiscal year. In both fiscal years, the deferred taxes are predominantly the result of the recognition or reversal of temporary differences.

The following reconciliation statement summarises the individual deferred tax items determined in relation to the individual companies and applying the tax rates prevailing in the various countries, taking due account of consolidation measures. The table reconciles expected tax expense with the tax expense actually recognised.

INCOME TAX EXPENSE

€k	2018	2017
Earnings before tax	80,480	76,637
Expected income tax expense (tax rate: 32.0%; 2017: 32.0%)	25,754	24,524
Effect of different foreign tax rates/ Other differences	-108	-171
Changes in tax rates or tax legislation	-3	-40
Permanent differences resulting from non-deductible expense, tax-free income etc.	555	1,518
Current taxes for previous periods	871	247
Deferred taxes for previous periods	-639	-1,206
Effects of value adjustments	2,855	3,934
Recognised income tax expense	29,285	28,806

The expected tax rate for both fiscal years was determined on the basis of a corporation tax rate of 15.0% plus a solidarity levy of 5.5% of the tax due and a local business tax rating of 462%. The applicable tax rates for companies outside Germany range from 10.0% to 34.0%.

Deferred taxes resulting from recognition and measurement differences arose in the following balance sheet items:

DEFERRED TAXES

DEFERRED TAXES		2018	2017	
€k	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets	2,360	7,313	2,731	6,756
Property, plant and equipment	577	9,819	699	10,359
Inventories	0	0	0	734
Other assets	2,443	3,531	2,289	2,853
Pension provisions	173,484	0	169,627	0
Other provisions	10,210	23	9,969	467
Other liabilities	700	119	469	55
Tax loss carryforwards	475	0	2,407	0
Gross amount	190,249	20,805	188,191	21,224
Offsettings	-11,398	-11,398	-11,461	-11,461
Balance sheet recognition	178,851	9,407	176,730	9,763

Deferred tax assets are recognised only if there is sufficient probability that these tax advantages will be realised. Any value adjustments are determined taking into account all positive and negative factors known at the present time that may influence future taxable earnings. The estimates made for this purpose may be subject to future adjustments.

Deferred taxes amounting to €14,390k (2017: €14,271k) were recognised in comprehensive income. This is essentially a result of the recognition of actuarial gains/losses relating to pension provisions.

As of the reporting date, deferred tax assets were recognised for loss carryforwards in the amount of €1,892k (2017: €14,637k) existing in the Group. In respect of further tax loss carryforwards in the amount of €81,532k (2017: €64,314k), no additional deferred tax assets have been recognised as of the reporting date, since it is not sufficiently certain that these can be realised. Under current legislation, there is no limitation, either of time or amount, on such loss carryforwards for tax purposes.

4. NOTES ON THE CONSOLIDATED STATEMENT OF COMPEHENSIVE INCOME

The deferred taxes in the amount of €14,390k (2017: €14,271k) reported in Other comprehensive income relate to the actuarial losses of €51,020k (2017: €47,894k) in the fiscal year. The actuarial losses after deferred tax amount to €36,630k (2017: €33,623k). The other comprehensive income before deferred tax amounts to €-53,500k (2017: €-52,803k).

5. CONSOLIDATED BALANCE SHEET DISCLOSURES

In accordance with IAS 1, the Consolidated Balance Sheet (Statement of Financial Position) is structured to present the breakdown between current and non-current assets and liabilities. Assets and liabilities are regarded as current if it is expected that they will be recovered or settled within a year. Inventories and trade receivables are also classified as current, irrespective of their expected use or due dates, if they are to be sold, used or recovered not within one year, but within the company's normal operating cycle. In accordance with IAS 12, deferred taxes are recognised as non-current assets or liabilities.

5.1. Intangible assets

The following changes in intangible assets occurred:

INTANGIBLE ASSETS - CHANGES 2018

€k	Concessions, proprietary rights and similar rights and assets, including licences on such rights and assets	Goodwill	Payments made on account	Total
Cost (of purchase or production)				
Amounts as of 1 January	59,736	91,111	39	150,886
Changes in basis of consolidation	0	0	0	0
Additions/Current investments	2,104	0	139	2,242
Disposals	-2,404	0	0	-2,404
Reclassifications	1	0	0	1
Currency translation differences	-69	11	0	-58
Amounts as of 31 December	59,367	91,122	178	150,668
Accumulated amortisation and impairment losses				
Amounts as of 1 January	55,961	1,123	0	57,084
Changes in basis of consolidation	0	0	0	0
Additions	1,834	0	0	1,834
Disposals	-2,378	0	0	-2,378
Reclassifications	0	0	0	0
Currency translation differences	-65	1	0	-64
Amounts as of 31 December	55,352	1,124	0	56,476
Net carrying amounts	4,015	89,998	178	94,192

INTANGIBLE ASSETS - CHANGES 2017

€k	Concessions, proprietary rights and similar rights and assets, including licences on such rights and assets	Goodwill	Payments made on account	Total
Cost (of purchase or production)				
Amounts as of 1 January	58,849	91,282	36	150,166
Changes in basis of consolidation	-85	0	0	-85
Additions / Current investments	1,790	0	35	1,825
Disposals	-1,048	0	-1	-1,049
Reclassifications	378	0	-30	348
Currency translation differences	-149	-171	0	-319
Amounts as of 31 December	59,736	91,111	39	150,886
Accumulated amortisation and impairment losses				
Amounts as of 1 January	55,013	1,122	0	56,135
Changes in basis of consolidation	-85	0	0	-85
Additions	1,914	0	0	1,914
Disposals	-1,048	0	0	-1,048
Reclassifications	307	0	0	307
Currency translation differences	-140	1	0	-139
Amounts as of 31 December	55,961	1,123	0	57,084
Net carrying amounts	3,775	89,988	39	93,802

Impairment testing of all the goodwill recognised in the Consolidated Balance Sheet did not lead to any additional impairment losses, since in each case the fair value less costs to sell is higher than the carrying amount recognised by the cash-generating unit concerned. The weighted average cost of capital (WACC) applied for discounting purposes is 6.00% (2017: 6.00%), where a growth discount of 1.0% is applied after the end of the three-year planning period.

No change that might reasonably be anticipated in any of the basic assumptions made for the purpose of determining the value in use of the cash-generating units could lead to their carrying amounts materially exceeding the recoverable amounts.

The goodwill subjected to impairment testing is essentially shared between the Natural Resources (2018: €35,687k; 2017: €35,687k), Industrial Services (2018: €28,814k; 2017: €28,804k), Aerospace (2018: €14,189k; 2017: €14,189k) and Mobility (2018: €11,210k; 2017: €11,210k) business units.

5.2. Property, plant and equipment

The following changes occurred in property, plant and equipment:

PROPERTY, PLANT AND EQUIPMENT – CHANGES 2018

€k	Land, leasehold rights and buildings, including buildings on third-party land	Machinery	Furniture and fittings, other factory and office equipment	Payments made on account and assets under construction	Total
Cost (of purchase or production)					
Amounts as of 1 January	271,768	153,548	222,844	8,964	657,124
Changes in basis of consolidation	0	2	38	0	40
Additions/Current investments	6,718	14,572	26,970	7,109	55,369
Disposals	-23,566	-2,937	-19,025	-13	-45,541
Reclassifications	7,586	621	-388	-7,654	165
Currency translation differences	-138	-128	-247	-1	-513
Amounts as of 31 December	262,368	165,679	230,192	8,406	666,645
Accumulated depreciation and impairment losses					
Amounts as of 1 January	147,037	107,491	175,972	196	430,695
Changes in basis of consolidation	0	1	9	0	10
Depreciation	5,023	9,173	18,298	0	32,493
Impairment	0	0	1	0	1
Disposals	-15,240	-2,937	-14,446	0	-32,622
Reclassifications	0	300	-300	0	0
Currency translation differences	-26	-67	-127	0	-221
Amounts as of 31 December	136,793	113,961	179,407	196	430,356
Net carrying amounts	125,575	51,718	50,786	8,210	236,289

