

Annual  
report &  
accounts  
2019





**Location technology for a safer,  
cleaner, congestion-free world**

**TomTom** 

# Table of contents

## WE ARE TOMTOM

Highlights .....	02
Message from the CEO .....	03

## MANAGEMENT BOARD REPORT

Management Board biographies .....	05
Business model .....	06
Core technologies .....	10
Growth opportunities .....	15
People and culture .....	18
Responsible business .....	21
Privacy and data governance .....	26
Financial review .....	27
Risk management and control .....	31
Corporate governance .....	37
Statements .....	43

## SUPERVISORY BOARD REPORT

Supervisory Board biographies .....	44
Supervisory Board report .....	46
Remuneration report .....	51
Statement .....	59

## FINANCIALS

### CONSOLIDATED FINANCIAL STATEMENTS

Consolidated statement of income .....	61
Consolidated statement of comprehensive income .....	62
Consolidated balance sheet .....	63
Consolidated statement of cash flows .....	64
Consolidated statement of changes in equity .....	65
Notes to the consolidated financial statements .....	66

### COMPANY FINANCIAL STATEMENTS OF TOMTOM NV

Company statement of income .....	98
Company balance sheet .....	99
Notes to the company financial statements .....	100

### OTHER INFORMATION

Other information .....	103
Independent auditor's report .....	104

### SUPPLEMENTARY INFORMATION

Investor relations .....	111
Key figures overview 2012–2019 .....	113
Quarterly statement of income 2019 .....	114
Quarterly statement of cash flows 2019 .....	115
Definitions and abbreviations .....	116
Non-GAAP measures .....	117
Other notices .....	118

## HIGHLIGHTS

# Our Location Technology business continues to grow, with revenue increasing by 14% in 2019

## OPERATIONAL HIGHLIGHTS

Nearly **70%** of our revenue mix is now derived from data, software & services

Over **60%** of our revenue mix is derived from Location Technology

Total R&D cash spend totaled **€347 million** in 2019, representing a **16%** increase year on year (2018: €299 million)

## FINANCIAL HIGHLIGHTS

## Group revenue

## €701m

2018: €687m

## Location Technology revenue

## €426m

2018: €372m

## Gross margin\*

## 74%

2018: 69%

## Free cash flow\*

## €66m

2018: €90m

## Net cash\*

## €437m

2018: €252m

## Automotive backlog\*

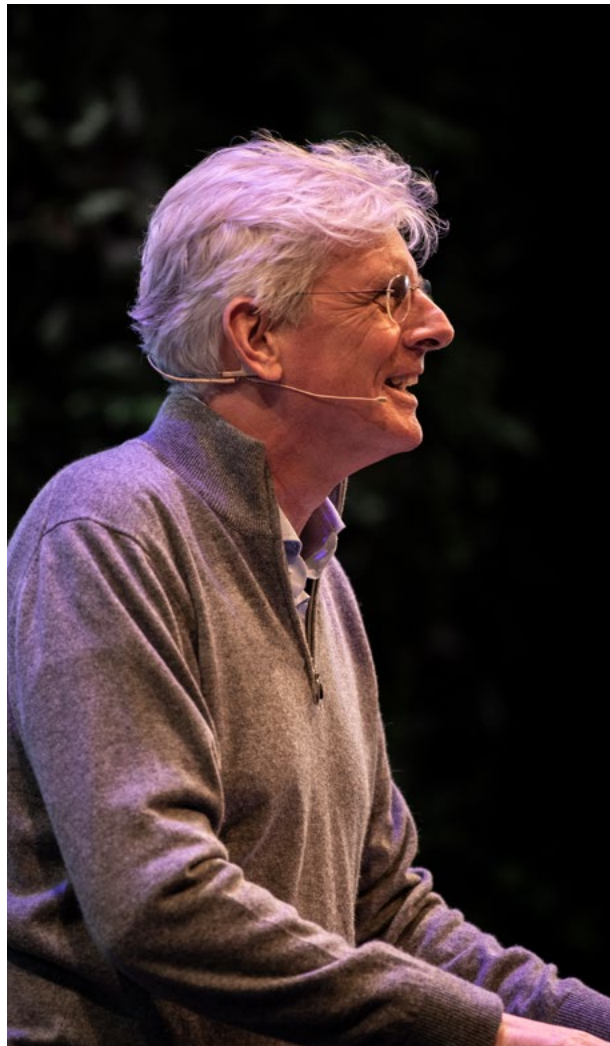
## €1.8bn

The figures presented throughout the report are for continuing operations only.

\*Non-GAAP measures; see page 117 for more information.

MESSAGE FROM THE CEO

# Positioned for continuous growth



**“Mobility will be autonomous, connected and electric. TomTom’s leading location technologies are accelerating this revolution, together with drivers, cities and our partners.”**

**HAROLD GODDIJN**  
CHIEF EXECUTIVE OFFICER, TOMTOM NV

#### DEAR STAKEHOLDERS,

We operate in a fast-moving industry. Heightened competition and rapid technological developments are constant. We are excited by the resulting market opportunities, as we continue creating the most innovative technologies to help shape tomorrow’s mobility. Our position for future growth is substantiated by a more simplified business model following the divestment of our Telematics business, longer-term contracts in both Automotive and Enterprise businesses, as well as a strong balance sheet.

We continue working towards our vision of a safe, connected, autonomous world that is free of congestion and emissions. This isn’t possible without our people. We go to great lengths to make sure we hire the right talent, and ensure we retain them through training and by advancing their careers within our organization.

Maps remain central to everything we do. We have built a leading and efficient mapmaking platform which is continuously improved. Investments in machine learning means that the cost per modification is declining while the quality of our maps is improving rapidly. The efficiency of our mapmaking capabilities is a significant competitive advantage for TomTom.

We continue to progress in our product offerings. In connected driver navigation, we announced multiple new deals and launched a new service, TomTom IQ Maps, which is a machine learning-based mechanism that allows seamless over-the-air map updates to in-dash navigation systems. Our electric vehicle (EV) solutions are helping EVs reach the mainstream sooner, with our APIs serving as tools to reduce range anxiety for EV drivers.

## 2.3bn+

This year we achieved a record of more than 2.3 billion modifications to our map database in a single month

## 1.5m+

Today, more than 1.5 million vehicles are powered by our ADAS Map

## MESSAGE FROM THE CEO CONTINUED

## We are excited about the trends that are shaping our industry and which provide us with significant growth opportunities today, tomorrow and into the future.

Today, more than 1.5 million level 1 and 2 assisted driving systems have integrated our ADAS Map. Our ADAS Map contains information on curvature, gradient, and speed restrictions to further automate the driving experience, allowing for better path planning, improving safety and fuel efficiency.

We won multiple HD Maps deals this year, securing market leadership in the autonomous driving evolution. Our HD Maps for autonomous driving help automated vehicles know where they are on the road, plan their path, and determine what's happening around the corner. To advance our automated driving solutions, we launched our fully autonomous testing vehicle, named Trillian, during the year. Multiple laser scanners, cameras and radars are built into the vehicle. This vehicle will allow us to test and improve our autonomous technologies and services.

Our APIs and location-based technologies are central to the work of developers and we maintain strong relationships with location technology players across the automotive and enterprise industries. Extending our Maps API partnership with Microsoft is a strong proof point of the competitiveness of our portfolio. During the year, we integrated our technology with Microsoft Connected Vehicle Platform and together, we can offer a system that seamlessly connects the in-car experience with the cloud back-end for services, analytics and more.

