



We are the leading **location technology specialist**, keeping **the world moving with** highly accurate maps, navigation software, real-time traffic information and services.

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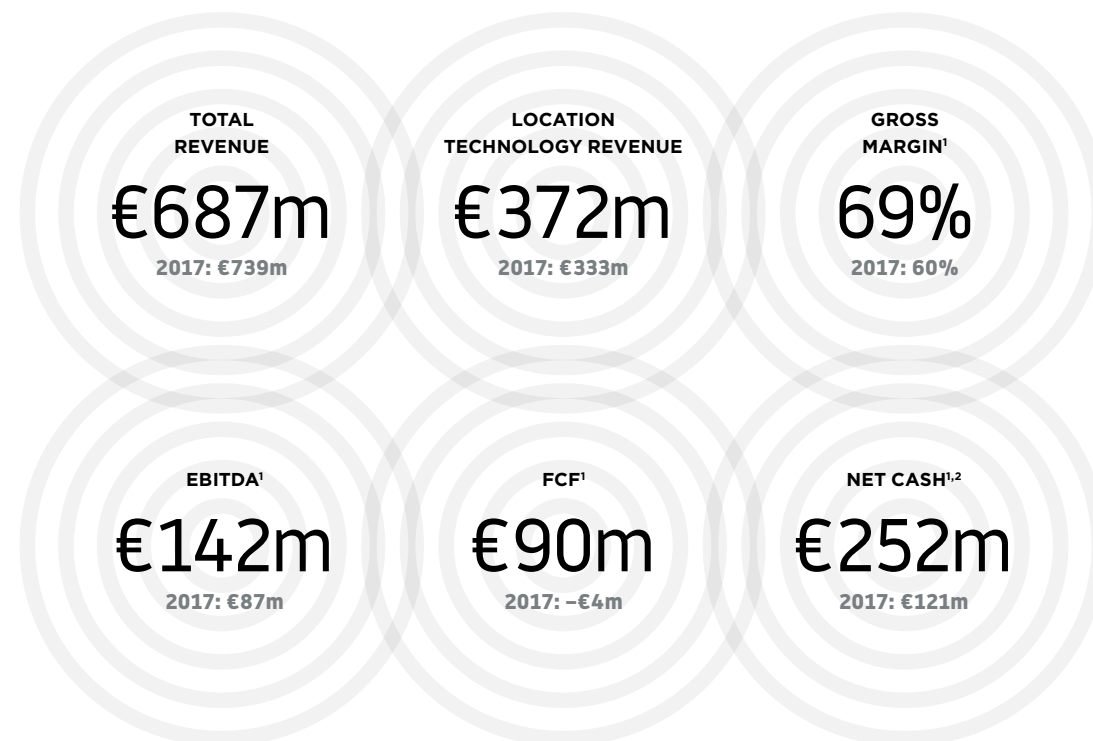
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WE ARE TOMTOM

2018 HIGHLIGHTS

Our data, software and services business continues to grow, strengthening our free cash flow¹ to €90 million in 2018.



➤ 64% of our revenue mix is now derived from data, software & services.

➤ Over 54% of our revenue mix is derived from Automotive & Enterprise business units.

➤ Adjusted net result totaled €83 million in 2018, representing a 97% increase year on year.

Unless otherwise stated, the figures presented throughout the report are for continuing operations only.

1 Non-GAAP measures; see page 116 for more information.

2 Net cash includes cash classified as held for sale.

MESSAGE FROM THE CEO

Positioning the business for **strong future growth**



In 1991, we set out to change the world with technology. Today, we have. Tomorrow, we will again. Our eyes are focused on the road ahead, accelerating into the future of mobility."

Harold Goddijn
Chief Executive Officer, TomTom NV

DEAR STAKEHOLDERS,

2018 has been a turbulent year with heightened competition and rapid technological developments. We've made great strides to transform our business and will continue to focus on creating the most innovative technologies to help shape tomorrow's mobility. Our business continues to shift towards higher gross margins and better predictability due to longer term contracts.

All this was done without losing focus on our core purpose as a company. Our vision is a safe, connected, autonomous world, free of congestion and emissions. To realize this, we rely on the unique skills of our workforce worldwide and that workforce's capacity to design and create technology and services that are precise, agile, and available in real time.

Maps remain at the heart of our company. Our transactional mapmaking system is being used for standard definition (SD) and high definition (HD) maps, enabling operational productivity and shorter map update cycle times. This year we reached a major milestone, making 1.5 billion changes in a single month to our digital maps, which are delivered to customers on a weekly basis. Our transactional map production platform, with continuous integration, uses machine learning and artificial intelligence to ensure short cycle times between detecting changes in the real world and updating the map. This level of scalability allows us to deal with any level of detail in both SD and HD maps. Our maps for automated driving already power over half a million Level 1 and Level 2-enabled automated vehicles on the road today.

The unrivalled quality of our technology sets us apart from our competitors – our APIs and location-based technologies are central to the work of developers and designers in all kinds of companies.

In September 2018 we announced that we were looking for strategic options for our Telematics business. After a thorough review, we've agreed to sell the business to Bridgestone. This sale is subject to customary closing conditions including the relevant regulatory approvals, consultation with employee representative bodies and the approval of TomTom's shareholders, but I don't see any reason why it shouldn't go ahead, most likely in Q2 2019.

I'm delighted to have found a buyer who recognizes and respects the talent and skills in the Telematics team, and intends to foster and grow the business to its full potential. At the same time, the transaction means that TomTom will become a more agile company, focused on cementing its position as the leading location technology specialist, shaping the future of driving with highly accurate maps, navigation software and real-time traffic information and services.

Competition defines our industry. However, we believe we have clear advantages over our competition. First, as the only independent mapmaker, we are an attractive partner to the automotive industry as well as the technology industry. Second, the investments we made in our mapping platform have transformed our core product offering.

Third, our approach to data privacy is very different, as user data is utilized to improve our core products only; privacy, trust, and responsible use of data are critical to our operations. Finally, with nearly three decades of experience, we know what drivers want and need better than anyone else.

Through our renewed positioning and brand refresh, showcased in this report, and the streamlining of our business operations, we will continue to strengthen our status as the world's location technology specialist.

I would like to thank all our stakeholders: our shareholders for their continued support and confidence in TomTom; our customers for their loyalty and valuable feedback that keeps us innovating; and our employees for their commitment, energy and hard work.

Harold Goddijn
Chief Executive Officer, TomTom NV



FOR MORE INFORMATION

<https://www.tomtom.com/company/company-profile/>

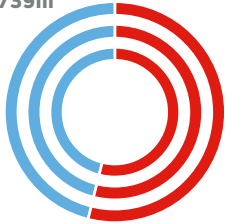
AT A GLANCE

Our real-time maps, navigation software, traffic information and services **keep the world moving**

REVENUE BY BUSINESS UNIT

€687m

2017: €739m



Automotive & Enterprise	54%
Consumer	46%

REVENUE BY GEOGRAPHY

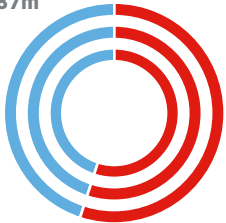


Europe	77%
North America	16%
Rest of World	7%

EBITDA BY BUSINESS UNIT*

€142m

2017: €87m



Automotive & Enterprise	55%
Consumer	45%

TOTAL R&D CASH SPEND

€299m

2017: €292m



* The breakdown excludes non-allocated group costs of €15 million. EBITDA is a non-GAAP measure, see page 116 for more information.

OUR GLOBAL PRESENCE

Headquartered in Amsterdam, we are present in **29 countries** with **43 offices**.

EMPLOYEES BY REGION

Europe		65%
Asia Pacific		27%
Americas		8%



AT A GLANCE CONTINUED

Our business units

AUTOMOTIVE & ENTERPRISE

Harnessing location-based technologies

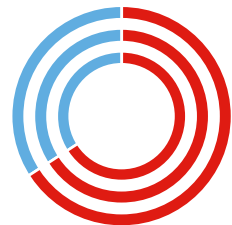
Our Automotive and Enterprise businesses provide **maps, navigation software and services** such as traffic information as components to be integrated into customers' applications. We offer these components in a flexible way and, when combined, they create the most advanced connected navigation system available today.

Our products hold the same promise for customers as for their end users: uncompromising quality, continuous innovation, ease of use and reduced complexity.

REVENUE

€372m

2017: €333m



REVENUE

Automotive	66%
Enterprise	34%

METRICS

>€250m

Automotive order intake
(2017: >€400m)

€317m

Automotive
operational revenue
(2017: €242m)

100%

Data, software & services
Revenue model based on
licensing of map content,
navigation software
and online services such
as traffic.

Key customers – Automotive

Our Automotive business unit licenses to automotive customers, both original equipment manufacturers (OEMs) and head unit (Tier 1) vendors, components for embedded navigation systems, mobile applications, advanced driver-assistance systems (ADAS), and autonomous driving (AD) applications. Customers include: BMW, Daimler, Fiat, Groupe PSA, Renault, Nissan Mitsubishi, VW and others.

Key customers – Enterprise

Our Enterprise business unit licenses our products to some of the world's most innovative companies other than automotive manufacturers, such as application developers, IoT experts, fleet and logistic management providers, governments and cloud service providers. Our products are mainly used for location-enabled applications. Customers include: Alteryx, Apple, MapQuest, Microsoft, Pitney Bowes, Uber and others.

KEY PRODUCTS



MAPS



TRAFFIC



NAVIGATION



MAPS APIs

CONSUMER

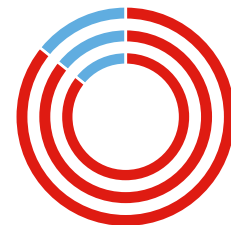
Managing for cash

Our Consumer business offers **drivers directions, guidance, information and inspiration** for their journeys on the road. By creating the world's largest connected driving community, we help people make smarter decisions to get where they want to be effortlessly, quickly and safely. The Consumer business is an important source of cash flow as well as critical user insights and market research.

REVENUE

€315m

2017: €406m



KEY PRODUCTS



NAVIGATION
DEVICES



SERVICES
& APPS

TELEMATICS

Capitalizing on the opportunity

Our Telematics business provides a range of services for businesses with fleets, including **fleet management and other connected car services**. Through one platform, we facilitate different user interfaces, solutions and applications to support multi-car-brand, multi-car-type and multi-car-age use cases. The number one provider in Europe, according to Berg Insight, for the fourth successive year.

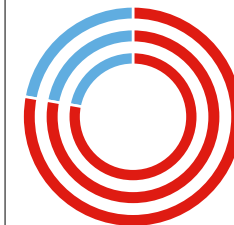
Key customers

Vehicle fleet owners and other businesses managing vehicles or offering automotive services, such as car dealers, car insurance, and vehicle leasing companies.

REVENUE

€174m

2017: €164m



KEY PRODUCTS



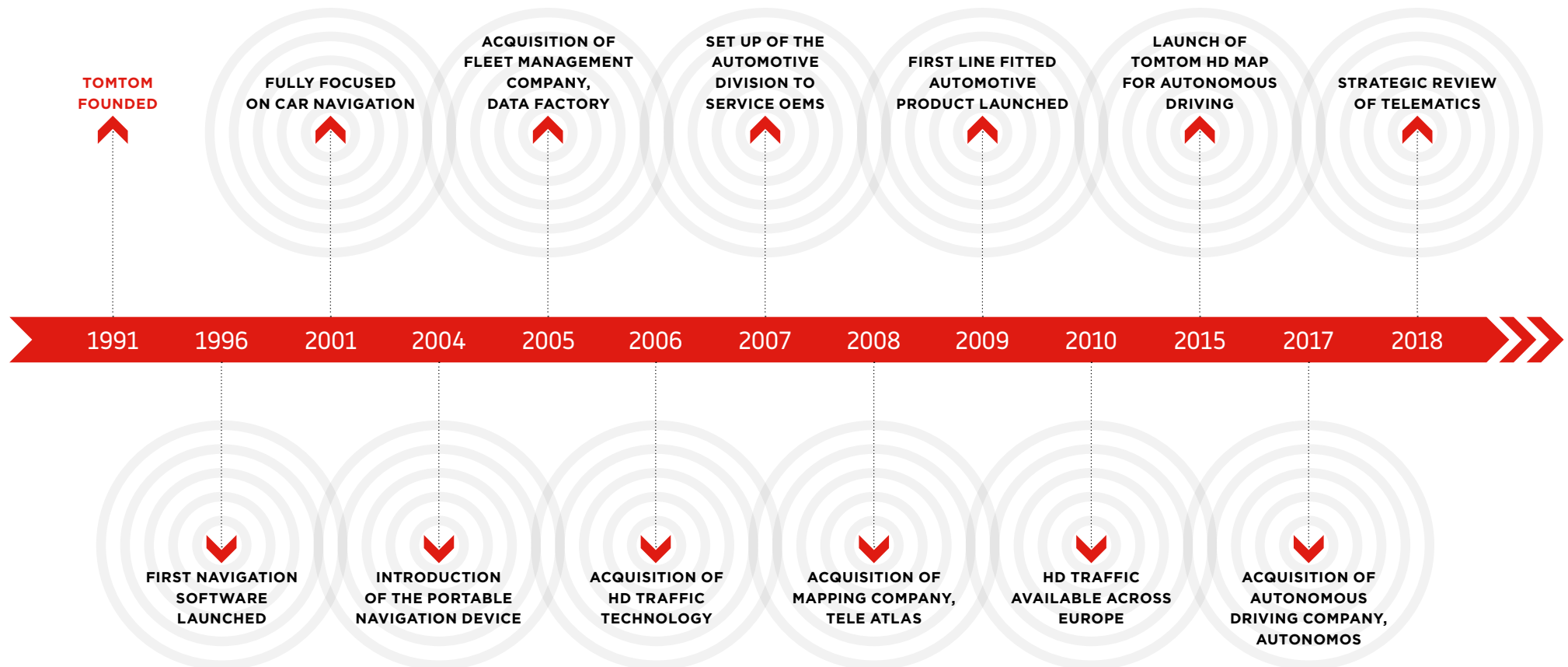
WEBFLEET



NEXTFLEET

AT A GLANCE CONTINUED

Our 27-year focus on navigation technologies



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MANAGEMENT BOARD REPORT

MANAGEMENT BOARD BIOGRAPHIES



HAROLD GODDIJN
CHIEF EXECUTIVE OFFICER

Nationality Dutch
Date of first appointment 2001
Term of office 2017–2021
Age 58

Current positions

Member of the Supervisory Board of Coolblue

Former positions

Harold began his career with a venture capital firm. In 1989, he founded and led Psion Netherlands BV, a joint venture with Psion PLC. He also served on the board of Psion PLC. In 1991, he co-founded TomTom together with Corinne Vigreux, Peter-Frans Pauwels and Pieter Geelen. Harold is the CEO of TomTom since 2001

Education

Master's degree in Economics, University of Amsterdam



TACO TITULAER
CHIEF FINANCIAL OFFICER

Nationality Dutch
Date of first appointment 2015
Term of office 2015–2019
Age 47

Current positions

Member of the Executive Master of Finance and Control Advisory Board, University of Amsterdam

Former positions

Taco joined TomTom in 2005 and held various senior management positions in Group Control, Treasury and Investor Relations before his appointment as CFO in 2015. Before joining TomTom, Taco spent eight years with KPN. During this period he held various management roles in Finance and Investor Relations

Education

Master's degree in Business Economics, University of Groningen



ALAIN DE TAEVE
MEMBER OF THE MANAGEMENT BOARD

Nationality Belgian
Date of first appointment 2008
Term of office 2016–2020
Age 61

Current positions

Non-Executive Director of Cyient Ltd

Former positions

Alain founded Informatics and Management Consultants (I&M) where, next to IT Consultancy, he continued his research work on digital map databases and routing. In 1989, I&M was integrated into the Dutch Tele Atlas Group. From 1990, Alain headed Tele Atlas, which was acquired by TomTom in 2008. Alain became a member of the Management Board of TomTom in 2008

Education

Graduated as engineer-architect, University of Gent

OUR BUSINESS MODEL

Shaping mobility through location technology

By combining our extensive experience with leading business and technology partners, we power connected vehicles, smart mobility and, ultimately, autonomous driving.

WHAT WE CREATE

We create the most innovative technologies to help achieve our vision: a safe, connected, autonomous world that is free of congestion and emissions.

HOW WE CREATE IT

Our data and information come from multiple sources. Dealing with big data to develop our products and applications requires advanced, scalable and state-of-the-art technology. We use human capital and data from traditional sources, as well as user input, to create TomTom data, content and services. Our products are created on platforms, built with our own IP and expertise developed over the last three decades. Each platform and technology is uniquely developed to deliver best-in-class location and navigation products that fit the demand in their own markets. Our platforms support the whole process of collecting, analysing, fusing and editing data, and developing and distributing our products through various formats.



FOR MORE INFORMATION
Our core technologies: pages 12–14

OUR MAIN PRODUCTS



**SD, ADAS AND
HD MAPS**



**TRAFFIC AND
SERVICES**



**MAPS
APIs**



TARGETED MARKET SEGMENTS

Our activities are organized in the following customer-facing business units: Automotive & Enterprise and Consumer.

They leverage our brand and common technology assets to provide consumers, businesses, governments and local authorities with industry-leading products and services.

CONTINUOUS DEVELOPMENT

As a technology company, investments in Research & Development (R&D) are key in our business for long-term value creation. In 2018, cash R&D spend totaled €299 million, representing over 40% of our total revenue.

We are committed in continuing our investments in our technology, products and services, with the main goal of fully automating the process of data analysis and map updates in order to create a fully automated mapmaking platform.

More than 70% of our employees work in R&D, distributed in 41 R&D locations globally.

OUR BUSINESS MODEL CONTINUED

VALUE CREATION

All of our activities aim to create the most relevant and beneficial impact possible for all of our stakeholders: our customers, shareholders, employees and society.

Our investments to date in mapmaking have advanced our SD map coverage to 62 million km in 186 countries and territories, and our HD map coverage to over 400 thousand km across Europe, the United States, South Korea and Japan.

We also enhanced our services, with traffic information launched in nine new countries, including Japan, and now available in 77 countries in total.

Our continuous development allowed us to reach in 2018:

ORDER BOOK

€250m

Automotive order intake exceeded €250 million.

FREE CASH FLOW

€90m

€90 million in free cash flow for the year.

TOTAL REVENUE

€687m

€687 million in total revenue, with an adjusted net result of €83 million, which translates to an Adjusted EPS of €0.36.

NET CASH

€252m

€252 million in total net cash, which includes cash classified as held for sale.

Social initiatives in 2018:

- Employed over five thousand people.
- Sponsored over 30 social development programs.
- Decreased waste output on average by 31% in comparison to last year.
- Paid €39 million in social security contributions and €9 million in corporate income taxes over the past year.

DIVESTMENT OF TELEMATICS

After a thorough strategic review, it was decided that the best methodology to unlock value to our shareholders and improve the future perspectives of TomTom was to sell the Telematics business unit.

In January 2019, we announced the sale of Telematics to Bridgestone for a purchase price of €910 million. The majority of the proceeds, €750 million in total, will be distributed to shareholders by means of a capital repayment, combined with a share consolidation. This capital repayment will not be subject to Dutch dividend withholding tax.

The transaction is subject to customary closing conditions and is expected to close in the second quarter, followed by the capital repayment to be executed in the third quarter of 2019.

With a renewed focus on the remaining business, TomTom will continue to do what it does best, shaping the future of mobility.



We will continue to create value by developing our technological assets and capabilities.”

STRATEGY

Our strategy is to focus on growing our Automotive and Enterprise businesses. For Automotive customers, we will continue to supply best in-class maps and services for traditional vehicle navigation, while focusing our future efforts in ADAS offerings as we establish ourselves as the preferred provider of navigational and path planning features for Autonomous Driving. For our Enterprise customers, we will continue to supply uncompiled maps and traffic data, as we further push into the Maps APIs space for location-based applications.



FOR MORE INFORMATION
[Growth Opportunities: pages 15-17](#)

OUR BUSINESS MODEL CONTINUED

Our competitive advantages



INDEPENDENCE

We are one of the few independent technology companies in Europe. As an independent location content and service provider, we are in a unique position to serve customers in the Automotive & Enterprise markets.



EXTENSIVE MARKET EXPERTISE IN LOCATION DATA

Since our inception, we have been relentlessly innovating to stay ahead of the game. This allowed us to further build on our mapmaking, navigation and traffic expertise, as well as our ADAS and autonomous driving products.



GLOBAL, SCALABLE PRODUCTS AND TECHNOLOGIES

Headquartered in Amsterdam with offices in 29 countries, we offer digital maps that cover 186 countries and territories, and our detailed and real-time traffic information service reaches more than five billion people in 77 countries.



MULTIPLE COLLABORATIONS IN COMPLEX ECOSYSTEMS

With our extensive market experience, we paved the way for significant collaborations. In the last few years, we have established collaborations with, among others, Apple, Baidu, Bosch, Delphi, Denso, Microsoft, NVIDIA, Qualcomm, Uber and Zenuity. We also work directly with R&D departments of OEMs such as Groupe PSA for advanced use cases including ADAS and electric vehicles. We will continue to work together with companies to make innovative technology accessible to anyone, and to position TomTom as a leading player for the future of driving.



STRONG DATA GOVERNANCE

Our long-term success depends on having access to data provided by our users so we can continuously improve our products and services. Their trust is paramount and therefore we abide by the strictest data protection laws. Besides the privacy laws applicable in the various countries in which we are active, we operate according to European privacy laws. These laws are considered to be some of the most extensive in the world and offer a high level of protection to our users. Our company policy on privacy and processing of personal data reflects these laws and we apply this policy globally. More information is available in the Privacy and Data Governance section.



A STRONG BRAND, ASSOCIATED WITH INTUITIVE USER INTERFACE

We developed navigation technology when we created the portable navigation device – one of the most influential products of all time. Since then, we have established a strong consumer-facing technology brand.

OUR CORE TECHNOLOGIES

We are on a mission to create the most innovative technologies to help shape tomorrow's mobility.

Our core technology assets are maps, navigation and traffic services, which power our products and are further strengthened by a continuous cycle of analysing, developing, and sharing location-based data.



FOR MORE INFORMATION

Maps
<http://www.tomtommaps.com>

Automotive
<http://www.tomtom.com/automotive/>



MAPS

In a connected world, users demand maps that are accurate and up-to-date, and which can be seamlessly integrated across automotive, mobile and online location-based applications. With nearly three decades of experience, we offer an extensive digital map database with global coverage.

To deliver accurate and up-to-date maps, we implement a highly efficient multi-disciplinary approach that combines professional mapmaking methods with community input. Through this mapmaking approach, we tap into our local teams of skilled map technicians, our fleet of mobile mapping vans that drive the streets every day and our growing community of hundreds of millions of data sources. With more than half a billion sources generating millions of kilometers of probe data each day, we have access to one of the largest networks of connected devices on the market.

Transactional mapmaking

Making maps means big data, and this requires an advanced map production platform. We continuously invest in our state-of-the-art transactional map production platform that allows us to rapidly close the loop between detecting changes in the real world and updating the map. This platform deploys automation and artificial intelligence to achieve shorter cycle times, gaining efficiency and enhancing quality.

During 2018, an important milestone was achieved. In a single month, we are now able to process more than 1.5 billion changes to our digital map, which can be delivered to our customers on a weekly basis.

Productivity of our map platform will be crucial to the future of mapmaking, where even more data will be collected, and faster processing will be mandatory in order to meet the demands of ever-expanding use cases.

Key figures:

- Our global SD Map covers over 62 million km and our ADAS Map for driver assistance covers more than 4 million km across all continents.
- Our HD Map covers over 400 thousand km across Europe, the United States, South Korea and Japan.
- Over 385 million address points and over 120 million POIs.



NAVIGATION

We deliver a global, end-to-end navigation experience. Flexible and customizable, it is easy to integrate in a vehicle that will be driven by a human, a computer, or both. We will continue to invest in providing the best navigation experience, allowing for the most accurate routing and expected times of arrival (ETAs), with a User Interface that is safe, intuitive and easy-to-use.

NavKit, our state-of-the-art navigation engine, is the foundation for many of our products. This engine implements our core navigation IP and algorithms. It also provides APIs that enable the development of fully customized navigation applications. NavKit is fully portable to any high-level Operating System (OS), such as Linux, Android, iOS, QNX, Tizen and Windows.

Our navigation software components support relevant automotive standards such as TPEG, NDS, and ADASIS. Based on the ISO 25010 standard, our navigation software gets regularly quality-checked by TIOBE, the software quality company, and for a number of years we have been leading in the top-2 ranks of all quality categories.

Key figure:

- Navigable maps in 186 countries and territories.

OUR CORE TECHNOLOGIES CONTINUED



SERVICES

We provide an extensive portfolio of cloud-based services, including traffic information, speed cameras, parking, fuel price information, electric vehicle stations and weather, which provide a real-time value-added layer to our mapping technology. These services are widely used across automotive and smartphone manufacturers, smart mobility platforms, application developers, government organizations and a wealth of additional customers.

We have come a long way to position TomTom as a global leader of traffic and travel information services. During the last decade, we have developed a comprehensive product portfolio as well as road data analytics to help improve mobility and provide products and services for better decision-making in transportation.

Traffic information service

Our market leading traffic service provides drivers with highly accurate measurements of traffic jams and delays for better route calculation, ETAs and jam-tail warnings.

We use a wide range of sources to generate real-time traffic information. The growing community of over half a billion data sources signifies the success of our traffic congestion service. These data sources generate over 20 billion anonymous location measurements every day. The community input provides the source data that is fused to provide precise and up-to-date traffic information for highways, major roads and secondary roads on a global scale.

Our traffic technology intelligently combines into a single database both traffic flow and incident data from all available sources, equipping road users with the most relevant and up-to-date information.

EV charging stations

We also have a service dedicated to supporting car manufacturers in developing electric vehicles (EV), where drivers have an overview of nearby available charging stations. This reduces range anxiety, one of the main barriers of purchasing an EV. We source EV charging station information data from leading third parties and integrate with our maps for one consistent database.

Key figures:

- Real-time traffic information service available in 77 countries.
- Real-time availability information on over 130,000 EV charging stations in 50 countries.
- Weather information available in 146 countries.
- On-Street Parking information available in 114 cities in 21 countries.
- Off-Street Parking information in more than 70 countries.
- Fuel price information available in 40 countries.



MAPS APIs

High-quality and comprehensive location data is key in building the next generation of IoT applications, connected cars and smart cities. To address these opportunities, we provide industry-leading maps, search, routing and traffic as-a-service via Maps APIs. These APIs give customers an easy access to a wide array of services including map tiles (Map API), search (Search API), routing (Routing API) and traffic (Traffic API).

We also offer Maps SDKs that allow customers to integrate our services into web and mobile applications by using a convenient and well-documented client library. The SDK enables developers to easily integrate our APIs into their products and services with fully customizable components.

Our Maps APIs and SDKs are already being used by a variety of enterprises and start-ups, from mobile and web application development to fleet management, vehicle tracking and logistics.



FOR MORE INFORMATION

Maps APIs

<http://www.tomtommaps.com/maps-apis/>

For developers

<https://developer.tomtom.com/>

OUR CORE TECHNOLOGIES CONTINUED



ADAS & AUTONOMOUS DRIVING

Autonomous driving will not only completely transform the way people travel but also improve the safety, comfort and efficiency of vehicles to a level beyond imagination. Innovations in vehicle sensors, processing power and digital maps are driving the autonomous driving evolution. Leveraging more than a decade of experience in digital mapping and location-based services, we are developing innovative technologies to power automated vehicles.

Our ADAS Map includes map attributes such as road gradient, curvature and traffic signs, which will not only be used for autonomous driving, but already fulfill a broad range of ADAS applications for increased comfort, safety and fuel efficiency. Customer use cases include Predictive Powertrain Control, Highway Pilot and Adaptive Cruise Control.

Our HD Map allows automated vehicles to precisely locate themselves on the road, building a detailed model of the surrounding environment together with the vehicle sensors, and to plan the path to their destination.



RoadDNA

Automated vehicles today come equipped with a variety of sensors used for perceiving its surroundings: cameras, radars, and LiDARs (3D laser scanners). Yet, a key challenge for automated vehicles remained: determining its exact location on a specific lane on a given road.

Traditional GPS fails to deliver the necessary level of accuracy and robustness needed. In fact, GPS is only accurate down to a few meters, meaning that a vehicle relying on GPS data for localization would not always be able to determine what lane it is currently driving in.

To address this challenge, we developed the RoadDNA suite, a set of localization data in the map, tailored to each type of sensor. A vehicle can then correlate RoadDNA data with data obtained by its own sensors, and by doing this correlation in real-time, it can precisely position itself on the road even while traveling at high speeds.

By offering a broad suite of RoadDNA localization data, we give our customers the freedom to use different sensors and different localization techniques, achieving precise localization in a storage-friendly and processing-friendly format.

Roadagrams

To further scale up our map-making capabilities, we extract map data, such as road geometry, traffic signs and landmarks, from observations made from vehicle sensors. Once the map data is extracted from camera images, it is compressed into Roadagrams. Roadagrams are compressed snippets of road data that can be sent to the cloud with minimal bandwidth, enabling scalable and efficient updates to our HD map. The crowdsourced map updates will ensure that our maps reflect the reality of the road.

AutoStream

Automated vehicles need to use the latest, most up-to-date map at all times, to ensure they understand the surrounding environment. Therefore, an important step in mapping for automated driving involves being able to always deliver the most up-to-date map from the cloud to the vehicle in real time.

AutoStream is an innovative map delivery system for automated vehicles that streams the latest map from the TomTom cloud to the vehicle, on-demand, with minimal latency and minimal bandwidth. AutoStream comes as a full solution, including an on-board software component with smart logic, which reduces complexity and shortens development time for OEMs and Tier 1 suppliers.

Depending on the use case and desired function, the customer can decide what map data to use. For example, the customer can decide to use our HD Map to power a function like Highway Pilot and use our ADAS Map for a function like Predictive Cruise Control.



FOR MORE INFORMATION

Automotive

<http://www.tomtom.com/automotive/>

GROWTH OPPORTUNITIES

We will continue to strengthen our location-based technologies and develop innovative services for our community of users worldwide

Our vision for the future is a safe, connected, autonomous world, free of congestion and emissions. We create the most innovative technologies to help shape tomorrow's mobility.

Our strategy for future growth is two-fold. For Automotive customers, we will continue to supply best-in-class maps and services for traditional vehicle navigation, while focusing our future efforts in ADAS offerings as we establish ourselves as the preferred provider of navigational and path planning features for Autonomous Driving. For our Enterprise customers, we will continue to supply uncompiled maps and traffic data, as we further push into the Maps APIs space for location-based applications.



We are happy to extend our deal with PSA. With our complete stack of maps, navigation software, and real-time traffic information, TomTom is uniquely positioned in the automotive industry."



CONTINUED PROGRESS IN TRADITIONAL VEHICLE NAVIGATION

In October of 2018, we announced that Groupe PSA extended its current agreement to beyond 2020, bringing TomTom maps, navigation and connected services into their next generation infotainment system for all brands in all regions. Peugeot, Citroën, DS, Opel, and Vauxhall drivers will continue to benefit from our suite of mapping and guidance technologies and services.

In 2018, PSA sold over 1 million vehicles equipped with TomTom's full stack of navigation technology and services.



FOR MORE INFORMATION

Press releases

<http://corporate.tomtom.com/press-centre/news-releases/press-releases>

FROM LEVEL 0 TO LEVEL 5

Close to 100 million cars are produced every year, with 40 million newly built cars in Europe and North America combined. Some form of built-in navigation is becoming more and more common, even in entry-level models, with overall average take-up rates for navigation currently at around 30% in Europe and North America. By 2022, IHS Markit expects these adoption rates to increase above 35%, as new functionalities become available at affordable prices.

Most of our near-term growth will arise from increasing our market share in traditional vehicle navigation, where our strategy is to provide more technology in more vehicles by positioning ourselves as a trusted full-stack navigation system provider with the best end-user experience across all geographic regions.

Automated driving is developing step-by-step, in line with the five levels of automation outlined by the Society of Automotive Engineers. It will be an evolution from level 0 – where the driver is in full control – to level 5 – where the driver is no longer involved in the driving task and replaced by a system of sensors, computers and actuators. The higher the level of automation, the more vital it is to have an accurate, detailed and maintained map for accurate localization and path planning.

Automated vehicles require maps that are significantly different from the maps that are used in today's navigation systems. Drivers today mainly use digital maps to orientate themselves, to plan a journey and to navigate to their destination. However, as the driving task gradually shifts from the driver to in-vehicle automated systems, the role and scope of



GROWTH OPPORTUNITIES CONTINUED

digital maps shifts accordingly. This means that the user of the map is no longer the driver, but a machine. As a result, a new generation of maps built specifically for computers is needed.

While a fully automated car for commercial purposes is years away, OEMs are progressing rapidly towards this goal, with numerous manufacturers launching Level 2 and Level 3 Advanced Driver Assistance Systems (ADAS) features.

For this next wave of automotive growth, our strategy is to be the leading map provider for assisted driving and autonomous driving. To achieve our goal, we have built a portfolio of purpose-made, highly accurate maps to suit all levels of automation. Starting with our ADAS

Map for level 0, 1 and 2, to HD Maps for levels 2 to 5. Our maps for automated driving are currently powering over half a million Level 1 and Level 2-enabled automated vehicles on the road today, and we expect this number to gradually accelerate during the next few years.

As we move into a more automated driving experience, SD Maps, navigation and online services, such as traffic information, will continue to be sourced by OEMs. Our expectation is that even at Level 5, where the vehicle will drive itself, we see opportunities to continue to provide our current portfolio of maps, navigation and online services, as the passengers will continue to need to locate themselves and interact with the machine responsible for driving.

EVOLUTION TOWARDS AUTONOMOUS DRIVING

Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
Driver	Feet off	Hands off	Eyes off	Mind off	Passenger
No assistance	Assisted	Partially automated	Highly automated	Fully automated	Autonomous
Human	Transfer of responsibility			Machine	

TOMTOM PRODUCTS

SD MAP	SD MAP WITH ADAS	SD MAP WITH ADAS OR HD MAP	SD MAP WITH HD MAP
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TOMTOM TECHNOLOGY MAKES TRUCKS MORE EFFICIENT

TomTom's ADAS for commercial vehicles will allow truck and freight vehicle drivers to automate driving systems such as cruise control and gear shifting. Among the projected benefits is a five percent reduction per vehicle in annual fuel consumption and a corresponding decrease in fleet operating expenses.

Using road curvature, gradient, and speed limit data to automate the driving experience, we provide truck and freight vehicle drivers with a view of the road and traffic beyond their vehicles' sensors and the benefit of automatic gear shifting, braking, and acceleration in response to upcoming hazards.



This is the first time that trucks will use our map to automate driving functions, which not only delivers a safer, more comfortable ride but also significant fuel savings and a reduction in CO₂ emissions."

GROWTH OPPORTUNITIES CONTINUED



THE ADVANTAGES OF USING ADAS

Every single feature in our ADAS map has its own unique advantages and added value to traditional driver assistance systems:

- Leveraging curvature information from our ADAS map, a vehicle can anticipate a sharp turn. This avoids harsh braking that would happen when relying only on sensors.
- Gradient information can be used as input for gear selection and speed control. This helps vehicles drive efficiently both uphill and downhill, saving time and money.
- Many cars today rely on a camera to recognize speed limits and traffic signs. But the view can be blocked by another large vehicle, unreadable due to downpour or a sign can be misinterpreted. Traffic signs from our ADAS map correctly anticipate changes in the speed limit, regardless of the circumstances. This is very relevant for NCAP safety ratings.
- For guidance at junctions, roundabouts and intersections, lane information is used to guide the vehicle to the correct lane and avoid last-minute lane changes. Last-minute lane changes are a key cause of accidents. Therefore, providing precise lane-level guidance to the driver improves safety.

MAIN DIFFERENCES IN MAPS FOR
HUMANS VS MAPS FOR COMPUTERS

SD Map

- Used in: infotainment systems for search, routing and visualization.
- Features: POIs, addresses, speed limits, speed cameras, vertical clearance heights for bridges, sign trusses and pedestrian overpasses.
- Built from: mobile mapping vans, field surveys and probe data.
- Data accuracy: ± 0 to 10m.

ADAS Map

- Used in: Advanced Driver Assistance Systems for increased safety, comfort and fuel efficiency.
- Features: road curvature, gradient, lane information, traffic signs and speed restrictions.
- Built from: vehicle sensor data, mobile mapping vans and field surveys.
- Data accuracy: ± 0 to 10m.

HD Map

- Used in: automated driving for localization, path planning and perception support.
- Features: lane model and RoadDNA suite.
- Built from: mobile mapping vehicles and vehicle sensor data.
- Data accuracy: decimetre-level.

MAPS APIs

Location-enabled applications for mobility services and other IoT use cases have continuously increased over the years driven by the exponential growth of connected devices. We provide high-quality and comprehensive location data mainly as uncompiled maps and traffic data to some of the most well known technological companies in the world.

As demand continues to grow, we will continue to enhance our offerings and support our customers in such a way. Our customers increasingly want access to our location data via Maps APIs – maps as a service – instead of integrating datasets. Application developers are turning to public cloud platforms to access all of the components and technology they need to build their applications. Hence, during 2017 and 2018, we further developed our Maps APIs offering.

With online and offline platforms converging, location data has become more critical than ever before. These worlds colliding has also resulted in increases in the reliability and use of cloud computing, and lower connectivity costs have transformed location-as-a-service via APIs from a virtual accessory into an industry standard. This rapid change in the location APIs market has created a significant area of growth for us, as a lot of lot of start-ups and businesses are looking for providers.

This year, we began taking critical steps to advance the adoption of our Maps APIs. This includes not only enhancing our product offering, but also building out our own developer community via our developer portal where users can easily access our APIs and SDKs.

Through the portal, developers can begin building with our APIs for free and easily buy credits, while businesses with more advanced or particular needs can contact our sales

team to receive a tailor-made contract with enterprise-grade support. In September 2018, we announced our free maps and traffic tiles offering on our Mobile Software Development Kit (SDK). These unlimited, free transactions on the Mobile SDK are on top of our 2,500 daily free transactions that can be applied to the entire product line including our Maps API, Search API, Traffic API, and Routing API. Developers also have access to decades of high quality traffic and routing data allowing them to build reliable and innovative applications.

Our Maps APIs and SDKs are already being used by a variety of enterprises and start-ups, from mobile and web application development to fleet management, vehicle tracking and logistics.