PROPERTY, PLANT AND EQUIPMENT – CHANGES 2017

€k	Land, leasehold rights and buildings, including buildings on third-party land	Machinery	Furniture and fittings, other factory and office equipment	Payments made on account and assets under construction	Total
Cost (of purchase or production)					
Amounts as of 1 January	281,127	141,987	215,531	9,941	648,584
Changes in basis of consolidation	-5	-112	-433	-1	-551
Additions/Current investments	3,715	8,895	20,656	7,921	41,187
Disposals	-2,513	-2,168	-12,419	-31	-17,130
Reclassifications	-10,441	5,262	95	-8,865	-13,948
Currency translation differences	-116	-316	-587	0	-1,019
Amounts as of 31 December	271,768	153,548	222,844	8,964	657,124
Accumulated depreciation and impairment losses					
Amounts as of 1 January	152,659	101,461	168,454	192	422,765
Changes in basis of consolidation	-5	-112	-433	0	-549
Depreciation	6,628	8,655	17,262	3	32,548
Impairment	4	0	0	0	4
Disposals	-2,001	-2,005	-8,995	0	-13,001
Reclassifications	-10,262	-372	65	0	-10,569
Currency translation differences	13	-139	-378	0	-504
Amounts as of 31 December	147,037	107,491	175,972	196	430,695
Net carrying amounts	124,731	46,057	46,871	8,769	226,429

The following assets are subject to limitations on their availability:

LIMITATIONS ON AVAILABILITY

€k	31.12.2018	31.12.2017
Machinery	180	193
Furniture and fittings, other factory and office equipment	673	733

Items of property, plant and equipment to the value of €2,926k (2017: €3,053k) are pledged as collateral for debt. The liabilities secured as of 31 December 2018 amount to €253k (2017: €296k).

Compensation payments by third parties in the amount of €475k (2017: €717k) are recognised as Other operating income.

The following carrying amounts of property, plant and equipment relate to assets on lease under finance leases:

FINANCE LEASE

€k	Initial recognition amounts		Accumulated depreciation and impairment losses		Net carrying amounts	
	2018	2017	2018	2017	2018	2017
Machinery	40	0	4	0	36	0
Furniture and fittings, other factory and office equipment	655	730	182	204	473	526
Total	695	730	186	204	509	526

The following minimum lease payments will be payable in future on the basis of existing finance leases:

MINIMUM LEASE PAYMENTS

	Up to 1 year		1-5 years		Total	
€k	2018	2017	2018	2017	2018	2017
Total minimum lease payments	179	248	331	376	510	624
Interest expense included	-7	-7	-4	-5	-11	-12
Present values	172	241	327	371	499	612

There are no minimum lease payments with residual terms of more than 5 years.

Obligations under finance leases are recognised under Other liabilities (see under 5.13.).

Future obligations under operating leases where the benefits of ownership do not lie with TÜV NORD Group as lessee are recognised under Other financial liabilities (see under 5.16.).

5.3. At equity consolidated investments

The following table shows the names and the locations of the registered offices of companies accounted for using the equity method, together with the percentage of the equity held, the company's total equity and its total earnings after tax:

AT EQUITY CONSOLIDATED INVESTMENTS

Name, location of registered office	Share of equity in %	Total equity 100 in % €k	EAT 100% in €k
National Inspection and Technical Testing Company Ltd. (FAHSS), Damman, Saudi Arabia	25.11	7,549	646
TÜV Middle East W.L.L., Manama, Bahrain	25.10	5,570	1,029
UAB TÜVLITA, Vilnius, Lithuania	50.00	6,177	375
EnergieAgentur.NRW GmbH, Düsseldorf, Germany	50.00	477	126
TUV NORD NTA Mobility (Shanghai) Co., Ltd., Shanghai, China	49.00	-2,490	-1,057

For the associates that are material to TÜV NORD AG the following table show financial information as well as a reconciliation to the carrying amount of the interest in the associate.

These figures were determined on the basis of audited financial statements for the previous year (see under 2.6.).

RESULTS FROM FAHSS

€k	2017	2016
Revenues	24,137	25,521
Earnings after tax / total comprehensive income	646	705
Share of earnings after tax / total comprehensive income	162	102

BALANCE SHEET INFORMATION FAHSS

€k	31.12.2017	31.12.2016
Current assets	15,437	17,916
Non-current assets	3,777	3,300
Current liabilities	-5,738	-6,188
Non-current liabilities	-5,927	-5,143
Equity	7,549	9,885
Share of equity	1,904	2,233
Dividend payment during the year	0	0
Other	0	-362
Book value of the at equity consolidated FAHSS	1,904	1,871

RESULTS FROM TÜV MIDDLE EAST

€k	2017	2016
Revenues	18,741	19,620
Earnings after tax / total comprehensive income	1,029	75
Share of earnings after tax / total comprehensive income	258	19

BALANCE SHEET INFORMATION TÜV MIDDLE EAST

€k	31.12.2017	31.12.2016
Current assets	10,995	11,799
Non-current assets	569	778
Current liabilities	-4,244	-3,803
Non-current liabilities	-1,751	-1,783
Equity	5,569	6,991
Share of equity	1,398	1,755
Dividend payment during the year	0	0
Book value of the at equity consolidated TÜV Middle East	1,398	1,755

Results from non-material investments accounted for using the equity method are shown in the following table:

RESULTS

€k	2017	2016
Revenue	26,071	23,761
Earnings after tax	-556	-605
Share of earnings after tax	-268	-303

The following table shows summarised balance sheet information on the non-material investments accounted for using the equity method:

BALANCE SHEET INFORMATION

€k	31.12.2017	31.12.2016
Assets	10,681	10,664
Liabilities	-6,518	-5,558
Equity	4,163	5,106
Book value of non-material associates	3,169	2,637

5.4. Other financial assets

For TÜV NORD AG's other equity investments please refer to the list of shareholdings (see under 7.8).

The following changes in other financial assets occurred during the year under review:

OTHER FINANCIAL ASSETS – CHANGES 2018

€k	Investments in affiliates	Investments in joint ventures and associates (not equity accounted)	Other equity investments	Long-term securities	Loans granted	Shares in guarantee funds arising from reinsurance	Total
Cost (of purchase or production)							
Amounts as of 1 January	12,436	1,270	176	7,804	1,120	18,922	41,728
Changes in basis of consolidation	0	0	0	0	0	0	0
Additions	1,631	230	0	0	150	2,555	4,565
Disposals	0	-117	-41	-6,825	-109	-1,711	-8,803
Reclassifications	-250	0	0	0	0	-3,472	-3,722
Currency translation differences	-16	-6	-1	0	0	0	-23
Amounts as of 31 December	13,801	1,376	135	979	1,161	16,293	33,746
Accumulated amortisation and impairment losses							
Amounts as of 1 January	4,833	303	0	238	985	31	6,389
Changes in basis of consolidation	0	0	0	0	0	0	0
Additions	342	0	0	22	0	0	364
Disposals	0	-117	0	-36	0	-31	-184
Reclassifications	0	0	0	0	0	0	0
Currency translation differences	-11	0	0	0	0	0	-11
Amounts as of 31 December	5,164	185	0	224	985	0	6,558
Net carrying amounts	8,638	1,191	135	755	177	16,293	27,189

The additions/ongoing investments under the shares in affiliated companies refer to companies acquired in the 2018 fiscal year which are currently of merely minor significance to the communication of a picture of the asset, financial and earnings position of the Group that reflects its actual circumstances.

Of the reinsurance claims on Alters- und Hinterbliebenen-Versorgungsstelle der Technischen Überwachungs-Vereine – VvaG –, Essen, (AHV), claims of €3,903k (2017: €4,766k) have been pledged as collateral to secure loan liabilities and obligations arising out of pre-retirement part-time working arrangements.

OTHER FINANCIAL ASSETS – CHANGES 2017

€k	Investments in affiliates	Investments in joint ventures and associates (not equity accounted)	Other equity investments	Long-term securities	Loans granted	Shares in guarantee funds arising from reinsurance	Total
Cost (of purchase or production)							
Amounts as of 1 January	6,769	969	195	10,492	1,195	22,536	42,156
Changes in basis of consolidation	976	0	0	-40	0	-862	74
Additions	4,761	300	0	0	205	540	5,805
Disposals	0	-13	-19	-2,648	-279	-641	-3,599
Reclassifications	0	0	0	0	0	-2,651	-2,651
Currency translation differences	-69	13	0	0	0	0	-56
Amounts as of 31 December	12,436	1,270	176	7,804	1,120	18,922	41,728
Accumulated amortisation and impairment losses							
Amounts as of 1 January	3,839	303	19	278	1,052	0	5,489
Changes in basis of consolidation	976	0	0	-40	0	-43	893
Additions	143	0	0	0	0	0	143
Disposals	-104	0	-19	0	-67	73	-117
Reclassifications	0	0	0	0	0	0	0
Currency translation differences	-19	0	0	0	0	0	-19
Amounts as of 31 December	4,833	303	0	238	985	31	6,389
Net carrying amounts	7,604	968	176	7,566	136	18,891	35,339

5.5. Inventories

INVENTORIES

€k	2018	2017
Raw materials and supplies	1,739	1,486
Work in progress	0	46,389
Finished products and merchandise	0	4,035
Payments made on account	1,656	1,567
Total	3,394	53,477

Write-downs amounting to €131k (2017: €0k) are recognised under Inventories.