What differentiates TomTom from the competition is not only our technology platform. We can play the role of consolidator of data as a result of our technology, but also due to the independent nature of our company. The data we collect are used exclusively to improve our products, and not to feed alternative business models. That, in short, makes us a trusted and non-competing partner at the heart of the alternative mapping community. As a result, we have close relationships with top technology companies and most of the top 25 automakers and tier 1 suppliers.

Moreover, with nearly three decades of experience, we know what drivers want and need better than anyone else. User experience is a fundamental part of our DNA and heritage. We interact with end-users directly to test, develop and refine our content and products. This competitive advantage distinguishes TomTom from some of our peers, especially in the automotive context.

We are excited about the trends that are shaping our industry and which provide us with significant growth opportunities today, tomorrow and into the future. I am proud of what we have achieved this year. We love what we do and are better prepared than ever to face the future.

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

Our company  
[tomtom.com/company/  
company-profile/](https://tomtom.com/company/company-profile/)

# Management Board **biographies**



## HAROLD GODDIJN

CHIEF EXECUTIVE OFFICER

Nationality Dutch

Date of first appointment 2001

Term of office 2017–2021

Age 59

### 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 has been 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 2019–2023

Age 48

### Current positions

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

### Former positions

Taco joined TomTom in 2005, holding various senior management positions in Group Control, Treasury and Investor Relations before his appointment as CFO in 2015. Prior to TomTom, Taco spent eight years with KPN, holding various senior 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 62

### 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. The same year, Alain became a member of TomTom's Management Board

### Education

Graduated as engineer-architect, University of Ghent

## BUSINESS MODEL

# Developing location technologies for today's and tomorrow's mobility

TomTom is well positioned to capture value from the megatrends that are shaping our industry.

We are a location technology software company, with clear priorities and a simplified operating model. Our core technologies include a transactional mapmaking platform, maps for all levels of autonomous driving, navigation software, real-time traffic and travel information, and Maps APIs. Through these technologies, we aim to create value for all stakeholders by improving driver navigation, making autonomous driving a reality and further enhancing Maps APIs. Our core Location Technology business, consists of Automotive and Enterprise, while we continue to capitalize on our Consumer business, as it is an important source for consumer insight and cash flow.

We work with a vast array of leading technology and automotive companies. The independent nature of our company allows us to put our customers first, with the data collected solely used to improve our products and services and not to feed alternative business models. We are not competing with our customers.

We are at the center of location information sharing, cooperating in new mobility concepts and developments in smart, safe and sustainable transportation solutions.

#### What we create

As a location technology company, maps are central to all our products and services. We have built a leading mapmaking platform and have transitioned over the years into a software engineering company.

#### How we create it

Our data and information come from multiple sources. Dealing with big data to develop our products and services requires advanced, scalable and state-of-the-art technology.

Our products are created in 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, analyzing, fusing and editing data, developing and distributing our products through various formats.

#### Strategy

Our strategy is to grow our core Location Technology business by providing our customers and users with the most up-to-date and relevant content for their applications. To achieve this, we will further develop our proprietary transactional mapmaking platform and strengthen and expand our product portfolio, allowing us to capture value from the opportunities shaping our industry in the following areas: mapping ecosystem, connected in-vehicle navigation, autonomous driving and Maps APIs.

#### Key products



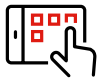
**MAPS:**  
SD, ADAS  
AND HD  
MAPS



**TRAFFIC  
AND TRAVEL  
INFORMATION**



**NAVIGATION**



**MAPS APIs**



**FOR MORE INFORMATION**  
Core technologies



**FOR MORE INFORMATION**  
Growth opportunities



## BUSINESS MODEL CONTINUED

### TARGETED MARKET SEGMENTS

Our activities are organized in two customer-facing units: Location Technology and Consumer.

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

#### Location Technology

Location Technology consists of our Automotive and Enterprise businesses, which provide maps, navigation software and services 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.

#### Key Automotive customers

Our Automotive business unit licenses to automotive customers – both automakers, known as original equipment manufacturers (OEMs), and head-unit vendors, known as Tier 1 suppliers. We license components for embedded navigation systems, mobile applications, advanced driver assistance systems and autonomous driving applications. Customers include BMW, Daimler, Fiat Chrysler, Groupe PSA, Hyundai Kia, Mitsubishi, Nissan, Renault, Subaru, Toyota and Volkswagen Group, among others.

#### Key Enterprise customers

Our Enterprise business unit licenses to some of the world's most innovative companies, such as web and mobile application developers, on-demand service providers, location intelligence platforms, cloud providers, and fleet and logistics management suppliers. We license uncompiled maps, traffic data and Maps APIs for location-enabled applications. Customers include Alteryx, Apple, Microsoft, Pitney Bowes, Uber and Verizon, among others.

#### Consumer

Our Consumer business offers driver navigation, including directions, guidance, information and inspiration for their journeys on the road. We help people make smarter decisions to get where they want to be effortlessly, quickly and safely. Our consumer products are portable navigation devices and mobile applications.

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



## BUSINESS MODEL CONTINUED

## COMPETITIVE ADVANTAGES

**Independent**

We are one of the few independent location technology companies in the market, uniquely positioned to collaborate with our customers and partners.

**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 expertise and offer better products and services related to connected driver navigation, ADAS and HD Maps and Maps APIs.

**Multiple collaborations in complex ecosystems**

Being independent and with our extensive market experience, we have paved the way for significant collaborations with leading technology and automotive companies. 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 and FCA for advanced use cases including ADAS and electric vehicles.