MICROSOFT AZURE MAPS IS POWERED
BY OUR MAPS APIs

In 2018, Microsoft officially launched its location-based services called Azure Maps, powered by our Maps APIs. Our ability to innovate and fully support Microsoft as partners along with our ability to deploy and license our technology on a third-party cloud platform allowed us to be successful in partnering with them.

Microsoft and its Azure customers now have direct access to our Maps APIs natively integrated into the Microsoft Azure cloud platform, allowing for a more fluid and flexible platform for developers to build and manage their location-aware applications.

OUR PEOPLE AND CULTURE

People are the key to our success

Attracting and retaining the most talented people will allow us to continue to innovate and advance our company.

In 2018, our HR strategy and objectives around people and culture, World Class Leadership, and Employer Brand continued to deliver. We strengthened our efforts in these key areas and revamped our offerings in global Talent Development and Rewards to bring us closer to reaching our ultimate ambition – to become the employer of choice in technology.

OUR PEOPLE

Our people are the key to our success. Continuing to push boundaries, innovating, and doing smart business across the company, means attracting and retaining the most talented people. To stand out as an employer in an increasingly competitive, dynamic, and digital world, in 2018 we amplified our 'Achieve More' promise – you can achieve more at TomTom – across all touch points. Rooted in our company values of entrepreneurialism, integrity, and inclusion, we have invested in the development of our people, providing opportunities for growth in our rapidly changing industry.

Our values are reflected in TomTom's Code of Conduct, which provides guidance to our employees. More information can be found in the Sustainability section.

FOSTERING CULTURE

Culture is cultivated through communication. In 2018, we continued our efforts to drive internal communication through our intranet platform and internal social sharing channel, Yammer. Internal awareness campaigns as well as employee events such as our annual Hackathon, were live streamed on Yammer and we accompanied employees' stories about personal and professional challenges and successes.

Also in 2018, we introduced TomTom Ambassador program, where we recognize outstanding representatives of our culture throughout our global offices. We also launched TomTalks, an external speaker series, where thought-leaders from various disciplines are invited to share their knowledge and experience with TomTomers.

PROMOTING A LEARNING CULTURE

Enabling learning, development and growth is key to our 'Achieve More' promise. Our Talent Development offerings provide our employees with effective ways to accelerate their knowledge and skills. In 2018 we offered various online and offline events, webinars, classroom courses and external presentations that employees can choose from to tailor their development.

We made LinkedIn Learning available to all employees in 2018. The company-wide engagement, totalling nearly 31 thousand hours of courses viewed and over 346 thousand completed training videos, led TomTom to win LinkedIn Benelux's Best Culture of Learning award.



OUR PEOPLE AND CULTURE CONTINUED

TIME WAS MOSTLY SPENT ON THE LEARNING PATHS CREATED TO DRIVE DEVELOPMENT IN ALIGNMENT WITH OUR FIVE LEADERSHIP PILLARS:

1 DRIVE HIGH PERFORMANCE



2 DARE TO LEAD



3 CREATE AN AUTONOMOUS ENVIRONMENT



4 UNLEASH TALENT



5 CONNECT

In addition, we have focused on programs that build the technical skills that are influential in positioning TomTom as a leading technology company. In particular, our software development capability is critical to our business success. With our World Class Software Development program, we continue to drive improvement across activities and practices in software development, which will remain a priority.

LEADING TO THE TOP

At TomTom, we employ the best. And the best people need the best leaders – who make decisions, inspire, mentor and cascade our company's energy and ambition down to all employees. This not only drives our Achieve More proposition and helps deliver on our company vision for the future, but also plays a key role in attracting, developing and retaining the right people.

In 2017, we launched the TomTom leadership model and assessed the leadership potential of all people managers as a first step in taking our company to the top through the World Class Leadership program. In 2018, the development of these managers has been the main priority.

Participants have clear development expectations, with the necessary tools and opportunities to chart their development path. For example, the World Class Leadership team has created a coaching network and launched a six-month mentoring program that matches high-potential employees with suitable mentors within TomTom. In Pune, India, we ran a six-month leadership development program, Scaling New Heights. This program will continue in 2019 and be expanded to other locations.

In addition, together with Judge Business School, which is an affiliate of Cambridge University, we used our leadership model to create an Executive Leadership program aimed at accelerating development at the executive level and succession planning. Our second cohort of eight participants was extremely successful and we will continue this program in the coming years.



At TomTom, we employ the best. And the best people need the best leaders – who make decisions, inspire, mentor and cascade our company's energy and ambition down to all employees."



FOR MORE INFORMATION

www.tomtom.com/careers

OUR PEOPLE AND CULTURE CONTINUED

STAYING COMPETITIVE

We increased our talent acquisition resources significantly in 2018, which resulted in a vast reduction of our recruitment lead times and number of open vacancies. Also, we successfully hired a record number of software developers. In total, over one thousand people joined TomTom during the year.

Our remuneration strategy is key for attracting and retaining talent. It is our objective to provide competitive, fair and responsible compensation for each of our employees, as well as offering market competitive benefits such as pension and health care according to each country's unique context.

The global workforce is constantly evolving and markets are becoming highly competitive with respect to benefits, compensation and perks. A one-size-fits-all policy does not make sense for the workforce of the future. Given the changes in the market, especially in the technology sector, we continue to look for the needs of our employees so that we can create customized programs for different segments of our employee population. This will lead to a unique attraction and retention approach and will enable us to compete effectively against other employers.

Long-term incentives for senior management and key individuals are part of our remuneration policy. These incentives are intended to help us attract and retain more talent. Our long-term incentive program includes phantom stock, restricted stock units and stock options. All of our long-term incentive programs are conditional to continued employment of the employee and have a vesting period of three years. The selection of employees eligible for these programs is based

on a combination of their talent potential estimate, performance rating and salary range.

Our performance-related bonus plan is in line with our vision, which is that success for our business should also mean success for the individual employee. The bonuses paid as a percentage of base salary vary according to the job grade and reflect the level of influence that each role has on the execution of our strategy.

We also recognize and celebrate our employees via both personal and public recognition.

We want our employees to thrive both personally and professionally. As such, we enable our employees to have a work-life balance that works for them, and provide many development and growth opportunities so that they may flourish and grow within TomTom.

DIVERSITY AND INCLUSION

At TomTom, we embrace and encourage our employees' differences and value being a Dutch company with a diverse workforce, welcoming over 70 nationalities across our global offices. This mix of cultures is rich with people of all backgrounds, races and perspectives.

The collective sum of these individual differences, life experiences, knowledge, inventiveness, self-expression, capabilities and talent that our employees invest in their work represents a significant part of our culture, and our reputation. And furthermore, they are the key drivers of our company's achievements and innovation. In our Diversity & Inclusion Policy we reflect our commitments to foster a diverse and inclusive workforce.

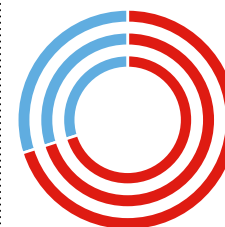


At TomTom, we embrace and encourage our employees' differences and value being a Dutch company with a diverse workforce."

DIVERSITY

70

Employing over 70 nationalities across our global offices.



GENDER DIVERSITY

Male	70%
Female	30%



FOR MORE INFORMATION

www.tomtom.com/company/diversity-inclusion-policy/

In 2018, we followed up on these commitments through initiatives in a variety of areas; for example, through our Talent Development offerings, leadership development initiatives, Employer Brand work, HR policies and community giving actions. To further this, we hired a project manager in the Talent Development team who is fully dedicated to Diversity & Inclusion initiatives.

DIVERSITY AND INCLUSION POLICY

- We strive for workforce diversity and equality, embracing people of every race, age, nationality, gender, background, sexual orientation, ethnicity or religion;
- Promoting and supporting a culture of inclusion; and
- Providing career opportunities in local communities.

As a technology company, however, improving gender balance remains a key challenge. This is reflected in our workforce, which is 30% female. We want to do better, increasing this percentage to close to 34% by the end of 2019. To do so, we need to continue strengthening our efforts to attract and hire more women into technology and leadership roles.

We continue to be strong advocates of gender equality, encouraging and promoting it in and outside of the company.

Furthermore, in Amsterdam, the Netherlands, we sponsored local initiatives including Girlsday, which introduces more young women to technology careers and the World Solar Challenge, featuring an all-female drive team in a solar-powered race in Australia.

OUR PEOPLE AND CULTURE CONTINUED



In partnership with the VHTO (National expert organization on girls/women and science/technology), we promoted Girlsday events in Amsterdam and Ghent.”

GIVING BACK TO COMMUNITY

We continue our commitment to supporting communities in which we work and live. Our employees organized and sponsored over 30 local initiatives across the globe aimed at educating and steering youth in the right direction during their development, as well as helping them stay active and healthy. Some of these initiatives are:

Girlsday

To inspire and encourage young women to select STEM (Science, technology, engineering, and mathematics) academic disciplines and to pursue careers in math and science. TomTom, in partnership with the VHTO (National expert organization on girls/women and science/technology), promoted Girlsday events in Amsterdam and Ghent.

The initiative is organized for girls age 7 to 14, and features interactive exhibits and workshops about robotics, cybersecurity, wearable tech, and bioengineering, each enhanced by visual art, music, game design, and computer programming projects.

2018 marked our fifth year as a corporate partner, and to commemorate this, our co-founder and managing director, Corrine Vigreux, gave a lecture at the event in Ghent about women in technology.

**CEO for a Day**

To inspire students from neighborhoods with a socioeconomic disadvantage in career planning. TomTom, in cooperation with JINC, a Dutch Nonprofit Organization, has promoted this initiative since 2015 at our local offices in Amsterdam and Eindhoven. The 2018 event welcomed Ike Iyere as our CEO for a day. He was hosted in our Amsterdam office by our CEO, Harold Goddijn, and in the Eindhoven office, by our Head of Custom Systems, Paul Heslen. Part of the activities included meeting TomTom board members, management and employees and discussing various topics related to business. He was, of course, addressed as CEO.

INSPIRE

2018

Marked our fifth year as a corporate partner with VHTO promoting Girlsday events in Amsterdam and Ghent.

SUSTAINABILITY

Our vision is a safe, connected, autonomous world, **free of congestion and emissions**

As a global organization our key sustainable business practices are aimed at minimizing our environmental impact and maximizing our positive contribution to the communities we work and live in. Our sustainable business practices are focused on i) the creation of sustainable products, ii) ensuring sustainability in our operations, and iii) doing business in an ethical way.

31%

reduction in waste compared to 2017.

980

tonnes of waste recycled in 2018.

We have implemented a Social and Environmental Management System (SEMS) which captures our sustainable business practices. SEMS is compliant with the requirements of the International Organization for Standardization (ISO) 14001:2015 and the Responsible Business Alliance (RBA). TomTom is ISO 14001 certified since 2017 and our goal is to prolong this ISO certification. Annual (external) audit performance on pre-defined measurements is an integrated part of this certification. SEMS is helping us in our efforts to continuously improve our products, operations and social responsibility and is supportive to our ambition to help our customers to further manage and reduce their environmental impact and contributing to a safer and greener world.

Our environmental policy gives guidance to our employees, suppliers, customers and other relevant stakeholders on how we uphold our social and environmental standards in everything we do, and helps us to keep track of our goals, specific targets and continuous progress.

CREATING SUSTAINABLE PRODUCTS

We create innovative technologies to help shape tomorrow's mobility, to empower businesses, consumers and governments to make smarter mobility decisions collectively.

An example is our ADAS offering for commercial vehicles premiered early January 2019. This marked a first in auto-technology, allowing truck and freight vehicle drivers to automate driving systems such as cruise control and gear shifting with TomTom mapping and guidance. Among the projected benefits is a five percent reduction per vehicle in annual fuel consumption and a corresponding decrease in fleet operating expenses.

Our maps for automated driving powers over half a million Level 1 and Level 2-enabled automated vehicles on the road today across multiple manufacturers.

More autonomous vehicles can help to reduce the number of cars on the road moving forward, contributing to a safer world, free of congestion and emissions.

ENSURING SUSTAINABILITY IN OUR OPERATIONS

Environmental impact of our offices

In 2018, we further integrated several environmentally sustainable practices into our day-to-day business activities. We are persistently working to minimize the environmental impact of our offices by focusing on resource consumption, waste management, sanitation and cleaning management. With our TomTom Green Ambassador Program we aim to increase the engagement of our employees and overall environmental awareness.

No specific risks regarding environmental matters are identified by TomTom.

Waste take-back and recycling

We continued our well-embedded Environmental Product Compliance program in 2018, to ensure we consider and comply with legislation related to restricted substances, take-back and recycling in the countries where our products are being sold. In 2018, we financed the collection and recycling of nearly 507 tonnes of waste from electrical and electronic equipment (WEEE), 35 tonnes of battery waste and 438 tonnes of packaging waste. In comparison to 2017, our waste output decreased on average by 31%. This reflects 100% of the waste from end-of-life TomTom electric and electronic products, batteries and packaging. Because of our ongoing shift towards providing more data, content and services and a declining PND market, we expect to produce less waste in the coming years, resulting in a smaller environmental footprint.



FOR MORE INFORMATION

Environmental Policy

<https://corporate.tomtom.com/responsible-business/sustainability>

SUSTAINABILITY CONTINUED

Driving a sustainable supply chain

Outsourcing is a key element of our business model – in fact, the assembly of PNDs, accessories and (reverse) logistics is entirely outsourced. It is therefore of great importance that our suppliers recognise and observe fundamental human rights, safety and the environment in their operations.

Our Supplier Code sets out the standards and behaviors we require from our supplier and is based on the RBA Code of Conduct and covers areas like Labor, Health & Safety, Environment and Ethics. We ask our major suppliers to sign and comply with this code, to acknowledge our environmental policy and support our plans and efforts to reduce the environmental footprint of our business activities and improve social, environmental and ethical practices.

In 2018, we completed risk assessments for 100% of our major suppliers using the RBA tools and concluded that there were no high-risk findings. As a result, we did not conduct any independent supplier audits in 2018.

DOING BUSINESS IN AN ETHICAL WAY

We have integrated the RBA standards into our way of working through our internal Code of Conduct, underlying policies and procedures, and an awareness program. Our Code of Conduct describes our values and business principles and guides our employees inside the company and in their interactions with stakeholders.

As a company with a global footprint, we interact with parties and government officials all over the world. We have a zero-tolerance approach to bribery and corruption and all other forms of misconduct.

Our internal Code of Conduct also outlines our commitments to human rights by applying labor principles in everything we do. Not applying these principles could have a severe impact on our brand reputation and business continuity. Our labor principles cover, among others, freely chosen employment, respect for age requirements, non-discrimination and freedom of association. Our labor principles are reflected in all our employment agreements, recruitment procedures, global and local policies and the way we treat our employees.

We also published a Slavery and Human Trafficking Statement under the UK Modern Slavery Act that summarizes our actions to address the risk of modern slavery within our own operations and those of our suppliers.

More information about social and employee matters at TomTom, including diversity, can be found in the People and Culture section.

Our Code of Conduct awareness Program and control mechanisms play a pivotal role in preventing bribery and corruption and other misconduct at TomTom. The program is designed to permanently instil an awareness of everyone's responsibility to uphold TomTom's business principles and to speak up in case of any misconduct. The program includes online gamified training, localized and interactive on-site workshops, tailored communication and custom-made campaigns on specific topics like human rights, safe working environment, anti-bribery and corruption, (information) security and confidential information and our Open Ears Procedure.

Our employees and external stakeholders are provided the opportunity to (anonymously) speak up about any (potential) misconduct, without the fear or retaliation. During 2018, we received 16 reports through our Open Ears Procedure, nine of which related to the same case: an allegation of bullying and discrimination. The remaining reports related to claims of unsafe working environment, breaches of internal procedures, harassment, discrimination and bullying. All reports were duly investigated and of the eight different claims, seven were found to be substantiated. Although the other claim could not be substantiated as such, the investigation process did produce several improvement points that have further increased the company's resilience.

Tax principles

TomTom's contribution to society includes the payment of taxes. The taxes we pay help fund public services provided by governmental institutions in the countries where we operate. Annual internal trainings on tax dilemmas were organized to keep internal stakeholders aware of relevant tax legislation and to ensure compliance herewith. Our approach to tax is formulated and published on TomTom's corporate website.

**FOR MORE INFORMATION**

Corporate website

<https://corporate.tomtom.com/corporate-governance/governance/corporate-governance>

PRIVACY AND DATA GOVERNANCE

Privacy is about freedom

We believe privacy is about freedom and being able to decide for oneself how one's data is used and by whom.



TOMTOM IS A HIGHLY DATA INTENSIVE COMPANY

To create and maintain our various products and services, we process billions of data points every day on a global scale.

A significant part of the information is contributed by our users or relates to individuals. It is paramount to the continuity of us being able to use our users' data that we retain their trust and keep providing valuable insights to them based on the data they provide us with. We operate according to the privacy laws applicable in the various countries we are active.

In 2018, the new EU General Data Protection Regulation (GDPR) entered into force, and since we are rooted in Europe, we apply the GDPR on a global scale. This regulation is considered to be the most extensive in the world and offers a high level of protection to our users across the globe by only allowing us to use their data when the strict conditions of these laws are met. We started working towards meeting the requirements of the GDPR as early as 2012 and believe we are well positioned. Our company policy on privacy and processing of personal data reflects this. To make it easier for our users to understand this policy, we have translated them into ten promises we make. These can be found on our website: www.tomtom.com/privacy.

To be able to live up to our promises, we employ what is generally known as 'privacy by design'. Effectively this means that when designing and engineering our products and services, privacy and properly dealing with data from or about our users is a topic we consider right from the start and throughout our engineering and operations.

TOMTOM PRIVACY PRINCIPLES

1 CLARITY

We will always keep you fully informed about your data. We make sure you understand which data from or about you we use, why we use it, how long we use it and who can use it.



2 CONTROL

We enable you to remain in control of your data. We consider the data from or about you to be yours. We only use it for the purposes for which you have given it to us, or for which we collected it from you. At any time, you can opt-out or opt-in using our software and websites.



3 CARE

We protect your data. Your data is yours. We keep it that way by protecting it as best as we reasonably can to prevent it from falling into the wrong hands.

GROUP FINANCIAL REVIEW

Continued growth in Automotive revenue and increase in gross margin **resulted in year on year EBIT growth and strong cash generation**

KEY FIGURES OVERVIEW

(€ in millions, unless stated otherwise)	2018	2017 restated	YoY change ¹
Key figures from continuing operations			
Automotive & Enterprise	372.3	333.2	12%
Consumer	314.5	406.1	-23%
Total revenue	686.8	739.3	-7%
Gross profit	475.3	446.0	7%
Gross margin (%)	69%	60%	
Operating expenses ²	472.4	516.9	-9%
Operating result (EBIT)^{2,3}	2.9	-70.9	
EBIT margin (%) ³	0%	-10%	
Depreciation & amortization	139.1	158.3	-12%
EBITDA³	142.0	87.4	62%
EBITDA margin (%) ³	21%	12%	
Key figures from total operations			
Net result from continuing operations	-2.9	-77.1	-96%
Net result from discontinued operations	47.6	51.3	-7%
Total net result²	44.8	-25.7	
Adjusted net result⁴	83.2	42.3	97%
EPS from total operations – fully diluted (€)	0.19	-0.11	
Adjusted EPS – fully diluted (€) ⁴	0.36	0.18	100%
Cash flows from operating activities	229.0	173.6	32%
Cash flows from investing activities	-83.9	-129.7	-35%
Net cash⁵	252.1	120.9	105%

1 Change percentages and totals calculated before rounding.

2 2017 excludes a €169 million goodwill impairment charge.

3 EBIT and EBITDA measures are non-GAAP measures and are further explained at the end of this report. The reconciliation to our income statement is further explained in note 4 of the consolidated financial statements.

4 Adjusted EPS is a non-GAAP measure and is further explained at the end of the report. A reconciliation of adjusted net result and adjusted EPS to our income statement is provided in note 27 of the consolidated financial statements.

5 Net Cash is a non-GAAP measure and is further explained at the end of this report.

Revenue

Group revenue from continuing operations in 2018 was €687 million, which is 7% lower compared with €739 million in 2017. Automotive & Enterprise reported year on year revenue growth of 12% mainly driven by strong revenue growth in Automotive partially offset by a limited decline in Enterprise. Consumer revenue declined year on year in line with our expectation.

From a regional perspective, 77% of 2018 revenue was generated in Europe (2017: 75%), 16% in North America (2017: 18%) and 7% in the rest of the world (2017: 7%).

Gross profit

While revenue declined, the gross profit for the year was €475 million, 7% higher than €446 million in 2017. The gross margin for the year was 69% compared with 60% last year mainly reflecting increasing proportion of high margin recurring data, software and services revenue in our product mix.

Operating expenses

2018 operating expenses were €472 million compared with €517 million in 2017. Both years are impacted by one-off items. In 2018 we recorded a one-time gain of €22 million from settlement of litigation. 2017 operating expenses included a €13 million restructuring costs and €28 million expenses relating to assets disposals.

Excluding these one-off items the underlying operating expenses showed a modest year on year increase.

R&D expenses amounted to €221 million in 2018 compared with €202 million in 2017. The year on year increase is mainly the result of lower capitalization as our mapmaking platform matured and reached its intended use.

Total R&D cash spending during the year, including capital expenditures, amounted to €299 million compared with €292 million last year. The increase is mainly explained by increased investments in our map content and technology.

Marketing expenses showed a considerable year on year decline as we aligned our cost base with the revenue development within Consumer. SG&A expenses decreased to €115 million in 2018 from €160 million in 2017 mainly driven by the one-off gain from litigation in 2018 and the assets disposal and restructuring expenses included in 2017. Underlying SG&A showed a year on year decline following the reorganization of our Consumer business unit.

Total depreciation and amortization expenses were €139 million in 2018 compared with €158 million in 2017. Amortization of technology and database costs decreased by €2.9 million year on year.

GROUP FINANCIAL REVIEW CONTINUED

2018 operating result (EBIT) amounted to €2.9 million (2017: -€71 million – excluding impairment) driven by lower operating expenses and higher gross profit.

Net result from discontinued operations

On 22 January 2019 we announced the sale of our Telematics business to Bridgestone. Telematics is presented as discontinued operations in the financial statements for all periods presented.

In 2018 Telematics generated revenue of €174 million, an increase of 6% compared with prior year revenue of €164 million. The 2018 net result of discontinued operations was €48 million, €4 million lower than last year.

Net result total operations

The total net result for the year was €45 million (2017: loss of -€194 million including the impairment charge). The net result adjusted for deferred revenue, unbilled revenue, deferred cost of sales, impairments and material restructuring and disposal costs on a post-tax basis was €83 million compared with €42 million in 2017. The adjusted EPS for the year was €0.36 (2017: €0.18).

Cash flows from operating activities

Total cash flows from operating activities in 2018 was €229 million, an increase of €55 million compared with €174 million in 2017. The year on year increase is explained by the increase of EBITDA of the continuing operations and higher payments of Automotive customers which is reflected in our working capital via an increase in the deferred revenue balance.

Cash flows from investing activities

The total cash used in investing activities in 2018 was €84 million, a decrease of €46 million compared with €130 million in 2017. Excluding the acquisition of Autonomos in 2017, the cash used in investing activities decreased by €21 million year on year mainly due to lower capitalization of expenditures in our mapmaking platform.

Investments (excluding acquisitions)

(€ in millions)	2018	2017	YoY change ¹
Maps	61.3	63.9	-4%
Other	15.4	28.6	-46%
Continuing operations	76.7	92.5	-17%
Telematics	7.4	13.0	-43%
Total investments	84.2	105.4	-20%

¹ Change percentages and totals calculated before rounding.

Cash, liquidity and debt financing

The cash flow from financing activities for the year was an outflow of €15 million versus €64 million in 2017. The higher outflow in 2017 was driven by the cash outflow of €50 million related to the share buyback program conducted in 2017. In 2018, 0.8 million options (2017: 2.5 million options) were exercised resulting in a €3.8 million cash inflow for the year (2017: €12 million).

At year-end 2018, TomTom had zero utilization of its available credit facility of €250 million and reported a net cash position of €252 million (2017: €121 million).

The net cash is defined as cash and cash equivalents including cash classified as held-for-sale (IFRS 5) minus the nominal value of our outstanding bank borrowings.

OUTLOOK 2019

The outlook for 2019 is based on TomTom's continuing operations.

	Outlook 2019	Actuals 2018
Continuing operations		
Revenue	€675m	€687m
of which Location Technology	€430m	€372m
Gross Margin	> 70%	69%
OPEX	€555m	€472m
CAPEX	€55m	€77m
Adjusted EPS*	€0.15	€0.32
FCF as a % of revenue**	10%	13%

➤ In 2019 Location Technology (Automotive and Enterprise) revenue is expected to grow by around 15% year on year. We have decided to accelerate our OPEX and CAPEX spend by around 10% year on year to further improve our competitive position in a constantly changing market and to keep current positive momentum going.

➤ Although the resulting adjusted EPS will decline (approximately €0.10 of the decline is explained by our Consumer business), we will continue to generate free cash flow around 10% of revenue.

➤ The total number of employees in 2019 is expected to decline following the divestment of Telematics.

* For the 2019 outlook, the adjusted EPS is now adjusted as well for acquisition related amortization on a post-tax basis.

** Free cash flow (FCF) is defined as cash flow before financing activities. 2018 FCF of continuing operations was €90 million.

BUSINESS UNITS REVIEW

2018 Performance highlights of our business units

AUTOMOTIVE & ENTERPRISE

Traditional navigation

New deals announced:

- **Groupe PSA** selected our maps, navigation and services for its next generation infotainment;
- **BMW Group** selected our traffic data, routing and EV services for all BMW, MINI and Rolls-Royce vehicles across more than 33 countries in Europe and around the world;
- **Hyundai** and **Kia** expanded their connected car services to include our On-Street and Off-Street Parking, EV Service and Fuel Price Service;
- **Toyota** launched a new navigation app that combines offline maps with online services and that can be mirrored to the in-dash screens of its vehicles in Argentina, Brazil and Paraguay.

A collaboration with ParkWhiz for On-Street and Off-Street Parking was also announced.

ADAS & Autonomous Driving

New technologies launched:

- **AutoStream** – a map delivery service that enables vehicles to build a horizon for the road ahead by streaming the latest map data from our cloud.
- **Roadagrams** – snippets of compressed data generated from vehicle sensors used to update our HD map.

Several collaborations announced with Baidu, Delphi Technologies, DENSO, Elektrobit, Qualcomm and Zenuity.

MAPS APIS

Enhanced the distribution of our Maps APIs in cloud platforms:

- **Microsoft** officially launched its location-based services called Azure Maps, powered by our Maps APIs;
- **Developer portal** improved, with developers now able to easily build their applications with our APIs and SDKs.

Expanded our partnership with Microsoft, with our location technologies chosen to power Bing, Cortana, Windows and other products.

New collaborations were also announced with Alteryx, rideOS, STMicroelectronics, trivago and Zenly.

The Automotive & Enterprise financial review is combined as both segments make use of the same location technology assets:

- Generated a combined revenue of €372 million in 2018, a 12% increase year on year;
- Automotive revenue grew by 25% to €245 million in 2018, compared with €196 million last year. Automotive operational revenue in 2018 (P&L corrected for deferred and unbilled movement) grew by 31% to €317 million in 2018;
- This growth reflects increasing revenue due to higher volume from existing contracts as well as higher revenue from new contracts starting this year;
- The deferred revenue position of Automotive increased to €172 million at the end of 2018 from €98 million at the end of 2017;
- Enterprise revenue for the year was €127 million, 7% lower compared with 2017. The main driver of this decline was a one-off revenue recognition in 2017;

- EBITDA declined year on year due to lower capitalization as our technology and mapmaking platform matured.

(€ in millions, unless stated otherwise)	2018	2017	YoY change ¹
Automotive	245.0	195.7	25%
Enterprise	127.3	137.5	-7%
Total revenue	372.3	333.2	12%
EBITDA^{2,3}	87.2	101.1	-14%
EBITDA margin (%)	23%	30%	
Operating result (EBIT)³	-46.0	-43.0	
EBIT margin (%)	-12%	-13%	

- 1 Change percentages and totals calculated before rounding.
- 2 D&A costs mainly relate to our map asset (including acquisition-related amortization).
- 3 The EBIT and EBITDA measure and the reconciliation to our income statement is further explained in note 4 of the consolidated financial statements. This note also provides a split between Automotive and Enterprise.



FOR MORE INFORMATION

<https://www.tomtom.com/company/business/>

<https://corporate.tomtom.com/press-centre/news-releases/press-releases>

BUSINESS UNITS REVIEW CONTINUED

CONSUMER

- The PND business is cash generative and continues to provide valuable consumer insight and location data;
- Daimler Trucks selected TomTom Bridge HUB – a hardware platform that seamlessly connects location technologies with business applications – to provide navigation and vehicle data to drivers globally;
- Generated revenue of €315 million in 2018, a 23% decrease year on year. This decrease was mainly driven by the expected overall market decrease. Our niche PND products for Truck and Camper drivers outperformed the market;
- Despite discontinuing our Sports business in 2017, the leftover wearables inventory generated €14 million of revenue in 2018. Inventory levels – both at TomTom and retail channels – are nearly depleted;
- EBITDA showed a sharp increase following the reorganization at the end of 2017.

(€ in millions, unless stated otherwise)	2018	2017	YoY change ¹
Consumer products	271.0	361.2	-25%
Automotive hardware	43.5	44.9	-3%
Total revenue	314.5	406.1	-23%
EBITDA²	70.0	2.7	
EBITDA margin (%)	22%	1%	
Operating result (EBIT)²	63.4	-12.1	-626%
EBIT margin (%)	20%	-3%	

¹ Change percentages and totals calculated before rounding.

² The EBIT and EBITDA measure and the reconciliation to our income statement is further explained in note 4 of the consolidated financial statements.

DISCONTINUED OPERATIONS – TELEMATICS

- Generated revenue of €174 million in 2018, a 6% increase year on year;
- The recurring subscription revenue was €136 million compared with €126 million in 2017, reflecting a year on year growth of 8%;
- EBITDA showed a marginal year on year improvement.

(€ in millions, unless stated otherwise)	2018	2017	YoY change ¹
Subscriptions	136.2	126.3	8%
Hardware and other services ²	37.6	37.3	1%
Total revenue	173.8	163.6	6%
EBITDA^{2,3}	71.7	70.8	1%
EBITDA margin (%)	41%	43%	
Operating result (EBIT)³	52.6	53.6	-2%
EBIT margin (%)	30%	33%	
Monthly revenue per subscription (€)	13.4	13.8	-3%
Subscriber installed base (# in thousands)	868.0	809.0	7%

¹ Change percentages and totals calculated before rounding.

² Other services revenue comprises installation services and separately purchased traffic service and/or map content.

³ The EBIT and EBITDA measure include cost allocations which are not part of the discontinued operations. Reconciliation to our income statement is further explained in note 4 of the consolidated financial statements.

RISK MANAGEMENT AND CONTROL

We have implemented comprehensive and structured risk management and internal control systems to help us achieve our business objectives

Our approach to risk management, the main risks per category and actions to manage, control and mitigate the risks, among other things, are described in this section.

APPROACH TO RISK MANAGEMENT

Senior management together with the Management Board agrees on the strategy for TomTom. This includes identifying significant strategic risks and determining how to manage them. The defined strategy and identified risks cascade into and are expanded upon in organizational unit strategies.

A single owner is assigned responsibility for each risk, which helps to ensure clear accountability for mitigating actions. We update the risk considerations contained in the group strategy every year to manage our most important risks. Over the year, we monitor the mitigating actions in relation to each risk and the trend for each risk. The group strategy (including the group risks) forms the basis of our annual business plans and budgets.

In 2018, the Internal Control department further strengthened our control environment by continuing to utilize the benefits provided by Governance Risk and Compliance tooling implemented last year. This has resulted in business process owners gaining a deeper insight into their processes and associated control environment. Additionally, Internal Control continued to simplify and strengthen communications and guidance given regarding the delegation of authorities through the organization.

CONTROL FRAMEWORK

TomTom follows a top-down approach whereby the Management Board identifies the major risks that could affect the company's business objectives and the integrity and quality of the company's financial reporting.

As a result of this annual assessment, the Management Board concluded no material changes to the control framework were required for 2018.

The internal controls are contained and maintained in the Internal Control Framework. Assurance on the effectiveness of controls is obtained through management reviews, monitoring dashboards, self-assessments, internal audits and testing of certain aspects of our internal financial control systems by the Internal Control team.

Based on these assessments we conclude that in 2018, there were no major failings in the internal risk management and control systems and there were no such topics for discussion with the audit committee and supervisory board.

The internal control systems are designed to manage, rather than eliminate, the risk that we fail to achieve our business objectives and can provide reasonable, but not absolute, assurance against financial loss or material misstatements in the financial statements.

The key features of our systems of Internal Control are as follows:

- Defined lines of accountability and delegation of authority are in place, together with reporting and analysis against forecast and budgets;
- Minimized operating risk by ensuring that the appropriate infrastructure, controls, policies, systems and people are in place throughout the business;
- Maintain organizational design that supports business objectives and a culture that encourages open and transparent communication;
- Maintain a financial shared service center with a centralized Enterprise Resource Planning (ERP) environment which allows us to monitor our business throughout all regions and apply a consistent level of control;
- Centralized Treasury operations that manage cash balances and exposure to credit default and currency risks through Treasury policies, risk limits and monitoring procedures; and
- Ensure the Code of Conduct is accessible to all staff via the intranet, which includes whistleblowing facilities.

In 2018, there were no major failings in the internal risk management and control systems and there were no such topics for discussion with the Audit Committee and Supervisory Board. These systems continue to provide reasonable assurance that the financial statements do not contain material misstatements.

RISK MANAGEMENT AND CONTROL CONTINUED

Risk overview

CATEGORY	DESCRIPTION	APPETITE	IMPACT	LIKELIHOOD	MATERIALIZED STRATEGIC RISK	RISK APPETITE AND IMPACT
Strategic risks	Failure to grow our Automotive business	➤➤	➤➤➤➤	➤➤	Last year we included a strategic risk titled 'Failure to grow our Automotive business'. A component of this risk was the possibility that new map and navigation providers choose to enter the automotive market, which would lead to increased levels of competition. In 2018, both Volvo and the Renault, Nissan and Mitsubishi car-making alliance announced intentions to use Google products as components of future vehicles' infotainment systems.	Our willingness to assume risks and uncertainties (the risk appetite) differ for each category. The level of the company's risk appetite gives guidance as to whether TomTom will take measures to control such uncertainties. The overview table below shows the appetite and the expected impact on the group's achievement of its strategic, operational and financial objectives if one or more of the main risks and uncertainties were to materialize. The likelihood of the risk taking place is also disclosed. The risk severities shown relate to residual risk. This means that the risks are described after taking the risk response into consideration.
	Reputation damage	➤	➤➤	➤➤		
	Failure to improve our mapmaking process	➤	➤➤➤➤	➤		
Operational risks	Inability to attract, develop and retain talent	➤	➤➤	➤➤	These are the first indications of Google making a significant attempt to enter the automotive location and navigation services market. However, these developments are expected to represent at least for the short term, a limited segment of the market. We have used these events to refine our strategy and strengthen our resolve to remain competitive. Information relating to automotive market trends and our strategy is set out in the Growth Opportunities section of this Management Board report.	The table on this page gives an overview of the risks that we believe are most relevant to the achievement of our strategy, which has a time horizon of at least 12 months. The sequence of risks below does not reflect an order of importance, vulnerability or materiality. This overview is not exhaustive and should be considered in connection with forward-looking statements. There may be risks not yet known to us or which are currently not deemed to be material.
	Unavailability of online services	➤	➤➤➤➤	➤		
	Failure to recover from a disaster	➤➤	➤➤➤➤	➤		
Legal & compliance risks	Intellectual property claim	➤➤	➤➤	➤		
	Customer privacy of changing regulatory requirements	➤	➤➤➤➤	➤		
	Information security risk	➤➤	➤➤➤➤	➤➤		
Financial risks	Unfavourable movements in foreign currencies	➤➤	➤➤	➤➤➤➤		

KEY

Unchanged  Low 
 Medium  High 

RISK MANAGEMENT AND CONTROL CONTINUED

Strategic risks

FAILURE TO GROW OUR AUTOMOTIVE BUSINESS

We might be unable to pursue new automotive opportunities and lose market share versus competition. Also, new map and navigation providers are entering the automotive market, which could increase the level of competition we face.

There could be additional operational and technical challenges in growing our Automotive business and maintaining profitability over the longer-term in such a rapidly evolving environment. If we are unsuccessful in maintaining and growing a profitable Automotive business, our financial condition, results of operations and liquidity may be materially adversely affected.

Risk response

We believe TomTom is well positioned to address the future needs of our customers and to successfully pursue Automotive opportunities. With our technological innovation, we continuously develop new product and service offerings in the areas of navigation, traffic, maps and assisted and autonomous driving. We believe these innovations will allow us to remain competitive in the automotive market.



REPUTATION DAMAGE

All our products and services are brought to market under one brand. This leads to brand concentration risk. Brand value can be severely damaged, even by isolated incidents affecting the reputation of our business or our products and services.

Some of these incidents may be beyond our ability to control and can erode customer confidence in our products or services.

Factors that negatively affect our reputation or brand image, such as adverse consumer publicity, inferior product quality, late delivery of customer commitments or poor service, could have a material adverse effect on our financial condition and results of operation.

Risk response

TomTom employs a rigorous quality management process for its products and services before they are entered into the market. Additionally, TomTom's Customer Care department aims to provide quality, responsive customer service and proactively monitors various digital platforms for customer feedback and issues. Furthermore, internal policies, governance teams and our Code of Conduct are designed to further mitigate the risk of incidents that could result in reputation or brand damage.



FAILURE TO IMPROVE OUR MAPMAKING PROCESS

The competitive environment requires continuous investment in new technology for creating and updating map databases. Maps need to be constantly updated for changes in the environment and we are constantly adding new geographies and attributes to our map database to enable us to meet the needs of existing and new customers, bring out new products and expand into new markets.

If we are unable to invest and innovate sufficiently to compete with other global map providers in terms of quality, coverage and cycle times and to modernize our map creation, maintenance and delivery platforms, our map-based business may be materially adversely affected.

Risk response

We continue to improve our mapmaking processes based on our transactional mapmaking platform (CPP). This unique platform strengthens TomTom's competitive position by moving away from traditional batch processing towards a real-time map.



RISK MANAGEMENT AND CONTROL CONTINUED

Operational risks

INABILITY TO ATTRACT, DEVELOP AND RETAIN TALENT

Our markets are characterized by rapid technological change, which challenges us to deliver highly competitive products and services on an ongoing basis. In order to be a market leader in our industry, we need to have the most talented people working effectively together.