Unfinished services and finished products and goods are no longer accounted for under Inventories after the first-time application of IFRS 15 and are instead recognised as contract assets under Trade and other receivables, Other assets.

5.6. Trade and other receivables

Trade and other receivables can be disaggregated in accordance with their residual terms as follows:

TRADE AND OTHER RECEIVABLES

€k	2018			2017		
	Current	Non-current	Total	Current	Non-current	Total
Trade receivables						
from third parties	174,463	139	174,602	162,724	139	162,863
from contract assets	84,013	0	84,013	15,090	0	15,090
Receivables from affiliates	2,314	4	2,318	774	19	793
Receivables from joint ventures, associates and other entities in which equity investments are held	4,572	0	4,572	2,589	0	2,589
Total	265,363	143	265,506	181,178	158	181,336

Historical default rates and future-oriented conditions are considered for the determination of the value adjustments for receivables from goods and services. The expected loan defaults that arise according to the simplified procedure pursuant to IFRS 9 are as follows:

IMPAIRMENT MATRIX 31 DECEMBER 2018

€k	expected loss in %	Trade receivables	Value adjustment
actual	1.0	178,678	1,843
1 to 30 days due	4.9	45,629	2,225
31 to 60 days due	9.2	14,253	1,311
61 to 90 days due	14.2	5,612	796
more than 90 days due	18.6	25,360	4,742
Total		269,532	10,917

IMPAIRMENT MATRIX 1 JANUARY 2018

€k	expected loss in %	Trade receivables	Value adjustment
actual	0.9	149,368	1,385
1 to 30 days due	3.8	49,302	1,878
31 to 60 days due	7.3	15,283	1,120
61 to 90 days due	11.2	5,672	636
more than 90 days due	18.5	20,045	3,682
Total		239,670	8,701

The closing balance of value adjustments for trade receivables and contract assets on 31 December 2018 is transferred to the opening balance sheet value of the value adjustments as follows:

VALUE ADJUSTMENTS

€k	2018	2017
Carrying amount as of 1 January	8,301	9,901
Changes in accounting methods	400	0
Changes in basis of consolidation	0	-105
Additions	3,091	1,874
Use	378	1,740
Reversals	497	1,629
Carrying amount as of 31 December	10,917	8,301

During the period under review, value adjustments on doubtful receivables were effected in the amount of €3,091k (2017: €1,874k). In the reporting period, bad debts amounting to €744k were written off.

In the previous year, the maturities and value adjustments were as follows:

AGE STRUCTURE

€k	2017
Trade receivables from third parties, gross	171,164
a) of which neither overdue nor impaired	80,862
b) of which overdue by the following periods, but not yet impaired	
1 to 30 days	49,302
31 to 60 days	15,283
61 to 90 days	5,672
91 to 180 days	6,020
more than 180 days	14,025
Value adjustments	-8,301
Trade receivables from third parties, net	162,863

No significant value adjustments were required for receivables from affiliated companies and joint ventures, associated companies and other participations.

5.7. Other assets

Other assets with a residual term of more than one year are classified as non-current, and those with a residual term of less than one year as current.

The other assets recognised essentially consist of accrued items and tax reimbursement claims. The items break down as follows:

OTHER ASSETS

€k	2018			2017		
	Current	Non-current	Total	Current	Non-current	Total
Other assets	15,541	5,050	20,591	12,149	4,160	16,309

5.8. Cash and cash equivalents

The cash and cash equivalents consist of cheques, cash in hand and balances on account with a number of different banks in various currencies. The bank balances earn interest at customary market rates.

5.9. Assets held for sale

Pursuant to IFRS 5, developed and undeveloped properties in respect of which disposal procedures have been initiated are reported under the item "Assets held for sale".

5.10. Equity

For further details of changes in equity between 1 January 2017 and 31 December 2018, see the Statement of Changes in Consolidated Equity.

TÜV NORD's capital management policy aims not only to secure the continued existence of the business but also to achieve an adequate return in excess of the costs of capital, thereby enhancing the value of the company in the long term. The equity is monitored regularly on the basis of various indicators.

Subscribed capital

The subscribed capital remains unchanged at €10,000k, divided into 100,000 registered no-par-value shares. All the shares are fully paid.

At the time of preparation of the Consolidated Financial Statements for the 2018 fiscal year, TÜV NORD AG had neither contingent nor authorised capital. TÜV NORD AG does not grant any share-based remuneration (share option programmes) to its employees.

Capital reserves

The capital reserves of TÜV NORD Group in the amount of €114,413k correspond to the capital reserves of TÜV NORD AG.

Subordinated registered debenture

As of 31 December 2017, the subordinated registered debentures taken out by the TÜV NORD AG amounted to €50,000.

On 8 December 2015, TÜV NORD AG took out a subordinated registered debenture without a fixed term amounting to €10,000k with RWTÜV e.V., Essen. The interest rate is fixed at 4.125% until 7 June 2021 and will then increase by 100 basis points for each additional 5-year period. A termination option is exclusively available to TÜV NORD AG for the first time as of 7 June 2021, thereafter annually.

On 1 October 2015, TÜV NORD AG took out a subordinated registered debenture without a fixed term amounting to €11,000k with

TÜV Nord e.V., Hamburg and amounting to €9,000k with TÜV Hannover/Sachsen-Anhalt e.V., Hannover. The interest rate is fixed at 4.125% until 31 March 2021 and will then increase by 100 basis points for each additional 5-year period. A termination option is exclusively available to TÜV NORD AG for the first time as of 31 March 2021, thereafter annually.

On 22 December 2014, TÜV NORD AG took out a subordinated registered debenture without a fixed term with Alters- und Hinterbliebenen-Versorgungsstelle der Technischen Überwachungs-Vereine –VvaG–, Essen, (AHV). The interest rate is fixed at 4.125% until 30 June 2020 and will then increase by 100 basis points for each additional 5-year period. A termination option is exclusively available to TÜV NORD AG for the first time as of 30 June 2020, thereafter annually.

Interest payments are at the discretion of TÜV NORD AG. They are also to be paid retroactively in full, for instance, in the event of the redemption of the registered debenture, distributions to the shareholders or the repayment of other liabilities of equal rank or in the case of economically similar procedures.

Retained earnings

The retained earnings include the earnings of the consolidated companies, to the extent that these have not been distributed as dividends. In addition, the offsetting of asset-side and liability-side differences arising out of the capital consolidation of acquisitions up to 31 December 2006 and also the net amount of non-cash adjustments in connection with the first-time adoption of IFRS are recognised under this item.

Other equity items

The other equity items include the non-cash impacts on equity of the currency translation of foreign subsidiaries' separate financial statements, of the valuation of financial instruments at fair value, and of actuarial gains and losses arising out of post-employment benefit plans, and also the deferred taxes recognised in connection with these items.

Non-controlling interests

Non-controlling interests cover holdings by investors outside TÜV NORD Group in the consolidated equity of Group companies.

The significant non-controlling interests are held in the following Group companies:

NON-CONTROLLING INTERESTS

€k	31.12.2018	31.12.2017
DMT Consulting Private Limited, Kolkata, India	632	623
TÜV India Private Ltd., Mumbai, India	6,672	5,395
TÜV NORD CERT GmbH, Essen, Germany	1,245	1,176
TÜV NORD Mobilität Immobilien GmbH, Essen, Germany	1,135	1,055
Various other companies	873	2,014
Total	10,557	10,263

The voting rights of other shareholders are in proportion to their share of the equity. Due to lack of materiality, no further information is given on the subsidiaries in which non-controlling minority shareholders have a stake. More information can be found in the list of shareholdings in chapter 7.8.