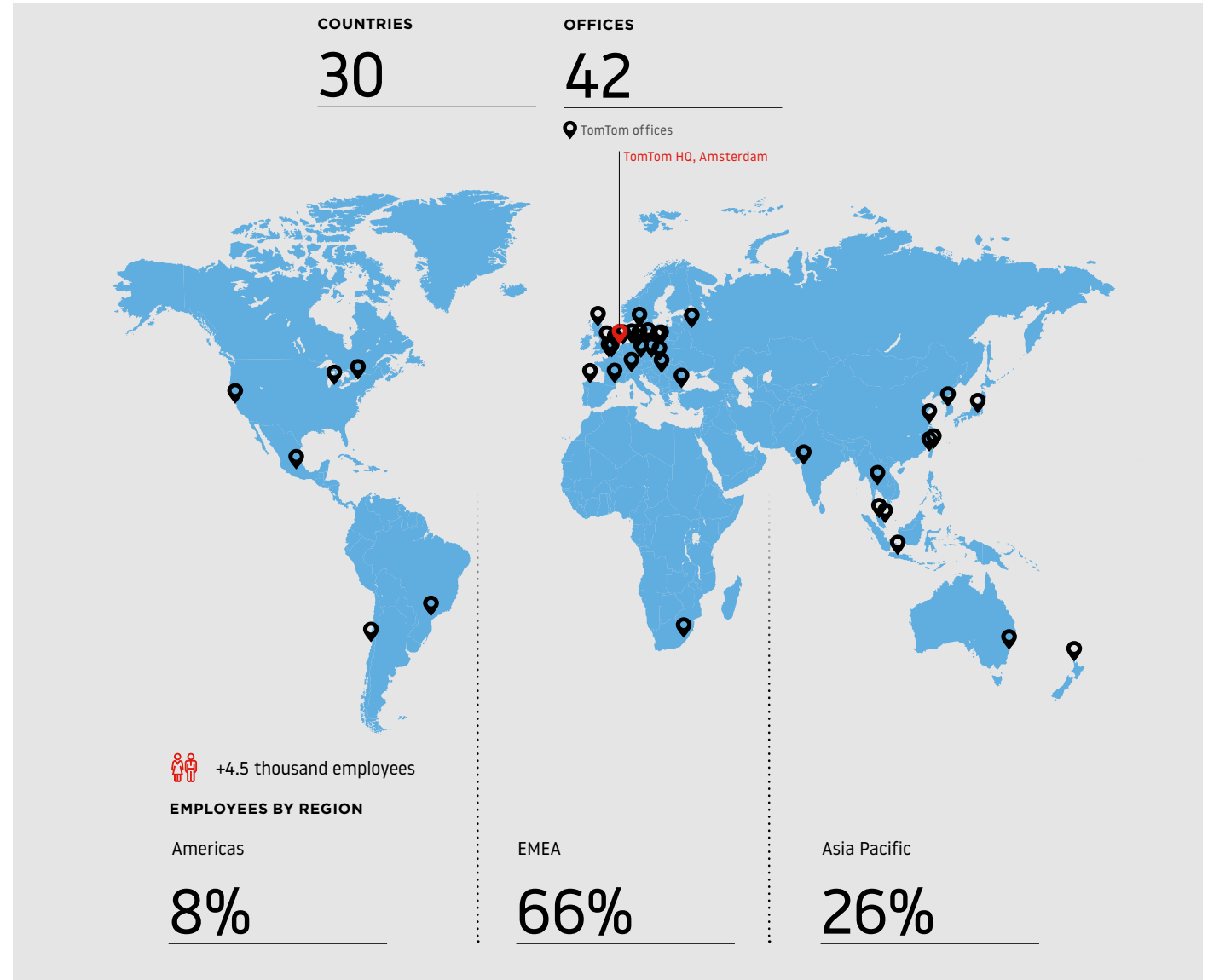
**Strong data governance**

Our long-term success depends on capturing data to continuously improve our products and services. User trust is therefore paramount and to ensure it we adhere to the strictest data protection laws and apply a privacy-by-design approach that ensures that the full life-cycle of our products and services are designed to enable user privacy and control over their personal data.

**Strong technology brand, associated with driver user interface**

We disrupted the industry and created a new market category when we introduced the portable navigation device – one of the most influential products of all time – establishing in the process a powerful technology brand with strong user experience knowledge.

## GLOBAL PRESENCE



## BUSINESS MODEL CONTINUED

### VALUE CREATION

We provide location technologies to enable a safer, clearer, congestion-free world. We aim to create the most relevant and beneficial impact for all stakeholders in everything we do. Our continuous development allowed us to achieve the following main outcomes in 2019:

INPUT	OUTCOMES			
<h3>People and Culture</h3> <p>Over 4,500 diverse, creative employees spread across 42 offices, we help people and the world move into a better future</p>	<p><b>Great place to work and develop</b></p> <ul style="list-style-type: none"> <li>&gt; Voluntary turnover: 9% (2018: 10%)</li> <li>&gt; 15% job offers accepted by internal candidates</li> </ul>	<ul style="list-style-type: none"> <li>&gt; 24,000 hours of training viewed on LinkedIn Learning</li> <li>&gt; Finalist for LinkedIn award Best Culture of Learning and Best Employer Brand</li> </ul>	<p><b>Fostering Equality</b></p> <ul style="list-style-type: none"> <li>&gt; 80 nationalities in the total workforce</li> <li>&gt; 41 nationalities in people managers positions</li> <li>&gt; 29% of total workforce is female</li> </ul>	<ul style="list-style-type: none"> <li>&gt; 21% of all people managers is female</li> <li>&gt; 18% of product engineering roles is taken by females</li> </ul>
<h3>Intellectual</h3> <p>We foster a culture of continuous development where people are supported to create innovative technologies</p>	<p><b>Investing in R&amp;D and Patents</b></p> <ul style="list-style-type: none"> <li>&gt; €347 million R&amp;D investment</li> <li>&gt; Over 2,100 employees in R&amp;D in 36 locations</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Total number of TomTom granted patents &amp; designs at year-end: 1,921 (2018: 1,707)</li> <li>&gt; Number of TomTom patents &amp; designs granted in 2019: 245 (2018: 308)</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Number of pending TomTom patents &amp; designs at year-end: 401 (2018 : 408)</li> <li>&gt; Over 250 data scientists attending Data &amp; AI Summit</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Bootcamps and hackathon resulting in over 200 self-initiated innovation ideas</li> </ul>
<h3>Responsible Business</h3> <p>We aim to align our business practices with our vision</p>	<p><b>Reducing environmental impact and improving road safety with our innovative technologies</b></p> <ul style="list-style-type: none"> <li>&gt; TomTom ADAS map is used in Daimler's Predictive Powertrain Control, which generates up to 5% in fuel reduction per vehicle, and delivers lower CO<sub>2</sub> emissions</li> </ul>	<ul style="list-style-type: none"> <li>&gt; More than 1,5 million Level 1 and Level 2-enabled vehicles powered by TomTom's ADAS maps, helping vehicles be more efficient and safer</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Over 1,300 global media coverage of TomTom's Traffic Index, which was created to help cities combat mobility challenges and influence drivers' behaviors to ease congestion and optimize traffic flow</li> </ul>	<p><b>Creating a better world goes beyond our technology</b></p> <ul style="list-style-type: none"> <li>&gt; Partnerships with TechConnect and Codam Coding College</li> <li>&gt; Launch of TomTom Cares resulting in 500+ volunteering hours in NL</li> </ul>
<h3>Financial Capital</h3> <p>Our equity position helps us to invest in the growth of our business</p>	<p><b>Delivering growth</b></p> <ul style="list-style-type: none"> <li>&gt; Automotive backlog of €1.8 billion</li> <li>&gt; Location Technology revenue growth of 14%</li> </ul>	<ul style="list-style-type: none"> <li>&gt; FCF of €66 million, representing 9% of group revenue</li> </ul>	<p><b>Generating shareholder value</b></p> <ul style="list-style-type: none"> <li>&gt; €751 million capital repayment</li> <li>&gt; Equity FCF yield* of 5.3%</li> </ul>	

\* The definition of Equity FCF yield is FCF/Market Capitalization (31 December 2019).

## CORE TECHNOLOGIES

# Our mission is to create the technologies that help shape tomorrow's mobility

Our core technologies are highly-accurate maps, navigation software, real-time traffic and Maps APIs.

**MAPS**

Building on nearly three decades of mapmaking expertise, we offer an extensive digital map database with global coverage. We provide standard-definition maps for humans and high-definition maps for machines, as well as advanced driver assistance maps.

In our view, we have the best transactional mapmaking platform in the world, increasingly making headways in automation, which is core to developing constantly refreshed maps faster and at lower cost.

To deliver fast, accurate and continuously up-to-date maps, we implement a highly efficient, multi-disciplinary approach that combines best-in-class mapmaking methods with growing community input from hundreds of millions of data sources. Altogether, more than 600 million sources generate around 3.5 billion kilometers of probe data each day, giving us access to one of the largest networks of connected devices on the market.

**Continuously releasable maps**

A primary source of mapmaking is big data. Our state-of-the-art transactional map-production platform is highly capable of handling enormous amounts of data and 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, enhancing efficiency and quality. We continue to invest and further develop the platform to achieve even greater gains.