We aim to employ highly talented people in our organization. Having the best people enables us to create and deliver highly innovative products and services to our customers. If we are unable to attract, develop and retain the right people, our ability to operate our business successfully could be significantly impaired.

Risk response

In our ambition to be the employer of choice in technology, our rigorous recruitment process aims to attract the best talents. We monitor the organizational health of the company and have programs in place to retain and keep employees engaged.

Ongoing significant investments are made in understanding what our employees need and want so we can offer customized experiences. We invest in our increasingly agile and talented workforce and ensure that we have the right Employer Brand strategy in place to attract and retain the talent we need. For example, we continuously invest in and develop our software engineering and product management capabilities through initiatives.



UNAVAILABILITY OF ONLINE SERVICES

We provide a variety of customer-facing online services on a 24/7 basis. These include live traffic information, location-based services and sales via our website.

To provide these services to our customers we rely on our own, as well as outsourced, information technology, telecommunications and other infrastructure systems. A significant disruption to the availability of these systems could cause interruptions in our service to customers that may cause reputational damage for TomTom and could trigger contractual penalties, which could have a material adverse effect on our financial condition and results of operations.

Risk response

We have established a process in relation to business continuity for internal infrastructure including full redundancy for key services such as location-based services and some traffic delivery platforms.

We also agreed minimum service levels with relevant outsourced service providers.

Continuous monitoring of system availability is in place.



FAILURE TO RECOVER FROM A DISASTER

Unforeseen business disruptions could affect our service to customers and cause loss of, or delays in TomTom's critical business systems, our research and development work and/or product shipments. Any permanent or temporary loss of these systems could result in reputational damage, loss of revenue and liabilities to our clients. In the case of a catastrophic disaster, our company's success rests on our ability to restore our critical data and rebuild our IT business systems.

Risk response

We have business continuity and disaster recovery planning in place for business-critical systems and various eventualities. However, we are unable to plan for every possible disaster or incident. A major failure of a business-critical system from which we are not able to quickly recover, could have a material adverse effect on our financial condition, results of operations and liquidity.



RISK MANAGEMENT AND CONTROL CONTINUED

Legal & compliance risks

INTELLECTUAL
PROPERTY CLAIM

We rely on a combination of trademarks, trade names, patents, confidentiality and non-disclosure agreements, copyrights and design rights, to defend and protect our trade secrets and the intellectual property in our expanding range of products. We may be faced with claims that we have infringed the intellectual property rights or patents of others, which if asserted against us may result in us being ordered to pay substantial damages or forced to stop or delay the development, manufacturing or sale of infringing products. Any such outcome could have a material adverse effect on our financial condition, results of operations and liquidity. Furthermore, even if we were to prevail, any litigation could be costly and time-consuming.

Risk response

We have a dedicated Intellectual Property team responsible for the protection of TomTom's products and services against unauthorized use by third parties. By obtaining and enforcing intellectual property rights, such as patents and trademarks, TomTom can prevent the competition from reproducing our unique products. TomTom has built a substantial prior art portfolio and has a reputation for strongly defending its position in all intellectual property litigation, including against non-practicing entities (NPEs).

CUSTOMER PRIVACY AND CHANGING
REGULATORY REQUIREMENTS

We provide location-based products and services to individual customers. As there is growing public awareness and increased scrutiny by regulatory authorities, this means that compliance with privacy regulations and customer expectations is increasingly important in maintaining our competitive position.

Next to this, various governments across the globe are implementing legislation allowing law enforcement and intelligence services bodies direct access to data held by businesses. Depending on country and cultural background, this could raise additional concerns regarding the use of our products and services.

Our reputation and brand may suffer and regulatory sanctions may be imposed if we fail to comply with privacy laws and regulations or otherwise fail to meet our customers' expectations in relation to privacy matters.

Risk response

Inherent in the design and operations of our products and services we apply 'privacy by design' to ensure that TomTom's own Privacy Principles as well as obligations from applicable privacy laws and regulations are structurally adhered to in the design of our products and services and throughout our operations.

INFORMATION
SECURITY RISK

Our business operations and reputation are substantially dependent on our ability to maintain confidentiality, integrity and availability of information regarding customers, employees, suppliers, proprietary technologies, intellectual property and business processes.

Additionally, the volume and sophistication of information security ('cybersecurity') threats continue to grow. The inadvertent disclosure of confidential information, unauthorized access to our systems and networks, defective products and sanctions potentially imposed by regulators could adversely affect our business, our reputation and could have a material adverse effect on our financial conditions, results of operations and liquidity.

Risk response

We deploy and maintain information security governance, controls, processes and tools in our engineering, operations and products using a risk-based approach, based on ISO information security standards. We continuously update these defences to be effective in a changing risk environment.

Financial risks

UNFAVOURABLE MOVEMENTS
IN FOREIGN CURRENCIES

The group operates internationally and conducts business in multiple currencies. Revenue is earned in EUR, USD and other currencies, and do not necessarily match cost of sales and other costs which are largely in EUR and the USD and to a lesser extent in other currencies.

Foreign currency exposures on commercial transactions relate mainly to estimated purchases and sales transactions that are denominated in currencies other than reporting currency – EUR. Unfavourable foreign currency movements such as a strengthening of the USD will have a negative impact on our profitability.

Risk response

We manage foreign currency transaction risk through options and forward contracts to cover forecasted net exposures. All such transactions are carried out within the guidelines set by our Corporate Treasury Policy, which prescribes appropriate risk limits and controls. Furthermore, we try to temper any negative foreign currency effect by conscious and calculated pricing of TomTom products and services to combat the negative impact of the exchange rate movement. Note 30 to the consolidated financial statements provides information on other financial risks.

Appetite	➤➤
Impact	➤➤
Likelihood	➤
Trend	➤

Appetite	➤
Impact	➤➤➤
Likelihood	➤
Trend	➤

Appetite	➤➤
Impact	➤➤➤
Likelihood	➤➤
Trend	➤

Appetite	➤➤
Impact	➤➤
Likelihood	➤➤➤
Trend	➤

CORPORATE GOVERNANCE

TomTom is committed to conducting business in a transparent, ethical and accountable manner

GENERAL

TomTom NV is a public limited liability company incorporated under Dutch law and listed on Euronext Amsterdam in the Netherlands. We have a two-tier board structure, consisting of a Management Board and a Supervisory Board, accountable to the General Meeting for the performance of their duties.

Our corporate governance structure is based on the company's Articles of Association, the requirements of the Dutch Civil Code, the Dutch Corporate Governance Code, as revised in 2016 (the Code), applicable securities laws, and the rules and regulations of Euronext Amsterdam.

We continuously monitor and assess our corporate governance structure ensuring compliance with the Code, applicable laws and regulations and relevant developments. If a substantial

change to the corporate governance structure of TomTom occurs affecting its compliance with the Code, the shareholders shall be informed thereof at a General Meeting. The governance documents can be found on TomTom's corporate website.

The below overview reflects how TomTom addresses the respective themes of the Code and where necessary, reference is made to other sections of this Annual Report.

THEMES

LONG-TERM VALUE CREATION

Drive a culture of long-term value creation

- ▶ All of our activities aim to create the most relevant and beneficial impact for all of our stakeholders: customers, shareholders, employees and society.
- ▶ We allocate capital to the businesses we think offer the best prospects for growth and returns.
- ▶ We minimise the environmental impact through our sustainable solutions, operations and supply chain.
- ▶ We contribute to society through investments in local communities.
- ▶ Reference is made to Our Business Model Section.

CULTURE

Foster a culture of entrepreneurialism, integrity and inclusion

- ▶ Our values are embedded in our Code of Conduct, policies and procedures, and overall way of working.
- ▶ We foster our culture to build future success and to contribute to a sustainable business.
- ▶ We continuously invest in our people and in a diverse workforce.
- ▶ Reference is made to Our People and Culture Section and our Global Diversity & Inclusion Policy.

TRANSPARENCY

Create clear and transparent communication

- ▶ Since 2017, the Supervisory Board issues a stand-alone Remuneration Report, including reporting on the pay ratio within the company. Reference is made to the Remuneration report.
- ▶ Our principles upon which TomTom disseminates information and engages with (potential) shareholders and analysts is published on our corporate website.



FOR MORE INFORMATION

<https://corporate.tomtom.com/corporate-governance/governance/corporate-governance>

CORPORATE GOVERNANCE CONTINUED

Management Board

The Management Board consists of three members: Harold Goddijn, Taco Titulaer and Alain De Taeye. The members of the Management Board are jointly authorized to represent the company. Biographies of the members of the Management Board, as well as other details relating to their careers can be found in the Management Board report section.

The Management Board is responsible for the day-to-day management of the operations of the company. In fulfilling its duties, the Management Board is guided by the interests of the company, taken into consideration the interests of the company's stakeholders as a whole.

Its responsibilities involve setting and achieving the company's strategic objectives, managing the company's strategic risks, legal compliance and sustainability matters. The Management Board is accountable for this to the Supervisory Board and to the General Meeting.

The Management Board provides the Supervisory Board in a timely manner with all information necessary for the Supervisory Board to fulfil its duties. Furthermore, the Management Board consults with the Supervisory Board on important matters and submits important decisions to the Supervisory Board for its pre-approval.

Composition and appointment

The company's Articles of Association provide that the Management Board must consist of at least two members. Each member of the Management Board is appointed for a maximum period of four years with the possibility of re-appointment for consecutive four-year terms in accordance with the Code. The General Meeting appoints the members of the Management Board, subject to the right of the Supervisory Board to make a binding nomination.

The General Meeting may at all times, by a resolution passed with a majority of at least two-thirds of the votes cast, and representing more than 50% of the issued share capital, resolve that the nomination submitted by the Supervisory Board is not binding. In such a case, the appointment of a member of the Management Board in contravention of the Supervisory Board's nomination requires a resolution of the General Meeting adopted with a majority of at least two-thirds of the votes cast representing more than 50% of the issued share capital. If the Supervisory Board fails to use its right to submit a binding nomination, the General Meeting may appoint members of the Management Board with a majority of at least two-thirds of the votes cast, representing more than 50% of the issued share capital.

A resolution of the General Meeting to suspend or dismiss members of the Management Board requires a majority of at least two-thirds of the votes cast, representing more than 50% of the company's issued share capital.

No member of the Management Board holds more than two supervisory positions at Dutch 'large companies' in accordance with section 2:132a Dutch Civil Code.

Diversity

TomTom's Diversity & Inclusion Policy aims for at least one woman in the Management Board at any time. TomTom at present has no women in the Management Board. Therefore, TomTom does not qualify as gender balanced within the meaning of article 2:166 of the Dutch Civil Code and under TomTom's Diversity & Inclusion Policy.

TomTom recognizes the benefits of diversity, including gender balance. However, TomTom feels that gender is only one part of diversity and future members of the Management Board will continue to be selected on the basis of specific experience, backgrounds, skills, knowledge and insights. Currently, TomTom does not have any plans to change the composition of the Management Board. When a vacancy in the Management Board occurs, the Supervisory Board will take TomTom's Diversity & Inclusion Policy into account.



FOR MORE INFORMATION

<https://www.tomtom.com/company/management-board/>

CORPORATE GOVERNANCE CONTINUED

Committees of the Management Board

The Disclosure Committee is aimed to ensure compliance with the disclosure requirements under applicable laws and regulations. The Disclosure Committee reports to and assists the Management Board in the maintenance and evaluation of disclosure controls and procedures. The Disclosure Committee gathers all relevant financial and non-financial information and assesses materiality, time-lines and necessity for disclosure of such information. The Disclosure Committee comprises representatives of the following departments: Corporate Affairs, Group Control, Investor Relations, and Corporate Communications.

Another committee is the Security, Ethics & Compliance Committee (SE&CC). The SE&CC is the formalized governance body that looks after security, ethics and (regulatory) compliance. The SE&CC is responsible for (i) establishing direction, policies and procedures with respect to security, ethics and compliance, (ii) driving, overseeing and monitoring company wide improvement programs on these topics, and (iii) reviewing and evaluating security events and incidents and deciding on improvement actions. The SE&CC comprises a member of the Management Board (Alain De Taeye) and representatives of the following departments: Privacy & Security, IT, Internal Audit and Risk Management and Compliance.

In 2018, certain key officers were appointed to the Extended Management Board committee. The Extended Management Board members assist the Management Board members with support, expertise and advise in executing the company's strategy and business priorities.

The functions represented in the Extended Management Board committee are: Chief Technology Officer, Chief Product Officer, Chief of Staff and Chief HR Officer. The Extended Management Board committee is deemed not to be an Executive Committee as referred to in best practice provision 2.1.3 of the Code.

Remuneration

The remuneration of each member of the Management Board is determined by the Supervisory Board, upon a proposal by the Remuneration Committee, and based on TomTom's Remuneration Policy for the Management Board as established by the General Meeting in 2014.

For further information about the (application of) Remuneration Policy, see the Remuneration report and note 35 to the consolidated financial statements.

Conflicts of interest

Members of the Management Board must report any (potential) conflict of interest to the Chairman of the Supervisory Board. The Supervisory Board shall decide whether a conflict of interest exists.

The member of the Management Board who has a (potential) conflict of interest shall not participate in discussions and decision-making on a subject or transaction in relation to which the member has a conflict of interest with the company. Decisions to enter into transactions under which members of the Management Board have conflicts of interest that are of material significance to the company and/or to the relevant member(s) of the Management Board, require the approval of the Supervisory Board.

During 2018, no conflicts of interest were reported.

RISK MANAGEMENT AND INTERNAL CONTROL FRAMEWORK

The company has an adequate risk management and Internal Control Framework in place. TomTom follows a top-down approach regarding the internal controls. The Management Board identifies and maintains the strategic, operational, legal and compliance, and reporting risks, and annually assesses, the effectiveness of the processes and internal controls in place to manage and mitigate those risks. The internal controls are contained and maintained in the Internal Control Framework. Together with senior management, the Management Board agrees on the risk management priorities and group risk profile for the group.

The group risk profile is taken into account when establishing our strategy, annual business plans and budgets.

CORPORATE GOVERNANCE CONTINUED

The Audit Committee assists the Supervisory Board in its responsibility to oversee the system of internal control and risk management, the effectiveness of the internal auditors. For more information, reference is made to the Audit Committee activities included in the Supervisory Board report.

For a full overview of the risk management and Internal Control Framework, reference is made to the Risk Management and Control section.

EXTERNAL AUDITOR

EY was appointed as external auditor by the 2018 General Meeting for an additional term of three years up to and including the financial year 2020. The Audit Committee monitors the performance of the external accountant and the effectiveness of the external audit process, as well as its independence.

SUPERVISORY BOARD

The Supervisory Board consists of six members: Peter Wakkie, Jacqueline Tammenoms Bakker, Jack de Kreij, Michael Rhodin, Bernd Leukert and Derk Haank.

Biographies of the members of the Supervisory Board, as well as other details relating to their careers can be found in the Supervisory Board report section.

The Supervisory Board supervises the Management Board and the general affairs of the company and supports the Management Board by providing advice.

The Supervisory Board oversees how the Management Board determines its strategy and maintains a sustainable business supported by the company's sustainability program. The Supervisory Board regularly discusses the strategy, the implementation of the strategy and the principal risks associated with it. In performing its duties, the Supervisory Board acts in the interest of the company as well as that of stakeholders: its employees, shareholders, customers and society, including the environment we live in.

The company's Articles of Association require that certain decisions of the Management Board be subject to the approval of the Supervisory Board, such as resolutions of the Management Board to issue shares, to grant rights to acquire shares or to restrict or exclude pre-emptive rights. Other resolutions that must be approved by the Supervisory Board are, among others:

- Proposals to amend the Articles of Association;
- Proposals to conclude a legal merger or a legal demerger; and
- Proposals to reduce the issued share capital.

A more detailed description on the Supervisory Board's activities in the area of corporate governance can be found in the Supervisory Board report.

Composition and appointment

The company's Articles of Association provide that the Supervisory Board shall consist of a minimum of three members. Members of the Supervisory Board may be appointed for a maximum period of 12 years in accordance with the Code.

The Supervisory Board appoints a Chairman and a Deputy Chairman from amongst its members. The members of the Supervisory Board retire periodically in accordance with a rotation plan, which can be downloaded from TomTom's corporate website.

The General Meeting appoints the members of the Supervisory Board, subject to the right of the Supervisory Board to make a binding nomination. The full procedure of appointment and dismissal of members of the Supervisory Board is explained in article 17 of the company's Articles of Association.

The General Meeting may at all times, by a resolution passed with a majority of at least two-thirds of the votes cast, and representing more than 50% of the issued share capital, resolve that the nomination submitted by the Supervisory Board is not binding. In such a case, the appointment of a member of the Supervisory Board in contravention of the Supervisory Board's nomination requires a resolution of the General Meeting adopted with a majority of at least two-thirds of the votes cast, representing more than 50% of the issued share capital.

A resolution of the General Meeting to suspend or dismiss members of the Supervisory Board requires a majority of at least two-thirds of the votes cast, representing more than 50% of the issued share capital.

**FOR MORE INFORMATION**

Corporate website

<https://corporate.tomtom.com/corporate-governance/governance/governance-documents>

CORPORATE GOVERNANCE CONTINUED

The diversity objectives and current status:

Objectives	Status
An equal number of men and women during a search, selection and appointment procedure	➡
At least one woman in the Management Board at any time	➡
At least two women in the Supervisory Board at any time	➡
A Supervisory Board Chairman living in the Netherlands	➡
At least one member in the Supervisory Board from the US	➡
At least two members in the Supervisory Board with a technology background	➡

STATUS

Achieved ➡ More to do ➡

Profile and diversity

The Supervisory Board has determined a profile regarding its size and composition, taking into account the nature of TomTom's business, its activities and the desired experience and expertise. In addition to the profile, TomTom's Diversity & Inclusion Policy aims for: (i) an equal number of men and women during a search, selection and appointment procedure, (ii) the Supervisory Board Chairman living in the Netherlands, (iii) at least one member in the Supervisory Board from the US, (iv) at least two members in the Supervisory Board with a technology background, and (v) at least two women in the Supervisory Board at any time. These goals were all reached in 2018, except for the latter target.

Currently one member of the Supervisory Board is female. As such, the Supervisory Board does not qualify as gender balanced within the meaning of article 2:166 of the Dutch Civil Code and under TomTom's Diversity & Inclusion Policy. TomTom recognizes the benefits of diversity, including gender balance.

TomTom feels that gender is only one part of diversity and future members of the Supervisory Board will continue to be selected on the basis of specific experience, backgrounds, skills, knowledge and insights. One new Supervisory Board member was appointed in 2018. Significant effort was made to identify qualified women and a number of women was included in the short-list.

The Supervisory Board selected the candidate best qualified for the role.

Committees of the Supervisory Board

In line with the Code, the Supervisory Board has established an Audit Committee, a Remuneration Committee and a Selection and Appointment Committee. Each of these committees is staffed by members of the Supervisory Board and at least one of the members of the Audit Committee is a financial expert. For an overview of all activities performed by the committees, reference is made to the Supervisory Board report section.

Remuneration

The remuneration of the members of the Supervisory Board and the additional remuneration of the Chairman and the members of its committees is determined by the General Meeting, last amended in 2009 and has been reviewed in 2018. This review concluded in a proposal to the General Meeting of Shareholders in 2019 to compensate members with an intercontinental travel allowance of three thousand euros. This travel allowance will be applicable per physical Supervisory Board meeting attended in the Netherlands, to better reflect the actual time spent attending a meeting.

More information about the remuneration of individual members of the Supervisory Board can be found in the Supervisory Board report and for more details see note 35 Remunerations of members of the Management Board and the Supervisory Board in the consolidated financial statements.

Conflicts of interest

Members of the Supervisory Board (excluding the Chairman) must report any (potential) conflict of interest to the Chairman of the Supervisory Board. If the (potential) conflict of interest involves the Chairman of the Supervisory Board, it must be reported to the Deputy Chairman of the Supervisory Board. The Supervisory Board shall decide whether a conflict of interest exists.

The member of the Supervisory Board who has a (potential) conflict of interest shall not participate in discussions and decision-making on a subject or transaction in relation to which the member has a conflict of interest with the company. Decisions to enter into transactions under which members of the Supervisory Board have conflicts of interest that are of material significance to the company and/or to the relevant member(s) of the Supervisory Board, require the approval of the Supervisory Board. During 2018, no conflicts of interest were reported.

In addition, in accordance with best practice provision 2.7.5 of the Code, TomTom reports that no transactions occurred in 2018 between the company and legal or natural persons who hold at least 10% of the shares in the company.



FOR MORE INFORMATION

SvB

<https://www.tomtom.com/company/management-board/>

Corporate website

<https://www.tomtom.com/company>

CORPORATE GOVERNANCE CONTINUED

FUNCTIONING OF THE GENERAL MEETING

The General Meeting is held at least once a year and generally takes place in Amsterdam, the Netherlands. The General Meeting is convened by public notice via the company's corporate website.

The compilation of the annual report is a recurring agenda item, as well as the adoption of the annual accounts, the release from liability of the members of the Management Board and Supervisory Board and the execution of the remuneration policy during the present year. When deemed necessary in the interests of the company, an Extraordinary General Meeting may be convened by resolution of the Management Board or the Supervisory Board.

The minutes and the resolutions of the General Meeting are recorded in writing. The minutes will be made available to the shareholders on TomTom's corporate website no later than three months after the meeting.

VOTING RIGHTS

Each of our ordinary shares and preferred shares is entitled to one vote. The voting rights attached to any shares held by the company are suspended as long as they are held in Treasury. Resolutions of the General Meeting are adopted by an absolute majority of the votes cast, except where Dutch law or the company's Articles of Association provide for a special majority.

According to the company's Articles of Association, the following decisions of the General Meeting require a majority of at least two-thirds of the votes cast, representing more than 50% of our issued share capital:

- Resolution to cancel a binding nomination for the appointment of a member of the Management Board or the Supervisory Board;
- Resolution to appoint a member of the Management Board or the Supervisory Board in contravention of the binding nomination by the Supervisory Board or in case the Supervisory Board did not make use of its rights to make a binding nomination; and
- Resolution to dismiss or suspend a member of the Management Board or the Supervisory Board.

In addition, in accordance with Dutch law, the company's Articles of Association provide that, if less than 50% of our issued share capital is represented at the meeting, certain decisions of the General Meeting require a majority of at least two-thirds of the issued capital represented. This includes decisions of the General Meeting regarding:

- The restriction and exclusion of pre-emptive rights, or the designation of the Management Board as the authorized body to exclude or restrict such rights;
- The reduction of the issued share capital; and
- A legal merger or legal demerger of the company.

AMENDMENT OF THE ARTICLES OF ASSOCIATION

The General Meeting may resolve to amend the Articles of Association of the company if it acts on a proposal by the Management Board that has also been approved by the Supervisory Board.

A resolution of the General Meeting to amend the Articles of Association requires an absolute majority of the votes cast, irrespective of the share capital represented at the General Meeting.



FOR MORE INFORMATION

The General Meeting

<http://corporate.tomtom.com/investors/shareholder-information/shareholder-meetings>

CORPORATE GOVERNANCE CONTINUED

THE CAPITAL STRUCTURE

The company's authorized share capital amounts to €180,000,000 and is divided into 600,000,000 ordinary shares with a nominal value of €0.20 each and 300,000,000 preferred shares, with a nominal value of €0.20 each.

On 31 December 2018, a total of 235,318,516 (including 4 million treasury shares) ordinary shares were issued and are outstanding.

Issue of shares

The Management Board may issue shares or grant rights to subscribe for shares if so designated by the General Meeting or the company's Articles of Association. This Management Board resolution is subject to the prior approval of the Supervisory Board. No resolution of the General Meeting or the Management Board is required for the issuance of shares pursuant to the exercise of a previously granted right to issue shares or to subscribe for shares.

The Management Board continues to believe it is in the company's best interests that it should be in a position to react promptly when business opportunities arise that require the issuance of ordinary shares. When such occasions arise, the Management Board therefore wishes to be authorized to issue ordinary shares and to grant rights to subscribe for such shares without the need to obtain prior approval from the shareholders at an Extraordinary General Meeting. Such meetings take time to convene and could generate disruptive market speculation.

On 17 April 2018, the General Meeting passed a resolution extending the Management Board's authorization to resolve to issue ordinary shares or grant rights to subscribe for such shares until 17 October 2019.

This authority is limited to 10% of the number of issued ordinary shares for general purposes, and up to 10% in connection with or on the occasion of a merger, acquisition and/or (strategic) alliances, and authorizes the restriction or exclusion of the pre-emption rights for existing shareholders for such issue or grant of rights.

Separately, the Management Board has been authorized to grant, subject to the prior approval of the Supervisory Board, rights to subscribe for ordinary shares and to restrict or exclude the pre-emption rights for existing shareholders for those rights, up to 960,000 ordinary shares for the purpose of executing the TomTom Employee Stock Option Plan and the Management Board Stock Option Plan. It was granted for a period starting from the 2018 General Meeting and ending with the General Meeting to be held in 2019.

Repurchase by the company of its own shares

The 2018 General Meeting resolved to authorize the Management Board to acquire shares in the capital of the company up to 10% of the issued share capital, subject to certain conditions. The authorization was granted for a period of 18 months from the date of the General Meeting and will be in effect until 17 October 2019.

At 31 December 2018, the remainder of the repurchased ordinary TomTom shares under the 2017 Share Buyback Program amounted to 4,078,002, to cover the company's commitments for its stock option and share plans. This equals a capital interest of 1.7% by TomTom NV. Details of the share buyback transactions can be found on TomTom's corporate website.

Preferred shares

Foundation Continuity TomTom (Stichting Continuïteit TomTom) was established in 2005, with a board independent of TomTom (the Foundation). The purpose of the Foundation is to safeguard the interests of the company and all of its stakeholders. It does so by ensuring that the company is in a position to resist influences that could affect its independence, continuity and/or corporate identity in any manner that would be in contravention of the interests of the company or its stakeholders.

The granting of rights to subscribe for preferred shares to the Foundation may help to prevent, discourage or otherwise delay unsolicited attempts to obtain (de facto) control of the company.

The General Meeting adopted the proposal of the Management Board to grant the Foundation a call option entitling it to subscribe for preferred shares up to 100% of the aggregate nominal value of the outstanding ordinary shares at the time of issue, up to a maximum of the number of preferred shares included in the authorized capital at the time of issue.

**FOR MORE INFORMATION**

Share buyback

<http://corporate.tomtom.com/share-buyback.cfm>

CORPORATE GOVERNANCE CONTINUED

The Foundation shall subscribe for the preferred shares at par. Immediately after subscribing for preferred shares, the Foundation shall proceed to pay one-quarter of the nominal value of the preferred shares at the time of issue.

Three-quarters of the nominal amount shall only need to be paid upon call by the company, without prejudice to the provisions of article 2:84 of the Dutch Civil Code. The Foundation is entitled to exercise the option right in one or more tranches. The possible issuance of preferred shares to the Foundation will be temporary and subject to the company's Articles of Association and the legislation on takeovers. Currently, there are no preferred shares outstanding.

Unless the preferred shares have been issued pursuant to a resolution of the General Meeting, the company's Articles of Association require that a General Meeting be held within one year after the issue of preferred shares to consider their purchase or withdrawal. If no resolution on the purchase or withdrawal of the preferred shares is adopted at such a General Meeting, a General Meeting will be held every year thereafter for as long as preferred shares remain outstanding.

Substantial shareholdings and short positions

Shareholders owning 3% or more of the issued capital and/or voting rights of a listed company (a substantial shareholding or short position) must report this to the Netherlands Authority for Financial Markets (AFM) as soon as this threshold is reached or exceeded.

The thresholds for substantial shareholding notifications are: 3%, 5%, 10%, 20%, 30%, 40%, 50%, 60%, 75% and 95% of the company's issued share capital and/or voting rights.

As at 31 December 2018, the following shareholders owning 3% or more of the company's issued capital and/or voting rights were registered with the AFM.

Name	% issued capital/voting rights
Founder – Harold Goddijn	11.2%
Founder – Corinne Vigreux	11.1%
Founder – Peter Frans Pauwels	11.1%
Founder – Pieter Geelen	10.7%
J.H.H. De Mol*	5.1%

* Source AFM register.

OUR COMPLIANCE WITH THE CODE

TomTom complies with all the relevant provisions of the Code, with the exception of the provisions 3.1.2 (v) and 4.3.3. The nature of and reasons for these deviations are explained below.

Provision 3.1.2 (v)

Best practice provision 3.1.2 (v) provides that the variable remuneration component shall be linked to measurable performance criteria determined in advance, which shall be predominantly long-term in character.

TomTom deviates from best practice provision 3.1.2 (v) to the extent that it does not specify targets beforehand for its long-term incentive. All options granted under the Management Board Stock Option Plan (the Plan) shall be granted conditional to continued employment of the members of the Management Board only and a vesting period of three years is applicable.

The reason for this deviation is that it is very difficult for TomTom to identify long-term performance conditions other than share price evolution.

Stock options carry an 'innate de facto' performance condition that focuses on achieving stock price growth, and therefore increasing shareholder value, before any monetary value can be derived from stock option grants.

The inclusion of vesting criteria, in addition to the increase of TomTom's share price, results in multiple hurdles which reduce the effectiveness of the Plan.

Provision 4.3.3

Best practice provision 4.3.3 provides that the General Meeting may pass a resolution to cancel the binding nature of a nomination for the appointment of a member of the Management Board or the Supervisory Board and/or a resolution to dismiss a member of the Management Board or of the Supervisory Board by an absolute majority of the votes cast. It may be provided that this majority should represent a given proportion of the issued capital, the proportion of which may not exceed one-third.

The company's Articles of Association provide that a binding nomination for the appointment of members of the Management Board or of the Supervisory Board may only be set aside by a resolution of the General Meeting passed with a two-thirds majority representing more than 50% of its issued share capital. The same provision applies to any resolution to dismiss a member of the Management Board or of the Supervisory Board.

The reason for this deviation is that the company believes that maintaining continuity in its Management Board and Supervisory Board is critical for delivering long-term value creation.

The company would like to protect its stakeholders against a sudden change in management by maintaining the qualified majority and voting quorum requirement, which is consistent with Dutch law.

STATEMENTS

The 'Management report' ('Bestuursverslag'), within the meaning of section 2:391 of the Dutch Civil Code, comprises the sections of the Management Board Report and such parts of the Financial Statements as referred to in the Management Board Report.

IN CONTROL AND RESPONSIBILITY STATEMENT

The Management Board states, in accordance with best practice provision 1.4.3. of the Code, that:

- The Management Board report provides sufficient insight into any important deficiencies in the effectiveness of the internal risk management and control systems that may have been detected during the 2018 financial year and no major failings have been detected.
- The risk management and control systems provide a reasonable assurance that the 2018 financial statements do not contain any errors of material importance.
- Based on TomTom's current state of affairs, it is justified that the financial reporting is prepared on a going concern basis. This is based upon the strong free cash flow of the group, the available (undrawn) credit facility and the principal risks facing the group. Commentary on the group's cash flow, liquidity and financial position is set out in the Group Financial Review. The Group's Financial Risk Management is set out in note 30 of our Consolidated Financial Statements.
- The Management Board report discloses all material risks and uncertainties that are relevant regarding the expectation as to the continuity of TomTom for the 12-month period after the date of issue of this Management Board report.

The risk management and control section of the Management Board report provides a clear substantiation of the previous-mentioned statement.

With reference to section 5.25c paragraph 2c of the Financial Markets Supervision Act, the Management Board states that, to the best of its knowledge:

- The annual financial statements give a true and fair view of the assets, liabilities, financial position and loss of the company and the undertakings included in the consolidation taken as a whole; and that
- The Management Board report provides a fair view of the development and performance of the business and the position of the company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that the company faces.

CORPORATE GOVERNANCE STATEMENT

The information required to be included in this Corporate Governance Statement as described in articles 3, 3a and 3b of the Dutch Decree on the contents of Director's Report (the Decree) are incorporated in the Corporate Governance section.

The main characteristics of the company's internal risk management measures and control systems connected to its financial reporting process, as required by article 3a sub a of the Decree, are described in the In Control and Responsibility Statement, in the Management Board report section.

INFORMATION PURSUANT TO ARTICLE 10 TAKEOVER DIRECTIVE

The Management Board states that all information, which must be disclosed pursuant to Article 10 of the EU Takeover Directive, is included in the Corporate Governance section, the Supervisory Board report and the notes referred to herein, to the extent that it is applicable to TomTom.

NON-FINANCIAL STATEMENT

Directive 2014/95/EU on the disclosure of non-financial information requires companies to publish a non-financial statement. The relevant provision has been implemented into Dutch law through the Decree disclosure on non-financial information ('Besluit bekendmaking niet-financieel informatie'). The information regarding environmental, anti-corruption and bribery matters and respect for human rights, as required by this Decree, is incorporated in the Sustainability section. The information regarding social and employee matters, as required by this Decree, is incorporated in our people and culture section.

Amsterdam, 6 February 2019

The Management Board**HAROLD GODDIJN**

Chief Executive Officer

TACO TITULAER

Chief Financial Officer

ALAIN DE TAEYE

Member of the Management Board

**FOR MORE INFORMATION**

Dutch Corporate Governance Code applicable in 2018

www.commissiecorporategovernance.nl

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SUPERVISORY BOARD REPORT

SUPERVISORY BOARD BIOGRAPHIES



PETER WAKKIE
CHAIRMAN

Nationality Dutch

Date of first appointment 28 April 2009

Term of office 2017–2019

Age 70

Current positions

Founding partner of Spinath+Wakkie BV (now named Wakkie+Perrick BV), member of the Supervisory Board of BCD Holdings NV and member of the Supervisory Board of Steinhoff International Holdings NV

Former positions

Member of the Executive Board of Royal Ahold NV. Chairman of the Supervisory Board of Wolters Kluwer NV

Committees

Remuneration Committee
Selection and Appointment Committee (Chairman)

Expertise

Compliance, corporate governance and company law



JACQUELINE TAMMENOMS BAKKER
DEPUTY CHAIRMAN

Nationality Dutch

Date of first appointment 1 May 2014

Term of office 2018–2022

Age 65

Current positions

Non-Executive Director of CNH Industrial NV, member of the Supervisory Board of Unibail-Rodamco and member of the Supervisory Board of Groupe Wendel, Chairman of the Van Leer Group Foundation, and member of the advisory board of the Bath School of Management

Former positions

Non-executive Director of Tesco PLC and Vivendi, Director General at the Dutch Ministry of Transport, responsible for Civil Aviation and Freight Transport and Chairman of the High Level Group for the future of aviation regulation in Europe

Committees

Remuneration Committee (Chairman)
Selection and Appointment Committee

Expertise

Talent development and selection, remuneration



JACK DE KREIJ

Nationality Dutch

Date of first appointment 1 January 2017

Term of office 2017–2021

Age 59

Current positions

Member of the Supervisory Board of Corbion NV, and Chairman of the Audit Committee of Corbion NV, member of the Supervisory Board of Royal Boskalis and member of the Advisory Council YGroup Companies

Former positions

Vice Chairman of the Executive Board and CFO of Royal Vopak NV, Vice Chairman of the Supervisory Board of Evides, Senior Partner & Territory Leader PricewaterhouseCoopers NV (PwC), Manager Register Accountant Coopers & Lybrand and formerly employed for several years with the Dutch Ministry of Finance

Committees

Audit Committee (Chairman)

Expertise

Financial administration, accounting, M&A, international business, and internal risk management and control systems

SUPERVISORY BOARD BIOGRAPHIES CONTINUED



MICHAEL RHODIN

Nationality American

Date of first appointment 24 April 2017

Term of office 2017–2021

Age 58

Current positions

Independent Director of Openbank (subsidiary of Santander), member of the Board of Directors of HZO, Inc., member of the Board of Directors of SyncSort Inc., and member of the advisory board of Arboretum Ventures

Former positions

Senior Vice President of IBM

Committees

Audit Committee

Expertise

Technology, innovation, and transformation



BERND LEUKERT

Nationality German

Date of first appointment 28 September 2017

Term of office 2017–2021

Age 51

Current positions

Member of the Executive Board of SAP SE, member of the Supervisory Board of the German Research Center for Artificial Intelligence and of Bertelsmann SE & Co. KGaA, member of the Market Strategy Board of the International Electrotechnical Commission, and the steering committee chairman of the Plattform Industrie 4.0 for the German government's Industrie 4.0 initiative

Former positions

Various management positions at SAP SE

Committees

Audit Committee

Expertise

Technology, innovation, and transformation



DERK HAANK

Nationality Dutch

Date of first appointment 26 September 2018

Term of office 2018–2022

Age 65

Current positions

Vice Chairman of the Supervisory Board of KPN

Former positions

CEO of Springer Science+Business Media, CEO of Elsevier Science and member of the Executive Board of Reed Elsevier Plc

Committees

Remuneration Committee
Selection and Appointment Committee

Expertise

Business leadership, commercial, transformation

CHANGES TO THE SUPERVISORY BOARD DURING 2018:

Jacqueline Tammenoms Bakker

Re-appointed at the 2018 General Meeting for a term of four years.

Derk Haank

Joined in September 2018 as new member of the Supervisory Board for a term of four years. He will succeed Mr Wakkie as Chairman of the Supervisory Board as of the Annual General Meeting in 2019.

SUPERVISORY BOARD REPORT

As a Supervisory Board, we aspire to live up to the **highest standards of good corporate governance**

INTRODUCTION

With its innovative product portfolio and supportive technology, we, as the Supervisory Board, ensure that the company pursues a growth strategy, that positions TomTom in a rapidly changing landscape with increased demands for navigation technologies for location-based applications. We provide oversight, evaluate progress, performance and maintain an adequate system of checks and balances, advising the Management Board as appropriate. In doing this, the Supervisory Board considers long-term value creation, the interests of the company and its stakeholders, and management of a sustainable business model.

The Supervisory Board is assisted in its decision-making process by the Audit Committee, the Remuneration Committee and the Selection and Appointment Committee.

In 2018, the company continued its transformation and focus on the creation of innovative technology to help shape tomorrow's mobility. Management announced the review of strategic options for its Telematics business, which will result in a sale of the division to Bridgestone. The sale is subject to customary closing conditions including the relevant regulatory approvals, consultation with employee representative bodies and the approval of TomTom's shareholders, as announced on 22 January 2019. The Supervisory Board supports management in its view that the Telematics business could accelerate its growth trajectory as part of Bridgestone and that with fewer

conflicting priorities and a stronger focus on Automotive and Enterprise businesses, TomTom is ideally positioned as a pure mapping, navigation, and application business.

We greatly appreciate the efforts and commitment of TomTom's employees and its Management Board and we look forward to a further successful execution of TomTom's growth strategy.