5.11. Provisions for pensions and other post-employment benefits

Provisions are formed for obligations arising out of entitlements and current benefits of serving and former employees and their surviving dependents, to the extent that these arise under a defined benefit plan. These provisions are determined in accordance with actuarial valuations of existing benefit obligations, which are recalculated every year. The costs resulting from these commitments are allocated over the employee's period of service in accordance with the actuaries' findings and comprise current or past service cost and interest cost.

The full amount of actuarial gains and losses is recognised in Other comprehensive income, with due allowance for deferred taxes. These actuarial gains and losses are therefore presented in the Group Statement of Comprehensive Income.

The net pension cost is shown as personnel expense.

A contractual trust agreement (CTA) was initially funded with effect from 30 December 2008. Shares in reinsurance guarantee funds which serve exclusively and irrevocably to cover and fund post-employment benefit obligations were vested in TÜV NORD PENSION TRUST e.V. Under IFRS rules, the assets of the CTA are to be regarded as "plan assets". The plan assets consist exclusively of these reinsurance guarantee fund shares. The plan assets consist exclusively of these reinsurance guarantee fund shares. The plans encumber the Group with general actuarial risks, such as, for example, longevity risk, currency risk, interest rate risk and market risk.

The level of post-employment benefit obligations (the present value, determined by actuarial valuation, of the defined benefit obligation (DBO)) was calculated by actuarial methods, a procedure in which the use of estimated values is unavoidable.

Pursuant to IAS 19, Employee benefits, the level of post-employment benefit obligations is determined by the projected unit credit method, under which actuarial methods on the basis of best estimates of the relevant parameters are used to assess the vested future obligations existing as of the valuation date.

The post-employment benefits that are expected to become payable, including dynamic components, are distributed over the employee's entire period of service. For the year under review, the following assumptions were made by the actuaries with regard to the variable parameters to be included in their calculations:

ASSUMPTIONS

%	2017	2016
Discount rate as of 31.12.	1.30	1.55
Future pension increases	1.20	1.20
Future wage and salary increases	1.50	1.50
Employee turnover	2.00	2.00

The actuaries review and revise their findings every year. The actuarial assumptions with regard to mortality are based (with regard to Germany) on the Heubeck mortality tables, version 2008G as amended in October 2018 (2017: 2005G). The actuarial assumptions do not materially differ between Germany and other countries with the exception of the discount rate.

The Group has both defined benefit and defined contribution plans for commitments for retirement, invalidity and surviving dependants' pensions based on works agreements and individual contractual agreements. Defined benefit pension plans were offered only to staff who joined the company up to and including 31 December 1991 or, as the case may be, 31 December 1993. The level of these commitments is calculated according to the eligible income and/or social insurance pension as well as length of service. The benefits are paid directly by the company which granted the pension commitment.

The following table shows changes in the present value of future post-employment benefit obligations and of the plan assets.

CHANGES IN THE PRESENT VALUE OF FUTURE BENEFIT OBLIGATIONS AND IN PLAN ASSETS 2018

€k	Benefit obligation	Plan assets	Total
Carrying amounts as of 1 January 2018	1,239,133	-754,282	484,851
Current service cost	12,759	0	12,759
Net interest cost (interest cost/interest income)	19,352	-12,079	7,273
Net pension cost	32,111	-12,079	20,032
Actual interest on plan assets less actuarial interest income	0	-7,338	-7,338
Actuarial gains/losses from changes in financial assumptions	57,452	0	57,452
Remeasurement of defined benefit pension plans	57,452	-7,338	50,114
Pension payments	-54,121	0	-54,121
Payments from the pension plan	0	39,368	39,368
Employer's contributions to the pension plan	0	-28,890	-28,890
Total payments	-54,121	10,478	-43,643
Transfer of obligations	-1,650	-1,256	-2,906
Changes in scope of consolidation/changes in currency translation and other effects	1,021	-2,274	-1,253
Carrying amounts as of 31 December 2018	1,273,946	-766,751	507,195

CHANGES IN THE PRESENT VALUE OF FUTURE BENEFIT OBLIGATIONS AND IN PLAN ASSETS 2017

€k	Benefit obligation	Plan assets	Total
Carrying amounts as of 1 January 2017	1,201,989	-740,580	461,409
Current service cost	12,714	0	12,714
Net interest cost (interest cost/interest income)	22,892	-14,821	8,071
Net pension cost	35,606	-14,821	20,785
Actual interest on plan assets less actuarial interest income	0	-7,288	-7,288
Actuarial gains/losses from changes in financial assumptions	55,182	0	55,182
Remeasurement of defined benefit pension plans	55,182	-7,288	47,894
Pension payments	-53,670	0	-53,670
Payments from the pension plan	0	39,946	39,946
Employer's contributions to the pension plan	0	-29,119	-29,119
Total payments	-53,670	10,827	-42,843
Transfer of obligations	926	-743	183
Changes in scope of consolidation/changes in currency translation and other effects	-900	-1,677	-2,577
Carrying amounts as of 31 December 2017	1,239,133	-754,282	484,851

The benefit obligation in proportion to plan assets reflects the funded status of the benefit plan in question, with any excess of the benefit obligation over plan assets constituting a plan deficit. Both the benefit obligation and plan assets can vary over time, leading to an increase/decrease in the plan deficit. Reasons for such fluctuation can include changes in market interest rates and thus in the discount rate, or adjustments to actuarial assumptions.

The TÜV NORD Group's plan assets exclusively comprise employer's pension liability insurance policies and are subject to only limited fluctuation on account of the existing minimum returns. A price reporting on an active market does not exist for employer's pension liability insurance policies. The recognised plan deficit is covered by cash flows from operating activities. It is the long-term goal of the TÜV NORD Group to gradually increase plan assets. The employer contributions to plan assets are expected to amount to €18.0 million in 2019. The weighted average term of the remainder of benefit obligations is 13.5 years.

The table below shows the effects on the defined benefit obligation (DBO) of any change in the parameters. The analysis relates to parameters where a change was considered possible as of the reporting date. The values here are mean values which were weighted with the present value of the respective pension obligation. No correlation between the parameters was taken into account in the calculation.

SENSITIVITY ANALYSIS

%	Change in parameter	Increase in parameter	Decrease in parameter
Interest rate	1.0%	12.4% DBO decrease	15.4% DBO increase
Rate of pension progression	0.5%	6.0% DBO increase	5.5% DBO decrease

Employer contributions to mandatory pension schemes as well as contributions to other defined contribution plans were made in the amount of €45.7 million in 2018 (2017: €44.0 million).

5.12. Other non-current and current provisions

OTHER NON-CURRENT AND CURRENT PROVISIONS

€k	Provisions for the areas of personnel and welfare	Sundry other provisions	Total
Carrying amounts as of 1 January 2018	49,144	39,524	88,668
Additions	29,233	10,347	39,580
Use	29,927	4,187	34,114
Reversals	3,057	4,286	7,343
Reclassifications/Transfers	-388	428	40
Currency translation differences	-30	-49	-79
Carrying amounts as of 31 December 2018	44,976	41,778	86,753

The provisions for obligations in the areas of personnel and welfare relate essentially to pre-retirement part-time working, long-service bonuses, social plan measures and other personnel and non-wage personnel costs.

Of the total amount of the provisions in the areas of personnel and welfare as of 31 December 2018, €23,966k (2017: €28,945k) are current and €21,010k (2017: €20,199k) are non-current.

The sundry other provisions relate mainly to provisions for warranty obligations, provisions for threatened losses from pending transactions and other risks.

Of the total amount of the sundry other provisions as of 31 December 2018, €30,061k (2017: €30,601k) are current and €11,717k (2017: €8,922k) are non-current. No material interest accruals have been recognised on non-current provisions.

5.13. Non-current and current trade and other payables

Cash payables can be disaggregated in accordance with their residual terms as follows:

NON-CURRENT AND CURRENT TRADE AND OTHER PAYABLES

€k	2018			2017		
	Current	Non-current	Total	Current	Non-current	Total
Amounts payable to banks	105	130	235	90	197	287
Amounts payable under finance leases	158	326	484	240	370	611
Financial liabilities	263	456	718	330	567	897
Trade payables						
to third parties	34,862	0	34,863	33,721	0	33,721
from contract liabilities	52,167	0	52,167	37,787	65	37,851
Payables to affiliates	1,582	5	1,587	123	2	125
Payables to joint ventures, associates and other entities in which equity investments are held	842	0	842	1,206	0	1,206
Outstanding invoices	21,125	0	21,125	24,692	0	24,692
Amounts payable to employees	27,869	865	28,734	27,789	865	28,653
Other taxes	12,036	0	12,036	19,898	0	19,898
Other payables	41,005	7,675	48,679	39,607	7,592	47,199
Trade and other payables	191,488	8,545	200,033	184,822	8,524	193,346
Total payables	191,751	9,001	200,752	185,153	9,091	194,244

Amounts payable under finance leases relate to leases of capital goods and are recognised as liabilities in the amount of the future obligation.