We continued to push our boundaries during 2019 as we further enhanced our mapmaking platform. Over 2.3 billion modifications were completed in a single month. This is nearly 70% more than our systems were capable of at the start of the year, demonstrating our capacity to capture and process big data faster and at scale. Nearly 90% of these changes are done through automated processes.

The productivity and cost efficiency of our mapmaking platform is crucial to the future of mapmaking, as even more data will be collected and faster processing will be mandatory in order to meet the demands of an ever-expanding connected world, with users demanding online maps that are faster, more accurate and always up to date.

**For real-time maps it's essential that a transactional map production system is in place. This enables changes to be made independently and verified automatically. Having such production systems in TomTom is a huge step towards real-time mapmaking.**

**KEY FIGURES**

- > Our global SD Map covers over 69 million km of roads, over 426 million address points and over 131 million POIs.
- > Our ADAS Map for driver assistance covers nearly 6 million km of roads across all continents.
- > Our HD Map covers over 500 thousand km of roads across Europe, the US, Japan and South Korea.

**FOR MORE INFORMATION**

Maps  
[tomtom.com/explore/location-mapping-technology](https://tomtom.com/explore/location-mapping-technology)

**FOR MORE INFORMATION**

Automotive  
[tomtom.com/industries/automotive](https://tomtom.com/industries/automotive)

**FOR MORE INFORMATION**

Enterprise (for developers)  
[developer.tomtom.com](https://developer.tomtom.com)

## CORE TECHNOLOGIES CONTINUED

**NAVIGATION**

We deliver a global, connected navigation experience. It is flexible and customizable for easy integration into any vehicle that will be driven by a human, a computer, or both. We will continue to invest in providing the best user experience in navigation, allowing for the most accurate routing and expected time of arrival (ETA), with a user interface that is safe, intuitive and easy to use.

NavKit, our navigation engine, is the foundation of many of our products. This engine implements our navigation algorithms and provides APIs that enable the development of fully customized navigation applications. NavKit is fully portable to any high-level operating system.

Our navigation software components support relevant automotive standards such as TPEG, NDS, and ADASIS. Based on the ISO 25010 standard, our navigation software undergoes regular quality checks by TIOBE, the software quality company, and for a number of years, we have led in the top-two ranks of all quality categories.

**Highly accurate map data, combined with real-time information on traffic and weather make it possible to drive with foresight. We use artificial intelligence to help process large amounts of data fast and efficiently.**

**CONNECTED SERVICES**

TomTom is the global leader of traffic and travel information services. Our extensive portfolio of cloud-based services includes 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. This comprehensive product portfolio also includes road data analytics to help improve mobility through products and services that enable better decision-making on the road.

**Traffic information service**

Our industry-leading traffic service, TomTom Traffic, provides drivers with highly accurate measurements of traffic jams and delays for better route calculation, ETA and dynamic safety content such as traffic jam tail warnings.

We use a wide range of sources to generate real-time traffic information. Our growing community of over 600 million connected devices highlights the success of our traffic information service. These data sources generate over 61 billion anonymous location measurements every day. We fuse the community input's source data to provide precise and up-to-date traffic information for highways, major roads and secondary roads on a global scale.

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

**Optimizing traffic data consumption**

In 2019, we launched Flexible Radius, a new TomTom Traffic feature that allows automakers to dynamically change how traffic information is delivered based on a driver's current route.

Rather than delivering traffic data for a large radius, while many drives are shorter than 50 kilometers, the service works by only sending relevant information.

The result is a service that significantly reduces traffic data consumption and the associated costs for automakers, without compromising quality. It is also fully configurable and adaptable to automakers' requirements and local market needs.

**EV charging stations**

This service is dedicated to supporting car manufacturers in electric vehicle (EV) charging. The service integrates into an embedded navigation system to give drivers 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 it with our maps to offer one consistent database.

In 2019, we entered into an agreement with ChargeHub, a leading aggregator and digital platform for EV charging stations, which will allow us to provide our users with access to one of the largest databases of public EV charging stations in North America.

**KEY FIGURES**

- > Real-time traffic information service available in 81 countries.
- > Real-time information availability on over 300 thousand EV charging stations in 53 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.

## CORE TECHNOLOGIES CONTINUED

**AUTONOMOUS DRIVING**

Autonomous driving will completely transform the way people get around. It will increase vehicle safety, comfort and efficiency to levels beyond imagination. Advanced driver assistance systems in certain vehicles is already a reality, with the evolution to fully autonomous vehicles expected in the long term.

**ADAS Map**

Our map for assisted driving includes map attributes such as road gradient, curvature, speed limit and other traffic signs. These attributes fulfill a broad range of applications that increase comfort, safety and fuel efficiency today, and will be used for autonomous driving. Current customer use cases include Predictive Powertrain Control, Highway Pilot, and Adaptive Cruise Control.

**HD Map**

Our map for autonomous driving is built on nearly three decades of expertise in digital mapping. It allows self-driving vehicles to safely and precisely locate themselves on the road, build a detailed model of the surrounding environment together with the vehicle sensors, and plan the path to their destination.

**RoadDNA**

Vehicle sensors alone cannot determine a vehicle's exact location in a specific lane on a given road. Our RoadDNA suite can. It is a set of localization data in the map, tailored to each type of sensor. Our patented technology delivers a highly optimized, 3D lateral and longitudinal view of the roadway. A vehicle can then correlate RoadDNA data with data obtained by its own sensors in real time to position itself on the road with centimeter-level accuracy, 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- and processing-friendly format.

**AutoStream**

Changes on roads happen every day. We developed TomTom AutoStream to deliver the most up-to-date map from the cloud to the vehicle in real-time.

TomTom AutoStream is on demand, with minimal latency and minimal bandwidth. It comes as a full solution, including an on-board software component with smart logic to reduce complexity and shorten development time for OEMs and Tier 1 suppliers.

**LAUNCHED OUR OWN FULLY SELF-DRIVING VEHICLE**

To continuously improve our HD mapping technologies, we launched our very own fully autonomous test vehicle in 2019 named Trillian. The vehicle will allow us to test and improve our autonomous technologies and services. Multiple laser scanners, cameras and radars are built into the vehicle.

**DIFFERENT MAPS FOR DIFFERENT NEEDS****SD MAPS FOR HUMANS**

- > Used in infotainment systems for search, routing and visualization.
- > Features road geometry POIs, addresses, speed limits, speed cameras, vertical clearance.
- > Heights for bridges, sign trusses and pedestrian overpasses.
- > Built using mobile mapping vans, field surveys and probe data.
- > Data accuracy  $\pm 0$  to 20 meters.

**ADAS MAPS FOR MACHINES**

- > Used in advanced driver assistance systems for increased safety, comfort and fuel efficiency.
- > Features road curvature, gradient, lane information, traffic signs and speed limits.
- > Built using vehicle sensor data, mobile mapping vans and field surveys.
- > Data accuracy  $\pm 0$  to 20 meters.

**HD MAPS FOR MACHINES**

- > Used in autonomous driving for precise localization, smoother path planning and improved sensor perception.
- > Features lane marking and composition, road edges and barriers and road and traffic signs.
- > Built using vehicle sensor data and mobile mapping vans.
- > Data accuracy: centimeter-level accuracy.