COMPOSITION

On 31 December 2018, the Supervisory Board of TomTom consisted of six members: Peter Wakkie (Chairman), Jacqueline Tammenoms Bakker (Deputy Chairman), Jack de Kreij, Michael Rhodin, Bernd Leukert, and Derk Haank.

Changes in 2018

- ▶ Jacqueline Tammenoms Bakker was re-appointed for a term of four years.
- ▶ Derk Haank started as a new member of the Supervisory Board on 26 September 2018. Derk will succeed Peter Wakkie as Chairman of the SVB as of the Annual General Meeting in 2019.

For more details of the Supervisory Board composition, see the graphical overview below.

The Supervisory Board confirms that all members are independent as defined in best practice provisions 2.1.7 to 2.1.9 of the Code.

No member of the Supervisory Board holds more than five directorships at Dutch 'large companies', in accordance with section 2:142a of the Dutch Civil Code.

The composition of the Supervisory Board is in line with the Supervisory Board profile, as drawn up by the Supervisory Board and published on the company's website.

In 2018, one out of six members of the Supervisory Board was female. The Supervisory Board acknowledges that this is not in line with the company's Diversity & Inclusion Policy and the Dutch Corporate Governance Code (the Code). The Supervisory Board recognizes the benefits of diversity, including gender balance.

	Committees	Date of initial appointment	2018	2019	2020	2021	AGM 2022
Peter Wakkie (Chairman)		28 April 2009					
Jacqueline Tammenoms Bakker		1 May 2014					
Jack de Kreij		1 January 2017					
Michael Rhodin		24 April 2017					
Bernd Leukert		28 September 2017					
Derk Haank		26 September 2018					

KEY

Committee Chairman Audit Committee Remuneration Committee Selection and Appointment Committee

SUPERVISORY BOARD REPORT CONTINUED

Gender is only one part of diversity and future members of the Supervisory Board will continue to be selected on the basis of their expertise, background, independence and diversity as described in the Supervisory Board profile and the Diversity & Inclusion Policy. For more information on this policy, please see the Corporate Governance section.

Biographies of the members of the Supervisory Board, as well as the information on the members as prescribed by the Code can be found in the 'Biographies of the Supervisory Board members' section of this report. This section also provides details of the Supervisory Board's committees and its members.

EVALUATION

The Supervisory Board and its committees reviewed and discussed its own functioning, that of its individual members, its committees and of the Chairman of the Supervisory Board. The evaluation of the Chairman of the Supervisory Board was discussed by the entire Supervisory Board, without the Chairman present. In preparation for these discussions, the members of the Supervisory Board and Management Board provided feedback through interviews with Derk Haank. Topics which were discussed included the composition and expertise of the Supervisory Board, its effectiveness, its dynamics and succession planning. The Supervisory Board's oversight of the company's strategy was also reviewed and discussed, as well as the composition, functioning and succession planning of the Management Board and the performance of its individual members.

The Supervisory Board greatly values annual evaluations since it embeds a culture of continuous improvements into the functioning of and the relationship between the Supervisory Board and the Management Board. At the beginning of the year, the Supervisory and Management Boards agree on topics for improvement, which are incorporated into the agenda to be discussed during the year.

In principle, the Supervisory Board engages a third party to assess its functioning every three years. The next such occasion would have been in 2018. However, the Supervisory Board agreed to delay the engagement of a third party considering its relatively new composition.

MEETINGS AND ATTENDANCE

The Supervisory Board met 13 times in 2018: seven physical meetings and six conference calls. The conference calls were held to discuss financial updates and recent developments within the company most of all in months where no physical meeting was scheduled. The Management Board members attended all those meetings either in full or in part. The physical meetings of the Supervisory Board achieved an overall average attendance rate of 97%.

All members had sufficient time available for their duties relating to their membership of the Supervisory Board. No members were frequently absent from the meetings.

The agenda for the meetings was prepared through consultation with the Chairman, the Management Board and the Company Secretary. In addition to regular meetings, the Chairman of the Supervisory Board had regular contact with the CEO of the company. Further, members of the Supervisory Board also held informal consultations with members of the Management Board and senior management of the company so as to remain closely informed about the business.

Meetings of the Supervisory Board are preceded by committee meetings. Summaries of the committee meetings are provided at each Supervisory Board meeting.

The chairs of the committees work closely together with senior management and conduct regular meetings to set agendas and prepare all relevant information for the committee meetings.

Supervisory Board members	Attendance
Peter Wakkie	7/7
Jacqueline Tammenoms Bakker	7/7
Jack de Kreij	7/7
Michael Rhodin	7/7
Bernd Leukert	6/7
Derk Haank	3/3

Note: Attendance is presented as the number of physical meetings attended out of the number eligible to be attended.

SUPERVISORY BOARD REPORT CONTINUED

2018 Activities

Strategic oversight

The Supervisory Board devoted considerable time to reviewing strategic options, the company's strategy and the progress and execution thereof. Constructive discussions were held with the Management Board on the strategic priorities of the Telematics, Automotive and Enterprise businesses. During these sessions, the Supervisory Board ensured that the Management Board's ideas were challenged and tested in order to reach decisions that would underpin the company's strategy.

Ample time was spent reviewing the constantly changing technology landscape within which TomTom operates and the impact thereof on the company's strategy. In addition, continuous attention was given to product competitiveness, potential new business models, autonomous driving and technologies supportive of this technology including AI and IoT.

The Supervisory Board discussed with the Management Board the proposal to explore strategic alternatives for its Telematics business and expressed its support. Regular updates were provided on the progress of the project.

Through its Audit Committee, the Supervisory Board was kept informed of the company's strategic, operational, financial, legal and compliance risks, as well as the actions taken and internal control and management systems in place to manage these risks.

Business review and financial oversight

The Supervisory Board was regularly updated by the Management Board on commercial opportunities, deals, partnerships and order bookings. Every quarter, reports were provided by senior management that outlined the developments, achievements, challenges and opportunities in each business unit. The renewed proposition and brand refresh was also shared.

The Supervisory Board was frequently updated on the innovative progress made within maps, traffic and navigation software, and the positioning and traction of these technology components in the market place.

The company's financial results, its operating result and its cash generation from operations were presented and closely supervised throughout the year. The level of investment (both CAPEX and OPEX) in the core technologies of the company were thoroughly assessed every quarter. The Supervisory Board reviewed and approved the budget for 2019.

Every quarter, the Supervisory Board was updated on the company's Investor Relations activities, such as share price developments, analysts' research and communication with shareholders. The press releases regarding the full-year and half-year results, and the quarterly updates were all reviewed and approved by the Supervisory Board.

Interaction with talent

The Supervisory Board continued to meet talent from within the company staying in touch with the TomTom culture, dynamics and operational challenges. For this purpose, among other things, quarterly breakfast sessions were organized to facilitate a Meet & Greet between representatives of the Supervisory Board and selected talent. In an open and transparent setting they held a group dialogue on relevant matters. The participants of the Executive Leadership Program shared their experience. The outcome of the employee survey was shared with the Supervisory Board.

Succession planning

The Supervisory Board discussed its own succession planning and spent ample time on the search for a sixth member who could fulfil the Chairman position. The search was successfully completed with the appointment of Derk Haank on 26 September. With Derk Haank, the Supervisory Board found a very suitable and capable successor for Peter Wakkie as Chairman of the Supervisory Board as of 2019 Annual General Meeting.

An induction program was organized to familiarize Derk Haank with TomTom's business, governance and culture.

The Supervisory Board discussed with the Management Board the talent management process for senior management within the organization, including succession planning.

Diversity

As a technology company, improving gender balance remains a key challenge. The Supervisory Board was updated on the company's efforts on its commitments as reflected in its Diversity & Inclusion Policy.

Works council

The Supervisory Board and the Dutch Works Council held two meetings.

Corporate Governance, regulations and sustainability

The Supervisory Board was regularly updated on the company's governance structure, as well as the status of the implementation of the European Shareholders Directive. An update was provided on the company's progress on its sustainability program.

SUPERVISORY BOARD REPORT CONTINUED

COMMITTEES OF THE SUPERVISORY BOARD

In line with the Code, the Supervisory Board has established an Audit Committee, a Remuneration Committee and a Selection and Appointment Committee. Each of these committees is staffed by members of the Supervisory Board.

REMUNERATION OF THE SUPERVISORY BOARD

The remuneration of the members of the Supervisory Board and the additional remuneration of the Chairman and the members of its committees is determined by the General Meeting, last amended in 2009. Members of the Supervisory Board are not authorized to receive any payments under the company's pension or variable pay schemes or under any long-term incentive plan. No shares or rights to shares were granted to a Supervisory Board member by way of remuneration. At present, none of the Supervisory Board members own any shares in the company.

The annual remuneration of the Supervisory Board and committees' membership remained unchanged during 2018. Respective amounts are shown in the subsequent table.

The Supervisory Board will propose to the General Meeting of Shareholders in 2019 to compensate its members with an intercontinental traveling allowance of three thousand euros. This travel allowance will be applicable per regular physical Supervisory Board meeting in The Netherlands, to better reflect the actual time spent. Mike Rhodin is currently the only member of the Supervisory Board who is eligible for the allowance.

Supervisory board annual remuneration 2018

Role	Chairman	Member
Supervisory Board	€50,000	€40,000
Audit Committee	€10,000	€7,000
Remuneration Committee	€7,000	€4,000
Selection and Appointment Committee	€7,000	€4,000

For more detailed information about the remuneration of individual members of the Supervisory Board see note 35 to the consolidated financial statements.

Members of the Supervisory Board are not entitled to any benefits upon the termination of their appointment.

AUDIT COMMITTEE

Members:

- Jack de Kreij (Chairman)
- Michael Rhodin
- Bernd Leukert

Role and responsibility

The Audit Committee (AC) undertakes preparatory work for the Supervisory Board's decision making regarding the supervision of the integrity and quality of the company's financial reporting and the effectiveness of the company's internal risk management and control systems. For the composition and the manner in which it discharges its duties reference is made to the AC Charter.



FOR MORE INFORMATION

Audit committee

<https://corporate.tomtom.com/corporate-governance/supervisory-board-and-committees/audit-committee>

Meetings and attendance

The AC met four times during the course of 2018, with an overall attendance rate of 92%. All four meetings were held prior to the publication of the financial results. All meetings were attended in full by the CFO and the Head of Corporate Accounting and Internal Audit.

The other members of the Management Board attended the meetings as required (for instance, where group risks and internal controls were discussed).

The external auditor attended each of the four AC meetings in full to report on its audit plan, quarterly procedures and management letter. The AC and the external auditor also met separately, without the Management Board present, in order to facilitate free and open discussions on other relevant topics such as quality of risk assessments and the collaboration with the Managing Board and the organization.

Other heads of departments (e.g. Treasury, Tax, Investor Relations, Group Control, Business Finance, Corporate Affairs, Privacy & Security, Financial Shared Service Center and IT) were invited when the AC deemed it necessary and appropriate.

AC members	Attendance
Jack de Kreij (Chairman)	4/4
Michael Rhodin	4/4
Bernd Leukert	3/4

Note: Attendance is presented as the number of meetings attended out of the number eligible to be attended.

SUPERVISORY BOARD REPORT CONTINUED

2018 Audit Committee Activities

Financial oversight

The AC assisted the Supervisory Board in its responsibility to oversee the system of internal control and risk management, the effectiveness of the internal auditors, the company's financing, financial statements and financial reporting process. In relation to the external auditor, the AC monitored its performance and the effectiveness of the external audit process, as well as its independence.

A core task of the Audit Committee was to extensively review the financial reports and budget before consideration by the full Supervisory Board. Throughout the year, the AC monitored and reviewed the quarterly financial results and full-year financial statements as presented under IFRS (as adopted by the EU and in accordance with Part 9 of Book 2 of the Dutch Civil Code) including the respective disclosures prior to their releases. Also the guidance to the financial markets was discussed. Special attention was paid to the transition to new accounting standards (IFRS 15 and IFRS 16) and the impact thereof on the financials and system environment as well as the accounting for discontinued operations (Telematics) and our impairment review on goodwill and intangible assets.

The Audit Committee also discussed topics related to TomTom's financing structure and cash flow planning, the SD and HD maps market needs and investment options and the analyses of the financial ratios.

Other areas of attention were significant estimates, pensions, the tax position and status of legal claims and proceedings.

Monitoring of internal controls

During all quarterly meetings, updates were provided on the company's management reporting and the maintenance and effectiveness of the system of internal controls and risk management relating to strategic, financial, operational, commercial, tax control and compliance matters. The company monitors its internal controls through a systematic approach, which is supported by tools, a risk management process and the Internal Audit team. The Head of Internal Audit reports functionally to the AC and administratively to the CFO.

Effectiveness review

The effectiveness of the AC was reviewed as part of the 2018 overall evaluation of the Supervisory Board which confirmed that the AC continues to function in line with the requirements in this respect. During 2018, Mr JP de Kreijl continued to act as financial expert. The role and functioning of the Internal Audit function, including its independence, were regularly discussed and the internal audit plan was approved by the AC. This plan considers the key risk areas of the business, important IT projects and information security, as well as the geographical spread of TomTom offices including local compliance (e.g. finance, HR and tax controls) and the core activities performed there.

In consultation with senior management, Internal Audit selects the areas of the business to be audited during the year. Members of the AC and the Management Board may at any time request Internal Audit to carry out an internal audit or a special consulting service. The follow up on the recommendations made by Internal Audit were observed by the AC. The Head of Internal Audit reported each quarter to the AC.

Policy and compliance oversight

The AC further discussed items including the company's policies related to financing, cash and foreign exchange management. In relation to tax, the AC discussed the status of ongoing tax audits, the innovation box ruling, 'Country by Country' reporting, tax risk management, tax transparency, and the tax strategy/policy. Regular updates were received by the AC on TomTom's compliance program (including fraud and whistle-blower reporting). The AC was provided with quarterly updates on the company's ongoing effort to maintain the appropriate level of a risk-based information security management program. Time was also dedicated to the Code of Conduct awareness program.

Evaluation of external auditor

EY was appointed as external auditor by the General Meeting in 2018 for a term of three years up to and including the financial year 2020. The 2018 external audit plan, including the scope, approach, key audit risks and materiality applied, were approved by the AC. Reviews and discussions were held between the AC and the Management Board on the findings of the external auditor in its management letter and the actions taken by management to address the recommendations and observations made by the external auditor. The performance of the external auditor was assessed based on a satisfaction survey conducted among the business units and the global corporate departments. The assessment also included a consideration of the quality of the audit work, the expertise and composition of the audit team, the audit fee and the quality control within the audit firm.

Auditor independence

TomTom has a policy on external auditor independence, whereby the auditor is not allowed to perform non-audit services that would compromise its independence or violate any other requirements or regulations affecting its appointment as auditor. The provision of non-audit services by the external auditor which do not conflict with its independence is always subject to pre-approval of the AC.

The AC reviewed the independence of the external auditor EY, taking into account qualitative and quantitative factors, and concluded that EY had sufficient objectivity and independence to perform the external audit function. EY confirmed its independence and compliance with this policy to the AC.

A summary is provided below of services performed by EY, its network affiliates and the fees earned.

KEY FIGURES OVERVIEW

(€ in thousands)	2018	% of total	2017	% of total
Audit – group ¹	520	67	560	69
Audit – statutory	222	29	200	25
Tax compliance ²	25	3	45	6
Other	6	1	6	1
Total fees	773	100	811	100

¹ The group 2017 audit includes additional fees related to the audit of the IFRS 15 and IFRS 16 conversion.

² Tax compliance comprises foreign tax compliance services.

SUPERVISORY BOARD REPORT CONTINUED

SELECTION AND APPOINTMENT COMMITTEE

Members:

- Peter Wakkie (Chairman)
- Jacqueline Tammenoms Bakker
- Derk Haank

Role and responsibility

The Selection and Appointment Committee (SelCo) looks after the size and composition of the Supervisory Board, its succession planning and the functioning of its members. It also pays strong attention to the company's talent management and succession planning for key positions. For the composition and the manner in which the SelCo discharges its duties reference is made to the Selection and Appointment Committee Rules.

**FOR MORE INFORMATION**

Appointment committee

<https://corporate.tomtom.com/corporate-governance/supervisory-board-and-committees/selection-and-appointment-committee>

Meetings and attendance

The Selection and Appointment Committee met four times during the course of 2018, with an overall attendance rate of 100%. Each meeting was also attended by Alain De Taeye, the Chief HR Officer and the Company Secretary.

Current Board members	Attendance
Jacqueline Tammenoms Bakker	4/4
Peter Wakkie	4/4
Derk Haank	1/1

Note: Attendance is presented as the number of meetings attended out of the number eligible to be attended.

2018 SELCO ACTIVITIES

Succession planning

To fill the vacancy for another Supervisory Board member to complement and strengthen its board and committees, the SelCo engaged in 2018 with an external executive search agency and conducted a thorough search and selection process that included candidates from Europe. The profile included the potential to become chairman of the board, considering Peter Wakkie's retirement in 2019. Significant effort was made to identify qualified women and a number of women was included in the short-list.

The search was successfully completed, resulting in the decision of the Supervisory Board to make a nomination to the Extraordinary General Meeting on 26 September 2018 to appoint Derk Haank as member of the Supervisory Board, and as a successor of Peter Wakkie as chairman of the board as of the Annual General Meeting in 2019.

HR strategy review

The HR strategy within the company was shared with the SelCo and quarterly updates were provided by the Chief HR Officer. Topics that were shared, were management initiatives regarding career development, management and leadership, policies, and compensation and benefits. Continued attention was given to the Executive Leadership Program, which was introduced in 2017 for senior management. These initiatives all underpin the company's attention to talent management; to attracting, retaining and developing TomTom talent. The SelCo focused on the company's progress in its succession planning for key positions within the company. On a quarterly basis, the committee was updated on the recruitment status of vacant key positions.

REMUNERATION COMMITTEE

Members:

- Jacqueline Tammenoms Bakker (Chairman)
- Peter Wakkie
- Derk Haank

Role and responsibility

The Remuneration Committee (RemCo) prepares the Supervisory Board decision making regarding the determination of the remuneration of the individual Management Board members. The RemCo oversees the effectiveness, relevance and implementation of the Remuneration Policy. For the composition and the manner in which the RemCo discharges its duties reference is made to the Remuneration Committee Rules.

**FOR MORE INFORMATION**

Remuneration

<https://corporate.tomtom.com/corporate-governance/supervisory-board-and-committees/remuneration-committee>

Meetings and attendance

The RemCo met six times in the course of 2018, with an overall attendance rate of 100%. Each meeting was also attended by Alain De Taeye, the Head of Rewards, the Chief HR Officer and the Company Secretary. Preparation meetings attended by the Chairman of the RemCo, the Head of Rewards and the Company Secretary were held prior to each meeting.

Current Board members	Attendance
Jacqueline Tammenoms Bakker	6/6
Peter Wakkie	6/6
Derk Haank	2/2

Note: Attendance is presented as the number of meetings attended out of the number eligible to be attended.

2018 REMCO ACTIVITIES

The RemCo performed a benchmark where the peer group was reviewed and updated, and the competitiveness of the remuneration of the Management Board members was assessed, resulting in an increase to the base salary for the CFO for 2019.

The RemCo concluded to maintain the same key performance indicators (KPIs) and weighting levels as set for the short-term variable remuneration of the Management Board in 2017, and periodically reviewed the progress on these KPIs.

The long-term variable remuneration components for the Management Board were also assessed and discussed, resulting in a proposal to replace the current stock option plan by restricted stock units.

A scenario analysis was carried out within the terms of the Code to evaluate the variable components of the remuneration packages of the Management Board members. The RemCo prepared a pay ratio, which was concluded by the Supervisory Board to be at an acceptable level.

For a full outline of the Remuneration Policy and its application in 2018, and outlook 2019, reference is made to the 2018 Remuneration report.

REMUNERATION REPORT

We aim for enhanced transparency on our Management Board remuneration

REMUNERATION POLICY

This section provides an overview of the Remuneration Policy for TomTom's Management Board. The Remuneration Policy has been adopted by the General Meeting, most recently in 2014.

Objectives and principles

TomTom's remuneration policy is designed to attract and retain talent and aims to provide fair, competitive and responsible remuneration for all employees, including the Management Board members. Success for the business means success for the individual employee. The policy provides a company-wide framework for the result-driven remuneration, linked to the achievement of strategic objectives.

The Remuneration Policy for the Management Board supports the company's strategy, its operational and financial results, and delivery of long-term value creation to all our stakeholders. The Management Board defines the company's strategy and the Supervisory Board decides how to reward its successful delivery and ensures that the policy and its implementation are linked to the company's strategic priorities.

TomTom's strategic focus is on future growth. The remuneration of the Management Board members is intended to encourage behaviors that focus on both short-term results generation to ensure ongoing progress and financial stability, and long-term value creation by pursuing growth opportunities through TomTom's location-based technologies and innovative services.

Our Remuneration Policy reflects the following remuneration principles, which shape the nature and positioning of pay for Management Board members as well as for senior management within TomTom:

- Company strategy and long-term value creation.
- Consistency within TomTom and comparable practices.
- Attractiveness and competitiveness.
- Simplicity.
- Compliance with relevant laws and regulations and the Dutch Corporate Governance Code.
- Respect for all stakeholders.

Summarised view of our remuneration policy and application in 2018

	Policy summary	Application in 2018 summary*
Base salary	<ul style="list-style-type: none"> ➤ Median market level of peer group benchmark (conducted at least every three years). ➤ Reviewed annually considering market environment and any planned adjustments for other employees. 	<ul style="list-style-type: none"> ➤ Base salary as follows: <ul style="list-style-type: none"> – Harold Goddijn €474,166 – Alain De Taeye €395,138 – Taco Titulaer €338,580 Salaries of Management Board members were adjusted by 2.6% to reflect Dutch salary market movement.
Short-term incentive	<ul style="list-style-type: none"> ➤ On target variable pay CEO: 80% of base salary. ➤ On target variable pay other Management Board members: <ul style="list-style-type: none"> – 64% of base salary. ➤ Maximum level: CEO 120%, other Management Board members 96%. ➤ Aligned with company variable pay structure. ➤ Payout in cash based on annual targets, typically financial in nature. 	<ul style="list-style-type: none"> ➤ Measures: <ul style="list-style-type: none"> – Revenue (excluding Consumer Revenue): 50% – EBITDA minus CAPEX: 50%. ➤ Actual payout: <ul style="list-style-type: none"> – CEO: 120% of base salary – Management Board members: 96% of base salary – The payout incentive zone is linear between minimum and target, and between target and maximum.
Long-term incentive	<ul style="list-style-type: none"> ➤ Stock option plan only incentive. ➤ Annual grant, options vest after three years. ➤ Vesting is conditional upon employment only. ➤ Target level CEO: 140% of base salary. ➤ Target level for other Management Board members: <ul style="list-style-type: none"> – 100% of base salary. ➤ Actual grant levels do not deviate from target. 	<ul style="list-style-type: none"> ➤ Stock option grants as follows: <ul style="list-style-type: none"> – Harold Goddijn 201,500 options – Alain De Taeye 120,000 options – Taco Titulaer 102,800 options ➤ Vest on the 3rd anniversary of grant, expire at the 7th anniversary of grant. ➤ Conditional on continued employment.
Pension benefits	<ul style="list-style-type: none"> ➤ Maximum contribution: 20% of gross annual base salary. ➤ Opportunity to opt out of the pension provisions. 	<ul style="list-style-type: none"> ➤ Harold Goddijn Waived his pension rights ➤ Alain De Taeye €79,028 ➤ Taco Titulaer €67,716

* For a two year remuneration overview reference is made to note 35 in the consolidated financial statements.

REMUNERATION REPORT CONTINUED

APPLICATION IN 2018

This section provides an overview of i) the application in 2018 of the Remuneration Policy, ii) other information to ensure transparent Remuneration Reporting and, iii) important contract terms of the Management Board members with the company.

Peer group and 2018 benchmark

The peer group serves as an essential yard stick to determine the overall competitiveness of the company's Management Board remuneration and gives an appropriate reflection of the competitive markets in which TomTom is operating. In principle, a benchmark with a peer group is conducted at least every three years. In the years where no benchmark is performed, the Supervisory Board considers the appropriateness of any changes to the base salary based on the market environment as well as on the salary adjustments for TomTom employees.

The peer group is reviewed and updated, if necessary, simultaneously with the performance of the benchmark. For 2018, a new benchmark was performed, and this review resulted in the changes of the peer group as detailed on this page. The changes to the peer group are due to significant consolidation in the industry, changes in the scope of peer companies, or changes to TomTom's strategic focus rendering peer companies no longer relevant. The peer group consists of the following 23 companies which are relevant technology organizations in the Netherlands, the European Union and the United States.

2018 Peer group

US Technology
Blackberry LTD (Canada)*
CalAmp Corp.
Fortive Group*
Garmin LTD
Inseego Corp*
MiX Telematics LTD
Nuance Communications*
Telenav Inc.
Trimble Inc.

EU Technology
CompuGroup Medical SE
Continental – Chassis & Safety*
HERE Technologies
Igenico Group SA*
Kudelski SA
Micro Focus International PLC*
SimCorp A/S
Software AG*
Temenos AG

Dutch Technology
Adyen NV*
ASM International NV
Signify NV*
Takeaway.com NV*
Wolters Kluwer NV

* Represent new additions to the peer group for 2018

Base salary

The salaries of the Management Board members were assessed against the market environment and the adjustments for other employees. For 2018, the salaries were adjusted by 2.6% in line with the salary market movement for employees in the Netherlands.

Additionally, the level of the base salary was separately benchmarked in 2018, for consideration for 2019. The result of the benchmark indicated that the base salary for the CEO remains under median market level. The base salary of the Management Board Member is in line with the median market level. The base salary of the CFO however, was below market median of the benchmark results.

Short-term incentive

TomTom's short-term incentive plan is the annual incentive plan in which Management Board members participate. This plan is aligned with incentive schemes throughout the company.

The 'on-target' variable pay percentages for the Management Board members are assessed relative to those of our peer group of companies. The 'on-target' variable pay percentage is 80% of base salary for the CEO, and 64% of base salary for the other Management Board members.

In case of excellent performance, the maximum variable pay opportunity is 120% of the base salary for the CEO and 96% of the base salary for the other Management Board members, which represents 150% of the target variable pay levels. The minimum variable pay opportunity is 0% of base salary. The short-term incentive structure is detailed in the following table.

2018 Management Board variable pay structure

	Target Performance Variable pay Award Level (% of salary)	Minimum Performance Variable pay Award Level (% of salary)	Maximum Performance Variable pay Award Level (% of salary)
CEO	80%	0%	120%
Management Board members	64%	0%	96%

The benchmark conducted in 2018 indicated the target short-term incentive levels as a percentage of base salary provided to Management Board members were in line with market median of the peer group.

REMUNERATION REPORT CONTINUED

2018 performance criteria and outcomes

On an annual basis, the Supervisory Board determines the most relevant performance criteria for the Management Board short-term incentive plan. These KPIs provide the framework for incentive schemes throughout the company. Additionally, the Supervisory Board sets challenging, but realistic target levels for each of those performance criteria. The emphasis for 2018 was on financial metrics reflecting a focus on profitable growth in line with the company's strategy of achieving growth while maintaining expected levels of profitability for TomTom as a whole. These performance criteria are an important measure of the success of the execution of the company's strategy and, as such, the remuneration is directly linked to long-term value creation by the company.

The target levels are set at the beginning of the year and do not change during the year. The performance against these targets is reviewed every quarter. The final assessment is determined at the end of the fiscal year, based on the audited financial results. Any potential payout under the short-term incentive plan occurs annually during the first quarter of the next financial year. A minimum level of performance must be achieved before any payment under the plan will be made. Payout is capped at an outstanding level of performance, known as the maximum.

The final assessment of performance under the short-term incentive plan is done by the Remuneration Committee, after consultation with the Audit Committee and proposed to the Supervisory Board for decision making purposes. In preparation for that final assessment, the Chairs of the Remuneration Committee and the Audit Committee review the final outcomes, inclusive of any quality of earnings elements, to ensure complete alignment on performance by both committees.

Both revenue and EBITDA – CAPEX targets were overachieved in 2018 resulting in a maximum performance variable pay.

The Supervisory Board considered the overall performance of the Management Board and concluded there was no reason not to award the maximum variable pay for 2018.

2018 criteria and outcomes – Short-term incentive

Measures ¹	Measure Weight	Achievement	Variable pay Outcome
Revenue	50%	150% of target	75%
EBITDA – CAPEX	50%	150% of target	75%
Total	100%		150%

1 These measures are non-GAAP metrics (refer to page 116). The revenue reflects group revenue minus Consumer revenue, to address the business transformation of TomTom. The EBITDA minus CAPEX measure was introduced in 2017 in order to optimize cash flow generation and encompasses TomTom as a whole.

2018 Variable pay outcome calculations

Harold Goddijn				
Target variable pay:				€ 568,999
€ 474,166 (base salary) x 80% = € 379,333	x	Outcome: 150%	=	(120% of base salary)
Alain De Taeye				
Target variable pay:				€ 379,333
€ 395,138 (base salary) x 64% = € 252,888	x	Outcome: 150%	=	(96% of base salary)
Taco Titulaer				
Target variable pay:				€ 325,037
€ 338,580 (base salary) x 64% = € 216,691	x	Outcome: 150%	=	(96% of base salary)

Long-term incentive

TomTom's long-term incentive refers to an option-based incentive plan. All options shall be granted on an annual basis and vesting is conditional on the continued employment of the Management Board members. The options will vest three years after the grant date. The vesting of the options is not subject to the achievement of pre-determined performance criteria. The options and the right to exercise the same will expire on the seventh anniversary date of the grant date.

As explained in the Corporate Governance report, our long-term incentive plan does not comply with best practice provision 3.1.2 v) of the Dutch Corporate Governance Code (Code) to the extent that there are no performance conditions set prior to the grant. Stock options carry an 'innate de facto' performance condition that focuses on achieving stock price growth, and therefore increasing shareholder value, before any monetary value can be derived from the stock option grants. The inclusion of vesting conditions, in addition to the increase of TomTom's share price, results in multiple hurdles which reduce the effectiveness of the plan.

REMUNERATION REPORT CONTINUED

2018 Long-term incentives

The annual stock option grants are set as a percentage of the fixed salary of the Management Board members. The following overview shows the number of stock options granted to each of the members of the Management Board in 2018.

Management Board member	% of gross annual salary	Number of stock options
Harold Goddijn	140%	201,500
Alain De Taeye	100%	120,000
Taco Titulaer	100%	102,800

See note 35 – consolidated financial statements.

The benchmark conducted in 2018 indicated the target long-term incentive levels as a percentage of base salary provided to Management Board members were in line with the market median of the peer group. However, the benchmark also indicated that stock options are much less prevalent than in prior benchmark assessments.

Management Board member	Pension contribution according to the following agreement	Pension contribution 2018
Harold Goddijn	Opted to waive his rights to participate in the company pension plan as well as his rights to receive a gross pension allowance instead.	No pension contribution
Alain De Taeye	Pension contribution is capped at 20% of gross annual base salary, to be paid as a gross pension allowance.	€ 79,028
Taco Titulaer	Total pension contribution is capped at 20% of gross annual base salary; this pension contribution is split into a contribution into the company's pension plan and a gross pension allowance. The company's pension plan is a Defined Contribution plan with age defined contribution percentages and a salary cap at EUR 105,075 in 2018. Employee contribution is 6.1% of pension base.	€ 67,716 (consisting of € 7,071 into the company pension plan and € 60,645 as gross pension allowance).

Other benefits

In addition to the pension benefits, the Management Board members receive remuneration for items such as medical insurance, death and disability insurance, and car allowances. They also benefit from directors' and officers' liability insurance coverage. These benefits are in line with market practice. The company does not provide loans to members of the Management Board.

Pension benefits

Pension contributions are an element of the overall total remuneration of Management Board members, and vary by individual. However, members may elect to waive their rights for personal reasons. The scheme below provides an overview of the pension contributions.

OTHER INFORMATION**Pay ratio**

The Code requires TomTom to report on the pay ratio within the company. The pay ratio used by TomTom reflects the average total compensation of the total global employee workforce of TomTom relative to the total remuneration package of the CEO of the company. This has resulted in the following outcome:

Fiscal year	CEO Total Remuneration (Excluding social security costs)	Average Total Compensation (All global employees) ¹	Resulting Pay Ratio
2018	€1,579,052	€54,621	28.9
2017	€1,388,686	€55,648	25.0
2016	€1,001,065	€51,882	19.3

¹ Total personnel expenses (note 7 – consolidated financial statements) excluding social security costs, Management Board total remuneration and capitalized employee expenses.

The pay ratio increased for 2018 as a result of the successful achievement of the short-term variable pay plan. The Supervisory Board deems the pay ratio for TomTom of 28.9 to be at an acceptable level, since it's within the market range (based on 2017 intelligence related to AMX companies).

TomTom also reviews on an annual basis the livable wage of each location in which we operate as well as the local competitive dynamics. If needed, adjustments are made to ensure team members are above those levels as part of TomTom's efforts to be a good employer. This contributes in a positive manner to our conservative pay ratio.

CEO Target Compensation Mix

The Remuneration Committee believes that the CEO's target compensation mix aligns with long-term interests of shareholders. As illustrated in the chart, the target pay that is at risk for the CEO represents 69% of the total compensation package and is designed to reward for the performance of the company.



Base	31%
Target Variable	25%
Target LTI	44%
Pension	–

► Target pay at Risk

REMUNERATION REPORT CONTINUED

Scenario analysis

A scenario analysis of the possible outcomes of the variable components and the impact on the remuneration of the Management Board members is conducted annually to minimise the risk that the performance criteria lead to inappropriate outcomes. The effect of different performance scenarios on the level and composition of the remuneration has been analyzed and the outcome hereof has been taken into consideration by the Supervisory Board when reviewing the Management Board remuneration. These scenarios include minimum (0%), target (100%) and maximum (150%) variable pay achievement and share price appreciation of 0%, 8% and 20% per annum. Under all scenarios, minimum, target, and maximum levels of performance, the Supervisory Board has assessed that the range of potential remuneration is within outcomes appropriate for that level of performance.

Own views of Management Board members

Each individual Management Board member shares his view of his own remuneration package with the Chairman of the Remuneration Committee at least once per year. The feedback is shared with the other Remuneration Committee members. The Remuneration Committee considers all feedback when discussing and evaluating the Remuneration Policy including its components and outlook.

Exceptional individual performance

The Supervisory Board did not choose to use its discretion in 2018 to provide an additional variable pay for each member of the Management Board for exceptional individual performance, although this is possible under the Remuneration Policy article 5.7.

Share ownership

TomTom does not have share ownership guidelines for its Management Board members. Harold Goddijn is one of the founders of TomTom, and Alain De Taeye founded Tele Atlas, which was acquired by TomTom in 2008.

	Current shares	Value of shares (as a multiple of base salary at 31 December 2018)
Management Board members		
Harold Goddijn	26,319,332	438.5
Alain De Taeye	278,643	5.6

* Taco Titulaer does not own any shares.

**OTHER POLICY INFORMATION
AND CONTRACT TERMS****Revision and claw back of variable pay**

The claw back provision as reflected in the Remuneration Policy is in accordance with Dutch law and forms an integral part of the employment contracts of the members of the Management Board. This means that if the variable pay, in the opinion of the Supervisory Board, produces an unfair result due to extraordinary circumstances during the period in which the predetermined performance criteria have been or should have been achieved, the Supervisory Board has the power to adjust the value downwards or upwards. In addition, the Supervisory Board is entitled at its discretion to recover on behalf of the company any variable pay awarded on the basis of incorrect financial data or other data, provided that such recovery decision shall be made in good faith.

This right of recovery exists irrespective of whether the Management Board member has been responsible for the incorrect financial data or other data or was aware or should have been aware of this incorrectness.

Change of control

In case of a change of control, the Supervisory Board may determine that any options, granted to the Management Board member, shall be (deemed to be) exercisable immediately prior to and conditional upon such change of control, or during such period after the change of control as the Supervisory Board may specify. Failing exercise in such change of control event, the options will lapse.

Term of appointment

The term of appointment for all members of the Management Board is four years, while the term of employment is indefinite. Management Board members may be re-appointed for another term of four years at a time.

Notice period

All members of the Management Board have a notice period of 6 months. For the company this notice period is 12 months for termination without cause under the applicable employment agreements with the respective Management Board members.

Severance compensation

In the event that the employment of a member of the Management Board is terminated by, or on the initiative of, the company, the Management Board member is entitled to a severance payment limited to 50% of one year's base salary, unless a higher statutory severance compensation applies.

These terms will not apply if the employment of a member of the Management Board is terminated for any reason as set out in articles 7:677 (1) and 7:678 of the Dutch Civil Code. In such situations, the Management Board member will not be entitled to any severance compensation. A member of the Management Board will not be entitled to severance compensation if the employment is terminated by himself, or on his own initiative.

OUTLOOK 2019

The Supervisory Board of TomTom has conducted a periodic review of the Remuneration Policy that has been adopted by the General Meeting, most recently in 2014. The benchmark performed in 2018 has shown that the Management Board has a well-balanced remuneration package with an appropriate emphasis on the long-term. However, it indicated the need for limited change to competitive remuneration levels. The table below summarises the results for the key elements of remuneration:

	Base Salary Levels	Short-Term Incentive Target	Long-Term Incentive Target
Harold Goddijn	No change	No change	No change
Taco Titulaer	Increase of 15.2% to €390,000	No change	No change
Alain De Taeye	No change	No change	No change

REMUNERATION REPORT CONTINUED

For the 2019 short-term incentive scheme, no changes are anticipated. Given the continued operational focus on growing the business and optimising profitability, the Supervisory Board feels that the current KPIs (Revenue and EBITDA – CAPEX), equally weighted, are still appropriate.

Regarding the long-term incentive scheme, within an otherwise unchanged policy, the Supervisory Board proposes to change the current long-term incentive from stock options to restricted stock units (RSUs) and to introduce shareholding guidelines.

TomTom will become an even more focused and agile company, shaping the future of driving with highly accurate maps, navigation software and real-time traffic information and services. The introduction of RSUs will facilitate the promotion of share ownership and therefore align management better with shareholder interests and long-term value creation.

RSUs are a simpler and more transparent instrument compared to stock options. Outcomes of the grant are more predictable, both for the recipients and for shareholders, as downward risk and upward potential are more balanced. Improved predictability makes RSUs more attractive to the top managers that TomTom wants to attract and retain.

RSUs will vest after 3 years, conditional to continued employment, supported by an extended 2-year holding period. Share ownership is encouraged by shareholding requirements of at least 3 times base salary for the CEO and 2 times base salary for other Management Board members.

As with stock options, vesting is not dependent on performance conditions as it has proven difficult for a company like TomTom in a rapidly changing market niche to set performance targets over a longer period of time.