Liabilities from contract liabilities relate to contracts with regard to which the payments received from customers on account exceed the accumulated receivables from the fulfilment of the contracts concerned.

Amounts payable to employees include €17,782k (2017: €15,995k) for obligations in lieu of free time and €8,265k (2017: €7,940k) for obligations relating to holiday not yet taken.

5.14. Contingent liabilities

TÜV NORD AG bears liability in cases where it and its subsidiaries have given guarantees in favour of various contractual partners.

In the year under review, contingent liabilities in the amount of €15,796k (2017: €12,493k) are recognised which relate to sureties given for the most part to banks. TÜV NORD AG gives performance bonds in respect of liabilities of Group companies arising out of joint projects or consortia. If the consortium partner does not honour its contractual obligations, TÜV NORD AG may be liable to meet claims for payment up to the amount of the agreed surety. Generally, the agreed terms correspond to those of the underlying transaction.

5.15. Litigation

Neither TÜV NORD AG nor its Group companies are involved in litigation that could have a material impact on the economic or financial position of the companies or of the Group. In respect of other litigation, adequate provisions have been formed by the company concerned in any given case for any awards that may be made against it. As of the reporting date, these provisions amount to €1,057k (2017: €1,707k).

5.16. Other financial liabilities

As of 31 December 2018, obligations exist to order items of property, plant and equipment to the value of €872k (2017: €384k).

The other financial liabilities relate to rental and leasing obligations for premises, furniture and fittings and factory and office equipment which are classified as operating leases pursuant to IAS 17.

The minimum lease payments fall due as follows:

MINIMUM LEASE PAYMENTS

€k	Up to 1 year	1-5 years	More than 5 years	Total
Minimum lease payments for rented real estate	15,574	41,320	39,280	96,174
Minimum lease payments under other operating leases	3,742	6,145	4,266	14,153

The other financial rental obligations are predominantly classified as non-current. They have terms of between five and ten years.

Expense under such contracts recognised in the Income Statement amounts to €40,993k (2017: €38,343k).

6. CONSOLIDATED CASH FLOW STATEMENT DISCLOSURES

The figures for cash and cash equivalents presented in the cash flow statement embrace all cash and cash equivalents recognised in the balance sheet, i.e. cash in hand, cheques and balances on account with banks. The recognised cash and cash equivalents are freely disposable and not subject to any restrictions in favour of third parties.

7. OTHER DISCLOSURES

7.1. Events after the reporting period

No events of particular significance occurred after the end of the fiscal year which are having a significant impact on the business of the Group.

7.2. Fees paid to the auditors of the Consolidated Financial Statements

The following fees, paid to the auditors of the Consolidated Financial Statements, BDO AG Wirtschaftsprüfungsgesellschaft, during the year under review, have been recognised as expense pursuant to Article 314 (1) (9) of the German Commercial Code (HGB):

FEES PAID TO THE AUDITORS

€k	2018	2017
Auditing services	717	735
Tax consultancy services	38	94
Other consultancy services	36	31
Total	791	860

7.3. Financial instruments

The evaluation of categories of financial instruments relevant after IFRS 9 for the reporting and the comparative period is shown in the following overview.

FINANCIAL INSTRUMENTS AS OF 31 DECEMBER 2018

€k	Carrying amounts	At amortized cost	Fair Value through other comprehensive income (FVOCI)	Fair Value through profit or loss (FVTPL)
ASSETS				
Non-current assets				
Investments in affiliates	8,638			8,638
Investments in joint ventures and associates (not equity accounted)	1,191			1,191
Other equity investments	135			135
Securities	755		755	
Loans	177	177		
Receivables and other assets	3,614	3,614		
Current assets				
Trade receivables from third parties	258,477	258,477		
Receivables and other assets	13,234	13,234		
Cash and cash equivalents	73,512	73,512		
LIABILITIES				
Non-current liabilities				
Financial liabilities	130	130		
Trade payables to third parties	0	0		
Other liabilities	7,818	7,818		
Current liabilities				
Financial liabilities	105	105		
Trade payables to third parties	35,605	35,605		
Other liabilities	138,686	138,686		

**FINANCIAL INSTRUMENTS AS OF 31 DECEMBER 2017
RECONCILIATION IAS 39 TO IFRS 9**

Classification according for IFRS 9 (Carrying amounts)					
€k	original Category as per IAS 39	Carrying amounts IAS 39	At amortized cost*	Fair Value through other comprehensive income (FVOCI)	Fair Value through profit or loss (FVTPL)
ASSETS					
Non-current assets					
Securities	AfS	7,566		7,566	
Loans	LaR	136	136		
Receivables and other assets	LaR	2,787	2,787		
Current assets					
Trade receivables from third parties	LaR	177,815	230,831		
Receivables and other assets	LaR	9,489	9,489		
Cash and cash equivalents	LaR	84,708	84,708		
LIABILITIES					
Non-current liabilities					
Financial liabilities	FLAC	197	197		
Trade payables to third parties	FLAC	0			
Other liabilities	FLAC	8,325	8,325		
Current liabilities					
Financial liabilities	FLAC	90	90		
Trade payables to third parties	FLAC	34,058	34,058		
Other liabilities	FLAC	122,081	122,081		

FINANCIAL INSTRUMENTS AS OF 31 DECEMBER 2017

€k	Category as per IAS 39	Carrying amounts	Loans and receivables measured at amortised cost*	Available-for-sale financial assets recognised at fair value in compre- hensive income	Financial liabilities measured at amortised cost*
Total by category as per IFRS 99			492,701	7,566	0
Total by category as per IAS 39					
Loans and receivables (LaR)		274,934			
Available-for-sale financial assets (AFS)		7,566			
Financial liabilities measured at amortised cost (FLAC)		164,751			

* The carrying amount corresponds to the fair values.

As laid down in the three stages of the valuation hierarchy in IFRS 13.72 et seq., the valuation of financial assets and liabilities is subject to the availability of the relevant information. For the first stage, quoted market prices are directly observable for identical asset values and liabilities in active markets. In the second stage, the assessment is made on the basis of valuation models which are influenced by values that are observable on the market. The third stage envisages the application of valuation models that do not rely on observable market inputs.

In view of the predominantly short maturities of the assets and liabilities measured at amortised cost, it is assumed that their carrying amounts approximately correspond to their fair values.

The securities classified as assessed at fair value with no impact on net earnings are based on market prices quoted on an active market (level 1 of the fair value hierarchy).

Net profit or loss by category

Net profit or loss from financial instruments that is recognised in the Income Statement is allocated to the following categories:

NET PROFIT OR LOSS BY CATEGORY

	2018			2017		
€k	From interest	From subsequent measurement	From disposal	From interest	From subsequent measurement	From disposal
Financial assets	956	0	-35	2,198	-3,089	0
Financial liabilities	-973	283	0	-2,187	181	0

Interest on financial liabilities and impairment losses on loans granted are recognised in Financial items. Impairment losses on receivables (essentially trade receivables) and gains or losses from disposals of securities are recognised under Other losses or gains.

Through TÜV NORD AG's centralised risk management system, these risks are managed and controlled on a Group-wide basis. The principles of the risk management system are explained in greater detail in the Management Report.

7.4. Management of financial risks

TÜV NORD Group companies are exposed to financial risks in the course of their operations. These risks consist of credit, liquidity and market risks in the form of currency and interest rate risks. The risk situation has not changed in comparison to the previous reporting period.

Credit default risks

Default risks arise in particular out of day-to-day operations. The receivables of TÜV NORD Group companies are generally subject to a default risk which it may seek to counter by demanding security, depending on the type and amount of the performance rendered. Where required, credit insurance with an excess component is concluded in respect of individual counterparties. In addition, payment in advance may be required. In order to minimise the risk of default,

counterparties are subjected to creditworthiness assessments in accordance with internal guidelines before contracts are concluded. Furthermore, customers' financial standing is regularly reviewed during the term of the contract. If there is any concrete risk of default, precautionary write-downs are effected, on the basis of either objective evidence in specific cases or the structure of maturities and the actual occurrence of defaults on payment.