## CORE TECHNOLOGIES CONTINUED

### TOMTOM ADAS MAP ADVANTAGES

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

- > Leveraging curvature information from the TomTom ADAS Map, a vehicle can anticipate a sharp turn. This avoids harsh braking that would happen when relying only on sensors and ultimately provides a more comfortable ride.
- > 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.
- > 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 – a key cause of accidents.
- > Many cars today rely on a camera to recognize speed limit and traffic sign information, yet cameras can misinterpret traffic signs, detect wrong speed limits from adjacent roads and suffer from poor visibility. Traffic signs and speed limit data from the TomTom ADAS Map improve driver safety and increases vehicle NCAP safety ratings. Furthermore, new EU legislation requires Intelligent Speed Assistance functionality in all new cars from 2022 onwards to include camera and/or digital maps to inform the driver of the legal speed limit.

**As vehicle sensors cannot see around corners, an HD Map is needed to anticipate what's ahead. If an autonomous vehicle doesn't have all the information available, then the self-driving experience will be subpar when the vehicle encounters something unexpected.**



## CORE TECHNOLOGIES CONTINUED

**MAPS APIS**

High-quality, comprehensive location data is key in building the next generation of location-based applications. To address these opportunities, we give customers easy access to a wide array of services through our Maps APIs suite. We also launched the TomTom Map Styler, a new tool that allows developers to customize every element of a map, giving them full control to design their map their way. The TomTom Map Styler further enhances our capabilities for the developer community.

In addition, we offer Maps SDKs that allow customers and developers to easily integrate our Maps APIs into their products and services for web and mobile applications.

**APIs and SDKs for electric mobility**

A main barrier to wide-scale electric vehicle (EV) adoption is range anxiety. Our Maps APIs and SDKs are designed to help EV drivers forget about range-related worries. Any developer can use the kit to build EV route planners, charging station locator apps and reachable range calculators.

**With Maps APIs, our aim is to support developers in building products that use the latest technologies, with heightened consumer data protection.**



**FOR MORE INFORMATION**  
For Developers  
[developer.tomtom.com](https://developer.tomtom.com)

**OUR MAPS APIS SUITE****Map Display API**

Enables static and interactive maps to be displayed in any mobile and/or web application. TomTom real-time mapmaking technology provides users with the most accurate and up-to-date maps.

**Traffic API**

A suite of web services that enables developers to create web and mobile applications around real-time traffic, traffic jams and road network incidents.

**Routing API**

Enables planning a route from A to B, considering both historical and real-time traffic conditions. Applications can provide users with highly accurate travel times and live updates on travel information and route instructions.

**Search API**

Enables geocoding and searching for an address or place. By using fuzzy matching algorithms and auto-completion, Search API provides an excellent query interface for interacting directly with end-users.

**Geofencing API**

Enables developers to define virtual boundaries and check if their tracked assets are inside or outside of them. The Geofencing API is compatible with any type of device and can be combined with the Search API to use geographical features as fences.

**Long Distance EV Routing API**

Offers optimized directions for electrical vehicles with recommended charging stations along the route as well as charging time.

**EV Charging Stations Availability API**

Allows users to find charging stations compatible for their vehicles, with real-time availability, in dozens of countries.

**TOTAL R&D CASH SPEND**

**€347m**

2018: €299m

**Continuous development**

Research & Development (R&D) is essential for our long-term aspirations. In 2019, cash R&D spend totaled €347 million. Over 45% of our employees work in R&D, distributed in 36 R&D locations globally.

We aim to develop a fully automated transactional mapmaking platform through our investments in AI and machine learning, which will enable us to create better content, faster and at a lower cost.

As we work with more customers and partners, and capture more probe data, higher degrees of automation will enable us to deliver continuously releasable maps, which will elevate our products and services across connected navigation, autonomous driving and Maps APIs.



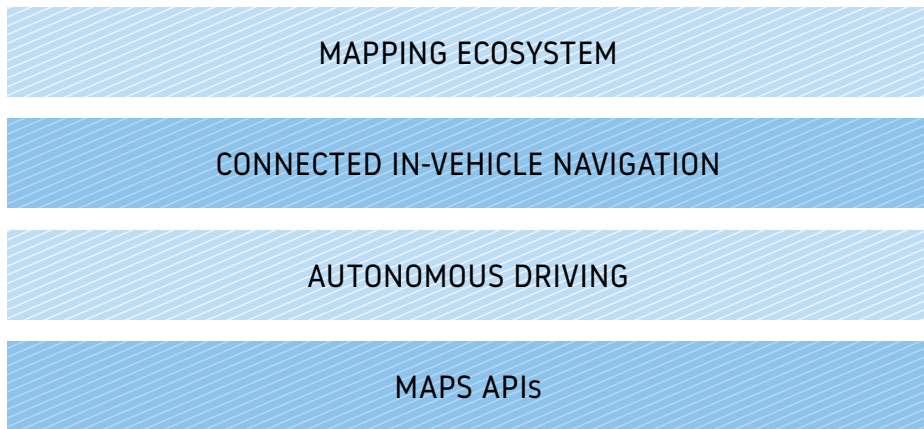
GROWTH OPPORTUNITIES

# We are excited about the mega trends that are shaping our industry and which provide us with significant growth opportunities

The way in which we move within urban areas will change in the future. We will see more automated, connected, electric, shared mobility services and other intermodal methods of transportation. All of which require highly detailed and accurate maps.

Technological innovation is driving a mobility revolution. Major shifts towards a fully automated, connected and electrified mobility landscape are generating great market opportunities. Our strategy for growth is aimed at strengthening and expanding our product portfolio in the following areas: mapping ecosystem, connected in-vehicle navigation, autonomous driving and Maps APIs.

**Growth opportunities**



**Mapping Ecosystem**

As a location technology specialist, maps are central to all our products and services. Over the years, we have built a leading mapmaking platform, constantly increasing its efficiency and capabilities. This is a significant competitive advantage and explains, among other factors, why we are a credible and leading player in the mapping world.

Over the years, we have built very strong relationships with cutting edge technology companies, OEMs and Tier-1 suppliers, allowing us access to a magnitude of data. We then process and aggregate value, developing better products at lower costs for everyone.

This is a very important flywheel effect that we will continue to encourage for years to come, as we are at the center of location information sharing around innovation in new mobility concepts and developments in smart, safe and sustainable transport solutions.

**NEW PARTNERSHIPS – MICROSOFT**

Developing cutting-edge technology has helped us to build strong relationships with leading technology companies. We integrated our navigation technology with Microsoft's connected vehicle platform, and in combination, offer the full stack of the end car-user experience through the cloud, including data analytics possibilities for OEMs. It's a very promising partnership that will develop over the years.

## GROWTH OPPORTUNITIES CONTINUED



### Connected in-vehicle navigation

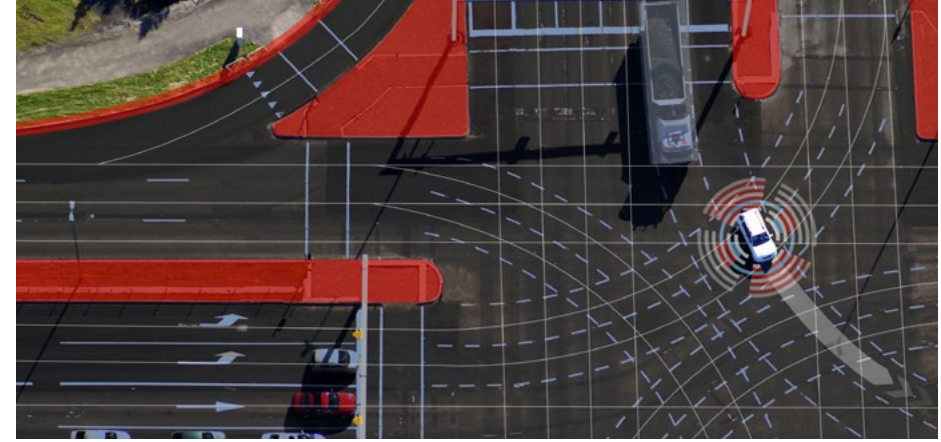
Enabling drivers to expand their connected digital life to their vehicles through in-vehicle navigation and infotainment systems.