The Supervisory Board will have the discretion, as a performance underpin, not to award RSUs in case of exceptional market or business circumstances. Further internal consistency is maintained as the long-term incentive plan for the senior leadership will also shift to RSUs in 2019 as it is a superior retention instrument.

The target value of the RSU grant will be equal to the target value of stock options, at 140% of base salary for the CEO and 100% for the other Management Board members, whereby the number of RSUs granted will be between 40% to 60% lower than the number of stock options granted, based on a commonly accepted calculation methodology.

Changes to the Remuneration Policy will be submitted for approval to the Annual General Meeting to be held on 17 April 2019.

STATEMENT

This report has been prepared in accordance with relevant Dutch corporate governance requirements, in particular best practice provision 3.4 of the Code and is part of the Supervisory Board report. The Supervisory Board has approved this report. Additional information on the Management Board remuneration in 2018 is included in note 35 to the consolidated financial statements, the information of which is incorporated in this Remuneration report (as part of the Supervisory Board report) by reference.

The annual financial statements of the company for 2018, as prepared by the Management Board, have been audited by EY. The financial statements, the independent auditor's report and the management letter of the external auditor were discussed extensively with the auditors by the Audit Committee in the presence of the Management Board, and by the full Supervisory Board with the Management Board.

The Supervisory Board believes the 2018 financial statements of TomTom NV meet all requirements for correctness and transparency. The Supervisory Board has approved the financial statements for 2018. All members of the Supervisory Board and members of the Management Board have signed the financial statements for 2018 pursuant to the statutory obligations under article 2:101 (2) of the Dutch Civil Code.

The Supervisory Board recommends to the General Meeting to adopt the financial statements for 2018 and requests that the General Meeting discharges the members of the Management Board of their responsibility for the conduct of business in 2018 and the members of the Supervisory Board for their supervision in 2018. The Annual Report for 2018 is available at the company's offices on request and on the company's website.

The Supervisory Board would like to thank TomTom's shareholders for their trust in the company and its management and express its appreciation to all employees and the Management Board for the continued dedication and commitment to the company.

Amsterdam, 6 February 2019

The Supervisory Board

PETER WAKKIE

JACQUELINE TAMMENOMS BAKKER

JACK DE KREIJT

MICHAEL RHODIN

BERND LEUKERT

DERK HAANK

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FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF INCOME

FOR THE YEAR ENDED
31 DECEMBER

(€ in thousands)	Notes	2018	2017 restated
Revenue	5	686,798	739,284
Cost of sales	6	211,471	293,295
Gross profit		475,327	445,989
Research and development expenses		220,853	201,979
Amortization of technology and databases		108,200	111,102
Marketing expenses		28,015	43,791
Selling, general and administrative expenses		115,354	159,985
Impairment charge	13	0	168,687
Total operating expenses	7-10	472,422	685,544
Operating profit/(loss)		2,905	-239,555
Interest expense	32	-1,062	-1,699
Other financial income	32	3,555	3,748
Income from associates	18	982	759
Profit/(loss) before tax		6,380	-236,747
Income tax expense	11	-9,242	-8,991
Net loss from continuing operations		-2,862	-245,738
Net after tax profit from discontinued operations	12	47,622	51,340
Net profit/(loss)		44,760	-194,398
Attributable to:			
– Equity holders of the parent		44,857	-193,974
– Non-controlling interests	28	-97	-424
Net profit/(loss)		44,760	-194,398
Earnings per share (€)	27		
Basic		0.19	-0.83
Diluted		0.19	-0.83
Earnings per share from continuing operations (€)	27		
Basic		-0.01	-1.05
Diluted		-0.01	-1.05

The notes on pages 64 to 97 are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED
31 DECEMBER

The notes on pages 64 to 97 are an integral part of these consolidated financial statements.

(€ in thousands)	Notes	2018	2017 restated
Net profit/(loss)		44,760	-194,398
Other comprehensive income			
<i>Items that will not be reclassified to profit or loss</i>			
Actuarial gains/(losses) on defined benefit plans	7	1,024	-1,109
<i>Items that may be subsequently reclassified to profit or loss</i>			
Currency translation differences		-505	-9,386
Recycled on disposal of foreign subsidiary		0	282
Remeasurement of deferred tax in equity	11	-814	0
Other comprehensive loss for the year¹		-295	-10,213
Total comprehensive profit/(loss) for the year¹		44,465	-204,611
Attributable to:			
- Equity holders of the parent		44,760	-204,127
- Non-controlling interests		-295	-484
Total comprehensive profit/(loss) for the year		44,465	-204,611

1 The items in the statement above are presented net of tax of €0.3 million for 2018 (2017: €0.6 million).

CONSOLIDATED BALANCE SHEET

AS AT 31 DECEMBER

(€ in thousands)	Notes	2018	2017 restated	1 January 2017 restated
Goodwill	13	192,294	256,319	400,318
Other intangible assets	14	634,728	718,397	762,751
Property, plant and equipment	15	26,380	33,621	40,398
Lease assets	16	35,393	45,689	56,209
Other contract related assets	5	10,426	8,657	4,270
Investments in associates	18	3,899	4,223	3,941
Deferred tax assets	11	5,296	7,453	12,046
Total non-current assets		908,416	1,074,359	1,279,933
Inventories	19	26,400	31,609	54,078
Trade receivables	20	92,530	114,254	132,424
Unbilled receivables	5	22,512	25,150	12,550
Other contract related assets	5	14,071	5,981	3,555
Other receivables and prepayments	21	54,977	26,396	31,247
Other financial assets	22	21	0	1,210
Cash and cash equivalents	23	247,675	120,850	142,527
		458,186	324,240	377,591
Assets held for sale	12	128,323	0	0
Total current assets		586,509	324,240	377,591
Total assets		1,494,925	1,398,599	1,657,524
Equity attributable to equity holders of the parent	26	774,109	719,594	952,017
Non-controlling interests	28	0	2,308	1,906
Total equity		774,109	721,902	953,923
Borrowings	29	0	0	9,586
Lease liabilities	16	25,558	33,172	43,460
Deferred tax liability	11	80,436	85,804	84,495
Provisions	33	62,085	43,727	54,406
Deferred revenue	5	155,875	148,058	129,697
Total non-current liabilities		323,954	310,761	321,644
Trade payables	24	51,076	51,441	76,630
Lease liabilities	16	13,172	15,006	16,482
Provisions	33	28,990	37,173	36,410
Deferred revenue	5	125,035	113,246	98,333
Other contract related liabilities	5	38,665	64,380	67,248
Income taxes	11	946	1,702	1,289
Accruals and other liabilities	25	83,571	82,988	85,565
		341,455	365,936	381,957
Liabilities associated with assets held for sale	12	55,407	0	0
Total current liabilities		396,862	365,936	381,957
Total equity and liabilities		1,494,925	1,398,599	1,657,524

The notes on pages 64 to 97 are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED
31 DECEMBER

(€ in thousands)	Notes	2018	2017 restated
Operating profit/(loss) from continuing operations		2,905	-239,555
Operating profit from discontinued operations	12	52,608	53,604
Operating profit/(loss) from operations		55,513	-185,951
Financial gains/(losses)		269	-2,303
Depreciation, amortization and impairment	9	158,188	344,221
Change in provisions	33	-1,155	4,788
Equity-settled stock compensation expenses	8	5,504	8,104
Change in working capital:			
– Change in inventories		8,140	9,964
– Change in receivables and prepayments		-29,814	7,135
– Change in liabilities (excluding provisions) ¹		42,592	-2,145
Cash generated from operations		239,237	183,813
Interest received	32	429	258
Interest paid	32	-1,593	-1,819
Corporate income taxes paid	11	-9,100	-8,654
Cash generated from operating activities		228,973	173,598
Investments in intangible assets	14	-64,117	-89,313
Investments in property, plant and equipment	15	-20,035	-16,116
Acquisition of subsidiaries and other businesses	17	0	-24,494
Dividends received	18	259	202
Cash used by investing activities		-83,893	-129,721
Change in utilization of credit facility	29	0	-10,000
Repayment of borrowings	29	0	-708
Change in lease liabilities	16	-17,011	-15,590
Change in non-controlling interest	28	-1,545	-244
Proceeds on issue of ordinary shares	8	3,785	12,403
Purchase of share capital	26	0	-49,831
Cash used by financing activities		-14,771	-63,970
Net increase/(decrease) in cash and cash equivalents		130,309	-20,093
Cash and cash equivalents at the beginning of period		120,850	142,527
Exchange rate changes on cash balances held in foreign currencies		953	-1,584
Cash and cash equivalents at the end of the period	23	252,112	120,850
– Cash and cash equivalents classified as held for sale	12	4,437	0
– Cash and cash equivalents at the end of the period	23	247,675	120,850

1 Includes movements in the non-current portion of deferred revenue presented under non-current liabilities.

The notes on pages 64 to 97 are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER

(€ in thousands)	Notes	Share capital	Share premium	Treasury shares	Other reserves ¹	Accumulated deficit	Total	Non-controlling interest	Total equity
Balance as at 1 January 2017 as previously reported		46,577	1,051,890	0	234,502	-338,138	994,831	1,906	996,737
Adoption of new accounting standards		0	0	0	0	-42,814	-42,814	0	-42,814
Balance as at 1 January 2017 restated		46,577	1,051,890	0	234,502	-380,952	952,017	1,906	953,923
Comprehensive income									
Net loss for the year restated		0	0	0	0	-193,974	-193,974	-424	-194,398
Other comprehensive income									
Currency translation differences ²		0	0	0	-9,326	0	-9,326	-60	-9,386
Actuarial losses on defined benefit obligations		0	0	0	0	-1,109	-1,109	0	-1,109
Disposal of subsidiary		0	0	0	282	0	282	0	282
Total other comprehensive income		0	0	0	-9,044	-1,109	-10,153	-60	-10,213
Total comprehensive income		0	0	0	-9,044	-195,083	-204,127	-484	-204,611
Transactions with owners									
Stock compensation related movement	8	487	16,259	1,041	2,518	1,178	21,483	0	21,483
Change in non-controlling interest		0	0	0	0	-1,130	-1,130	886	-244
Repurchase of shares		0	0	-49,831	0	0	-49,831	0	-49,831
Acquisition of subsidiary		0	0	0	1,182	0	1,182	0	1,182
Other movements									
Transfers between reserves		0	0	0	34,006	-34,006	0	0	0
Balance as at 31 December 2017 restated		47,064	1,068,149	-48,790	263,164	-609,993	719,594	2,308	721,902
Comprehensive income									
Net profit for the year		0	0	0	0	44,857	44,857	-97	44,760
Other comprehensive income									
Currency translation differences ²		0	0	0	-307	0	-307	-198	-505
Actuarial gains on defined benefit obligations		0	0	0	0	1,024	1,024	0	1,024
Remeasurement of deferred tax in equity	11	0	0	0	0	-814	-814	0	-814
Total other comprehensive income		0	0	0	-307	210	-97	-198	-295
Total comprehensive income		0	0	0	-307	45,067	44,760	-295	44,465
Transactions with owners									
Stock compensation related movement	8	0	-1,948	11,083	152	0	9,287	0	9,287
Change in non-controlling interest		0	0	0	0	468	468	-2,013	-1,545
Other movements									
Transfers between reserves		0	0	0	-11,210	11,210	0	0	0
Balance as at 31 December 2018		47,064	1,066,201	-37,707	251,799	-553,248	774,109	0	774,109

1 Other reserves include Legal reserve Currency translation reserve and the Stock compensation reserve.

2 Currency translation differences arise on the translation of foreign currencies relating to foreign operations.

The notes on pages 64 to 97 are an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The notes are grouped into six sections. The notes contain the relevant financial information as well as a description of accounting policy applied for the topic of the individual notes.

SECTION 1:		SECTION 3:		SECTION 5:	
GENERAL INFORMATION AND BASIS OF REPORTING		NON-CURRENT ASSETS AND INVESTMENTS		FINANCING, FINANCIAL RISK MANAGEMENT AND FINANCIAL INSTRUMENTS	
1 General	65	13 Goodwill	80	26 Shareholder's equity	88
2 Basis of preparation	65	14 Other intangible assets	82	27 Earnings per share	89
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		16 Leased assets and liabilities	84	29 Borrowings	90
		17 Business combinations	85	30 Financial risk management	90
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RESULTS OF THE YEAR		WORKING CAPITAL			
4 Segment reporting	69	19 Inventories	87	SECTION 6:	
5 Revenue from contracts with customers	70	20 Trade receivables	87	OTHER DISCLOSURES	
6 Cost of sales	72	21 Other receivables and prepayments	87	33 Provisions	94
7 Personnel expenses	73	22 Other financial assets/liabilities	87	34 Commitments, contingent assets and liabilities	95
8 Share-based compensation	74	23 Cash and cash equivalents	88	35 Remunerations of members of the Management Board and Supervisory Board	96
9 Depreciation, amortization and impairment	75	24 Trade payables	88	36 Related party transactions	97
10 Government grants	76	25 Accruals and other liabilities	88	37 Auditor's remuneration	97
11 Income tax	76			38 Subsequent events	97
12 Discontinued operations and assets held for sale	78				

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Section 1: General information and basis of reporting

This section introduces the basis of preparation and the general accounting policy applied to the consolidated financial statements as a whole, as well as a summary of the areas that involve significant judgments and estimates.

1 GENERAL

TomTom NV (the company) has its statutory seat and headquarters in Amsterdam, the Netherlands (registered under trade registration number of 34224566 in the Chamber of Commerce in Amsterdam). The activities of the company include the development and sale of navigation and location-based products and services, which includes among other things: maps, traffic, navigation software and PNDs.

The consolidated financial statements comprise the company and its subsidiaries (the group).

The financial statements have been prepared by the Management Board and authorized for issue on 6 February 2019. The financial statements will be submitted for approval to the General Meeting on 17 April 2019.

2 BASIS OF PREPARATION

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and IFRIC interpretations as adopted by the European Union as effective from 1 January 2018 and with Part 9 of Book 2 of the Dutch Civil Code. The financial statements have been prepared on the historical cost basis, except for financial instruments (including derivatives) classified at fair value through profit or loss, which are stated at fair value. Income and expenses are accounted for on an accrual basis.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICY

The general accounting policies applied to the consolidated financial statements as a whole are described below, while other significant accounting policies related to specific items are described under the relevant note.

The description of accounting policy in the notes forms an integral part of the description of the accounting policies in this section. Unless otherwise stated, these policies have been consistently applied to all the years presented.

NEW ACCOUNTING STANDARDS AND DEVELOPMENTS

Effective from 1 January 2018, the group has adopted IFRS 9 'Financial Instruments', IFRS 15 'Revenue from Contracts with Customers', IFRS 16 'Leases' and to the extent relevant, all other IFRS standards and interpretations including amendments that were in issue and effective from 1 January 2018.

The adoption of IFRS 9 as well as other not specifically mentioned relevant standards, interpretations and amendments had no material impact to the group.

The group adopted IFRS 15 using the full retrospective method of adoption. The effect of the transition on the current period has not been disclosed as the standard provides an optional practical expedient. The group did not apply any of the other available optional practical expedients.

IFRS 16 'Leases' is effective for annual periods beginning after 1 January 2019, however the group has early adopted the new standard as permitted by the transitional guidance.

The impact of adopting IFRS 15 and IFRS 16 on the comparative income statement for the year ended 31 December 2017 and balance sheet position at 31 December 2017 are presented below.

INCOME STATEMENT

(€ in thousands)	Previously reported	IFRS 15	IFRS 16	Restated
Revenue	741,318	-2,034	0	739,284
Cost of sales	298,881	-5,586	0	293,295
Gross result	442,437	3,552	0	445,989
Marketing expenses	49,379	-5,588	0	43,791
Selling, general and administrative expenses	162,728	0	-2,743	159,985
Total operating expenses	693,875	-5,588	-2,743	685,544
Operating result	-251,438	9,140	2,743	-239,555
Interest result	-970	0	-729	-1,699
Result before tax from continuing operations	-247,868	9,140	1,981	-236,747
Income tax	-6,489	-2,106	-396	-8,991
Net result from continuing operations	-254,357	7,034	1,585	-245,738
Net result after tax from discontinued operations ¹	49,946	1,686	-292	51,340
Net result	-204,411	8,720	1,293	-194,398
Total earnings per share €				
Basic	-0.87	0.04	0.01	-0.83
Diluted	-0.87	0.04	0.01	-0.83

1 The impact on Telematics has been represented to reflect the classification of Telematics as a discontinued operation. Refer to note 12.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

BALANCE SHEET

	Balance at 1 January 2017 as previously reported	Impact of new accounting standards	Balance at 1 January 2017 restated	Balance at 31 December 2017 as previously reported	Impact of new accounting standards	Balance at 31 December 2017 restated
(€ in thousands)						
Other intangible assets	795,771	-33,020	762,751	752,952	-34,555	718,397
Lease assets	0	56,209	56,209	0	45,689	45,689
Other contract related assets	0	4,270	4,270	0	8,657	8,657
Total non-current assets	1,252,474	27,459	1,279,933	1,054,568	19,791	1,074,359
Contract-related assets ¹	0	16,105	16,105	0	31,131	31,131
Other receivables and prepayments	46,115	-14,868	31,247	53,114	-26,718	26,396
Total current assets	376,354	1,237	377,591	319,827	4,413	324,240
Total assets	1,628,828	28,696	1,657,524	1,374,395	24,204	1,398,599
Accumulated deficit	-338,138	-42,814	-380,952	-577,193	-32,800	-609,993
Total equity	996,737	-42,814	953,923	754,702	-32,800	721,902
Lease liability	0	43,460	43,460	0	33,172	33,172
Deferred tax liability	97,282	-12,787	84,495	95,602	-9,798	85,804
Deferred revenue	107,151	22,546	129,697	142,059	5,999	148,058
Total non-current liabilities	268,425	53,219	321,644	281,388	29,373	310,761
Lease liability	0	16,482	16,482	0	15,006	15,006
Deferred revenue	97,256	1,077	98,333	101,572	11,674	113,246
Other contract related liabilities	0	67,248	67,248	0	64,380	64,380
Accruals and other liabilities	152,081	-66,516	85,565	146,417	-63,429	82,988
Total current-liabilities	363,666	18,291	381,957	338,305	27,631	365,936
Total equity and liabilities	1,628,828	28,696	1,657,524	1,374,395	24,204	1,398,599

1 Contract related assets is stated inclusive of unbilled receivables.

CASH FLOW STATEMENT

Other than the reclassification of the principal portion of operating lease payments to financing activities and customer specific investments to operating activities, these standards had no other material impact to the cash flow statement.

IFRS 15 REVENUE FROM CONTRACTS WITH CUSTOMERS

In adopting IFRS 15, the group has applied the fully retrospective transitional approach using the practical expedients allowing the group for not restating contracts that have been fully completed nor restating the impact of modifications of contracts that have taken place before 1 January 2017.

IFRS 15 uses the terms 'contract asset' and 'contract liability' to describe what the group historically referred to respectively as 'unbilled' and 'deferred revenue', however, the Standard does not prohibit an entity from using alternative descriptions in the balance sheet. Accordingly the group choose to continue using the terms 'unbilled revenue' and 'deferred revenue' in these statements and the related disclosure notes. The term 'Contract related assets' is used to denote the aggregate balance of unbilled revenue and capitalized contract costs while 'Contract related liabilities' refers to the collective balance of deferred revenue and other contract-related liabilities.

The group's accounting policies for its revenue streams as applicable from 1 January 2018 are disclosed in note 5.

At 1 January 2017 the adoption of IFRS 15 resulted in a net decrease in assets of €27.5 million, an increase in liabilities of €12.5 million and a decrease in equity of €40.0 million.

The impact on the revenue and operating result for the year ended 31 December 2017 as well as the balance sheet position at 31 December 2017 for each of the operating segments including discontinued operations is further explained in the following sections.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

AUTOMOTIVE

Revenue in Automotive is generated through licensing of software and digital map content as well as through provision of traffic and/or other location-based services. In some arrangements, the customers also pay for the required customization and/or integration efforts.

IFRS 15 guidance on licenses primarily impacts the accounting for the license of map within Automotive. Depending on the nature and contractual terms, each contract is assessed as to whether it should be treated as one license agreement whereby TomTom must estimate the total transaction price or as a framework agreement that covers multiple licenses. For contracts that are treated as one license agreement the estimated transaction price (e.g. sales/usage-based royalties) is recognized based on time as a measure of progress but restricted to the royalties TomTom is entitled to.

For contracts with multiple licenses, the payment for each identified license is either recognized immediately if they pertain to a one-time installation of the map or fully spread on a straight-line basis over time if the license includes the right to receive map updates during the agreed/estimated license period. To the extent possible, the group makes use of the practical expedient to use right to invoice instead of time as a measure of progress as long as the invoice reflects the benefits to the customers.

Under IAS 18, each individual license of map which includes the right to receive updates was separated as a license for the initial map and a license for the updates. The portion of the payment allocated to initial installation was recognized upfront while the portion allocated to the updates was spread over the update period.

In addition, fixed fee/guaranteed transaction price and associated costs from customization and/or integration efforts (non-recurring engineering) which is not distinct from software provided under 'right to use' to the customer must be recognized at the moment the control of the software is transferred to the customer. Under IAS 18, this revenue was recognized over the contract period. In addition, internal development costs for customer specific projects which were previously capitalized as part of intangible assets is now presented as capitalized costs under Contract related assets on the balance sheet.

The above changes in accounting for the Automotive segment increased the result for FY '17 by €8.1 million and decreased the equity at 31 December 2017 by €5.0 million. The impact of these changes on other items in the balance sheet is a decrease in deferred revenue as well as intangible assets of €15.4 million and €21.8 million respectively.

ENTERPRISE

In the Enterprise segment we have assessed all material contracts resulting in the identification of material rights which qualify for separate recognition under IFRS 15. The accounting for these material rights decreased the result FY '17 and equity at 31 December 2017 by respectively €0.5 million and €1.3 million. The impact of these changes on other items in the balance sheet is an increase in deferred revenue of €1.7 million.

CONSUMER

For the Consumer segment we have assessed all material revenue streams. Our revenue recognition principle as applied under IAS 18 was in line with IFRS 15 for most of our revenue streams. The main difference relates to the treatment of customer-related marketing expenses. Given the more detailed guidance under IFRS 15, certain payments that were previously presented as marketing expenses need to be classified as a reduction in revenue. Some smaller differences were noted in the treatment of deferred revenue for niche products. The total difference has limited impact on the result for FY '17 and equity as at 31 December 2017 (decreases of €0.5 million and €1.6 million respectively). The impact on our revenues and operating expenses for FY '17 is a decrease of €6.4 million and €5.6 million respectively.

DISCONTINUED OPERATIONS (TELEMATICS)

In the Telematics segment we sell hardware products (Telematics Control Unit) which enable the end-customer to receive our Webfleet services. Previously, the revenues from the sale of such hardware is recognized when risks and rewards of ownership have passed to the customers. Under IFRS 15 there is enhanced guidance on performance obligations and whether these are distinct. Based upon this guidance we assessed that the delivery of the hardware unit that enables the Webfleet service is not distinct from the delivery of the Webfleet service and should be treated as one performance obligation. Accordingly, the hardware revenue must be recognized over time in line with the revenue from Webfleet service from the moment the service is activated.

The above change in accounting for the Telematics segment will increase the result of FY '17 by €1.7 million with a total decrease in equity at 31 December 2017 of €23.0 million. The impact of these changes on the balance sheet is an increase in deferred revenue of €29.8 million. This increase in deferred revenue consists out of a netted position of a contract asset (the hardware) and contract liability (deferred revenue).

IFRS 16 LEASES

The group has adopted IFRS 16 in accordance with the fully retrospective transitional approach. The group applies the standard only to leases which were previously identified as leases under IAS 17 and IFRIC 4 in accordance with the practical expedient allowed under the standard. The leases within the group comprises only of buildings and car leases. The adoption of this standard results in almost all leases being recognized on the balance sheet, except for short-term and low-value leases.

As at 1 January 2017, the group recognized lease assets of €56.2 million, a corresponding lease liability of €59.9 million and reductions in deferred tax liability and equity of €0.9 million and €1.9 million respectively. The impact to the income statement for the year ended 31 December 2017 is a decrease in operating expenses of €2.7 million, an increase in finance costs of €0.7 million and a decrease in the net result of discontinued operations of €0.3 million. The decrease in operating expenses is represented by an increase in depreciation of €12.4 million offset by a decrease in lease expenses of €15.1 million.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

BASIS OF CONSOLIDATION

The consolidated financial statements incorporate the financial statements of the company and entities controlled either directly, or indirectly, by the company.

Control is achieved when the parent is exposed to, or has rights to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Where necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policy in line with the group.

All intercompany transactions and balances, including unrealized gains and losses, arising from transactions between group companies are eliminated.

FOREIGN CURRENCIES

The company's primary activities are denominated in EUR. Accordingly, EUR is the company's functional currency, which is also the group's presentation currency. Items included in the financial information of individual entities in the group are measured using the individual entity's functional currency, which is the currency of the primary economic environment in which the entity operates.

TRANSACTIONS AND BALANCES

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing on the dates of the transactions. At each balance sheet date, monetary items denominated in foreign currencies are translated at the rates prevailing at each balance sheet date. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized under 'Other financial result' in the income statement, except for gains and losses that arise from intercompany borrowings that form part of net investment in subsidiaries which are recognized in 'Other comprehensive income'.

GROUP COMPANIES AND FOREIGN OPERATIONS

For consolidation purposes, the assets and liabilities of entities that have a functional currency other than the group's presentation currency are translated at the closing rate at the date of the balance sheet, whereas the income statement is translated at the average exchange rate for the period. Translation differences arising thereon are recognized in 'Other comprehensive income'.

INCOME STATEMENT

The group presents its statement of income based on functional categories of expenses namely, research and development, marketing and selling general and administrative costs. Included in selling general and administrative costs are amounts of other business income received which are incidental in nature.

CASH FLOW STATEMENT

Cash flow statements are prepared using the indirect method. Cash flows from derivative instruments are classified consistently with the nature of the instruments. Dividend income is presented under investing activities.

3 ACCOUNTING ESTIMATES

The preparation of these financial statements requires management to make certain assumptions, estimates and judgments that affect the reported amounts of assets, liabilities and disclosure of contingent assets and liabilities, as of the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results may differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of revision and the future periods if the revision affects both current and future periods.

CHANGE IN ESTIMATE

As a result of changes in the Consumer market in recent years, effective 1 January 2018, the group has revised the expected useful life of PNDs from four years to three years.

Decreases in roaming connectivity costs and the increased prevalence of in-dash navigation in vehicles has contributed to a decrease in the average useful life of PNDs as used by consumers. The change in the estimated useful life of PNDs resulted in a release of deferred revenue and an increase in revenue in 2018 of €4.3 million. There will be a corresponding decrease in revenue in the future four years from 2019 to 2022.

SIGNIFICANT ESTIMATES

The table below presents the areas that involve a higher degree of judgment or areas where assumptions and estimates are significant to the financial statements:

	Note
Revenue related estimates	5
Income tax	11
Impairment of non-financial assets	13-14
Internally generated intangible assets	14
Provisions and contingent assets/liabilities	33-34

Detailed explanations of the degree of judgment and assumptions used are included under each of the respective sections in the notes to the financial statements as referenced above.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Section 2: Results of the year

This section presents the notes related to items in the income statement (except for financial income and expenses) and disclosure of operating segments. If applicable, relevant notes on balance sheet items, which also relate to items in the income statement, are also presented in this section. A detailed description of the results for the year is provided in the business and financial review and group financial review sections in the Management Board report.

4 SEGMENT REPORTING

The operating segments are identified and reported on the basis of internal reports about components of the group that are regularly reviewed by the Management Board to assess the performance of the segments.

The group's internal management reporting is structured primarily on the basis of the market segments in which the three operating segments – Automotive, Enterprise, and Consumer – operate. Automotive and Enterprise are engaged in developing and selling similar location-based application components such as maps, online services (e.g. traffic) and navigation software to customers in different market segments. Automotive serves automotive customers (mainly OEMs and tier one head unit vendors) while Enterprise serves a wide range of non-Automotive customers. Consumer generates revenue mainly from the sale of smart consumer electronics devices such as PNDs and sports watches.

Management assesses the performance of segments based on the measures of revenue and operating result (EBIT), whereby the EBIT measure includes allocations of expenses from supporting functions within the group. Such allocations have been determined based on relevant measures that reflect the level of benefits of these functions to each of the operating segments. As the three operating segments serve only external customers, there is no inter-segment revenue. The effects of non-recurring items such as goodwill impairment are excluded from management's measurement basis. Interest income and expenses and tax are not allocated to the segments.

Telematics is presented as a discontinued operation (refer to note 12) and no longer forms part of segment reporting. Costs previously allocated to the Telematics segment which are not considered to be part of discontinued operations have not been reallocated to the remaining segments.

There is no measure of segment (non-current) assets and/or liabilities provided to the Management Board. The non-current assets within the group include a significant portion of the carrying value of the step up resulting from the Tele Atlas acquisition in 2008. As this step up is not geographically allocated to the respective regions for internal management reporting, we believe that disclosure of geographic allocation would be highly judgmental and would not give a true representation of geographical spread of the group's assets.

(€ in thousands)	2018	2017 restated
Automotive & Enterprise	372,272	333,186
– Automotive	245,046	195,680
– Enterprise	127,226	137,506
Consumer	314,526	406,098
Total segment revenue	686,798	739,284

The EBIT of each segment is as follows:

Automotive & Enterprise	-46,044	-42,988
– Automotive ¹	-5,249	-9,467
– Enterprise ²	-40,795	-33,521
Consumer ³	63,419	-12,054
Total segment operating result (segment EBIT)	17,375	-55,042

The EBITDA of each segment is as follows:

Automotive & Enterprise	87,203	101,088
– Automotive ¹	86,098	71,506
– Enterprise ²	1,105	29,582
Consumer ³	69,970	2,674
Total segment EBITDA	157,173	103,762

- 1 Automotive EBIT in 2018 includes €9 million gain from litigation. 2017 includes €14.1 million one-off expenses relating to disposals of map and navigation technology assets.
- 2 Enterprise EBIT in 2017 includes the effect of changes in the expected useful life of certain customer relationships resulting in an increased amortization charge of €11 million as well as €3.1 million from disposal of other assets.
- 3 Consumer EBIT in 2018 includes a €13 million gain from litigation. EBIT in 2017 excluded a goodwill impairment charge of €169 million but included a restructuring charge of €28.1 million.

The difference between EBIT and EBITDA for each segment is explained by the depreciation and amortization charge of the respective segment. A reconciliation of the segment performance measure (EBIT) to the group's result before tax is provided below.

(€ in thousands)	2018	2017 restated
Total segment EBIT	17,375	-55,042
Unallocated expenses	-7,588	-7,491
Expenses no longer allocated as a result of discontinued operation	-6,882	-8,335
Goodwill impairment charge	0	-168,687
Interest result	-1,062	-1,699
Other finance result	3,555	3,748
Result of associates	982	759
Result before tax	6,380	-236,747

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

5 REVENUE FROM CONTRACTS WITH CUSTOMERS

Group revenue consists solely of revenue from contracts with customers. For disaggregation of revenue by operating segments, reference is made to note 4 'Segment reporting'. Below follows a disaggregation of revenue by types of products and services, timing of revenue recognition and by geographical areas:

(€ in thousands)	2018	2017 restated
External revenue by products and services		
License revenue	323,535	320,631
Sale of Goods	248,336	320,033
Rendering of services	114,927	98,620
	686,798	739,284
Revenue by timing of revenue recognition		
Goods and services transferred at a point in time	301,378	371,254
Goods and services transferred over time	385,420	368,030
	686,798	739,284
External revenue by geographical areas		
Europe ¹	532,375	552,378
North America ²	109,307	135,974
Rest of World	45,116	50,932
	686,798	739,284

1 Germany, France and the United Kingdom accounted for respectively 23%, 20% and 7% of 2018 group revenue (24%, 16% and 7% of 2017 group revenue).

2 The North American revenue in 2018 and in 2017 was generated mainly in the United States of America.

The geographical split of the group's revenue from sale of goods and content and services is based on the location of the customers, while the split for royalty revenue is based on the coverage of the group's geographical map data and other contents.

Total revenue generated in the Netherlands in 2018 amounted to €30 million (2017: €35 million). The group has no significant concentration of sales from a particular individual external customer.

CONTRACT BALANCES

Contract related asset balances consist of trade receivables (refer to note 20) and the following contract related assets:

(€ in thousands)	2018	2017 restated
Unbilled receivables	22,512	25,150
Capitalized contract costs	22,874	12,742
Other deferred cost of sales	1,623	1,896
Total contract related assets	47,009	39,788

Unbilled receivables is presented net of expected credit losses of €0.4 million (2017: nil). For details regarding the balance of trade receivables and expected credit losses refer to note 20.

Revenue of €114 million (2017: €100 million) was recognized from amounts included in contract liabilities at the beginning of the year and amounts of €21.6 million (2017: €16.7 million) was recognized relating to performance obligations satisfied in previous years.

Contract related liability balances are as follows:

(€ in thousands)	2018	2017 restated
Deferred revenue	280,910	261,304
Other contract related liabilities ¹	38,665	64,380
Total contract related liabilities	319,575	325,684
Of which:		
Current	163,700	177,626
Non-current	155,875	148,058

1 Other contract related liabilities comprise of items such as accrued rebates, sales return allowance and stock protection accrual.

Deferred revenue amounted to €281 million at the end of the year (2017: €261 million).

Deferred revenue per segment is as follows:

(€ in thousands)	2018	2017 restated
Automotive & Enterprise	189,507	113,725
– Automotive	172,080	98,038
– Enterprise	17,427	15,687
Consumer	91,403	116,257
Telematics	0	31,322
Total	280,910	261,304

Automotive and Consumer deferred revenue is mostly driven by upfront payments of our customers for longer-term (multiple years) content and service deliveries (e.g. traffic and map updates). The Enterprise deferred revenue is mostly related to some customers who prepay TomTom each year for their annual license to our content.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

PERFORMANCE OBLIGATIONS

In Automotive, payments for the licenses and services are typically in the form of fixed royalty payments for each car produced by the automotive customer during the duration of the program which may range from 3–7 years (royalty period). The obligation to deliver map updates and traffic services may extend for a number of years beyond the royalty period. Navigation software is typically delivered at the start date of the customer program.

For Enterprise, the payments typically take form of (annual) license fees for larger customers and royalty payments based on actual usage for smaller customers. The payments typically correspond with the period the group is obliged to provide the license and/or services.

In Consumer, both B2B and end-customers make payments for (bundled) products and services which may require TomTom to deliver map update and/or traffic service during the (estimated) remaining lifetime of a hardware product or subscription period. Payments for such products and/or services are generally received at the time the products are delivered (subject to applicable payment term for B2B customers) or when services are activated.

As at 31 December 2018, the total of the transaction price allocated to the group's (partially) unfulfilled performance obligations is estimated at €1 billion (2017: €831 million), of which €281 million (2017: €261 million) is reflected in deferred revenue. This total excludes the (estimated) transaction price of:

- contracts where revenue recognition is based on right to invoice (as allowed by the practical expedient); and
- license and/or service contracts where each individual future activation is treated as a separate (subscription) contract.

The estimated future timing of revenue recognition for the above mentioned amount are as follows:

(€ in millions)	2018	2017 restated
Within 1 year	281	215
Between 1–5 years	619	522
After 5 years	107	94
Total	1,006	831

ACCOUNTING POLICY

The revenue recognition policy for each type of revenue or their combination is presented below.

LICENSE REVENUE

License revenue is generated through licensing of digital map content and/or navigation software to B2B customers of Automotive and Enterprise and through sale of map update services directly to the end-customers.

In the B2B license arrangements, the license of our navigation software is typically granted as 'right to use' license while the license of digital map content can either be granted as 'right to access' and/or 'right to use'. Right to access licenses provides the customer the right to access over a certain period of time, TomTom's map data that are continuously developed and enhanced during the contract period. Right to use licenses are those that only provides the customer the right to use certain map data or software as they exist at the moment the control passes to the customer without giving the right to receive future updates or upgrades other than those that can be considered as minor enhancements or bug fixing.

Revenue from 'right to access' licenses is recognized over the (estimated) period during which TomTom is obliged to provide access to the customers. For royalty-based arrangements, the revenue is either recognized based on (estimated) reported royalties, as typically the royalties reflect the usage and benefits to the customers or based on time as progress measure but restricted to the amount of the (estimated) reported royalties. When restrictions in license terms result in multiple individual licenses in royalty-based arrangements, each reported unit of usage is treated as a separate license and the revenue is recognized on a straight-line basis over the applicable service period.

License revenue for 'right to use' licenses is recognized at the moment the control passes to the customer, except for the usage-based royalties, which are recognized when the usage has taken place based on royalties TomTom is entitled to for the period.

When license arrangements include a minimum guarantee, the excess of the reported royalties above the guaranteed amount is only recognized when cumulative reported royalties have exceeded the minimum guarantee, unless if the expected total royalties is estimated to be above the minimum. In this case, the revenue is recognized based on the royalties TomTom is entitled to. When contracts include annual minimum instead of a contract minimum, the excess of royalties above the annual minimum is recognized in the respective period when the royalties exceed the annual minimum.

To the extent possible, the group makes use of the practical expedient to use right to invoice as a measure of progress as long as the invoice reflects the benefits to the customers.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

SERVICE REVENUE

Service revenue includes revenue generated from sale of traffic and travel information services to both B2B and/or end-customers, sale of online map and location-based services through hosted API solutions (Online APIs) and providing connected navigation and fleet management services.

The (estimated) revenue relating to the service element is recognized over the agreed or estimated service period on a straight-line basis or based on the invoiced amount if such invoice reflects the benefit of the services to the customer over the service period. The service period for life-time traffic and map update service offering within Consumer is estimated at 3 years.

SALE OF GOODS

Revenue from the sale of goods is generated primarily through the sale of Consumer navigation, sport devices and related accessories and Automotive hardware products. Revenue from sale of goods is generally recognized at the moment the control passes to the customers except for the products of which the customers can only benefit in combination with other products and/or services.

BUNDLED GOODS AND SERVICES

When products and services are offered as a bundle under one agreement or under a series of agreements that are commercially linked, the (estimated) total transaction price of the agreement is allocated to each of the identified 'distinct' performance obligations based on the relative selling price of each element. Depending on their nature, the revenue from each of the 'distinct' performance obligations is recognized based on the applicable revenue recognition policy as described above.

CONTRACT COSTS

Contract costs are capitalized only to the extent they are recoverable. Internal development costs relating to customers specific customization of software and/or other technology platforms are capitalized as contract costs if they have no alternative use. The group does not capitalize costs to obtain multi-year contracts as they are deemed not significant.