Defaults on trade receivables, receivables based on contract assets and loans cannot exceed their carrying amount as of 31 December 2018. The structure of due dates of trade receivables is shown under 5.6.

The maximum credit risk relating to assets held for sale and financial instruments is equivalent to their market prices as of 31 December 2018.

Liquidity risks

Possible liquidity risks – the danger that the Group might not always be able to meet its payment obligations – are managed through the implementation of comprehensive short-term and long-term liquidity planning, taking into account existing credit lines. Funding requirements are for the most part covered by equity, participation in cash pooling agreements or loans from banks or from Group companies, to the extent that this is feasible and reasonable in the context of the legal and tax situation in each case. Bank balances are held exclusively with banks of impeccable standing.

A variety of financing instruments available on the market are used to cover the Group's central funding requirements. If events should occur that lead to an unexpectedly high requirement for liquidity, both existing liquidity in the form of cash and cash equivalents and available credit lines can be drawn upon.

A credit line up to a limit of €100,000k (2017: €100,000k) is available and can be drawn upon as required; the amount drawn down as of 31 December 2018 amounted to €0k. Interest at the three-month EURIBOR rate plus a margin of actual 80 basis points, minimum 0.8% per year, was payable on the amount drawn down from the time of disbursement.

An overview of the maturities of financial liabilities and the resulting outflows of funds can be derived from the table of residual terms of liabilities (see under 5.13.).

Currency risks

Currency risks result from the assets and liabilities recognised in the balance sheet that are denominated in foreign currencies, the fair values of which may be negatively influenced by fluctuations in exchange rates, and from pending foreign currency transactions whose future cash flows may develop disadvantageously as a result of exchange rate movements.

Exchange rate risk is of only minor importance, since the receivables and payables are due in local currency in the country in which the company concerned is domiciled. There are scarcely any country risks at the present time.

7.5. Related party disclosures

Under IAS 24 "Related party disclosures", companies are subject to an obligation to disclose relationships with, on the one hand, related business entities that are not fully consolidated, and, on the other, with persons with whom a close relationship exists.

Related party entities of TÜV NORD Group are basically TÜV Nord e.V., TÜV Hannover/Sachsen-Anhalt e.V. and RWTÜV e.V. associations, "Aktaios" Verwaltungs-GmbH and RWTÜV GmbH with its subsidiaries. For further information in relation to the registered debentures taken out with the associations, see under section 5.10.

In addition, the Group maintains direct or indirect relationships in the normal course of its business activities not only with its consolidated subsidiaries but also with non-consolidated affiliates and associates. All trading relationships entered into in the normal course of business with non-consolidated related entities are conducted on the basis of normal market conditions such as are also customary in arm's-length transactions.

Members of the Board of Management and the Supervisory Board are also considered to be related parties.

7.6. Total compensation of the Board of Management and the Supervisory Board

The compensation of key management personnel whose disclosure is required pursuant to IAS 24 embraces the compensation of the serving members of Board of Management and the Supervisory Board.

During the 2018 fiscal year, the serving members of the Board of Management received total compensation amounting to €1,638k (2017: €1,542k).

Total payments to former members of the Board of Management and their surviving dependents, consisting of pension payments and other compensation (one-off payments and payments for consultancy services), amounted to €681k (2017: €1,129k). A DBO in the amount of €15,679k (2017: €15,289k) exists towards former members of the Board of Management and their surviving dependents.

Members of the Supervisory Board were paid compensation of €257k (2017: €243k) for their services.

As in the previous year, no loans or advances were granted to members of the Board of Management or the Supervisory Board in the 2018 fiscal year. As was also the case in the previous year, no severance payments were made.

7.7. Proposal for the appropriation of profits

The Board of Management proposes to the Annual General Meeting that of the net profits of TÜV NORD AG as determined in accordance with the provisions of the German Commercial code, €1,000k should be distributed to the shareholders as dividends.

7.8. List of shareholdings

Name, location of registered office	Share of equity %
Consolidated affiliates	
adapt engineering GmbH & Co. KG, Nordhausen, Germany	100.00
ALTER TECHNOLOGY TÜV NORD S.A.U., Seville, Spain	100.00
Asesoría y Control en Protección Radiológica, S.L. (ACPRO), Barcelona, Spain	100.00
BRTUV AVALIAÇÕES DA QUALIDADE Ltda., São Paulo, Brazil	100.00
Cualicontrol-ACI S.A.U., Madrid, Spain	100.00
DMT Consulting Limited, Nottingham, United Kingdom	100.00
DMT Consulting Private Limited, Kolkata, India	51.00
DMT GEOSCIENCES LTD., Calgary, Canada	100.00
DMT Geosurvey spol. s.r.o., Prague, Czech Republic	100.00
DMT GmbH & Co. KG, Essen, Germany	100.00
DMT Engineering Surveying GmbH & Co. KG (former Dr.-Ing. Wesemann Gesellschaft für Ingenieurgeodäsie mbH), Herne, Germany	100.00
DMT Petrologic GmbH & Co. KG, Hanover, Germany	100.00
EE Energy Engineers GmbH, Gelsenkirchen, Germany	100.00
ENCOS GmbH & Co. KG, Hamburg, Germany	100.00
FS FAHRZEUG-SERVICE GmbH & Co. KG, Hanover, Germany	100.00
Guangzhou TÜV Industrial Technical Services Co., Ltd., Guangzhou, China	100.00
GWQ GmbH & Co. KG, Moers, Germany	100.00
HIREX ENGINEERING SAS, Toulouse, France	100.00
Höntzsch GmbH, Waiblingen, Germany	100.00
Ingenieurbüro Hofmann GmbH & Co. KG, Bamberg, Germany	65.00
MEDITÜV GmbH & Co. KG – Unternehmensgruppe TÜV NORD, Hanover, Germany	100.00
Nord-Kurs GmbH & Co. KG, Hamburg, Germany	100.00
Optocap Holding Ltd., Livingston, United Kingdom	100.00
Optocap Ltd., Livingston, United Kingdom	100.00
PT. TÜV NORD Indonesia, Jakarta, Indonesia	100.00
THE INSPECTION COMPANY OF KOREA (INCOK), Seoul, Korea	100.00
TÜ-Service Anlagentechnik GmbH & Co. KG, Potsdam, Germany	100.00
TÜ Service Ingenieurgesellschaft mbH & Co. KG, Potsdam, Germany	100.00
TÜV ASIA PACIFIC LTD., Kwun Tong, Kowloon, Hong Kong	100.00
TÜV Croatia d.o.o., Slavonski Brod, Croatia	100.00
TÜV CYPRUS LTD., Nicosia, Cyprus	60.16
TÜV Eesti OÜ, Tallinn, Estonia	100.00
TÜV HELLAS (TÜV NORD) S.A., Athens, Greece	100.00
TÜV India Private Ltd., Mumbai, India	50.00
TÜV Informationstechnik GmbH Unternehmensgruppe TÜV NORD, Essen, Germany	100.00
TÜV Nederland QA B.V., Best, The Netherlands	100.00
TÜV NORD Akademie GmbH & Co. KG, Hamburg, Germany	100.00