More than a quarter of new car sales today are from connected vehicles – with close to 100 million new cars produced every year, 40 million in Europe and North America alone. We see continued growth in connected in-vehicle navigation, as we continue innovating to position ourselves as a trusted full-stack navigation system provider with the best end-user experience across all geographic regions. Our navigation solutions work across brands, models and geographies while meeting stringent demands for costs, speed, quality and simplicity. More and more, drivers demand connected, online in-vehicle services that are on par with smartphones and apps. The market is shifting in response with connectivity enabling us to further capitalize on our software, over-the-air map updates and sensor data as we monetize new services. For example, in 2019 we launched Flexible Radius to deliver TomTom Traffic more efficiently and IQ Maps to deliver seamless over-the-air map updates to embedded, connected navigation systems.

Both services focus on contextual data delivery in order to reduce costs for automakers while increasing the benefits for drivers.

### CONTINUED PROGRESS

In 2019, MG India chose our full stack of navigation components to power the MG Connected Car. The vehicle uses our award-winning navigation and routing software, live traffic services, and is the launch customer for our groundbreaking new service, TomTom IQ Maps. TomTom IQ Maps leverages AI to automatically update the parts of the map that are most relevant to the driver. Enabled by connectivity, the personalized approach ensures the map is always up-to-date without any interaction from the driver or the automaker.



### Autonomous driving

Autonomous driving technology is generating significant interest in new, detailed maps that will help transform the way we think about driving. The journey to fully autonomous driving is developing along a six-level scale, evolving from level 0, where the driver is in full control, to level 5, where the vehicle is in full control. Across all levels, vehicles require maps that are significantly different from the maps used for driver navigation.

As the driving task shifts from the driver to the vehicle, the map must shift to serve a machine instead of a human. ADAS, or advanced driver assistance systems, enables vehicles to help make driving simpler and safer for people through adaptive cruise control or lane guidance systems. As it becomes mainstream, it will play a crucial role in preparing the technology for higher degrees of automation, eventually leading to autonomous vehicles.

OEMs are progressing rapidly in adopting ADAS features, with numerous manufacturers having already launched level 1- and level 2-enabled vehicles. Our ADAS maps already power more than 1.5 million vehicles on the road today, and we expect this number to continuously increase over the next few years.

The medium-term opportunities for TomTom lie in ADAS maps, while HD Maps will drive long-term value. Current market expectation is that by 2025, highly automated vehicles will be ready for the roads, with HD Maps essential for the safety and comfort of autonomous vehicles. To achieve this timeline, automakers are already sourcing HD Map deals.

As we move into a more autonomous 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 4 or 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.

### EARLY POSITION IN HD MAPS MARKET

In 2019, we closed our first deals for HD Maps with multiple global automakers, placing TomTom ahead of the competition, as we pursue further deals.

## GROWTH OPPORTUNITIES CONTINUED



### Maps APIs

Maps APIs are increasingly becoming mainstream for our customers and developers, which are accessing more and more maps, navigation software and other location-based applications in the cloud. As the reliability of cloud computing increases and the costs associated with connectivity decreases, location-as-a-service via APIs transforms from a virtual accessory into an industry standard. Instead of accessing uncompiled maps and having to manage large databases, companies with smaller engineering teams and developers of startups can access bits and pieces of content as needed, gaining speed to launch their applications.

Such rapid change in the location APIs market has created a significant area of growth for us, as many start-ups and businesses are looking for providers. In 2019, we took critical steps to advance the adoption of our Maps APIs, which included not only enhancing our product offering, but also building our own developer community via our Developer Portal, where users can easily access our APIs and SDKs for our entire product line.

A variety of enterprises and start-ups, from mobile and web application development to fleet management, vehicle tracking and logistics already use our Maps APIs and SDKs.

Our strategy to grow market reach also includes offering our location technology in third-party cloud platforms. This approach was initiated through a partnership with Microsoft, which allowed Microsoft and its Azure customers to have direct access to our Maps APIs. We natively integrated our location technologies into the Microsoft Azure cloud platform to allow a more fluid and flexible platform for developers to build and manage their location-based applications.



**As location-enabled services broaden and mature, we expect new opportunities in mobile apps to materialize.**

### NEW APIs LAUNCHED IN 2019

Only 5% of the vehicles sold in 2018 were equipped with electric powertrains. By 2021, the industry aspires to have over 50% of all new models produced with electric powertrains.

We are in a unique position to link navigation technologies with EV services. In 2019, we launched the TomTom Long Distance Electric Vehicle (EV) Routing API and the TomTom EV Charging Stations Availability API to help developers build applications for EV drivers that will lead to a reliable and stress-free driving experience. Our continued innovation within the EV technology space has recently been recognized as we were awarded the TaaS Technology Award 2019.

### NEW APPLICATIONS

Mobility-as-a-service is on the rise, with the percentage of trips by shared cars increasing as location-enabled services become more powerful. We have an opportunity to power the location layer for mobility providers, and expect new opportunities in mobile apps in the future to materialize.



**FOR MORE INFORMATION**  
Automotive  
[tomtom.com/industries/automotive](https://tomtom.com/industries/automotive)



**FOR MORE INFORMATION**  
Enterprise (for developers)  
[developer.tomtom.com](https://developer.tomtom.com)

PEOPLE AND CULTURE

# People are at the heart of TomTom, driving innovation every day

Our people keep the world moving, creating the technologies that help shape tomorrow's mobility.

**CULTURE**

At TomTom, we are about movement – about leading progress as we help people and the world move into a better future.

Innovation is not only in our technology; it's part of who we are, both as individuals and a global collective of more than 4,500 people across 42 offices.

Together we think big, share often, learn fast and support each other's growth and development. We have an agile work culture with an entrepreneurial spirit, where our talents make an impact.

Our people strategy aims to ensure that we attract and retain the people we need. Key to our efforts is fostering the TomTom culture, bringing our values to life and keeping our edge in the highly competitive world of tech-talent acquisition.

OUR VALUES

We care	We build trust	We create
We are confident	We keep it simple	We have fun

**DIVERSITY, INCLUSION AND BELONGING**

We thrive on people's differences, encourage individuality and embrace self-expression. In 2019, we put emphasis on increasing diversity and gender equality, launching a variety of initiatives to approach this challenge. For example:

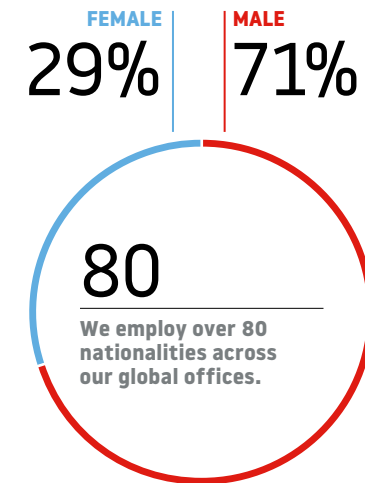
- > **Hiring and representation targets** are now being explored and implemented to foster a more gender balanced organization. For example, in key locations we implemented specific goals for team composition. In our graduate programs, we ensured that equal representation of applicants and hires were met. All our actions support our vision of increasing diversity in our workforce.
- > **Our leadership acceleration program** was launched, together with Cambridge Judge Business School, to accelerate female participants' entry into senior leadership roles. Participants are being trained, mentored and coached to better position themselves as leaders both internally and externally.
- > **We support diversity activities** initiated by our employees like WReach, TomTom women's network aimed to champion employees' growth and empowerment in line with the company values.