Where the amortization period of an asset recognized for the costs to obtain a contract is one year or less, the practical expedient to expense the costs has been used.

SIGNIFICANT ESTIMATES

Significant revenue estimates include the estimates of various pricing allowances deducted from the revenue, estimates of relative fair value of various elements in multiple-element arrangements and the estimation of total transaction price for contracts with customers.

PRICE ALLOWANCE DEDUCTIONS

The estimated sales return deduction is based upon historical data on the return rates and information on the inventory levels in the distribution channel. For sales incentives including channel and end-user rebates, the reduction in revenue is based on the group's historical experience, taking into account future expectations on rebate payments. If there is excess stock at retailers when a price reduction becomes effective, the group will compensate its customers on the price difference for their existing stock, provided certain criteria are met. To reflect the costs related to known price reductions in the income statement, an accrual is created against revenue at the time of sale based on an estimate of the inventory levels in the channel and future price reductions.

RELATIVE FAIR VALUE

In the absence of a stand-alone selling price, the fair value of each element under a multiple-element arrangement is estimated using other methods allowed under IFRS, such as the cost plus reasonable margin or the residual method or a combination thereof. In making such estimates, management makes use of judgment and assumptions to arrive at an outcome that best reflects a transaction's substance. Total deferred revenue balance relating to the elements deferred under such multiple-element arrangements as at 31 December 2018 amounted to €84 million (31 December 2017: €106 million).

TOTAL TRANSACTION PRICE

Under IFRS 15, the (expected) total transaction price of certain contracts that include variable considerations need to be estimated at the inception of the contract and each future reporting date. Such estimates are in particular relating to expected usage of our licenses and/or services which may be susceptible to factors outside our influence such as the developments in the market and industry in which our customer operates. In making such estimates management makes use of input from different sources such as historical experience, estimated sales volumes of customers as well as other relevant sources. The estimated variable consideration is only taken into account to the extent that management believes that it is highly probable that it will not be subject to significant reversal in the future.

6 COST OF SALES

The group's cost of sales consists of material costs for goods sold to customers, royalty and license expenses and fulfillment costs incurred on inventory sold during the year as well as costs attributed to certain contracts with customers.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

7 PERSONNEL EXPENSES

Personnel expenses for the group (including discontinued operations) can be broken down as follows:

(€ in thousands)	2018	2017 restated
Salaries	190,763	190,211
Social security costs	38,987	35,378
Pensions	9,589	8,574
Share-based compensation	8,923	12,503
Temporary employee expenses	20,625	21,372
Other ¹	32,900	17,127
Personnel expenses	301,787	285,165

1 Other personnel expenses includes costs of secondary benefits such as health insurance, sales commissions and bonuses offset by capitalized personnel expenses in an amount of €39.1 million (2017: €64.1 million).

Of the group personnel costs, €32 million (2017: €29 million) is presented as part of discontinued operations.

The average number of employees including discontinued operations (in FTE equivalents) in 2018 was 4,834 (2017: 4,738) spread across the following functional areas:

(€ in thousands)	2018	2017
Research and development	3,448	3,212
Marketing	113	137
Sales, general and administrative	1,273	1,389
Total	4,834	4,738

At 31 December 2018, the group (including discontinued operations) had a headcount of 5,144 (2017: 4,825) employees. During 2018, 3,991 (2017: 3,619) full-time equivalent (FTE) employees worked outside the Netherlands.

PENSIONS

The group's pension plans primarily comprise of defined contribution plans, limiting the employer's legal obligation to the amount it agrees to contribute during the period of employment.

In Italy, employees are paid a leaving indemnity on termination of their employment. This is a statutory payment based on Italian civil law. An amount is accrued each year based on the employee's remuneration and previously revalued accruals. The indemnity has the characteristics of a defined contribution obligation and is an unfunded, but fully provided liability. This liability is included as part of 'Other' provisions.

Employees in the United States are offered the opportunity to participate in the 401K pension plan, which involves no contribution or obligation from the group besides withholding and paying the employee's contribution.

In addition, the group has defined benefit plans in Germany and Belgium.

The total pension costs of €9.6 million (2017: €8.6 million) consists of the costs of the defined contribution plans of €7.9 million (2017: €8.3 million) and of the defined benefit plan of €1.7 million (2017: €0.3 million).

BELGIUM

The Belgian defined benefit plan is a (guaranteed) insurance plan. The plan is funded by fixed monthly contributions from both the Company and employees and assures the employees a lump-sum payment at retirement based on the contributions made, and provide employees with death-in-service benefits. Belgian law prescribes a variable minimum guaranteed rate of return. The group substantially insures these returns with the external insurance company that receives and manages the contributions to the plans. According to the relevant legislation, a short-fall only needs to be compensated by the employer at the point in time when the employee either retires or leaves the Company. As these plans have defined benefit features (when the return provided by the insurance company can be below the legally required minimum return), the Company treats these plans as defined benefit plans.

(€ in thousands)	2018		2017	
	Plan Assets	Plan Liabilities	Plan Assets	Plan Liabilities
Present value as at 1 January	10,073	11,382	10,073	9,256
Current service cost	0	1,258	0	1,880
Interest cost	0	212	0	246
	10,073	12,852	10,073	11,382
Remeasurements:				
- Experience gains due to change in demographical assumptions	0	-270	0	0
- Gains/losses from change in financial assumptions	709	843	0	0
	709	573	0	0
Benefits paid	-91	-92	0	0
Present value as at 31 December	10,691	13,333	10,073	11,382
Net defined benefit obligation		2,642		1,309

GERMANY

The defined benefit plan in Germany is unfunded and has no plan assets. Management is of the opinion that the plan has limited risks to the group as the plan was frozen in 2007. In the extraordinary event that the group is unable to meet its obligations, the participants will receive (partial) payments from a state-owned pension protection fund.

The following table presents the movement in the plan liabilities:

(€ in thousands)	2018	2017
Present value as at 1 January	9,647	9,188
Current service cost	86	82
Interest cost	158	173
	9,891	9,443
Remeasurements:		
- Experience (gains)/losses due to change in demographical assumptions	-861	-93
- (Gains)/losses from change in financial assumptions	-190	408
	-1,051	316
Benefits paid	-150	-112
Present value as at 31 December	8,690	9,647

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The significant actuarial assumptions used in determining the pension obligations were as follows:

	2018		2017	
	Belgium	Germany	Belgium	Germany
Discount rate	2.0%	1.9%	1.8%	1.7%
Average life expectancy ¹	18	20	18	20

1 The above average life expectancy is the average actual value for males and females retiring at age 65 for the Belgium plan (2017: n/a) in accordance with MR/FR -5 and 67 (2017: 67) for the Germany plan set in accordance with the common German mortality tables 'Heubeck 2018G'.

A 0.1% increase or decrease in discount rate would result in a decrease or increase in the defined benefit obligation of approximately €0.2 million respectively, and a 1-year increase or decrease in average life expectancy would result in a €0.1 million increase or decrease respectively in the defined benefit obligation.

ACCOUNTING POLICY

For defined contribution plans, the group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expenses when service has been rendered to the group. Prepaid contributions are recognized as an asset to the extent that a cash refund or reduction of future payments is available.

In relation to the defined benefit plan, the group recognized a liability on the balance sheet based on the present value of the defined benefit obligation at the end of the reporting period. The defined benefit obligation is calculated at least annually using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and which have terms to maturity approximating to the terms of the related pension obligation. The service cost and the interest cost are recognized as pension costs, while the actuarial (gains)/losses are credited/charged to 'Other comprehensive income'.

8 SHARE-BASED COMPENSATION

The group has share-based compensation plans for members of the Management Board and certain employees as part of their remuneration. The group currently operates share option plans, a restricted stock unit plan and phantom share plans. The purpose of the share-based compensation is to retain management and employees, and align the interests of management and eligible employees with those of shareholders, by providing additional incentives to improve the group's performance on a long-term basis.

The following disclosures relate to the total operations of the group.

EQUITY-SETTLED PLANS

The group's equity-settled share-based payment plans comprise of share option plans (options) and a restricted stock unit plan (RSU). These plans are settled through grant of the company's own equity instruments.

The group has adopted equity-settled plans for members of the Management Board and eligible employees. The General Meeting has extended the authority of the Management Board to grant, subject to the prior approval of the Supervisory Board, rights to employees to subscribe for shares under the respective equity plans. The instruments cannot be transferred, pledged or charged.

All equity-settled share-based compensation will be covered at the time of exercise, firstly through the issue of existing treasury shares held by the company, and secondly through the issue of new shares.

SHARE OPTIONS

Options are exercised at the discretion of the holder, however, they may only be exercised after the completion of a three-year vesting period. Options expire after a period of seven years following the grant date after which the options can no longer be exercised and are considered to have lapsed.

The following table summarizes information about the share options outstanding at 31 December 2018:

Year of grant	Number outstanding as at 31-12-2018	Exercise price per share (€)	Weighted average remaining life	Number exercisable at 31-12-2018	Weighted average exercise price (€)
2012	679,500	3.34–3.51	0.36	679,500	3.48
2013	1,115,600	3.36–4.62	1.38	1,115,600	3.54
2014	1,010,880	4.93–5.28	2.37	1,010,880	5.24
2015	979,920	7.60–7.83	3.18	979,920	7.79
2016	600,430	7.50–7.58	4.25	12,350	7.57
2017	738,800	7.95–9.60	5.39	0	n/a
2018	723,640	8.00–8.30	6.34	0	n/a

A summary of the group's share option plans and the movements during the years 2018 and 2017 is presented below:

	2018		2017	
	No.	Weighted average exercise price (€)	No.	Weighted average exercise price (€)
Option plans				
Outstanding as at 1 January	6,046,730	5.93	8,125,043	5.32
Granted	735,590	8.13	762,583	9.56
Exercised	-766,510	4.94	-2,545,033	4.87
Expired	-66,950	6.45	-12,666	5.33
Forfeited	-120,090	8.01	-283,197	7.68
Outstanding as at 31 December	5,828,770	7.28	6,046,730	5.93

Options are exercised on a regular basis throughout the year.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The average share price during the period was €8.00 (2017: €8.85). The fair value of the options is determined using the binomial tree model. This model contains the input variables, including the risk-free interest rate, volatility of the underlying share price, exercise price and share price at the date of grant.

	2018	2017
Share price at grant date (€)	8.30	9.60
Exercise price (€)	8.00–8.30	9.15–9.60
Expected volatility	41%	45%
Expected average option life in years	5.30	5.30
Weighted average risk-free rate	0.68%	0.50%
Expected dividends	Zero	Zero

The option valuation models require the input of highly subjective assumptions, including the expected share price volatility. Volatility is determined using industry benchmarking for listed peer group companies as well as the historic volatility of the TomTom NV's share. The group's employee share options have characteristics that are significantly different from those of traded options, and changes in the subjective input assumptions can affect the fair value estimate. There are no market conditions applicable to the grant.

RESTRICTED STOCK UNITS (RSU)

An RSU gives the holder the right to receive one TomTom share after the completion of the vesting period. The RSUs vest on an annual basis over a three-year period in equal tranches (cliff vesting). The RSU plan qualifies as equity-settled. The fair value of the RSUs is determined with reference to the share price of TomTom NV at the date of grant.

The movement in the restricted stock units during the years 2018 and 2017 is summarized below:

	2018	2017
Outstanding as at 1 January	1,283,540	0
Granted	3,450	1,283,540
Vested and settled	-427,838	0
Forfeited	-2,300	0
Outstanding as at 31 December	856,852	1,283,540

The following table summarizes movements in the equity share-based compensation reserve relating to the equity-settled plans during 2018 and 2017:

(€ in thousands)	2018	2017
Balance as at 1 January	17,913	14,213
Share-based compensation expense	5,504	8,104
Acquisition of subsidiary	0	1,182
Transfer to accumulated deficit	0	-203
Share options exercised and settlement of restricted stock units	-5,352	-5,383
Balance as at 31 December	18,065	17,913

CASH SETTLED PLAN

PHANTOM SHARE PLAN

TomTom has granted phantom shares to certain employees. Under this plan, eligible employees are entitled to receive a cash payment equal to the value at vesting date of the number of shares that have vested. These cash-settled phantom shares are conditional on the employee completing three years of service (the vesting period).

As at 31 December 2018, the outstanding liability with regard to the phantom share plan was €6.9 million (2017: €8.8 million).

The following table provides the movement in the number of phantom shares.

	2018	2017
Outstanding as at 1 January	1,530,700	2,312,520
Granted	491,410	368,520
Vested and paid out	-594,640	-925,065
Forfeited	-158,290	-225,275
Outstanding as at 31 December	1,269,180	1,530,700

ACCOUNTING POLICY

Equity-settled share-based payments are measured at fair value at the date of grant. The fair value per option is measured using the binomial tree model. For restricted share units, the fair value at grant date is equal to the share price at the date of grant. The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period.

Cash-settled share-based payments are initially measured at the fair value of the liability which is expensed on a straight-line basis over the vesting period. The liability is remeasured at each balance sheet date to its fair value, reflected by the share price at balance sheet date, with all changes recognized immediately through profit and loss.

All share-based compensation expenses are based on the number of units that are expected to vest. The group revises its estimates of the number of instruments expected to vest at each balance sheet date.

9 DEPRECIATION, AMORTIZATION AND IMPAIRMENT

Total depreciation, amortization and impairment for the year was €158 million (2017: €344 million) of which €19.1 million relates to discontinued operations (2017: €17.2 million).

Following the classification of Telematics as held for sale, no depreciation is included in cost of sales (2017: nil).

(€ in thousands)	2018	2017 restated
Amortization	127,117	139,143
Depreciation	31,071	36,391
Impairment	0	168,687
Total	158,188	344,221

The impairment in 2017 related to an impairment of goodwill, further details can be found in note 13.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Amortization charges totaling €127 million (2017: €139 million) are included in the following line items in the Income Statement:

(€ in thousands)	2018	2017 restated
Cost of sales	0	1,028
Amortization of technology and databases	108,200	111,102
Research and development expenses	160	630
Selling, general and administration expenses	5,283	14,582
Discontinued operations	13,474	11,801
Total	127,117	139,143

10 GOVERNMENT GRANTS

In 2018, the group received government grants amounting to €3.7 million, in relation to the research and development activities performed by the group (2017: €4.8 million) which mainly have been accounted as a deduction of wage tax expense in line with the nature of the grants.

ACCOUNTING POLICY

Government grants are recognized at their fair value when there is a reasonable assurance that the group will comply with the conditions attached to them, and that the grants will be received. Government grants that are receivable as compensation for expenses or losses already incurred, or for the purpose of giving immediate financial support to the group with no future related costs, are recognized as a deduction of the related expense in the period in which they become receivable.

11 INCOME TAX

Income tax comprises of the following current tax expense as well as deferred tax (gain)/expense:

(€ in thousands)	2018	2017 restated
Current tax	9,413	4,990
Deferred tax	-171	4,001
Total	9,242	8,991

CURRENT INCOME TAX

The current tax represents the tax charge on profit from continuing operations for current year as well as adjustments relating to prior periods. The tax paid in 2018 (including discontinued operations) was €9.1 million (2017: €8.7 million) which is broadly in line with the current tax charge. The tax charge represents €0.04 impact on our earnings per share.

The activities of the group are subject to corporate income tax in several countries, depending on presence and activity. The applicable statutory tax rates of the tax jurisdictions in which the group operates vary between 12.5% and 34.0% which may cause the group effective tax rate (ETR) to deviate from the Dutch corporate tax rate. The following table presents a numerical reconciliation between the tax charge on the basis of the Dutch tax rate and the ETR.

	2018	2017 restated
Dutch tax rate	25.0%	25.0%
Higher/(lower) weighted average statutory rate of group activities	-14.9%	-0.5%
Income exempted from tax	-9.0%	0.0%
Goodwill impairment charge	0.0%	-17.7%
Non-deductible expenses and additional tax deductibles	53.1%	-0.9%
Remeasurement of deferred tax	-57.0%	-2.3%
Elimination of discontinued operations	163.2%	-5.0%
Other	-15.4%	-2.4%
Effective tax rate	145.0%	-3.8%

The income tax expense of €9.2 million in 2018 represents an ETR of 145.0% (2017: -3.8%). This ETR is primarily impacted by the effect of the remeasurement of our deferred tax assets and liabilities and the effect of capitalizing tax losses which were previously not capitalized. Additionally, the income tax charge includes the current tax attributable to Telematics entities that form part of the fiscal unity with other Dutch entities in the group.

The remeasurement of deferred tax assets and liabilities is mainly driven by change in the statutory tax rate in the Netherlands at the end of 2018.

The income tax credited directly to equity in 2018 amounted to €1.1 million (2017: debit of €0.6 million) which is fully related to the deferred tax assets and liabilities.

ACCOUNTING POLICY

Current and deferred taxes are recognized as an expense or income in the profit and loss account, except when they relate to items that arise from initial accounting for a business combination or items credited or debited directly to equity. For the latter, the tax is also recognized either in Other comprehensive income or directly in equity. The group's income tax expense is calculated using tax rates that have been enacted or substantively enacted at the balance sheet date.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

DEFERRED INCOME TAX

As at 31 December 2018, the group had a deferred tax liability of €80 million (2017: €86 million) and a deferred tax asset of €5.3 million (2017: €7 million). The deferred tax asset and liability mainly results from the timing difference between the tax and accounting treatment of intangible assets, cash-settled share-based payments and certain provisions as well as from the capitalization of carried forward tax losses.

The following table presents the movement in each of the categories on a gross basis.

(€ in thousands)	Assessed losses & credits	Provisions	Share-based compensation expense	Intangible assets	Other	Total
Balance as at 31 December 2016	30,565	6,575	2,854	-124,852	-378	-85,236
Adoption of new accounting standards	12,787	0	0	0	0	12,787
Balance as at 31 December 2016 restated	43,352	6,575	2,854	-124,852	-378	-72,449
(Charged)/credited to income statement	-5,134	-1,686	-1,028	10,314	310	2,776
(Charged)/credited to equity	-1,664	525	0	0	0	-1,139
Impact of remeasurement (charged)/credited to income statement	-62	-986	172	-4,642	-334	-5,852
Acquisitions through business combination	0	0	0	-1,271	0	-1,271
Reclassifications to provisions	264	0	0	0	0	264
Currency translation differences	-357	-282	0	99	-140	-680
Balance as at 31 December 2017	36,399	4,146	1,998	-120,352	-542	-78,351
(Charged)/credited to income statement	-9,944	-782	-382	8,545	-17	-2,580
Credited/(charged) to equity	553	-291	0	0	0	262
Impact of remeasurement (charged)/credited to income statement	-2,243	0	-171	6,111	0	3,697
Reclassification to assets and liabilities held for sale	-541	0	-161	1,996	0	1,294
Reclassifications to provisions and other reclassifications	-198	688	0	0	-688	-198
Currency translation differences	225	122	12	405	-28	736
Balance as at 31 December 2018	24,251	3,883	1,296	-103,295	-1,275	-75,140

The group has in some jurisdictions remaining tax losses that have not been recognized as a deferred tax asset as the possible future recovery of these losses against future taxable income is uncertain. As at 31 December 2018, these losses amounted to €26.1 million (2017: €54.2 million) of which €26.1 million relating to foreign tax jurisdictions. The losses from foreign countries have no future expiry date while the vast majority of the losses generated in the Netherlands will expire in tranches in 2023 to 2026. In addition, the group has uncanceled withholding tax credits amounting to €5.5 million (2017: €3.1 million).

The following table presents the expected timing of reversal of our deferred tax assets and liabilities.

(€ in thousands)	2018	2017 restated
To be reversed within 12 months	-4,190	-4,987
To be reversed after more than 12 months	-70,950	-73,364
Total	-75,140	-78,351

After offsetting of deferred tax assets and liabilities, deferred taxes are presented as non-current assets and liabilities on the balance sheet as follows:

(€ in thousands)	2018	2017 restated
Deferred tax assets	5,296	7,453
Deferred tax liabilities	-80,436	-85,804
Total	-75,140	-78,351

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

ACCOUNTING POLICY

Deferred taxes are calculated using the liability method. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes (accounting base) and the amounts used for income tax purposes (tax base).

Deferred tax assets and liabilities are measured using the tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled, using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date.

The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the group expects, at the balance sheet date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets are recognized when it is probable that sufficient taxable profits will be available against which the deferred tax assets can be utilized. The carrying amounts of deferred tax assets are reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred income tax assets and liabilities are offset on the balance sheet when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to income taxes levied by the same fiscal authority.

SIGNIFICANT ESTIMATES

The determination of the group's provision for income tax as well as deferred tax assets and liabilities involves significant judgments and estimates on certain matters and transactions, for which the ultimate outcome may be uncertain. If the final outcome differs from the group's estimates, such differences will impact the current and deferred income tax assets and liabilities in the period in which such determination is made.

The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income in the countries where the deferred tax assets originated and during the periods when the deferred tax assets become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment.

12 DISCONTINUED OPERATIONS AND ASSETS HELD FOR SALE

On 27 September 2018, the Management Board announced to explore strategic alternatives for its Telematics business ("Telematics"), an operating segment of the group. The strategic review resulted in the decision to sell Telematics, as announced on 22 January 2019. The sale is subject to customary closing conditions including the approval of TomTom's shareholders, and is expected to be completed within a year from the reporting date.

At 30 November 2018, Telematics was classified as a discontinued operation and a disposal group held for sale. The business of Telematics represents the entirety of the group's Telematics operating segment until the date of classification as held for sale.

The results of Telematics for the year are presented below:

(€ in thousands)	2018	2017
Revenue	173,808	163,612
Cost of sales	38,512	39,815
Gross result	135,296	123,797
Operating expenses	-82,688	-70,193
Financial income and expenses	-3,615	-1,275
Result before tax from discontinued operations	48,993	52,329
Income tax expense	-1,371	-989
Net result from discontinued operations	47,622	51,340
Earnings per share from discontinued operations		
Basic	0.24	0.23
Diluted	0.24	0.23

Allocations of expenses from supporting functions within the group that have been allocated to Telematics, but are not expected to be disposed of are not presented as part of discontinued operations.

(€ in thousands)	2018	2017
Amounts included in accumulated OCI:		
Currency translation reserve	1,107	603
Reserve of disposal group classified as held for sale	1,107	603

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The major classes of assets and liabilities of Telematics classified as held for sale as at 31 December are:

(€ in thousands)	2018
Goodwill and other intangible assets	82,865
Property, plant, equipment and leased assets	17,064
Deferred tax assets	805
Inventories	8,502
Trade receivables	12,700
Other receivables, prepayments and contract related assets	1,950
Cash and cash equivalents	4,437
Assets held for sale	128,323
Provisions	565
Deferred tax liability	2,099
Lease liabilities	4,225
Deferred revenue	27,470
Trade payables	4,150
Income taxes	1,035
Accruals, other liabilities and contract related liabilities	15,863
Liabilities associated with assets held for sale	55,407
Net assets held for sale	72,916

Immediately before the classification of Telematics as a discontinued operation, the recoverable amount was estimated for certain assets with no impairment loss being identified.

Following the classification, it was determined that the fair value of the disposal group (as determined using level 1 inputs) exceeded its carrying value and no adjustment to the carrying value of the disposal group was required. Refer to the accounting policy regarding fair value estimation in note 30.

The below table presents the net cash flows of discontinued operations:

(€ in thousands)	2018	2017
Operating	62,627	60,957
Investing	-7,422	-12,957
Financing	-1,588	-1,590
Net cash inflow/outflow:	53,617	46,410

ACCOUNTING POLICY

NON-CURRENT ASSETS HELD FOR SALE

Non-current assets and disposal groups are classified as held for sale are if their carrying amounts will be recovered principally through a sale transaction rather than continuing use.

To be classified as a sale transaction an asset or disposal group should be available for immediate sale in its present condition. Management must be committed to the plan of sale, which should be highly probable and expected to be completed within one year from the date of classification.

Non-current assets (or disposal groups) classified as held for sale are measured at the lower of the asset's carrying amount or the fair value less costs of disposal. Depreciation or amortization of an asset ceases when it is classified as held for sale.

Assets and liabilities classified as held for sale are presented separately as current items in the statement of financial position.

DISCONTINUED OPERATIONS

A discontinued operation is a component of the entity that has been disposed of or is classified as held for sale and that represents a separate major line of business or geographical area of operations and is part of a single coordinated plan of disposal. The results of discontinued operations are presented separately in the statement of profit or loss.

All notes to the financial statements include amounts for continuing operations, unless indicated otherwise.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Section 3: Non-current assets and investments

The notes in this section specify the group's non-current assets including investments made during the year either through separate asset acquisitions or business combinations.

13 GOODWILL

(€ in thousands)	2018	2017
Cost	1,945,926	1,921,238
Accumulated impairment	-1,689,607	-1,520,920
Balance as at 1 January	256,319	400,318
Movements		
Recognized on business combination	0	23,688
Classified as held for sale	-63,559	0
Impairment	0	-168,687
Currency translation differences	-466	1,000
	-64,025	-143,999
Cost	1,881,901	1,945,926
Accumulated impairment	-1,689,607	-1,689,607
Balance as at 31 December	192,294	256,319

Our 2018 impairment test did not result in an impairment in any of the segments (2017: an impairment of €169 million relating to Consumer as presented under impairment charge in the income statement). Details of the assumptions and estimates made are presented under Significant estimates below.

A segment-level summary of the allocation for the group's remaining goodwill balance in 2018 and 2017 is presented below:

(€ in thousands)	2018	2017
Automotive & Enterprise	192,294	192,294
– Automotive	107,077	107,077
– Enterprise	85,217	85,217
Telematics	0	64,025
Total	192,294	256,319

Telematics goodwill has been reclassified to assets held for sale (refer note 12).

ACCOUNTING POLICY

Goodwill represents the excess of the costs of an acquisition over the fair value of the group's share of identifiable assets of the acquired subsidiary at the date of acquisition and is carried at costs less accumulated impairment losses. Goodwill is allocated to operating segments that are expected to benefit from the business combination in which the goodwill arose.

IMPAIRMENT TESTING OF GOODWILL

Assets such as goodwill that have an indefinite useful life are tested for impairment at least annually, or whenever management identifies conditions that may indicate a risk of impairment.

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount and is recognized immediately in the income statement. The recoverable amount is the higher of an asset's fair value less costs of disposal and its value in use. In estimating the recoverable amount, management is required to make an estimate of the expected future cash flows from the cash-generating unit in the forecasted period and also to determine a suitable discount rate in order to calculate the present value of those cash flows. Such estimates might be subject to a certain degree of judgment and uncertainty.

Impairments of goodwill are not subsequently reversed.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

SIGNIFICANT ESTIMATES

IMPAIRMENT TEST OF GOODWILL

We set out below the methodologies as well as assumptions applied in performing our year-end goodwill impairment test for Automotive, Enterprise and Telematics.

The recoverable amount of each of the segments is determined based on the higher of the value in use or fair value less costs of disposal calculations. The fair value less costs of disposal calculation resulted in a higher recoverable amount. The calculations of fair value less costs of disposal for Automotive, Enterprise use post-tax cash flow projections based on financial forecasts approved by management covering a five-year period (forecasted period) including terminal value. Telematics' recoverable amount has been determined based on third party offers which classify as Level 1 input.

Management's cash flow projections for Automotive and Enterprise in the forecasted period are based on management's assumptions on the expected revenue developments, gross margin and operating margin after allocation of operating expenses from shared units, taking into account management's expectation of market size and market share development.

Both Automotive and Enterprise revenue is projected to show a single digit growth rate in the forecasted period. Given the limited visibility on the longer-term growth, the growth rates in the later years are more subject to uncertainty compared with the earlier years. Gross margin and operating margin projections of each of the segments are consistent with the expected revenue developments.

The growth rates after the forecasted period as well as the discount rate used for each of the segments are presented in the table below. The input to the group's key assumptions include those that are based on non-observable market data (level 3 input in accordance with IFRS 13).

	Automotive	Enterprise
2018		
Revenue – perpetual growth ¹	1.0%	1.0%
Discount rate ²	8.5%	8.5%
2017		
Revenue – perpetual growth ¹	2.0%	0.0%
Discount rate ²	9.0%	9.0%

1 Weighted average growth rate used to extrapolate cash flows beyond the forecasted period.

2 Post-tax discount rate applied to the cash flow projections.

Discount rates used are post-tax and reflect specific risks relating to the relevant operating segments.

Management considered the effects of applying a pre-tax approach and concluded that this will not materially change the outcome of the impairment test.

Expectations and input to the impairment calculation, as well as the overall outcome, have been compared with the available external information (level 2 input in accordance with IFRS 13) from various analysts and to the extent available with market information on recent comparable transactions (mergers and acquisitions activity in relation to comparable companies).

There was no impairment charge recorded in 2018 for any of the segments (2017: €169 million related to Consumer).

The sensitivity test for the Automotive segment showed that the level of headroom available at year-end 2018 (headroom: €362 million) would fall to nil should the compound annual revenue growth rate in the forecasted period decrease from 7% to 4% while other factors remain constant. The sensitivity test for the Enterprise segment showed that the level of headroom available at year-end 2018 (headroom: €211 million) would fall to nil should the compound annual revenue growth rate in the forecasted period decrease from 6% to 3% while other factors remain constant.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

14 OTHER INTANGIBLE ASSETS

The movements in the intangible assets are as follows:

(€ in thousands)	Map content and mapmaking platform ²	Internally generated technology	Other ¹	Total
Balance as at 31 December 2016				
Cost	1,127,712	207,392	233,865	1,568,969
Accumulated amortization and impairment	-482,853	-124,804	-165,541	-773,198
	644,859	82,588	68,324	795,771
Impact of change in accounting policy	0	-33,020	0	-33,020
Balance as at 31 December 2016 restated	644,859	49,568	68,324	762,751
<i>Of which internally generated³</i>	<i>148,327</i>	<i>49,568</i>	<i>0</i>	<i>197,985</i>
Movements				
Additions	62,988	25,490	3,968	92,446
Acquired through business combination	0	0	4,100	4,100
Disposals (net) ⁴	-140	-376	-1,065	-1,581
Amortization charges	-81,896	-27,331	-29,916	-139,143
Currency translation differences	-625	-2	451	-176
	-19,673	-2,219	-22,462	-44,354
Balance as at 31 December 2017				
Cost	1,140,725	165,966	224,227	1,530,918
Accumulated amortization and impairment	-515,539	-118,617	-178,365	-812,521
	625,186	47,349	45,862	718,397
<i>Of which internally generated³</i>	<i>171,748</i>	<i>47,349</i>	<i>0</i>	<i>219,097</i>
Movements				
Additions	57,998	7,499	861	66,358
Amortization charges	-86,846	-17,925	-22,346	-127,117
Reclassified to assets held for sale	0	-8,712	-10,543	-19,255
Transfers	0	0	-2,230	-2,230
Currency translation differences	-1,342	-117	34	-1,425
	-30,190	-19,255	-34,224	-83,669
Balance as at 31 December 2018				
Cost	1,197,121	202,732	126,833	1,526,686
Accumulated amortization and impairment	-602,125	-174,638	-115,195	-891,958
	594,996	28,094	11,638	634,728
<i>Of which internally generated³</i>	<i>180,331</i>	<i>28,094</i>	<i>0</i>	<i>208,425</i>

1 Other intangible assets consists primarily of customer relationships with a book value of €9 million (2017: €31 million) as well as brand names and software.

2 The map content as acquired at acquisition date (June 2008) represents geographical content data used for the group's digital maps and has a remaining useful life of 9 years and 5 months (2017: 10 years and 5 months).

3 Internally generated technology includes technology in development for an amount of €5 million (2017: €37 million).

4 During the year the total gross amount of the assets disposed across all intangible asset classes was €44 million (2017: €77 million). Within other technologies we disposed technologies for an amount of €44 million. The disposed assets related to mapmaking tools and technologies that are not being used anymore.

ACCOUNTING POLICY

OTHER INTANGIBLE ASSETS

Other intangible assets includes both assets that have been acquired, either through individual asset acquisitions or through business combinations, and assets that have been generated internally, such as the group's core technology and geographical content database.

INTERNALLY GENERATED INTANGIBLE ASSETS

Internal development costs for core technology are recognized as an intangible asset if, and only if, all of the following have been demonstrated:

- The technical feasibility to complete the project;
- The intention to complete the intangible asset, and use or sell it;
- The ability to use or sell the intangible asset;
- How the intangible asset will generate probable future economic benefits;
- The availability of adequate resources to complete the project; and
- The cost of developing the asset can be measured reliably.

Internally generated databases are capitalized until a certain level of map coverage is reached and ongoing activities focus on maintenance. At this point, capitalization is discontinued.

Internal software costs relating to development of non-core software with an estimated average useful life of less than one year and engineering costs relating to the detailed manufacturing design of new products are expensed in the period in which they are incurred.

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. All expenditures on research activities are expensed in the income statement as incurred.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

ACQUIRED INTANGIBLE ASSETS

Definite-lived intangible assets acquired separately are initially recognized at cost. The cost of assets acquired separately includes directly attributable costs to bring the asset to its intended use. Intangible assets acquired in a business combination are identified and recognized separately from goodwill where they satisfy the definition of an intangible asset and their fair values can be measured reliably.

The cost of such intangible assets is their fair value at the acquisition date.

Subsequent to initial recognition, all intangible assets are carried at cost less accumulated amortization and accumulated impairment losses.

The amortization of other intangible assets is recorded on a straight-line basis over the following estimated useful lives as follows:

- Map content and mapmaking platform: 4–20 years;
- Internally generated core technology: 3–7 years;
- Acquired technology: 3–5 years;
- Customer relationships: 5–13 years;
- Computer software: 2–5 years; and
- Brand names: 5 years.

Map content and mapmaking platform created before 1 January 2017 is amortized over 20 years. All content created from 1 January 2017 is amortized over 4, 8 or 12 years depending on the type of content. Intangible assets generated for certain customer specific projects are amortized based on actual units of products sold to the customers.

IMPAIRMENT

Assets which have an indefinite useful life and are not subject to amortization and intangible assets not yet ready to use are tested for impairment at least annually, or whenever management identifies conditions that may indicate a risk of impairment. Assets that are subject to amortization are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Testing is conducted as per the policy outlined in note 13.

Non-financial assets, other than goodwill, which have been subject to an impairment, are reviewed for possible reversal of the impairment at each reporting date.

SIGNIFICANT ESTIMATES

Management made use of assumptions and judgment in assessing the expected future economic benefits that can be attributed to the internally generated technology, databases and tools, as well as their expected useful lives. For internally generated databases, assumption is also made on the level of completion, at which point the capitalization is discontinued and future activities are considered to be maintenance.

Such estimates are made on a regular basis, as they can be significantly affected by changes in technology and other factors.

IMPAIRMENT OF OTHER INTANGIBLE ASSETS

No impairment charge has been recorded for other intangible assets in 2018 and 2017.

15 PROPERTY, PLANT AND EQUIPMENT

(€ in thousands)	Furniture and fixtures	Computer equipment	Leasehold improvements	Other ¹	Total
Balance as at 31 December 2016					
Cost	12,133	65,883	16,496	31,955	126,467
Accumulated depreciation and impairment	-7,458	-45,861	-10,959	-21,791	-86,069
	4,675	20,022	5,538	10,163	40,398
Movements					
Additions	1,405	7,468	2,141	5,987	17,001
Disposals (net) ²	-36	-38	-661	-127	-862
Depreciation charges	-1,530	-10,377	-1,584	-8,987	-22,478
Currency translation differences	-66	-143	-142	-87	-438
	-227	-3,090	-246	-3,214	-6,777
Balance as at 31 December 2017					
Cost	13,182	64,480	17,179	27,735	122,576
Accumulated depreciation and impairment	-8,734	-47,548	-11,887	-20,786	-88,955
	4,448	16,932	5,292	6,949	33,621
Movements					
Additions	1,934	11,087	3,233	4,215	20,469
Disposals (net) ²	-199	-55	-128	-121	-503
Reclassified to assets held for sale	-723	-2,472	-1,110	-6,898	-11,203
Depreciation charges	-1,735	-8,728	-2,021	-3,074	-15,558
Currency translation differences	-90	-170	-8	-178	-446
	-813	-338	-34	-6,056	-7,241
Balance as at 31 December 2018					
Cost	10,213	65,688	15,780	4,053	95,734
Accumulated depreciation and impairment	-6,578	-49,094	-10,522	-3,160	-69,354
	3,635	16,594	5,258	893	26,380

¹ Other property, plant and equipment includes vehicles, production tools and moulds and service equipment.

² The total gross amount of the assets disposed across all asset classes was €25 million (2017: €18 million).

No impairment has been recognized for Property, plant and equipment in 2018 or 2017.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

ACCOUNTING POLICY

Property, plant and equipment are stated at historical cost less accumulated depreciation and impairment charges. Depreciation is recorded on a straight-line basis over the estimated useful lives of the assets as follows:

- Furniture and fixtures: 4–10 years;
- Computer equipment and hardware: 2–7 years;
- Leasehold improvements: 4–10 years;
- Vehicles: 4 years; and
- Service equipment: 5 years.

The estimated useful lives, residual values and depreciation methods are reviewed at each year-end, with the effect that any changes in estimate are accounted for on a prospective basis. The gain or loss arising on disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset, and is recognized in profit or loss.

IMPAIRMENT

For the accounting policy relating to impairment refer to note 14 Other intangible assets.

16 LEASED ASSETS AND LIABILITIES

LEASED ASSETS

The group leases assets including buildings, leased cars and, to a limited extent, certain office equipment. Key movements relating to lease balances are presented below:

(€ in thousands)	Leased Buildings	Leased vehicles	Total
2017 restated			
Balance as at 1 January restated	51,051	5,158	56,209
Additions to leased assets	3,631	2,030	5,661
Depreciation charges	11,178	2,735	13,913
Balance as at 31 December	41,658	4,031	45,689
2018			
Additions to leased assets	6,949	2,344	9,293
Depreciation charges	12,693	2,820	15,513
Balance as at 31 December	31,679	3,714	35,393

LEASED BUILDINGS

Buildings are leased for office space which typically run for a period of 2–5 years. Some leases for office buildings include extension options exercisable up to one year before the end of the cancellable lease term. Typically, the option to renew the lease is for an additional period of the same duration after the end of the contract term and are at the option of the group as lessee.

At the end of the year, the group had options to extend lease contracts for leased buildings which represent potential discounted future lease payments not included in lease liabilities of €29.8 million.

Lease payments are in substance fixed and the group had no leases which contained variable lease payments. Most real estate leases include annual escalation clauses with reference to an index or contractual rate.