Name, location of registered office	Share of equity %
TÜV NORD Austria GmbH, Vienna, Austria	100.00
TÜV Nord Baltik SIA, Riga, Latvia	100.00
TÜV NORD Bildung gGmbH, Essen, Germany	2) 100.00
TÜV NORD Bulgarien GmbH, Plovdiv, Bulgaria	100.00
TÜV NORD CERT GmbH, Essen, Germany	94.00
TÜV NORD CERT UMWELTGUTACHTER Gesellschaft mbH, Hanover, Germany	100.00
TÜV NORD College GmbH, Essen, Germany	100.00
TÜV NORD Czech, s.r.o., Prague, Czech Republic	100.00
TÜV Nord Danmark ApS, Kolding, Denmark	100.00
TÜV NORD EGYPT FOR INSPECTION AND CERTIFICATION SERVICES (S.A.E.), Cairo, Egypt	60.00
TÜV NORD EnSys GmbH & Co. KG, Hamburg, Germany	1) 2) 100.00
TÜV NORD Finland Oy, Vantaa, Finland	100.00
TÜV NORD Hangzhou Co., Ltd., Hangzhou, China	70.00
TÜV NORD HONG KONG LTD., Kwun Tong, Kowloon, Hong Kong	100.00
TÜV NORD Immobilien GmbH & Co. KG, Essen, Germany	1) 100.00
TÜV NORD InfraChem GmbH & Co. KG, Marl, Germany	1) 51.00
TÜV NORD INTEGRA BVBA, Berchem, Belgium	70.00
TÜV NORD International GmbH & Co. KG, Essen, Germany	1) 2) 100.00
TÜV NORD ITALIA S.r.l., Legnano, Italy	100.00
TÜV NORD Korea Ltd., Seoul, Korea	100.00
TÜV NORD (Malaysia) SDN. BHD., Petaling Jaya, Malaysia	100.00
TÜV NORD Mobilität GmbH & Co. KG, Hanover, Germany	1) 2) 100.00
TÜV NORD Mobilität Immobilien GmbH, Essen, Germany	94.00
TÜV NORD Mobility (Shanghai) Co. Ltd., Shanghai, China	100.00
TÜV NORD MPA Gesellschaft für Materialprüfung und Anlagensicherheit mbH & Co. KG, Leuna, Germany	1) 100.00
TÜV NORD NC GmbH & Co. KG, Hanover, Germany	1) 100.00
TÜV NORD Nederland Holding B.V., Rijswijk, The Netherlands	100.00
TÜV NORD Polska Sp. z o.o., Katowice, Poland	100.00
TÜV NORD SafetyConsult GmbH & Co. KG, Hanover, Germany	1) 100.00
TÜV NORD Scandinavia AB, Gothenburg, Sweden	100.00
TÜV NORD Service GmbH & Co. KG, Hanover, Germany	1) 100.00
TÜV NORD SLOVAKIA, s.r.o., Bratislava, Slovakia	100.00
TÜV NORD SOUTHERN AFRICA (PTY) LTD., Cape Town, South Africa	49.00
TÜV NORD Systems GmbH & Co. KG, Hamburg, Germany	1) 2) 100.00
TÜV NORD Technisches Schulungszentrum GmbH & Co. KG, Hamburg, Germany	1) 100.00
TÜV NORD (Thailand) Ltd., Bangkok, Thailand	99.97
TÜV NORD Transfer GmbH & Co. KG, Essen, Germany	1) 100.00
TÜV NORD Umweltschutz GmbH & Co. KG, Hamburg, Germany	1) 100.00
TÜV Teknik Kontrol ve Belgelendirme A.S., Istanbul, Turkey	100.00
TÜV Thüringen Anlagentechnik GmbH & Co. KG, Erfurt, Germany	1) 99.94

Name, location of registered office	Share of equity %
TÜV Thüringen Fahrzeug GmbH & Co. KG, Erfurt, Germany ¹⁾	99.50
TÜV UK Ltd., London, United Kingdom	100.00
TÜV USA, Inc., Salem, USA	100.00
Unterstützungseinrichtung des Technischen Überwachungs-Vereins Hannover / Sachsen-Anhalt GmbH, Hanover, Germany	100.00
Verebus Engineering B.V., Rijswijk, The Netherlands	100.00
Versicherungsvermittlung TÜV NORD GmbH, Essen, Germany	100.00
Unconsolidated affiliates	
adapt engineering Verwaltungsgesellschaft mbH, Nordhausen, Germany	100.00
ALTER TECHNOLOGY VENTURES, S.L., Tres Cantos, Spain	100.00
BILDUNG EmployAbility GmbH, Essen, Germany	100.00
British Mining Consultants Ltd., Sutton, United Kingdom	100.00
DMT-KAI BATLA (Mozambique) Limitada, Maputo Cidade, Mozambique	51.00
DMT-Kai Batla Pty. Ltd., Bordeaux, South Africa	51.00
DMT Mining Consulting Ltd., Nottingham, United Kingdom	100.00
DMT Engineering Surveying Verwaltungsgesellschaft mbH, Herne, Germany	100.00
DMT Petrologic Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
DMT Verwaltungsgesellschaft mbH, Essen, Germany	100.00
ENCOS Verwaltungsgesellschaft mbH, Hamburg, Germany	100.00
FAHRZEUG-SERVICE Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
FORMATION SaarLor FSL EURL, Forbach, France	100.00
GWQ Verwaltungsgesellschaft mbH, Moers, Germany	100.00
Hundt & Partner Ingenieurgesellschaft mbH & Co. KG, Hanover, Germany	100.00
IMC Group Consulting Limited, Nottingham, United Kingdom	100.00
IMC Montan Consulting Limited, Nottingham, United Kingdom	100.00
IMC Montan Russia Limited, Nottingham, United Kingdom	100.00
Ingenieurbüro Hofmann Verwaltungsgesellschaft mbH, Bamberg, Germany	65.00
International Mining Consultants Ltd., Nottingham, United Kingdom	100.00
International Mining Consultants Pty Ltd., Brisbane, Australia	100.00
MacKay & Schnellmann Ltd., Nottingham, United Kingdom	100.00
MEDITÜV Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
Montan Consulting Limited, Nottingham, United Kingdom	100.00
MONTAN RUSSIA Ltd., Nottingham, United Kingdom	100.00
Nord-Kurs Verwaltungsgesellschaft mbH, Hamburg, Germany	100.00
PT. DMT Exploration Engineering Consulting Indonesia, Jakarta, Indonesia	74.00
RP GmbH, Essen, Germany	100.00
RWTÜV Akademie GmbH, Essen, Germany	100.00
SEIQ – Serviços de Engenharia Industrial e Qualidade Ltda., Rio de Janeiro, Brazil	100.00
TN Portugal, Unipessoal Lda, Sines, Portugal	100.00
TÜ-Service Anlagentechnik Verwaltungsgesellschaft mbH, Berlin, Germany	100.00
TÜ Service Verwaltungsgesellschaft mbH, Potsdam, Germany	100.00

Name, location of registered office	Share of equity %
TÜV GmbH Hannover Hamburg Essen Berlin, Hanover, Germany	100.00
TÜV NORD Akademie Verwaltungsgesellschaft mbH, Hamburg, Germany	100.00
TÜV NORD ARGENTINA S.A., Buenos Aires, Argentina	100.00
TÜV NORD AUTO GmbH & Co. KG, Essen, Germany	100.00
TÜV NORD AUTO Verwaltungsgesellschaft mbH, Essen, Germany	100.00
TÜV NORD Bauqualität Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
TÜV NORD Bildung Verwaltungsgesellschaft mbH, Essen, Germany	100.00
TÜV NORD Certification (Tianjin) Co., Ltd., Tianjin, China	76.90
TÜV NORD EnSys Hannover Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
TÜV NORD FRANCE S.A.S., La Madeleine, France	100.00
TÜV NORD Hochfrequenztechnik GmbH & Co. KG (former m.dudde hochfrequenz-technik GmbH & Co. KG) Bergisch Gladbach, Germany	100.00
TÜV NORD Hochfrequenztechnik Verwaltungsgesellschaft mbH (former m.dudde hochfrequenz-technik Verwaltungs-GmbH), Bergisch Gladbach, Germany	100.00
TÜV NORD Immobilien Verwaltungsgesellschaft, Essen, Germany	100.00
TÜV NORD InfraChem Verwaltungsgesellschaft mbH, Marl, Germany	51.00
TÜV NORD International Verwaltungsgesellschaft mbH, Essen, Germany	100.00
TÜV NORD IT Secure Communications GmbH & Co. KG, Berlin, Germany	100.00
TÜV NORD IT Secure Communications Verwaltungsgesellschaft mbH, Berlin, Germany	100.00
TÜV NORD live-expert Geschäftsführungs GmbH (former live-expert Geschäftsführungs GmbH, Schmelz) Hanover, Germany	51.00
TÜV NORD live-expert GmbH & Co. KG (former live-expert GmbH & Co. KG, Schmelz) Hanover, Germany	51.00
TÜV NORD Luxembourg s.a.r.l., Luxembourg, Luxembourg	100.00
TUV NORD Mobility Inc., Vancouver, Canada	100.00
TÜV NORD MEXICO S.A. DE C.V., Querétaro, Mexico	100.00
TÜV NORD Mobilität Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
TÜV NORD MPA Verwaltungsgesellschaft mbH, Leuna, Germany	100.00
TÜV NORD Personal GmbH & Co. KG, Essen, Germany	75.00
TÜV NORD Personal Verwaltungsgesellschaft mbH, Essen, Germany	75.00
TÜV NORD Philippines, Inc., Manila, The Philippines	100.00
TÜV NORD ROMANIA S.R.L., Bucharest, Romania	100.00
TÜV NORD SafetyConsult Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
TÜV NORD Service Verwaltungsgesellschaft mbH, Hanover, Germany	100.00
TÜV NORD SofortGutachten GmbH & Co. KG, Hanover, Germany	51.00
TÜV NORD SysTec Verwaltungsgesellschaft mbH, Hamburg, Germany	100.00
TÜV NORD Systems Verwaltungsgesellschaft mbH, Hamburg, Germany	100.00
TÜV NORD Transfer Verwaltungsgesellschaft mbH, Essen, Germany	100.00
TÜV NORD TS Verwaltungsgesellschaft mbH, Hamburg, Germany	100.00
TÜV NORD Ukraina GmbH, Donetsk, Ukraine	100.00
TÜV NORD Umweltschutz Verwaltungsgesellschaft mbH, Hamburg, Germany	100.00
TÜV NORD VIETNAM LTD., Hanoi, Vietnam	100.00
TÜV Thüringen Anlagentechnik Verwaltungsgesellschaft mbH, Erfurt, Germany	99.60
TÜV Thüringen Fahrzeug Verwaltungsgesellschaft mbH, Erfurt, Germany	99.50