> **We are diversifying the local tech talent pool** in the Netherlands through a partnership with TechConnect, supporting a four-year initiative by the Amsterdam Economic Board to bring 50,000 people from unrepresented groups into the workforce.

Last year, we set a 2019 target of 34% female's representation in TomTom. Despite our efforts, we were not able to meet this objective. As our workforce is increasingly composed of highly technical roles, we face the challenge of limited female technical talent.

We have not adjusted our target of 34% female representation. We do however acknowledge the complexities and aim to reach this target in 2024. We will continue to strengthen our efforts to attract and hire more diverse talent into technology and leadership roles. We continue to test new approaches and strongly advocate for equality.

**DIVERSITY**



## PEOPLE AND CULTURE CONTINUED

### INNOVATION

We encourage a continuous learning culture, where our people have the room to develop, implement new ideas and maximize their skills. This increases engagement and creativity throughout the organization.

The company-wide engagement in LinkedIn Learning, totaling nearly 24 thousand hours of training since its introduction in 2018, led TomTom to participate as finalist in LinkedIn's talent awards for 'Best Culture of Learning' and 'Best Employer Brand (< 10 thousand employees)'.  
 Next to a large learning offering, we are always implementing innovation-focused initiatives for our engineers. For example:

- > **TomTalks** is a recurring event where TomTom'ers and thought leaders from various disciplines are invited to share their knowledge and experience with our organization, live-streamed to our offices around the world.
- > **TomTom Lab** is our company-wide innovation program. The program encourages TomTom'ers to come up with their own project ideas – that are currently not on the roadmap but could have a significant impact on our product and services offering – and work on them through unified, cross-office and cross-unit collaboration. TomTom Lab includes a TomTom Data & AI Summit, TomTom Boot-camp (three-day innovation event held twice a year) and the global TomTom annual hackathon, What the Hack (its fifth edition took place in 2019).

### PROJECTS DEVELOPED AND LAUNCHED FROM INNOVATION INITIATIVES OF PREVIOUS YEARS

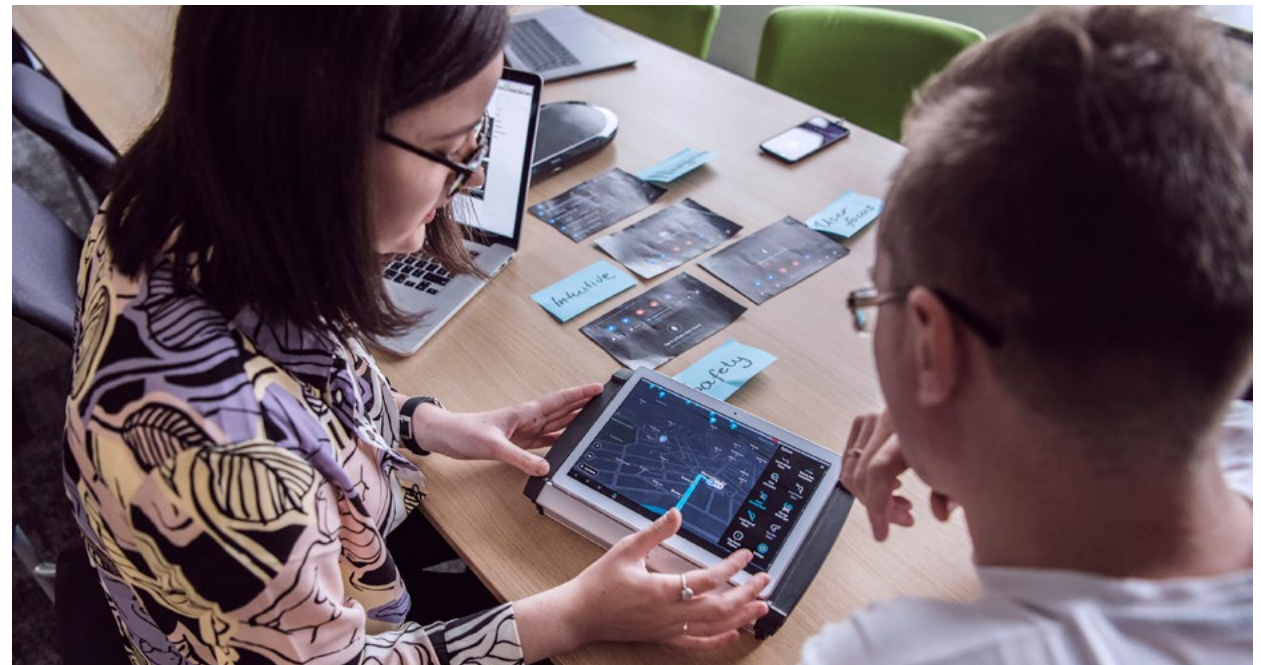
- > TomTom IFTTT Service.
- > Landmark Navigation.
- > Convenient Routes.
- > Multi-stop routing for EV.

### EMPLOYEE EXPERIENCE

We strive to provide personal employee experiences across our locations. To achieve this, we launched initiatives to help us better understand the needs and drivers of our people and created decentralized action plans for greater impact. For example:

- > **Enboarder, our new on-boarding tool**, allows us to build greater excitement and knowledge about the company with individual employees long before their first day. The tool also provides feedback and insights from those joining and leaving that we can use to continuously improve.
- > **We partnered with GLINT** to implement a best-in-the-market digital engagement platform. GLINT delivers real-time insights combined with team-specific action plans that managers can use to directly boost engagement on their teams.

- > **Giving back** to our local communities is important at TomTom. Aligned with our 'we care' value, we gave employees paid time off to volunteer for causes they care about, and partnered with the online platform Deedmob to make it easier for them to find, sign up and take part in local initiatives. Since its launch in September, already over 500 hours were volunteered in the Netherlands. For more, see the Responsible Business section.
- > **Communication** is a key to uniting our global workforce around the company vision and strategy, celebrating success stories and learning from each other.



## PEOPLE AND CULTURE CONTINUED

### LEADERSHIP

The right kind of leadership enables the brightest minds to do their best work, attracts talent, and is the cornerstone of our mission: to create the most innovative technologies to help shape tomorrow's mobility. With our World Class Leadership (WCL) program, launched in 2017, we drive development of our leaders in alignment with our five leadership pillars which is helping to achieve our mission: (i) drive high performance; (ii) dare to lead; (iii) create an autonomous environment; (iv) unleash talent; and (v) connect.

In 2019, we continued working with Cambridge Judge Business School and offered the third Executive Development Program to talented senior leaders, supporting both individual leadership development as well as collaboration between strategically important functions in TomTom.

Building on the success of our 2018 Scaling New Heights leadership development program for high-potential leaders, in 2019 we completed the program again in Pune, India, and introduced it in Lodz, Poland, and Taipei, Taiwan. The six-month program targets key TomTom leadership skills linked to our WCL pillars and location-based development needs.

To date, 56% of our current managers have participated in our WCL program and more than 1,200 participants have attended other leadership development programs, courses or workshops, or participated in leadership mentoring and coaching. In addition, over 3,000 leadership-related courses have been viewed on our LinkedIn Learning since we provided free licenses to all employees.