OTHER LEASES

The group leases vehicles for qualifying employees with a standard lease term of 4 years. The group does not purchase or guarantee the value of leased vehicles.

In some cases the group leases furniture and office equipment with terms of 1–3 years. The group considers these assets to be of low-value or short-term in nature and therefore no right-of use assets and lease liabilities are recognized for these leases.

Expenses recognized relating to short-term leases and leases of low value during 2018 was €0.5 million and €0.2 million respectively (2017: €0.7 million and €0.3 million).

LEASE LIABILITIES

The maturity of the lease liabilities is as follows:

(€ in thousands)	2018	2017 restated
Less than one year	13,172	15,006
One to five years	25,558	30,857
More than five years	0	2,315
Total lease liabilities	38,730	48,178

The total interest expense on lease liabilities and the total cash outflow in 2018 was €0.6 million and 17.0 million respectively (2017: €0.7 million and €15.6 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

ACCOUNTING POLICY

LEASES AS A LESSEE

At inception of a contract, the group assesses whether a contract conveys the right to control the use of an identified asset for a period in exchange for consideration, in which case it is classified as a lease.

The group recognizes a right-of-use asset (lease asset) and a lease liability at the lease commencement date. The asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to restore the underlying asset, less any lease incentives received.

The lease asset is subsequently depreciated using the straight-line method from the commencement date to the end of the useful life of the right-of-use asset, considered to be indicated by the lease term. The lease asset is periodically adjusted for certain remeasurements of the lease liability and impairment losses (if any).

The lease liability is initially measured at the present value of outstanding lease payments, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the group's incremental borrowing rate. Generally, the group uses its incremental borrowing rate as the discount rate.

The lease liability is measured at amortized cost using the effective interest method and is remeasured when there is a change in future lease payments arising from a change in an index or rate or if the group changes its assessment of whether it will exercise a purchase, extension or termination option. A corresponding adjustment is made to the carrying amount of the right-of-use asset with any excess over the carrying amount of the asset being recognized in profit or loss.

SHORT-TERM LEASES AND LEASES OF LOW VALUE ASSETS

The group has elected not to recognize lease assets and lease liabilities for short-term leases (leases with a term of 12 months or less) and leases of low-value assets, including IT equipment. The group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

EXTENSION OPTIONS

Extension options are applicable mainly to leased buildings.

The group assesses whether it is reasonably certain to exercise the options at lease commencement and subsequently, if there is a change in circumstances within its control. Such assessment involves management judgment and estimate based on information at the time the assessments are made.

Extension options are included in the lease term when the group has an economic incentive to exercise the option. The group considers available evidence at the time of the assessment, including potential favourable terms upon extension, potential termination penalties, the relative costs associated with potential relocation or termination of the lease and the extent of leasehold improvements undertaken. Additionally, the size of the leased premises

Additionally, the size and the relative importance of the leased premises as well as the availability of easily substitutable assets is taken into consideration when assessing whether the group has an economic incentive to extend a lease for which it holds an option to do so.

17 BUSINESS COMBINATIONS

There has been no business combinations in 2018.

2017

AUTONOMOS ACQUISITION

On 17 January 2017, the group acquired 100% of the shares of Autonomos GmbH for €25.9 million of which €24.5 million is paid in cash and the remainder through the issue of 138 thousand restricted share units at share price of €8.68 per share. Goodwill on the acquisition can be attributed to intangible assets that do not qualify for separate recognition.

The fair value of assets and liabilities acquired and the related cash flow on acquisition was as follows:

(€ in thousands)	2017
Identifiable net assets acquired:	
Assets	
– Technology	4,100
– Other assets	360
Liabilities	
– Deferred tax liability	-1,271
– Other liabilities	-943
Fair value of the net assets acquired	2,246
Goodwill at acquisition	23,688
Consideration transferred	25,934
– Settled through issue of restricted share units	-1,182
– Cash on hand at date of acquisition	-258
Cash outflow on acquisition	24,494

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

DISPOSAL OF TOMTOM SOUTH AFRICA (PTY) LTD

On 31 December 2017, the group disposed of its share in TomTom South Africa (Pty) Ltd. The group recorded a loss on sale of €0.7 million, which includes the recycling of the accumulated currency translation reserve of €0.3 million.

ACCOUNTING POLICY

The group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The group recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets.

18 INVESTMENTS IN ASSOCIATES

As of 31 December 2018, the group held interests in Cyient Ltd. ('Cyient') and WayTag (Pty) Ltd. ('WayTag'). During April 2018, the liquidation of Beijing Golden Tom Information Technology Co. Ltd. was completed and the entity is no longer an associate of the group.

The movements in the investments in associates can be specified as follows:

(€ in thousands)	2018	2017
Balance as at 1 January	4,223	3,941
Result of associates ¹	982	759
Dividend received	-259	-202
Other direct equity movements	-1,047	-275
Balance as at 31 December	3,899	4,223

1 The group's share in 'Other comprehensive income' of the associates are presented under 'Other direct equity movements' in the table above.

Cyient provides content development and support services. WayTag has limited activities and is in the process of de-registration. The group has no commitment in providing additional financing to any of its associates.

The (estimated) full-year revenue and net profits and the assets and liabilities of Cyient are as follows:

	Country of incorporation		(€ in thousands)			Interest held (%)
		Assets	Liabilities	Revenue	Net result	
2018						
Cyient Ltd. ¹	India	430,149	136,390	521,135	53,623	1.33%
2017						
Cyient Ltd. ¹	India	409,477	132,711	436,838	46,206	1.33%

1 Cyient has a 31 March year-end. Data for calculating the result of associate, based on the equity method, is obtained from January through to December. The summarized financial information presented above is based on financial statements for the year ending 31 March 2018 and 31 March 2017.

Cyient is regarded as an associate as TomTom is represented in its Board of Directors. The fair value of the investment in Cyient is €11.7 million (2017: €11.4 million).

ACCOUNTING POLICY

Associates entities over which the group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights, or other evidence of significant influence. Investments in associates are initially recognized at cost and are subsequently accounted for using the equity.

The group's share of its associates' post-acquisition profits or losses is recognized in the income statement, and its share of post-acquisition movements in 'Other comprehensive income' is recognized in 'Other comprehensive income'. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the associate. Unrealized gains on transactions between the group and its associates are eliminated to the extent of the group's interest in the associates. Unrealized losses are also eliminated, unless the transaction provides evidence of an impairment of the asset transferred. Accounting policy of associates has been adjusted where necessary to ensure consistency with the policy adopted by the group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Section 4: Working capital

The notes in this section specify items that form part of group's working capital including disclosure relating to cash and cash equivalents.

19 INVENTORIES

(€ in thousands)	2018	2017
Finished goods	16,022	17,555
Components and sub-assemblies	10,378	14,054
Inventories	26,400	31,609

The amount of inventories recognized as an expense when the inventories are sold and included in cost of sales amounted to €144 million (2017: €216 million). As a result of the write-down of inventories to their net realizable value, the group recognized a cost of €5.6 million (2017: €5.6 million). These costs are included in cost of sales.

ACCOUNTING POLICY

Inventories are stated at the lower of cost and net realizable value. The cost of inventories comprises costs of purchase, assembly and conversion to finished products. The cost of inventories is determined using the first-in, first-out (FIFO) method, net of reserves for obsolescence and any excess stock. Net realizable value represents the estimated selling price less an estimate of the costs of completion and direct selling costs.

20 TRADE RECEIVABLES

(€ in thousands)	2018	2017
Gross accounts receivables	94,352	119,450
Allowance for doubtful receivables	-1,822	-5,196
Trade receivables (net)	92,530	114,254

The group expects to recover all receivables within a year. The carrying amount of trade receivables approximates their fair value. The group does not hold any collateral over these balances.

Trade accounts receivable include amounts denominated in the following major currencies:

(€ in thousands)	2018	2017
EUR	75,236	89,582
GBP	2,387	6,107
USD	12,455	11,656
Other	2,452	6,909
Trade receivables (net)	92,530	114,254

ACCOUNTING POLICY

Trade receivables are initially recognized at fair value, and subsequently measured at amortized cost (if the time value is material), using the effective interest method, less expected credit loss allowances. For details of expected credit losses refer to note 30.

In determining the expected credit loss, the group applies the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance for all trade and unbilled receivables (contract assets). As unbilled receivables share the same risk characteristics as trade receivables for similar types of contracts, the expected loss rates for trade receivables are considered a reasonable approximation of the loss rates for unbilled receivables. The expected credit loss rates are measured by grouping trade and unbilled receivables based on shared credit risk characteristics and days past due. The expected loss allowances are recognized in the income statement within 'Cost of sales'. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against 'Cost of sales' in the income statement.

21 OTHER RECEIVABLES AND PREPAYMENTS

(€ in thousands)	2018	2017 restated
Prepayments	36,920	16,327
CIT, VAT and other taxes	5,851	7,126
Other receivables	12,206	2,943
Total other receivables	54,977	26,396

The carrying amount of the other receivables and prepayments approximates their fair value.

22 OTHER FINANCIAL ASSETS/LIABILITIES

Other financial assets/liabilities include derivative financial instruments carried at fair value through profit or loss.

(€ in thousands)	2018		2017	
	Assets	Liabilities	Assets	Liabilities
Derivatives at fair value through profit or loss	21	-114	0	-104

The notional principal amounts of the outstanding forward foreign exchange and option contracts as at 31 December 2018 were €4.5 million (2017: €3.6 million). All the group's outstanding options and forwards have a contractual maturity of less than one year.

The group does not apply hedge accounting.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

ACCOUNTING POLICY

Derivatives are initially and subsequently measured at fair value. Gains or losses arising from changes in fair value of derivatives are recognized in the income statement.

Transaction costs are expensed in the income statement.

23 CASH AND CASH EQUIVALENTS

(€ in thousands)	2018	2017
Cash and cash equivalents	247,675	120,850
Total cash and cash equivalents	247,675	120,850

Cash and cash equivalents consist of cash held by the group sometimes invested in short-term bank deposits with an original maturity of three months or less. The carrying amount of cash and cash equivalents approximates its fair value. All cash and cash equivalents are available for immediate use by the group.

ACCOUNTING POLICY

Cash and cash equivalents are stated at face value and comprise cash on hand, deposits held on call with banks, and other short-term highly liquid investments that are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value.

24 TRADE PAYABLES

All trade payable balances have a contractual maturity of less than six months and the carrying amount approximates their fair value.

ACCOUNTING POLICY

Accounts payable include trade payables as well as amounts for orders which have been fulfilled and the goods have been received, but for which no invoice has yet been processed. The timing and amount of the obligation relating to these payables are certain.

25 ACCRUALS AND OTHER LIABILITIES

Accruals and other liabilities comprise of the following:

(€ in thousands)	2018	2017 restated
Personnel related accruals	54,535	54,834
Operating expense accruals	22,077	21,047
Taxes and social security	6,845	7,003
Financial liabilities	114	104
Total	83,571	82,988

Section 5: Financing, financial risk management and financial instruments

This section includes notes related to financing items such as equity and borrowings as well as financial risk management and financial instruments. Related items such as earnings per share calculation as well as financial income and expenses, are included in this section.

26 SHAREHOLDER'S EQUITY

	2018		2017	
	No.	(€ in thousands)	No.	(€ in thousands)
Authorized:				
Ordinary shares	600,000,000	120,000	600,000,000	120,000
Preferred shares	300,000,000	60,000	300,000,000	60,000
Total	900,000,000	180,000	900,000,000	180,000
Issued and fully paid:				
Ordinary shares	235,318,516	47,064	235,318,516	47,064
Of which held in Treasury	4,078,002		5,272,350	

In 2017, the company initiated a share buyback program whereby the company repurchased 5,384,450 shares for a total consideration of €49.8 million at a weighted average share price of €9.25 per share. At 31 December 2018, TomTom possessed 4,078,002 shares (2017: 5,272,350) after utilizations of treasury shares to satisfy obligations under the equity-settled share-based compensation plans. The remaining treasury shares are also held for this purpose.

In 2018, 1,194,348 treasury shares were issued to cover the exercise of employee share options and settlement of restricted stock units (2017: 2,432,933 shares and 112,100 treasury shares).

Reserves are freely distributable except for €234 million of legal reserves (2017: €245 million). Note E. Other reserves in the company financial statements provides an overview of the non-distributable reserves.

All shares have a par value of €0.20 per share (2017: €0.20 per share). All issued shares have been fully paid. Further information on the rights, restrictions and other conditions attached to ordinary and preferred shares is provided in the Corporate Governance section in the Annual Report.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The Corporate Governance section provides a detailed description regarding the use of Foundation Continuity TomTom as a protective measure. Management is of the opinion that the call option as described in the Corporate Governance section does not represent a significant value as meant in IAS 1, paragraph 31, due to the fact that the likelihood that the call option will be exercised is remote. In the remote event that the call option is exercised, the preferred shares that are issued temporarily are intended to be canceled within a one year period. The option is therefore not accounted for, nor further disclosed in the annual accounts.

ACCOUNTING POLICY

SHARE CAPITAL

Ordinary shares are classified as share capital.

SHARE PREMIUM

The share premium represents the amount by which the fair value of the consideration received exceeds the nominal value of shares issued. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

TREASURY SHARES

Own equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the group's own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in the share premium on a first-in, first-out basis.

27 EARNINGS PER SHARE

The calculation of basic and diluted earnings per share is based on the following data:

(€ in thousands)	2018	2017 restated
Earnings		
Net result attributed to equity holders	44,857	-193,974
Number of shares		
Weighted average number of ordinary shares for basic earnings per share	230,878	233,722
Effect of dilutive potential ordinary shares		
Share options and restricted shares	2,265	3,114
Weighted average number of ordinary shares for diluted earnings per share	233,143	236,836
Earnings per share (€)		
Basic	0.19	-0.83
Diluted	0.19	-0.83

TomTom also reports an adjusted earnings per share, the definition of which has been changed from 1 January 2018 onwards to better reflect the transition of our business towards a software and service company. Adjusted net result is now calculated as net result attributed to equity holders adjusted for movement of deferred/unbilled revenue, deferred cost of sales, impairments and material restructuring and disposals on a post-tax basis.

The reconciliation of the adjusted net result to the reported net result is presented below:

(€ in thousands)	2018	2017 restated
Net result attributed to equity holders from total operations	44,857	-193,974
Movement of deferred revenue, unbilled revenue and deferred CoS	49,979	24,120
Tax effect on movement of deferred revenue, unbilled revenue and deferred CoS	-11,595	-5,100
Other one-off items ²	0	229,120
Tax effect of other adjustments	0	-11,900
Adjusted net result	83,241	42,266
Adjusted earnings per share (€)¹		
Basic	0.36	0.18
Diluted	0.36	0.18

1 Adjusted earnings per share is not an IFRS performance measure and hence is not comparable across companies.

2 Other one-off items includes an impairment charge of €169 million, restructuring costs of €28 million and disposals of €32 million.

ACCOUNTING POLICY

BASIC EARNINGS PER SHARE

Basic earnings per share is calculated by dividing the profit attributable to equity holders of the company by the weighted average number of ordinary shares outstanding during the year. Treasury shares are deducted from the number of ordinary shares outstanding on a weighted average basis.

DILUTED EARNINGS PER SHARE

Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares arising from share options and other equity-settled share-based plans. When the effect of the options and other equity-settled share-based plans is anti-dilutive, the number is excluded from the calculation of diluted earnings.

For the share options, a calculation is performed to determine the number of shares that could have been acquired at fair value (determined as the average annual market share price of the company's shares), based on the monetary value plus the remaining service cost of the subscription rights attached to outstanding share options. The number of shares calculated as above is compared with the number of shares that would have been issued, assuming the exercise of the share options.

ADJUSTED EARNINGS PER SHARE

Adjusted earnings per share is calculated by dividing the adjusted earnings by the weighted average number of ordinary and diluted shares outstanding during the year.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

28 NON-CONTROLLING INTERESTS

The following table presents the interest held by third parties in the group's consolidated subsidiaries as at 31 December:

Subsidiary	Country	2018	2017
TomTom Africa (Pty) Ltd.	South Africa	0%	24%
TomTom Telematics Solutions Mexico S.A. de C.V.	Mexico	0%	10%

The movements in non-controlling interest is presented below:

(€ in thousands)	2018	2017
Balance as at 1 January	2,308	1,906
Non-controlling interests in the net result of subsidiaries	-97	-424
Change in share of non-controlling interests	-2,013	886
Currency translation differences	-198	-60
Balance as at 31 December	0	2,308

During 2018, TomTom acquired all of the remaining outstanding non-controlling interests within the group by purchasing an additional 24% interest in TomTom Africa (Pty) Ltd and an additional 10% in TomTom Telematics Solutions Mexico S.A. de C.V.

In 2017, TomTom acquired the remaining interest of TomTom Navigation Taiwan Co., Ltd and an additional 10% of TomTom Telematics Solutions Mexico S.A. de C.V.

The net decrease in equity attributable to the parent for the purchase of minority interests was €0.5 million (2017: €1.1 million).

29 BORROWINGS

TomTom has a credit facility agreement (the facility) which is effective up to 31 March 2020. The facility comprises of a revolving credit facility for an amount of €250 million which remained undrawn at the end of 2018 and 2017.

The interest is in line with market conditions and is based on Euribor plus a margin that depends on certain leverage covenants. No interest was paid on borrowings in 2018 (2017: 0.7%).

ACCOUNTING POLICY

Borrowings are recognized initially at fair value, net of transaction costs incurred. Subsequently, amounts are stated at amortized cost with the difference being recognized in the income statement over the period of the borrowings using the effective interest rate method.

30 FINANCIAL RISK MANAGEMENT

FINANCIAL RISK FACTORS

The group's activities result in exposure to a variety of financial risks including credit, foreign currency, liquidity, interest rate and capital risk. Management policies have been established to identify, analyze and monitor these risks, and to set appropriate risk limits and controls. Financial risk management is carried out in accordance with our Corporate Treasury Policy. The written principles and policies are reviewed periodically to reflect changes in market conditions, the activities of the business and laws and regulations affecting the group's business.

CREDIT

Credit risk arises primarily from cash and cash equivalents held at financial institutions and, to a certain extent, from trade receivables and contract assets.

Cash balances are held with counterparties that have a credit risk rating of at least BBB-, as rated by an acknowledged rating agency. Moreover, to avoid significant concentration of exposure to particular financial institutions, we ensure that transactions and businesses are properly spread among different counterparties.

The group's exposure from its customers is managed through establishing proper credit limits and continuous credit risk assessments for each individual customer.

Procedures include aligning credit and trading terms and conditions with an assessment of the individual characteristics and risk profile of each customer. This assessment is made based on past experiences and independent ratings from external rating agencies whenever available.

The group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. Management actively monitors the credit risk related to these customers and takes proactive action to reduce credit limits if required.

The following table summarizes the movement in the expected credit loss allowances for both trade receivables unbilled receivables:

(€ in thousands)	2018	2017
Balance as at 1 January	-5,196	-4,475
Additions to credit loss allowance	-4,634	-4,265
Receivables written off during the year as uncollectible	2,609	2,463
Unused amounts reversed	2,504	1,156
Reclassified to assets held for sale	2,469	0
Currency translation differences	-18	-75
Balance as at 31 December	-2,266	-5,196

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due as presented below:

(€ in thousands)	2018	2017 restated
Gross trade receivables	94,352	119,450
Gross unbilled receivables	22,956	25,150
	117,308	144,600
Of which:		
Not overdue	99,802	122,851
Overdue <3 months	15,826	12,171
3 to 6 months	177	2,597
Over 6 months	1,503	6,981
Gross receivables	117,308	144,600

The provisions recorded in 2018 and 2017 are mainly related to the overdue amounts.

Not overdue represents balances for which payment terms specified in the terms and conditions established with the group's customers have not been exceeded or balances which have not yet been invoiced.

As at 31 December 2018, the total expected credit loss allowance represented approximately 0.3% of group revenue (2017: 0.7%).

ACCOUNTING POLICY

In determining the expected credit loss, the group applies the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance for all trade and unbilled receivables (contract assets). As unbilled receivables share the same risk characteristics as trade receivables for similar types of contracts, the expected loss rates for trade receivables are considered a reasonable approximation of the loss rates for unbilled receivables. The expected credit loss rates are measured by grouping trade and unbilled receivables based on shared credit risk characteristics and days past due. The expected loss allowances are recognized in the income statement within 'Cost of sales'. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against 'Cost of sales' in the income statement.

FOREIGN CURRENCIES

The group operates internationally and conducts business in multiple currencies. Revenue is earned in EUR, GBP, USD and other currencies, and does not necessarily match the cost of sales and other costs which are largely in EUR and USD and to a certain extent in other currencies. Foreign currency exposures on commercial transactions relate mainly to estimated purchases and sales transactions that are denominated in currencies other than reporting currency – EUR (€).

The group manages foreign currency transaction risk through options and forward contracts to cover forecasted net exposures. All such transactions are carried out within the guidelines set by Corporate Treasury Policy, which is reviewed annually by the Audit Committee.

A 2.5% strengthening/weakening of EUR as at 31 December 2018 against the currencies listed below would have increased/(decreased) profit or loss by the amount shown below. This analysis assumes that all other variables remain constant. The analysis was performed on the same basis as in 2017.

(€)	2018		2017	
	Strengthen	Weaken	Strengthen	Weaken
GBP	-418,811	418,811	-229,200	218,020
USD	-389,550	389,550	-750,330	713,730

A 2.5% strengthening/weakening of EUR as at 31 December 2018 against GBP and USD would have increased/decreased equity by €0.8 million (2017: increase/decrease of equity by €0.9 million).

A breakdown of receivables held in foreign currencies is provided in note 20.

LIQUIDITY

The approach to managing liquidity is to ensure that sufficient funds are available to meet financial obligations when they fall due under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the group's reputation. To ensure there is sufficient cash to meet expected operational expenses, including the servicing of financial obligations, actual and future cash flow requirements are regularly monitored, taking into account the maturity profiles of financial assets and liabilities and the rolling forecast of the group's liquidity reserve, which comprises cash and cash equivalents and an undrawn credit facility of €250 million (2017: €250 million).

Under the covenants of the facility, the group is required to meet certain performance indicators with regard to its interest cover (4.0) and leverage ratio (3.0), which are tested twice a year.

Interest cover is defined as the ratio of the last 12 months (LTM) EBITDA to LTM interest expense for the relevant test period. The leverage ratio is defined as the ratio of total consolidated net debt as at the testing date to the consolidated LTM EBITDA in respect of the relevant period ending on that date. In case of a breach of these covenants, the banks are contractually entitled to request early repayment of the outstanding amount.

As at 31 December 2018, the group complied with the loan covenants and, based on the group's plan for 2019, management expects to be able to comply with the loan covenants during 2019.

Any borrowings from the credit facility have a one-month maturity period from the date of draw down. This can be continuously rolled-over up to the end date of the facility agreement at management's discretion.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

INTEREST RATES

Interest rate risk arises primarily from borrowings. Borrowings have a floating interest coupon based on Euribor plus a spread that depends on leverage levels. Interest rate risk is hedged with appropriate hedging instruments whenever deemed necessary in accordance with the Corporate Treasury Policy.

Based on the expectation on the level of borrowings in the coming period and the acceptability of potential exposure, the current policy is not to hedge the interest rate of our borrowings. Accordingly, changes in Euribor may have an impact on the group's results for the coming year should borrowings levels change.

Our intention is to prioritize capital preservation and when possible we invest our surplus cash using approved investment instruments, such as bank deposits and money market fund investments. All transactions and counterparty risk limits are governed by Corporate Treasury Policy.

As the current utilization of the credit facility is zero, the company does not have material exposure to movements in interest rates.

CAPITAL RISK

The group's financing policy aims to maintain a capital structure that enables the group to achieve its strategic objectives and daily operational needs, and to safeguard the group's ability to continue as a going concern.

In order to maintain or adjust the capital structure, the group may issue new shares, adjust its dividend policy, return capital to shareholders or sell assets to reduce debt, taking into account relevant interest cover and leverage covenants of external borrowings as disclosed above.

As at 31 December 2018, the group had a net cash position of €252 million (2017:€121 million). The net cash is the cash and cash equivalents including cash held for sale minus the nominal amount of our outstanding bank borrowings.

For further quantitative disclosures in respect of liquidity, interest rate and capital risks, reference is made to note 23, note 26 and note 29.

31 FINANCIAL INSTRUMENTS

The group holds the following financial instruments for which additional disclosures are provided in the notes as indicated:

(€ in thousands)	Note	2018	2017 restated
Financial assets			
Financial assets at amortized cost			
Trade receivables	20	92,530	114,254
Cash and cash equivalents	23	247,675	120,850
Financial assets at fair value through profit or loss			
Derivatives instruments	22	21	0
Total		340,226	235,104
Financial liabilities			
Financial liabilities at amortized cost			
Trade payables	24	51,076	51,441
Lease liabilities	16	38,730	48,178
Financial liabilities at fair value through profit or loss			
Derivatives instruments	22	114	104
Total		89,920	99,723

Refer to note 30 for disclosure of groups exposure to risks associated with financial instruments.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

ACCOUNTING POLICY

FINANCIAL ASSET

The group classifies its financial assets, at initial recognition, as subsequently measured at amortized cost or at fair value through profit or loss. The classification depends on the purpose for which the financial assets were acquired.

FINANCIAL ASSETS AT AMORTIZED COST

Financial assets measured at amortized cost are financial assets which are held for the objective of collecting contractual cash flows and for which the contractual cash flows are fixed and determinable consisting solely of payment of principal and interest outstanding. They are included in current assets, except for those with maturities greater than 12 months after the balance sheet date, which are classified as non-current assets. Financial assets at amortized cost are initially recognized at fair value and subsequently measured at amortized cost (if the effect of time value is material) using the effective interest method, less any expected credit losses. For further details regarding expected credit losses, refer to note 30. Financial risk management.

FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

Derivatives are categorized at fair value through profit or loss unless they are designated as hedges. Derivatives are recorded as financial assets when the value of the derivative is positive in favour of the company; otherwise the derivative is classified as a financial liability. All derivative financial instruments are classified as current or non-current assets or liabilities based on their maturity dates and are accounted for at trade date. Financial assets are derecognized when the rights to receive cash flows from the investments have expired or have been transferred and the group has substantially transferred all risks and rewards of ownership.

FINANCIAL LIABILITIES AT AMORTIZED COST

Financial liabilities and equity instruments issued by the group are classified according to the substance of the contractual arrangements entered into, and the definitions of a financial liability and an equity instrument. Financial liabilities are initially recognized and measured at fair value and subsequently at amortized cost. An equity instrument is any contract that evidences a residual interest in the assets of the group after deducting all of its liabilities. Equity instruments are recorded at the proceeds received, net of direct issue costs.

FAIR VALUE ESTIMATION

The group classifies fair value measurements using a fair value hierarchy that reflects the significance of the inputs used in making the measurements.

The fair value hierarchy divides the inputs into the following levels:

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2: inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly (for example, derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data.

The fair value of financial assets/liabilities carried at fair value through profit or loss is determined using valuation techniques that maximize the use of observable market data where it is available and which rely as little as possible on entity-specific estimates. In accordance with the fair value hierarchy established by IFRS 13, these types of inputs classify as level 2 inputs.

32 FINANCIAL INCOME AND EXPENSES

Financial (income) and expenses include the following items:

(€ in thousands)	2018	2017 restated
Interest income	-397	-244
Interest expense	1,459	1,944
Interest result	1,062	1,699
Other financial result	-25	-12
Foreign exchange result	-3,530	-3,736
Other financial income	-3,555	-3,748

The interest expense relates mainly to interest expense on lease liabilities and commitment fees for the loan facility (see note 29 Borrowings).

The foreign exchange result (gain) includes results related to hedging contracts and balance sheet item revaluations. Hedging contracts are entered into to protect the group from adverse exchange rate fluctuations that may result from USD and GBP exposures.

ACCOUNTING POLICY

Interest income and expense are recognized using the effective interest method.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Section 6: Other disclosures

This section includes the notes on provisions, commitments and contingent liabilities, remunerations of members of the Management Board and the Supervisory Board, related party transactions and auditor's remuneration.

33 PROVISIONS

(€ in thousands)	2018	2017
Non-current	62,085	43,727
Current	28,990	37,173
Total	91,075	80,900

The movements in each category of provisions are as follows:

(€ in thousands)	Warranty	Claims & litigations	Pensions	Other	Total
Balance as at 31 December 2016	26,273	45,135	11,826	7,582	90,816
Increases in provisions	8,453	2,061	2,058	16,343	28,915
Utilized	-10,462	-2,258	-151	-13,873	-26,744
Released ¹	-4,751	-3,410	-208	-2,733	-11,102
Reclassified	0	264	429	0	693
Currency translation differences	0	-1,678	0	0	-1,678
Balance as at 31 December 2017	19,513	40,114	13,954	7,319	80,900
Increases in provisions	27,645	2,325	996	7,696	38,662
Utilized	-8,220	-897	-406	-7,412	-16,935
Released ¹	-8,742	-947	-1,453	-648	-11,790
Reclassified to held for sale	-330	0	0	-201	-531
Reclassified	0	-191	0	0	-191
Currency translation differences	0	960	0	0	960
Balance as at 31 December 2018	29,866	41,364	13,091	6,754	91,075

1 The releases were made to reflect the latest facts and circumstances and changes in estimates.

ACCOUNTING POLICY

Provisions are recognized when:

- The group has a present obligation as a result of a past event;
- It is probable that the group will be required to settle that obligation; and
- The amount can be reliably estimated.

Provisions are measured at management's best estimate of the expenditure required to settle the obligation at the balance sheet date, and are discounted to present value where the effect is material.

WARRANTY PROVISION

The group generally offers warranties for its products. Provisions for warranty costs are recognized at the date of sale of the relevant products, at management's best estimate of the expenditure required to settle the group's obligation. Warranty costs are recorded within cost of sales.

CLAIMS AND LITIGATION

The group made a provision for potential legal, tax and other risks in various jurisdictions. The legal matters consist mainly of intellectual property infringement issues. In the normal course of business, the group receives claims relating to allegations that it has infringed intellectual property assets.

In such cases, the companies making the claims seek payments that may take the form of licenses and/or damages. While these claims will be resisted, some are likely to be settled by negotiation and others are expected to result in litigation.

The cases and claims against the group often raise difficult and complex factual and legal issues which are subject to many uncertainties and complexities, including but not limited to the facts and circumstances of each particular case and claim, the jurisdiction in which each suit is brought, and the differences in applicable law. In the normal course of business, management consults with legal counsel and certain other experts on matters related to such claims and litigation. The group accrues a liability when it is determined that an adverse outcome is more likely than not, and the amount of the loss can be reasonably estimated.

If the likelihood of an adverse outcome is reasonably possible or an estimate is not determinable, the matter is disclosed, provided it is material. Management is of the opinion that the provision is adequate to resolve these claims.

PENSION PROVISION

Pension provisions relates to the defined benefit pension plan in Germany and Belgium as disclosed in note 7.

OTHER PROVISIONS

Other provisions relates mainly to provisions for expected restructuring expenses. The amount of 'Other provisions' estimated to be settled/utilized within the coming 12 months amounted to €6.7 million (2017: €9.6 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

SIGNIFICANT ESTIMATES

WARRANTY PROVISION

Management estimates the related provision for future warranty claims based on historical warranty claim information, as well as evaluating recent trends that might suggest that past cost information may differ from future claims. From the total warranty provision of €29.9 million (2017: €19.5 million), it is estimated that an amount of €17.5 million (2017: €9.8 million) will be utilized within 12 months while the remaining will be utilized between 1–3 years. The increase in warranty provision in 2018 includes an additional amount of €16.5 million relating to a specific warranty claim. The determination of the amount involves use of judgment and estimates on number of vehicles and the expected repair costs.

CLAIMS AND LITIGATION

The methodology used to determine the amount of the liability requires significant judgments and estimates regarding the costs of settling asserted claims. Due to the fact that there is limited historical data available, the estimated liability cannot be based upon recent settlement experience for similar types of claims.

Based on the best estimate, the portion of the claims and litigation provision expected to be settled in the coming 12 months amounts to approximately €4.7 million (2017: €17.7 million).

34 COMMITMENTS, CONTINGENT ASSETS AND LIABILITIES

The group has a number of long-term financial commitments, which are not shown in the group's balance sheet as at 31 December 2018.

OPERATING LEASES

Following the adoption of IFRS 16 as explained in note 2 operating lease commitments are reflected in the balance of lease liabilities. For further disclosures refer to note 16.

PURCHASE COMMITMENTS

As at 31 December 2018, the group had open purchase commitments with contract manufacturers for certain products and components. Contract manufacturers order the requisite component parts from their suppliers on the basis of forecasts of the number of units required. Manufacturers have commitments on these components. In certain circumstances, the group has a contractual obligation to purchase these components from the manufacturers.

OTHER COMMITMENTS

The group has contracts with third-party suppliers or other business partners that include minimum royalty or revenue share payments over the duration of the contracts that range from 1 to 5 years. The total commitments under these contracts are presented below.

(€ in thousands)	2018	2017
Commitments less than 1 year	57,096	8,702
Commitments between 1–5 years	82,567	50,000
Commitments over 5 years	13,333	0
Total¹	152,996	58,702

1 Other commitments in 2018 include a commitment to purchase services with a total value of €26 million (2017: €50 million) from our associate, Cyient Ltd.

The group has a guarantee facility of €10 million, of which a total amount of €2.5 million has been issued (2017: €10 million and €2.5 million respectively).

The group has also given a guarantee as described in section 479C of the UK Companies Act to TomTom Software Ltd. Accordingly, TomTom Software Ltd. is exempted from the requirements of the Companies Act 2006 relating to audit by virtue of section 479A.

In addition, a German subsidiary, TomTom Germany GmbH & Co. KG., which is included in these consolidated financial statements, applies the exemption as described in section 264b of the German Commercial Code (HGB) with regard to the publication of the annual financial statements and the drawing up of a management report and the notes to the financial statements.

CONTINGENCIES

Please refer to note 33 for disclosures on tax and legal contingencies.

As disclosed in prior year, in 2014, we won an arbitration award in which the tribunal ruled that one of our suppliers must repay royalties paid by TomTom in prior periods. In the prior year this was disclosed as a contingent asset as the outcome was not virtually certain. During the year, the arbitration award was upheld by the courts and a final judgment in this matter resulted in a settlement received by the group of €13 million. This forms part of other business income presented as part of selling, general and administrative expenses in the income statement.

Based on legal advice, there were no other contingencies that management expects to have a material adverse effect on the group's financial position as at 31 December 2018.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

35 REMUNERATIONS OF MEMBERS OF THE MANAGEMENT BOARD AND SUPERVISORY BOARD**THE REMUNERATION POLICY**

The Remuneration Policy for members of the Management Board is drawn up by the Supervisory Board and approved by the General Meeting.

The on-target bonus percentage is set at 80% of the base salary for the CEO and at 64% of the base salary for the other members of the Management Board. The maximum annual incentive achievable is 120% of the annual base salary for the CEO and 96% of the annual base salary for the other members of the Management Board. The actual bonus pay-out depends on challenging financial targets of revenue (minus Consumer revenue) and EBITDA minus CAPEX. These measures are non-GAAP metrics (refer to page 116). For more details refer to the Remuneration report. The total remuneration paid/ payable to or on behalf of the members of the Management Board for the year ended 31 December 2018, amounted to approximately €2.7 million (2017: €2.2 million) and included a bonus of €1.3 million (2017: €0.9 million). In 2018, the bonus achievement was 150% of the on-target bonus percentage (2017: 106%).

In accordance with the Code, the remuneration of Supervisory Board members does not depend on the results of the company. The company does not grant either share options or shares to its Supervisory Board members and the company does not provide loans to them.

OVERVIEW OF SALARIES, PERFORMANCE-RELATED BONUSES AND OTHER EMOLUMENTS OF THE MANAGEMENT BOARD

The remuneration of the Management Board members comprises of the direct remuneration paid or payable in relation to their employment in the year and other remuneration-related expenses that comprise social security contributions and share-based awards. The expenses recognized for share-based awards are determined in accordance with IFRS 2 and do not represent the amounts paid or payable to Management Board members. The expenses for the direct remuneration and other remuneration-related expenses are presented below:

(€)	Short-term benefits			Post-employment benefits	Total direct remuneration	Share-based compensation	Other short-term expenses	Total including Other and Direct remuneration
	Salary	Bonus	Other emoluments ¹					
2018								
Harold Goddijn	474,166	568,999	0	0	1,043,165	535,887	9,770	1,588,822
Taco Titulaer	338,580	325,037	60,645	7,071	731,333	243,248	9,770	984,351
Alain De Taeye	395,138	379,333	25,320	79,028	878,819	305,888	9,770	1,194,477
Total	1,207,884	1,273,369	85,965	86,099	2,653,317	1,085,023	29,310	3,767,650
2017								
Harold Goddijn	462,150	392,273	0	0	854,423	534,263	9,301	1,397,987
Taco Titulaer	330,000	224,083	57,631	8,369	620,083	166,182	9,301	795,566
Alain De Taeye	385,125	261,515	25,320	77,025	748,985	286,613	9,301	1,044,899
Total	1,177,275	877,871	82,951	85,394	2,223,491	987,058	27,903	3,238,452

1 The other emoluments for Taco Titulaer relate to a gross allowance that can be spent on private pension savings as the pension contribution is capped up to a pensionable salary of €103,217. The remaining other emoluments relates to company car and other costs.

The share-based awards scheme is set out in the Management Board Share Option Plan and is most recently amended in the 2014 General Meeting. In May 2018, each of the Management Board members were granted new share options under this plan. The following tables summarizes information about outstanding share options of each member of the Management Board, as well as the movements during the year.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Board member	Year of grant	Outstanding at 1 January 2018	Granted in 2018	Outstanding at 31 December 2018 ¹	Exercise price (€)	Expiry date
Harold Goddijn	2012	113,750	0	113,750	3.51	10/5/2019
	2013	155,000	0	155,000	3.53	8/5/2020
	2014	300,000	0	300,000	5.28	13/5/2021
	2015	210,000	0	210,000	7.83	7/5/2022
	2016	112,500	0	112,500	7.58	10/5/2023
	2017	165,000	0	165,000	9.57	10/5/2024
	2018	0	201,500	201,500	8.13	2/5/2025
Taco Titulaer	2013	50,000	0	50,000	3.53	8/5/2020
	2014	34,600	0	34,600	5.28	13/5/2021
	2015	39,200	0	39,200	7.83	7/5/2022
	2016	48,500	0	48,500	7.58	10/5/2023
	2017	85,000	0	85,000	9.57	10/5/2024
	2018	0	102,800	102,800	8.13	2/5/2025
Alain De Taeye	2012	113,750	0	113,750	3.51	10/5/2019
	2013	155,000	0	155,000	3.36	8/5/2020
	2014	150,000	0	150,000	4.93	13/5/2021
	2015	110,000	0	110,000	7.83	7/5/2022
	2016	56,500	0	56,500	7.58	10/5/2023
	2017	100,000	0	100,000	9.57	10/5/2024
	2018	0	120,000	120,000	8.13	2/5/2025
Total		1,998,800	424,300	2,423,100		

1 The 2016, 2017 and 2018 options will vest three years after the grant date conditional to the Management Board members still being in service. All options outstanding related to years prior to 2016 have vested.