Name, location of registered office	Share of equity %
At equity accounted associates	
EnergieAgentur.NRW GmbH, Düsseldorf, Germany	50.00
National Inspection and Technical Testing Company Ltd. (FAHSS), Dammam, Saudi Arabia	25.11
TÜV Middle East W.L.L., Manama, Bahrain	25.10
TUV NORD NTA Mobility (Shanghai) Co., Ltd., Shanghai, China	49.00
UAB TÜVLITA, Vilnius, Lithuania	50.00
Not at equity accounted associates (A) and joint ventures (JV)	
ARGE "Technische Prüfstelle für den Kraftfahrzeugverkehr 21" GbR, Dresden, Germany (JV)	25.00
DMT Middle East W.L.L., Manama, Bahrain (A)	33.40
Energy Agency GmbH, Düsseldorf, Germany (JV)	50.00
IMC MONTAN Ltd., Nottingham, United Kingdom (JV)	50.00
Radiologic Facility Services S.A., Tarragona, Spain (A)	20.00
TÜV NORD Autoservice GmbH (former A&K Dienstleistungs- und Servicegesellschaft mbH), Bremerhaven, Germany (A)	25.10
TÜV NORD ENGINEERING SERVICES (M) SDN. BHD., Selangor, Malaysia (A)	30.00
TÜV NORD IRAN JOINT VENTURE CO., Tehran, Iran (A)	49.00
TÜV NORD PV Science and Technology Co., Ltd., Shanghai, China (A)	40.00
Other investments	
D&T Microelectronica IAE, Barcelona, Spain	5.00
Engineering Financial Cooperative, Seoul, Korea	0.02
FSD Fahrzeugsystemdaten GmbH, Dresden, Germany	13.43
Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Cologne, Germany	15.40
Korea Electric Engineers Association, Seoul, Korea	0.12
VIA Consult GmbH & Co. KG, Olpe, Germany	2.50
WINDTEST Grevenbroich GmbH, Grevenbroich, Germany	12.50

1) These trading partnerships take advantage of the exemption rule pursuant to Art. 264b HGB

2) These trading partnerships take advantage of the exemption rule pursuant to Art. 291 HGB

7.9. Governing Bodies

Members of the Board of Management:

Dr. rer. nat. Dirk Stenkamp Chairman and CEO
Dipl.-Kfm. Jürgen Himmelsbach CFO
Harald Reutter M.A. Human Resources

Members of the Supervisory Board:

Prof. Dr. Karl Friedrich Jakob
 Chairman (from 22.3.2018)
 Vice Chairman (until 22.3.2018)
 Chairman of the Board of Directors of RWTÜV e.V.

Dr. rer. nat. Georg Schöning (until 22.3.2018)
 Chairman

Dipl.-Ing. Rüdiger Sparfeld
 1st Vice Chairman
 Chairman of the Group Staff Council of TÜV NORD

Dr.-Ing. Guido Rettig (from 22.3.2018)
 Vice Chairman
 Chairman of the Board of TÜV Nord e.V. and
 TÜV Hannover/Sachsen-Anhalt e.V.

Peter Bremme
 Vice Chairman
 Regional representative Special Services, ver.di Hamburg

Dr.-Ing. Klaus-Dieter Beck

Prof. Dr.-Ing. Hans-Jürgen Ebeling (until 22.3.2018)

Dipl.-Ing. Christine Flöter (until 22.3.2018)
 Technical employee, TÜV NORD CERT GmbH

Dr. Wolfram von Fritsch (until 22.3.2018)

Prof. Dr.-Ing. Heinz Jörg Fuhrmann
 Chairman of the Executive Board of Salzgitter AG

Dipl.-Ing. Raimund Gemballa (until 22.3.2018)
 Chairman of Group Staff Council of TÜV NORD (until 3.7.2018)

Ludger Halasz (until 22.3.2018)
 Human Resources Developer of TÜV NORD AG

Kurt Hay (until 22.3.2018)
 Regional Director of IG BCE Westphalia region

Andreas Henniger (from 22.3.2018)
 Head of Department IG BCE head office Hanover

Ursula Jedberg (from 22.3.2018)
 Chair of the General Staff Council of TÜV NORD Bildung gGmbH

Carsten Kohn (from 22.3.2018)
 Vice Chairman of the Staff Council of TÜV NORD

Dr. rer. pol. Elmar Legge (from 22.3.2018)
 Vice Chairman of the Board of Directors of RWTÜV e.V.

Graduate commercial lawyer (FH), MBA Tuesday Porter (from 22.3.2018)
 Head of the Group Representative Office TÜV NORD AG

Dipl.-Ing. Thomas Rappuhn (from 22.3.2018)
 Chairman of the Board of Management of DGMK e.V.
 (until 31.12.2018)

Roland Rudolph (from 22.3.2018)
 Vice Chairman of the General Staff Council at
 TÜV NORD Mobilität GmbH & Co. KG

Dr. jur. Jürgen-Johann Rupp
 Member of the Executive Board, RAG Aktiengesellschaft

Dipl.-Ing. Stephan Schaller
 Director of BMW Motorcycles (until 28.2.2018)
 Chairman of the Group Management Board of
 VOITH GmbH & Co. KGaA (until 30.10.2018)

Barbara Schipp
 Attorney-at-law, Regional Legal Department of the ver.di trade union

DV-Kfm. Michael Schnoor (until 22.3.2018)
 Chairman of the Joint Staff Council of TÜV NORD Systems GmbH &
 Co. KG / TÜV NORD EnSys GmbH & Co. KG Augsburg-Berlin-
 Greifswald-Hamburg

Prof. Dr. Peter Schörner Schörner (until 22.3.2018)
Lecturer at EBZ BUSINESS SCHOOL

Uwe Schulze (until 22.3.2018)
Chairman of the Joint Staff Council of TÜV NORD AG/
TÜV NORD Service GmbH & Co. KG Hamburg-Bremen-Kiel

Dipl.-Kfm. Holger Sievers (from 22.3.2018)
Vice Chairman of the Board of TÜV Nord. e.V. and
TÜV Hannover/Sachsen-Anhalt e.V.

Elisabeth Terodde (from 22.3.2018)
Head of Group Strategy and Organisational Development,
TÜV NORD AG

Ute Thiel (from 22.3.2018)
Vice Chairman of the General Staff Council at
TÜV NORD Systems GmbH & Co. KG

Dipl.-Kfm. Lars Velde (from 22.3.2018)
General Manager of LAMARA Holding GmbH

Dipl.-Ing. Lothar Velde (until 22.3.2018)
Consultant of the General Management of
VKK Standardkessel Köthen GmbH

Dipl.-Ing. Albert Veldmann (until 22.3.2018)
Officially recognised expert,
Member of the Group Staff Council of TÜV NORD

Hanover, 28 February 2019



Dr. Dirk Stenkamp



Jürgen Himmelsbach



Harald Reutter

LEGAL NOTICE

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