For a description of the share option plans, reference is made to note 8. Share-based compensation.

OVERVIEW OF REMUNERATION OF THE MEMBERS OF THE SUPERVISORY BOARD

(€)	2018	2017
Peter Wakkie	61,450	61,000
Anita Elberse ¹	0	14,679
Ben van der Veer ¹	0	15,833
Bernd Leukert ²	47,000	12,141
Derk Haank ²	13,000	0
Doug Dunn ¹	0	14,679
Jack de Kreij	50,000	49,050
Jacqueline Tammenoms Bakker	51,000	51,000
Michael Rhodin ²	47,649	47,000
Total	270,099	265,382

1 Anita Elberse, Doug Dunn and Ben van der Veer stepped down from the Supervisory Board after the 2017 General Meeting.
2 Derk Haank was appointed as a member of the Supervisory Board for a term of 4 years on 26 September 2018. Michael Rhodin was appointed as a member of the Supervisory Board for a term of four years at the 2017 General Meeting. Bernd Leukert was appointed as a member of the Supervisory Board for a term of four years at an Extraordinary General Meeting held on 28 September 2017.

36 RELATED PARTY TRANSACTIONS

The expenses relating to remuneration of key management personnel are presented in the following table:

(€)	Salary and bonus ¹	Other short-term benefits ²	Post-employment benefits	Share-based compensation	Total remuneration
2018					
Management Board and senior management	3,145,439	238,928	86,099	1,306,078	4,776,544
Supervisory Board	270,099	0	0	0	270,099
Total	3,415,538	238,928	86,099	1,306,078	5,046,643
2017					
Management Board and senior management	2,648,229	200,082	85,394	1,188,857	4,122,562
Supervisory Board	265,382	0	0	0	265,382
Total	2,913,611	200,082	85,394	1,188,857	4,387,944

1 In 2018, the total bonus expense amounted to €1.5 million versus €1.1 million in 2017.

2 The other short-term benefits in 2018 and 2017 relate mainly to social security charges.

Certain key personnel also hold ownership interests in TomTom NV, as disclosed in the Corporate Governance section under 'Notification of substantial shareholdings and short positions'.

In the normal course of business, the group receives map development and support services from its associate Cyient Ltd. Such transactions take place at normal market conditions and the total payments made for these services in 2018 amounted to €18.0 million (2017: €18.7 million). As at 31 December 2018, the outstanding payable due to Cyient Ltd. amounted to €1.7 million (31 December 2017: €1.7 million). Transactions and balances with other associates are not material and hence are not disclosed.

37 AUDITOR'S REMUNERATION

The total remuneration to Ernst & Young Accountants LLP for the statutory audit of 2018 for the group amounted to €520,000 (2017: €560,000). The total service fees paid/payable to the Ernst & Young network amounted to €773,000 (2017: €811,000).

Included in the total remuneration is an amount of €617,000 (2017: €637,000) invoiced by Ernst & Young Accountants LLP, which includes an amount of €97,000 (2017: €77,000) for other statutory audits. The service fees paid to the EY Network included €125,000 (2017: €123,000) relating to statutory audits (2017: additional €45,000 relating to tax services). Details of the audit, audit-related and non-audit fees paid to EY can also be found in the Audit Committee report. Also included is €31,000 for other services relating mainly to services on government grant declarations performed by the EY network.

38 SUBSEQUENT EVENTS

Reference is made to note I in the company financial statements.

COMPANY FINANCIAL STATEMENTS OF TOMTOM NV

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**COMPANY
STATEMENT
OF INCOME
OF TOMTOM NV
FOR THE YEAR ENDED
31 DECEMBER**

The notes on pages 101 to 102 are an integral part of these company financial statements.

(€ in thousands)	Notes	2018	2017 restated
General and administrative expenses	B	6,608	5,848
Operating result		-6,608	-5,848
Interest (expenses)		-3,151	-3,688
Other financial result		393	-765
Result before tax		-9,366	-10,301
Income tax gain		2,358	2,583
Result of subsidiaries after taxation	C	51,865	-186,256
Net result		44,857	-193,974

COMPANY BALANCE SHEET OF TOMTOM NV

AS AT 31 DECEMBER
(BEFORE PROPOSED
APPROPRIATION
OF RESULT)

The notes on pages 101 to 102
are an integral part of these
company financial statements.

(€ in thousands)	Notes	2018	2017 restated
Investments in subsidiaries	C	2,804,801	2,748,843
Total non-current assets		2,804,801	2,748,843
Receivables		34,794	33,208
Cash and cash equivalents		20	107
Total current assets		34,814	33,315
Total assets		2,839,615	2,782,158
Share capital		47,064	47,064
Share premium		1,066,201	1,068,149
Treasury shares		-37,707	-48,790
Other reserves	E	251,799	263,164
Accumulated deficit		-598,105	-416,019
Result for the year		44,857	-193,974
Total shareholders' equity	D	774,109	719,594
Intercompany payable	F	2,063,784	2,061,090
Deferred tax liability	G	0	21
Total non-current liabilities		2,063,784	2,061,111
Other liabilities		1,722	1,453
Total current liabilities		1,722	1,453
Total equity and liabilities		2,839,615	2,782,158

NOTES TO THE COMPANY FINANCIAL STATEMENTS

A. PRESENTATION OF FINANCIAL STATEMENTS AND RECOGNITION AND MEASUREMENT PRINCIPLES

The description of the activities of TomTom NV (the company) and the company structure, as included in the notes to the consolidated financial statements, also applies to the company financial statements.

The company has prepared its company financial statements in accordance with Part 9 of Book 2 of the Dutch Civil Code and, specifically, in accordance with section 362.8 of the Dutch Civil Code. In doing so, it has applied the principles of recognition and measurement as adopted in the consolidated financial statements (IFRS). Investments in subsidiaries are accounted for using the equity method. For more information on the accounting policy applied, and on the notes, please refer to the notes to the consolidated financial statements.

B. GENERAL AND ADMINISTRATIVE EXPENSES

The employees of the company comprise only the members of the Management Board. The General and Administrative expenses comprised mainly of the remuneration of the Management Board and the Supervisory Board and other general expenses such as the auditor's fees. For the remuneration of the Management Board and Supervisory Board, reference is made to note 35 in the consolidated financial statements. The auditor's fee is further disclosed in note 37 of the consolidated financial statements.

C. INVESTMENTS IN SUBSIDIARIES

The movements in 'Investments in subsidiaries' were as follows:

(€ in thousands)	2018	2017 restated
Balance as at 1 January as previously presented	2,748,843	2,978,665
Adoption of new accounting standards ¹	0	-42,814
Balance as at 1 January restated	2,748,843	2,935,851
Result of subsidiaries	51,865	-186,256
Transfer to stock compensation reserve	4,419	8,484
Currency translation differences	-307	-9,044
Other direct equity movements	-19	-192
Balance as at 31 December	2,804,801	2,748,843

1 The opening balance as at 1 January 2017 has been restated to reflect the adoption of new accounting policies adopted by the company. Refer to note 2 of the consolidated financial statements.

A list of subsidiaries and affiliated companies prepared in accordance with the relevant legal requirements (the Dutch Civil Code Book 2, Part 9, sections 379 and 414) is deposited at the office of the Chamber of Commerce in Amsterdam, the Netherlands.

D. SHAREHOLDER'S EQUITY

For the statement of changes in consolidated equity for the year ended 31 December 2018, please refer to Consolidated statement of changes in equity in the consolidated financial statements. Additional information on the shareholders' equity is disclosed in note 26 of the consolidated financial statements.

E. OTHER RESERVES

(€ in thousands)	Legal reserve participation	Cumulative translation adjustment	Total legal reserve	Stock compensation reserve	Total
Balance as at 31 December 2016	197,621	22,668	220,289	14,213	234,502
Currency translation differences	0	-9,044	-9,044	0	-9,044
Transfer from retained earnings	34,006	0	34,006	0	34,006
Stock compensation expenses	0	0	0	8,104	8,104
Acquisition of subsidiary	0	0	0	1,182	1,182
Transfer to retained earnings and share premium	0	0	0	-5,586	-5,586
Balance as at 31 December 2017	231,627	13,624	245,251	17,913	263,164
Currency translation differences	0	-307	-307	0	-307
Transfer to retained earnings	-11,210	0	-11,210	0	-11,210
Stock compensation expenses	0	0	0	5,504	5,504
Transfer to share premium	0	0	0	-5,352	-5,352
Balance as at 31 December 2018	220,417	13,317	233,734	18,065	251,799

LEGAL RESERVES

Legal reserves are the non-distributable reserves that are recorded for an amount equal to the restricted reserves of the company's subsidiaries and the cumulative translation adjustment reserve.

STOCK COMPENSATION RESERVE

The stock compensation reserve represents the cumulative expense of issued stock options that have been granted but not exercised.

F. INTERCOMPANY PAYABLES

'Intercompany payable' comprises of loans provided by subsidiaries. The interest rate on the loan during 2018 is based upon the applicable inter-bank offered rate plus a margin. Given that the current interbank rates are below zero, the margin charged is set at a rate of 0.0% (2017: 0.0%). Although no repayment period has been agreed the loan has a long-term nature.

G. DEFERRED TAXATION

As at 31 December 2018, the company had no deferred tax liability (2017: €21 thousand). The deferred tax liability in the prior period resulted from a temporary difference between the tax treatment and the accounting treatment of capitalized borrowing costs relating to the borrowing facilities. The movement of the deferred tax liability has been credited to the income statement.

NOTES TO THE COMPANY FINANCIAL STATEMENTS CONTINUED

H. OFF-BALANCE SHEET COMMITMENTS

The company has a guarantee facility of €10 million, of which a total amount of €2.5 million has been issued (2017: €10 million and €2.5 million respectively).

The company has also issued several declarations of joint and several liability for various group companies, in compliance with section 403 of Part 9 of Book 2 of the Dutch Civil Code. Besides these declarations, TomTom NV has given a guarantee as described in article 479C of the UK Companies Act for UK subsidiary TomTom Software Ltd.

In addition, a German subsidiary, TomTom Germany GmbH & Co. KG., applies the exemption as described in section 264b of the German Commercial Code (HGB) with regard to the publication of the annual financial statements.

The company forms a fiscal unity for corporate income tax and value added tax (VAT) purposes with several of its Dutch subsidiaries. Each company within the fiscal unity is jointly and severally liable for the fiscal liability of the fiscal unity.

I. SUBSEQUENT EVENTS

On 22 January 2019 it was announced that the company had reached an agreement to sell the Telematics business to Bridgestone Europe NV/SA ("Bridgestone"), a subsidiary of Bridgestone Corporation, for a purchase price of €910 million. Of the purchase price, €750 million is intended to be distributed to shareholders by means of a capital repayment, combined with a share consolidation. This capital repayment will not be subject to Dutch dividend withholding tax.

The transaction is subject to customary closing conditions including the relevant regulatory approvals, consultation with employee representative bodies and the approval of TomTom's shareholders. In addition to this TomTom will request approval for the capital repayment to its shareholders at an Extraordinary General Meeting of Shareholders.

The sale of the Telematics business is expected to close in the second quarter of 2019.

There has been no other subsequent event from 31 December 2018 to the date of issue of these financial statements.

J. PROPOSED APPROPRIATION OF RESULT

The Management Board proposes to add the net result in full to the Accumulated deficit.

Amsterdam, 6 February 2019

The Management Board

HAROLD GODDIJN

TACO TITULAER

ALAIN DE TAEYE

TOMTOM NV
Amsterdam

Amsterdam, 6 February 2019

The Supervisory Board

PETER WAKKIE

JACQUELINE TAMMENOMS BAKKER

JACK DE KREIJ

MICHAEL RHODIN

BERND LEUKERT

DERK HAANK

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OTHER INFORMATION

STATUTORY PROVISION WITH RESPECT TO APPROPRIATION OF RESULTS

According to the company's Articles of Association, the company's result is freely at the disposal of the shareholders, provided that total shareholders' equity exceeds the called-up and paid-up capital of the company, increased by legal and statutory reserves.

FOUNDATION CONTINUITY TOMTOM

For a description of the Foundation Continuity TomTom, refer to the Corporate Governance section in this Annual Report.

AUDITOR'S REPORT

Reference is made to the Independent auditor's report section in this Annual Report.

INDEPENDENT AUDITOR'S REPORT

To: the shareholders and supervisory board of TomTom N.V.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS 2018 INCLUDED IN THE ANNUAL REPORT

OUR OPINION

We have audited the financial statements 2018 of TomTom N.V., based in Amsterdam. The financial statements include the consolidated financial statements and the company financial statements.

IN OUR OPINION:

- The accompanying consolidated financial statements give a true and fair view of the financial position of TomTom N.V. as at 31 December 2018 and of its result and its cash flows for the year 2018 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code
- The accompanying company financial statements give a true and fair view of the financial position of TomTom N.V. as at 31 December 2018 and of its result for the year 2018 in accordance with Part 9 of Book 2 of the Dutch Civil Code

THE CONSOLIDATED FINANCIAL STATEMENTS COMPRISE:

- The consolidated balance sheet as at 31 December 2018
- The following statements for the year 2018: the consolidated statement of income, the consolidated statements of comprehensive income, changes in equity and cash flows
- The notes comprising a summary of the significant accounting policies and other explanatory information

THE COMPANY FINANCIAL STATEMENTS COMPRISE:

- The company balance sheet as at 31 December 2018
- The company statement of income for the year 2018
- The notes comprising a summary of the accounting policies and other explanatory information

BASIS FOR OUR OPINION

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the financial statements" section of our report.

We are independent of TomTom N.V. in accordance with the EU Regulation on specific requirements regarding statutory audit of public-interest entities, the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

MATERIALITY

Materiality	Benchmark used	Additional explanation
€7.2 million (2017: €8.4 million)	1.5% of gross profit (2017: 1.5% of gross profit)	Based on our professional judgment we have considered earnings-based measures, such as profit before tax and gross result, as the appropriate benchmark to determine materiality. We believe the gross profit is a suitable basis, as the gross profit is an important measure of the company's performance. The decrease in materiality is a result of the discontinued operations of TomTom Telematics (hereinafter: Telematics).

We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the supervisory board that misstatements in excess of €360,000, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

SCOPE OF THE GROUP AUDIT

TomTom N.V. is at the head of a group of entities. The financial information of this group is included in the consolidated financial statements of TomTom N.V.

As processes are highly centralized, we have applied a centralized audit approach. We have performed all audit procedures ourselves at group level for the accounts which were of most significance for our audit and are included in the section Key Audit Matters (Revenue and deferred revenues, goodwill and other intangible assets and discontinued operations (Telematics)).

Our audit coverage for total assets, revenues and gross profit can be summarized as follows:

- For total assets our audit procedures achieved a coverage of 99%.
- For revenues and gross profit our audit procedures achieved a coverage of 100%.

By performing the procedures mentioned above we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the consolidated financial statements.

OUR KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the supervisory board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The key audit matters are consistent with prior year except for the discontinued operations Telematics.

INDEPENDENT AUDITOR'S REPORT CONTINUED

Risk	Our audit approach	Key observations
REVENUE RECOGNITION AUTOMOTIVE AND ENTERPRISE SEGMENT (MULTIPLE ELEMENT ARRANGEMENTS AND DEFERRED REVENUES)		
<p>TomTom's Automotive and Enterprise segments include sales contracts that involve multiple-elements for which revenue is recognized based on their stand-alone selling prices and fulfillment of performance obligations. As such revenue recognition is based on estimates and assumptions that are complex and require significant management judgment in the areas of determining the relative stand-alone selling prices of the elements, estimation of contract values and the timing of the revenue recognition.</p> <p>Considering the nature of the business, inherently the aforementioned estimates and assumptions related to revenue recognition could be influenced by management and consequently we identified the risk of management override in relation to revenue recognition.</p> <p>Revenue related disclosures are included in note 5 to the consolidated financial statements.</p>	<p>Our audit procedures included an assessment of the appropriateness of the Company's revenue recognition policies, understanding of the internal control environment, data analytics procedures on revenues and substantive procedures relating to the estimated contract value for relevant contracts, contractual terms and conditions and the appropriate accounting thereof.</p> <p>For a sample of contracts containing multiple-element arrangements, we assessed the allocation of revenue to the separate performance obligations, based on the estimated stand-alone selling prices of the identifiable element and if applicable assessed the estimated contract values.</p> <p>We also assessed the adequacy of the Company's disclosure around revenues as included in note 5.</p>	<p>Management has updated the assumptions and estimates used based on the latest available (historic) data and expectations. We agree with the assumptions and estimates used by management.</p> <p>Based on our procedures performed we did not identify errors that require adjustment of the financial statements including revenue related disclosures.</p>

Risk	Our audit approach	Key observations
IMPAIRMENT OF GOODWILL AND OTHER INTANGIBLE ASSETS		
<p>At 31 December 2018, the total carrying value of goodwill and other intangible assets amounts to €827 million. Goodwill is tested for impairment at least on an annual basis. Other intangible assets are tested for impairment when a triggering event has been identified that indicates the carrying amount may not be recoverable. The valuation of goodwill and other intangible assets is significant to our audit due to the significant of the amount and the fact that the impairment test calculations are based on several key assumptions which are estimated by management, and are by nature judgmental. Key assumptions include the expected future cash flows for the five year forecasting period, the discount rate and perpetual growth rate per cash generating unit.</p> <p>There was no impairment recorded during 2018 relating to goodwill and other intangible assets.</p> <p>Disclosures relating to impairment of goodwill are enclosed in note 13 to the consolidated financial statements.</p>	<p>We involved a valuation expert in evaluating the impairment testing model and assumptions used by management. Specific attention was paid to the consistency of the impairment model and assumptions applied including the forecasted revenue growth. In addition we assessed the adequacy of the disclosures, including key assumptions and that no sensitivity disclosures were required.</p> <p>We also assessed the adequacy of the Company's disclosure around goodwill as included in note 13.</p>	<p>Management has updated the key assumptions and related forecast in the impairment models.</p> <p>The forecasted revenue growth is a significant assumption however it is in line with management's expectations, historic trend and developments in order intake and backlog.</p> <p>Based on our procedures performed we did not identify errors that require adjustment of the financial statements including related disclosure of goodwill impairment.</p>

INDEPENDENT AUDITOR'S REPORT CONTINUED

Risk	Our audit approach	Key observations
DISCONTINUED OPERATIONS TELEMATICS		
In 2018, the Company announced to initiate a strategic review of Telematics. Management assessed at what point in time Telematics should be accounted for as a discontinued operations and as assets held for sale in accordance with IFRS 5. This area involves significant management judgment and complexity with regards to the related accounting.	Our audit procedures included, amongst others, assessing the appropriateness of the Company's accounting policies in relation to the assets held for sale and discontinued operations and the basis for the accounting of discontinued operations and assessment of compliance with the respective accounting policies.	We assessed management's position as per 31 December 2018 and agree with the held for sale and discontinued operations classification, presentation and related disclosures.
Disclosure relating to discontinued operation are included in note 12 to the consolidated financial statements.	We met with management and the audit committee of the supervisory board on a regular basis and read minutes of board meetings to understand the status of the strategic review and following sales process of Telematics.	
	We assessed the Company's accounting of Telematics as discontinued operations in accordance with IFRS 5 including the adequacy of the Company's disclosure as included in note 12.	

REPORT ON OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- We are TomTom
- Management board report
- Supervisory board report
- Other information as required by Part 9 of Book 2 of the Dutch Civil Code
- Supplementary information

Based on the following procedures performed, we conclude that the other information:

- Is consistent with the financial statements and does not contain material misstatements
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements. By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

Management is responsible for the preparation of the other information, including the Management Board report in accordance with Part 9 of Book 2 of the Dutch Civil Code and other information pursuant to Part 9 of Book 2 of the Dutch Civil Code.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

ENGAGEMENT

We were engaged by the supervisory board as auditor of TomTom N.V. on 24 April 2015 as of the audit for the year 2015 and have operated as statutory auditor since that date.

NO PROHIBITED NON-AUDIT SERVICES

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audit of public-interest entities.

DESCRIPTION OF RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS

RESPONSIBILITIES OF MANAGEMENT AND THE SUPERVISORY BOARD FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so. Management should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The supervisory board is responsible for overseeing the company's financial reporting process.

INDEPENDENT AUDITOR'S REPORT CONTINUED

OUR RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objective is to plan and perform the audit assignment in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgment and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included among others:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management
- Concluding on the appropriateness of management's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit. In this respect we also submit an additional report to the audit committee in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the supervisory board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the supervisory board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Eindhoven, 6 February 2019

Ernst & Young Accountants LLP

SIGNED BY: P.J.A. GABRIËLS

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SUPPLEMENTARY INFORMATION

INVESTOR RELATIONS

TomTom is committed to providing a high degree of transparency and consistency in its reporting. We engage and maintain open dialogue with investors and analysts and have an extensive communication programme, which includes the General Meeting, roadshows, investor conferences, presentations, webcasts and in-house meetings. Related events are reported and regularly updated on the Investor Relations website.

TomTom strictly adheres to applicable rules and legislation on fair disclosure. Our goal is to inform investors about the company and its management, strategy, goals and expectations in a transparent, timely and consistent manner.

Contact with (potential) shareholders and analysts will at all times be conducted in compliance with applicable rules and regulations, in particular those concerning market abuse, inside information and equal treatment. For more information, please see Policy on bilateral and other contacts with shareholders on TomTom's corporate website.

Investors and analysts are invited to contact our Investor Relations team with information requests:

- Email: ir@tomtom.com
- Phone: +31 20 757 5194

WEBSITE

The company's Investor Relations website corporate.tomtom.com/investor.cfm contains up-to-date financial information about TomTom. Investors and analysts are encouraged to visit the Investor Relations website regularly for detailed and up-to-date coverage of the share price, shareholder meetings, quarterly and annual results, press releases, presentations, webcasts and investor relations-related events.

In addition, we recommend that investors and analysts visit TomTom's dedicated corporate website, which includes a wealth of information in relation to:

- Corporate Information: <http://corporate.tomtom.com/investor.cfm>.
- Corporate Governance: <http://corporate.tomtom.com/corporate-governance.cfm>.

FINANCIAL CALENDAR 2019

Date	Event
17 April 2019	Publication Q1 2019 results
17 April 2019	General Meeting
17 July 2019	Publication Q2 2019 results
16 October 2019	Publication Q3 2019 results

CLOSED PERIOD

During a closed period prior to the publication of the quarterly results, we do not engage in discussions with analysts, investors and financial journalists or make presentations at investor conferences.

SHAREHOLDER STRUCTURE

An overview of the company's shareholders with a holding (voting rights) of 3% or more of the issued capital can be found in the Corporate Governance section.

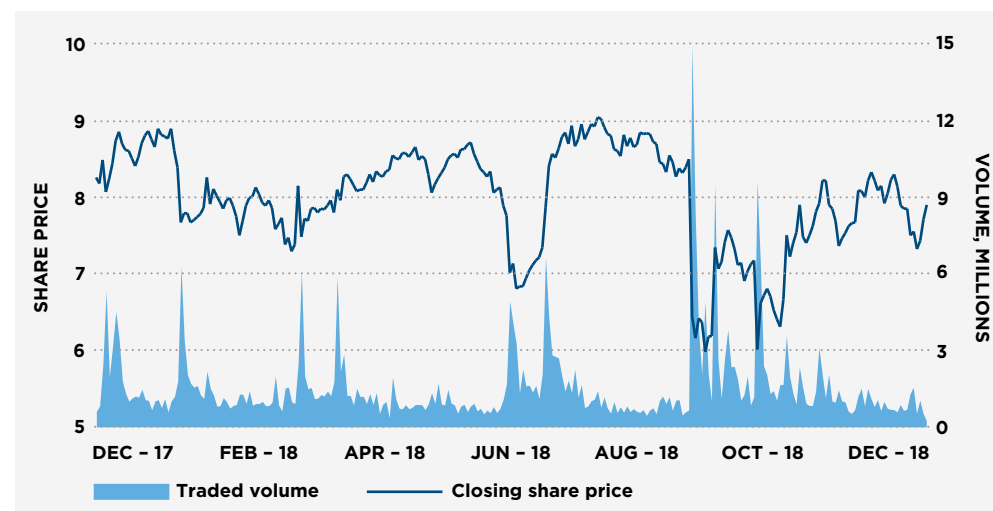
The following table shows the company's ordinary shareholder structure as at 31 December 2018:

Name	# shares	% of total
Founder – Harold Goddijn	26,319,332	11.2%
Founder – Corinne Vigreux	26,202,831	11.1%
Founder – Peter-Frans Pauwels	26,137,832	11.1%
Founder – Pieter Geelen	25,137,831	10.7%
Total founders	103,797,826	44.1%
Free float	127,442,688	54.2%
Treasury shares*	4,078,002	1.7%
Total shares outstanding	235,318,516	100%

* Treasury shares are related to the TomTom share buyback program in 2017.

SHARE PRICE

The graph below shows TomTom's share price development during 2018.



INVESTOR RELATIONS CONTINUED

KEY SHARE DATA

(€, unless stated otherwise)	2018	2017
Share price at the end of the previous year	8.26	8.55
Share price at the end of the year	7.90	8.26
Highest closing share price	9.05	9.86
Lowest closing share price	5.97	7.75
Market capitalization at year end (€ in millions)	1,827	1,943
Average daily volume traded (# in thousands)	1.59	1.46
EPS – fully diluted	0.19	-0.83
Adjusted EPS – fully diluted ¹	0.36	0.18
FCF per share – fully diluted ¹	1.03	0.78
Weighted average number of shares outstanding (# in millions)	230.9	233.7
Weighted average number of shares fully diluted (# in millions)	233.1	236.8

¹ Non-GAAP measures. See page 116 for more information.

LISTING

TomTom NV shares are traded on Euronext Amsterdam in the Netherlands, where the company is included in the Amsterdam Mid-Cap Index (AMX):

- Euronext Amsterdam symbol: TOM2
- ISIN: NL0000387058
- Common Code: 021984272
- Amsterdam Security Code Number: 38705

DIVIDEND POLICY

TomTom dividend policy not to distribute dividends remains unchanged, except for the capital repayment following the divestment of the Telematics business. The company gives priority to increasing technology investments to strengthen its capabilities and competitive position. The company believes that allocating its cash resources to these priorities serves shareholders' interests and the company's objective of long-term value creation.

KEY FIGURES OVERVIEW 2011-2018

KEY FIGURES OVERVIEW 2011-2018¹

(€ in millions, unless stated otherwise)

	2018	2017 restated	2016	2015	2014	2013	2012	2011
Income and expenses								
Revenue	861	903	987	1,007	950	963	1,057	1,273
Gross result	611	570	566	519	523	521	555	640
Operating result ²	56	11	9	1	21	26	70	102
Net result ³	45	-10	12	18	23	20	129	74
Data per share								
Earnings per share (€) – diluted	0.19	-0.83	0.05	0.08	0.10	0.09	0.58	-1.97
Shares outstanding (# in millions)								
Average # basic shares outstanding	231	234	232	228	223	222	222	222
Average # diluted shares outstanding	233	237	235	232	225	223	222	222
Regional revenue split								
Europe	532	552	773	771	719	710	773	937
North America	109	136	167	186	163	178	208	257
Rest of World	45	51	47	49	68	76	76	79
Cash flow								
Cash generated from operations	239	184	158	123	135	188	187	195
Cash flows from operating activities	229	174	144	119	119	260	167	174
Cash flows from investing activities	-84	-130	-120	-154	-106	-91	-51	-73
Cash flows from financing activities	-15	-64	-29	29	-118	-74	-146	-214
Net increase/decrease in cash and cash equivalents	130	-20	-5	-6	-106	95	-30	-112
Balance sheet								
Goodwill	256	256	400	403	382	382	382	382
Intangible assets	654	718	796	811	801	804	821	872
Inventories	35	32	54	49	47	42	44	66
Trade receivables	105	114	132	139	133	115	150	185
Cash and cash equivalents	252	121	143	148	153	258	164	194
Provisions	92	81	91	68	83	80	81	101
Borrowings	0	0	10	49	49	173	247	384
Trade payables	55	51	77	95	88	82	84	117
Total equity and liabilities	1,495	1,399	1,629	1,654	1,591	1,678	1,724	1,799
Net cash/(net debt)	252	121	133	98	103	83	-86	-194
Number of employees (#)								
At end of period (FTE)	5,077	4,768	4,716	4,605	4,116	3,630	3,441	3,677

1 The figures presented below relate to total operations of the group. Periods prior to 2017 have not been restated for the adoption of new accounting standards as detailed in note 2 of the financial statements.

2 Operating result in 2017 excludes the acquisition-related impairment charges of €169 million (2011: €512 million) and restructuring charges of €28.1 million (2011: €14.8 million; 2010: €3.3 million; 2009: €10.3 million).

3 Net result excludes the above mentioned impairment and restructuring charges and the related tax effects.

QUARTERLY STATEMENT OF INCOME 2018

(€ in thousands, unless stated otherwise; quarterly data unaudited)

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2018
Revenue	148,943	187,524	176,330	173,999	686,798
Cost of sales	48,320	56,237	50,275	56,638	211,471
Gross profit	100,623	131,287	126,055	117,361	475,327
Research and development expenses	45,853	52,461	50,637	71,902	220,853
Amortization of technology and databases	23,769	26,105	27,126	31,200	108,200
Marketing expenses	5,934	7,072	7,570	7,439	28,015
Selling, general and administrative expenses	29,848	35,418	30,521	19,568	115,354
Total operating expenses	105,404	121,056	115,854	130,109	472,422
Operating (loss)/profit	-4,781	10,231	10,201	-12,748	2,905
Interest result	-387	1	-272	-404	-1,062
Other financial result	844	805	316	1,590	3,555
Result of associates	163	111	105	603	982
(Loss)/profit before tax	-4,161	11,148	10,350	-10,959	6,380
Income tax (charge)/gain	-1,868	-3,334	-5,815	1,775	-9,242
Net loss/(profit) from continuing operations	-6,029	7,814	4,535	-9,184	-2,862
Net profit/(loss) from discontinued operations	12,416	11,974	12,625	10,605	47,622
Net profit/(loss)	6,387	19,788	17,160	1,423	44,760
Attributable to:					
– Equity holders of the parent	6,399	19,873	17,159	1,423	44,857
– Non-controlling interests	-12	-85	0	0	-97
Net profit/(loss)	6,387	19,788	17,160	1,423	44,760
Margins					
Gross margin (%)	90%	88%	91%	67%	69%
EBIT margin (%)	-3%	5%	6%	-7%	0%
Calculation of adjusted earnings per share (€ in million)					
Net result attributed to equity holders	6.4	19.9	17.2	1.4	44.9
Movement of deferred revenue, unbilled revenue and deferred CoS	21.1	-10.7	11.9	27.6	50.0
Tax effect on movement of deferred revenue, unbilled revenue and deferred CoS	-4.9	2.5	-2.8	-6.4	-11.6
Adjusted net result	22.6	11.7	26.3	22.6	83.2
Basic number of shares (in thousands)	230,086	230,836	231,069	231,203	230,878
Diluted number of shares (in thousands)	232,252	232,897	233,152	233,193	233,143
Earnings per share					
Basic EPS (€)	0.03	0.09	0.07	0.01	0.19
Fully diluted adjusted EPS (€)	0.10	0.05	0.11	0.10	0.36
Earnings per share from continuing operations					
Basic EPS (€)	-0.03	0.03	0.02	-0.04	-0.01

QUARTERLY STATEMENT OF CASH FLOWS 2018

(€ In thousands, quarterly data unaudited)	Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2018
Operating result from continuing operations	-4,781	10,231	10,201	-12,748	2,905
Operating result from discontinued operations	11,667	14,659	13,581	12,703	52,608
Operating result	6,886	24,890	23,782	-45	55,513
Financial (losses)/gains	-253	-1,421	523	1,420	269
Depreciation, amortization and impairment	37,353	38,515	38,654	43,666	158,188
Change in provisions	-4,558	-4,136	1,271	6,268	-1,155
Equity-settled stock compensation expense	1,586	1,358	1,298	1,262	5,504
Change in working capital:					
– Change in inventories	720	4,196	378	2,846	8,140
– Change in receivables and prepayments	3,291	-20,366	-15,077	2,338	-29,814
– Change in current liabilities (excluding provisions) ¹	-9,038	11,604	7,312	32,714	42,592
Cash generated from operations	35,987	54,640	58,141	90,469	239,237
Interest received	110	100	187	32	429
Interest paid	-444	-126	-506	-517	-1,593
Corporate income taxes paid	-3,295	-1,687	-1,407	-2,711	-9,100
Cash flows from operating activities	32,358	52,927	56,415	87,273	228,973
Investments in intangible assets	-18,815	-18,391	-22,149	-4,762	-64,117
Investments in property, plant and equipment	-3,539	-6,196	-5,841	-4,459	-20,035
Acquisition of subsidiaries and other businesses	0	0	0	0	0
Dividend received	75	0	75	109	259
Cash flows from investing activities	-22,279	-24,587	-27,915	-9,112	-83,893
Repayment of borrowings	0	0	0	0	0
Change in utilization of credit facility	0	0	0	0	0
Change in lease liabilities	-2,786	-4,556	-4,754	-4,915	-17,011
Change in non-controlling interest	0	-145	-1,400	0	-1,545
Proceeds on issue of ordinary shares	699	1,981	847	258	3,785
Cash flow on purchase of treasury shares	0	0	0	0	0
Cash flows from financing activities	-2,087	-2,720	-5,307	-4,657	-14,771
Net increase in cash and cash equivalents	7,992	25,620	23,193	73,504	130,309
Cash and cash equivalents at the beginning of period	120,850	128,537	155,292	178,522	120,850
Effect of exchange rate changes on cash balances held	-305	1,135	37	86	953
Cash and cash equivalents at the end of period	128,537	155,292	178,522	252,112	252,112

1 Includes movements in the non-current portion of deferred revenue presented under Non-current liabilities.

DEFINITIONS AND ABBREVIATIONS

Term	Definition
ADAS	Advanced Driver Assistance Systems
AFM	the Netherlands Authority for Financial Markets
AMX	the Amsterdam Mid-Cap Index
API	Application programming interface
App	Application
ASP	Average Selling Price
B2B	Business to Business
Code	the Dutch Corporate Governance Code
Company	TomTom NV
CRM	Customer Relationship Management
CSR	Corporate Social Responsibility
EICC	the Electronic Industry Citizenship Coalition
EPC	Environmental Product Compliance
ERP	Enterprise Resource Planning
ETR	Effective Tax Rate
EV	Electric vehicle
FMS	Fleet Management Service
Foundation	Foundation Continuity TomTom
GDPR	General Data Protection Regulation
GIS	Geographical Information System
GPS	Global Positioning System
Group	TomTom NV together with its subsidiaries
HD	High Definition
IFRS	International Financial Reporting Standards
IoT	Internet of Things

Term	Definition
ISO	International Standardisation Organisation
KPI	Key Performance Indicator
LBS	Location-based Service
LCV	Light Commercial Vehicle
LTM	Last Twelve Months
NDS	Navigation Data Standard
North America	The United States and Canada
NPE	Non-practicing entities
OEM	Original Equipment Manufacturer
OS	Operating System
PDA	Personal Digital Assistant
PND	Portable Navigation Device
POI	Point-of-interest
R&D	Research & Development
RBA	Responsible Business Alliance
SaaS	Software-as-a-Service
SD	Standard Definition
SDK	Software Development Kit
SEMS	Social and Environmental Management System
SG&A	Selling, general and administrative
TPEG	Transport Protocol Experts Group
USP	Unique Selling Point
xFCD	Extended Floating Car Data
YoY	Year on Year

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NON-GAAP MEASURES

The financial information in this report includes measures, which are not defined by generally accepted accounting principles (GAAP) such as IFRS. We believe this information, along with comparable GAAP measurements, gives insight to investors because it provides a basis for evaluating our operational performance. Non-GAAP financial measures should not be considered in isolation from, or as a substitute for, financial information presented in compliance with GAAP. Wherever appropriate and practical, we provide reconciliations to relevant GAAP measures.

Term	Definition
Gross margin	Gross profit divided by revenue.
EBIT	Earnings before interest and taxes (this corresponds to Operating profit/(loss) as reported in the consolidated statement of income).
EBIT (margin)	EBIT divided by revenue.
EBITDA	EBIT plus depreciation, amortization and impairment charges.
EBITDA margin	EBITDA divided by revenue.
Adjusted net result	Net result attributed to equity holders adjusted for is calculated as net result attributed to equity holders adjusted for movement of deferred revenue, unbilled revenue, deferred cost of sales, impairments and material restructuring and disposal costs on a post-tax basis.
Adjusted EPS (AEPS)	Adjusted net result divided by the weighted average number of diluted shares over the period.
Net cash	Cash and cash equivalents including cash classified as held-for-sale (IFRS 5) minus the nominal value of our outstanding bank borrowings.
Free Cash Flow (FCF)	Cash flow from operations less cash flow from investing activities.

IMPORTANT NOTICE

IN THIS ANNUAL REPORT ‘TOMTOM’ ‘THE COMPANY’ AND ‘THE GROUP’ ARE SOMETIMES USED FOR CONVENIENCE IN CONTEXTS WHERE REFERENCE IS MADE TO TOMTOM NV AND/OR ANY OF ITS SUBSIDIARIES IN GENERAL OR WHERE NO USEFUL PURPOSE IS SERVED BY IDENTIFYING THE PARTICULAR COMPANY.

FORWARD-LOOKING STATEMENTS

This document contains certain forward-looking statements with respect to the financial condition, results of operations and business of TomTom and certain of the plans and objectives of TomTom with respect to these items. In particular, the words ‘expect’, ‘anticipate’, ‘estimate’, ‘may’, ‘should’, ‘believe’, ‘outlook’, and similar expressions are intended to identify forward-looking statements. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future.

Actual results may differ materially from those expressed in these forward-looking statements, and you should not place undue reliance on them. For a discussion of factors that could cause future results to differ from such forward-looking statements, see also the Risk management and control of this Annual Report.

THIRD-PARTY MARKET SHARE DATA

Statements regarding market share, including the company’s competitive position, contained in this Annual Report are based on outside sources such as specialized research institutes, industry and dealer panels in combination with management estimates.

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