### COMPETITIVE HIRING

Engineering roles account for 65% of our total hiring numbers. While demand for tech talent begins to outweigh supply worldwide, attracting the right talent in a highly competitive landscape becomes imperative. Our hiring strategy is aimed at attracting the best people in the talent pool. As well as finding innovative ways to build an engineering talent pipeline. For example:

> **TomTom AI Summer School**, in collaboration with the University of Amsterdam and the Vrije Universiteit, held its first edition in 2019 and served as an opportunity to bridge educational institutions and talent with our organization. We selected 22 top international computer science, data science and mathematics students for the one-week, high-intensity program on AI and data science for autonomous driving and mapmaking.

> **Competitive rewards program** offers attractive compensation and benefits packages, and is key for attracting and retaining talent. Our objective is to provide competitive, fair and responsible compensation, as well as establishing initiatives that enable the flexibility needed for our employees to thrive both personally and professionally. In 2019, we restructured and simplified our global compensation structure to offer a more attractive fixed base salary to our workforce.

> **Long-term incentives** for senior management and key individuals are part of our remuneration policy and include phantom shares and stock options. In 2019, we introduced a restricted stock unit (RSU) plan to encourage share ownership among our employees and to align our long-term incentives better with our long-term objectives. The RSU plan is conditional to continued employment during the time of vesting. The selection of employees eligible for these programs is based on a combination of their estimated talent potential, performance rating and salary range.



**FOR MORE INFORMATION**  
Careers  
[tomtom.com/careers](https://tomtom.com/careers)

RESPONSIBLE BUSINESS

# Our ambition is to create a better world for all through our products and services, our business practices and our community involvement

**Our everyday actions to better the environment and advance society are deep-rooted in our company values, ethos and ambition. It's how we have structured our business operations, and not about checking a box or going an extra mile.**

At TomTom, we create technologies that help shape tomorrow's mobility. We believe in keeping the world moving forward. Our vision is a safer, cleaner, congestion-free world. Together with our people, customers and partners we are leading progress.

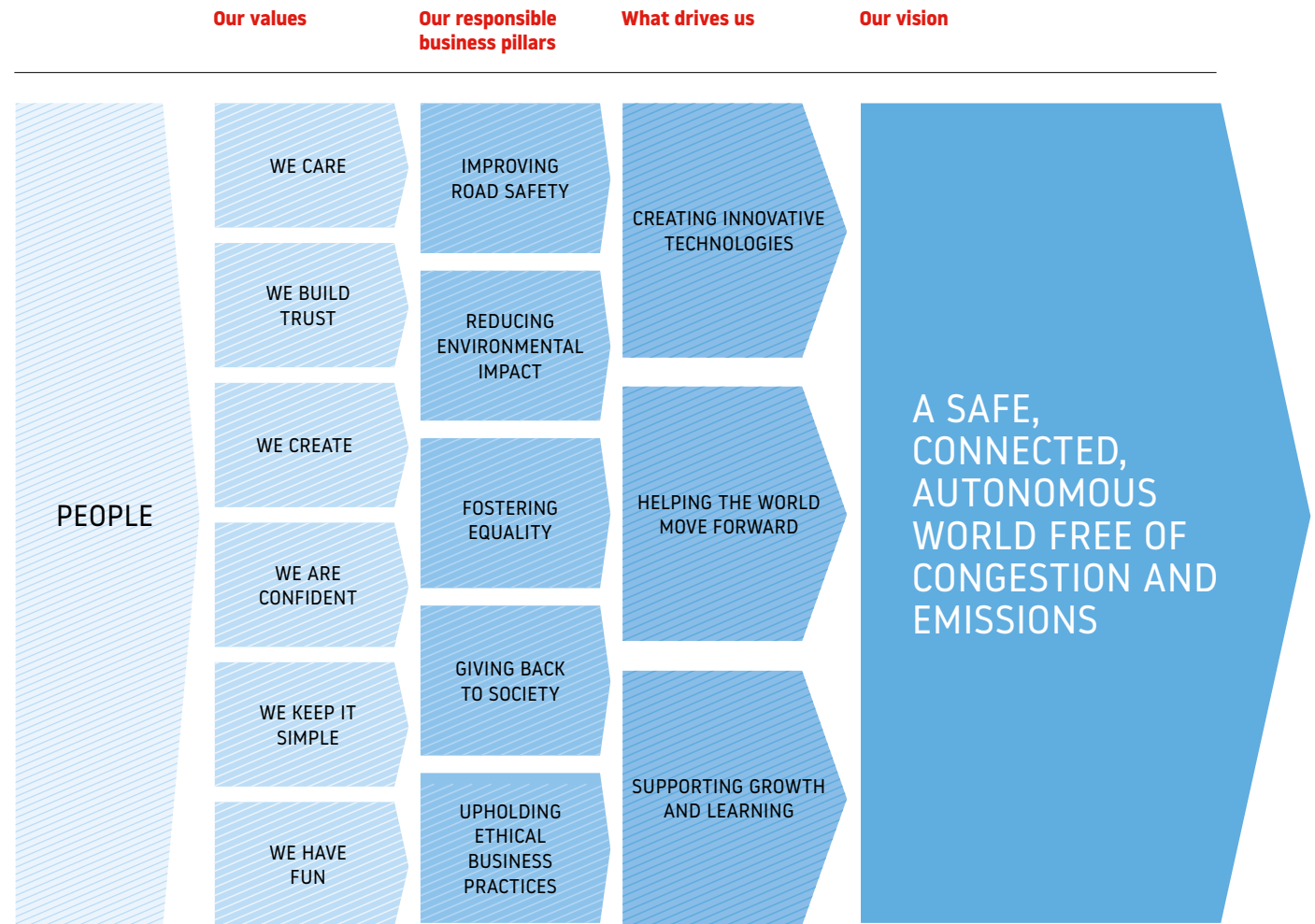
As a global technology company, we contribute to society through our work, but also embrace our capacity to do more by giving back to the communities in which we are present.

In 2019 we have aligned our responsible business program to the UN Sustainable Development Goals (SDGs). We have identified the three SDGs which best align with TomTom's vision, and in 2020 we will articulate our plans to contribute to these goals:

- > Quality education
- > Gender equality
- > Sustainable cities and communities



We are guided by 5 business pillars to operate as a responsible business. The pillars are derived from our values and drive us toward our vision.



## RESPONSIBLE BUSINESS CONTINUED

### OUR FIVE RESPONSIBLE BUSINESS PILLARS

#### 1. IMPROVING ROAD SAFETY

More than 3,000 people die in road accidents every day. Part of TomTom's mission is to change this reality. We create technologies that make driving safer – for both human drivers and self-driving cars.

TomTom Maps are made to help users move more efficiently and safer, delivering key information with speed, relevancy and accuracy. We call this approach contextual delivery, helping make roads safer across all levels of automation.

Already more than 1.5 million Level 1 and Level 2-enabled vehicles – both private and commercial – and from multiple vehicle manufacturers are powered by TomTom's HD Map for automated driving. From helping commercial vehicles to drive more efficiently, to keeping passenger cars safe on the highway, the TomTom HD Map for autonomous driving is paving the way for an autonomous – and thus – safer future. Using TomTom HD Map for driver assistance and safety warnings can help automakers to achieve higher Euro NCAP ratings.

#### TomTom Traffic Index

The Traffic Index is a key initiative in our ongoing mission to create a safer, cleaner, congestion-free world together with our partners and drivers. Created to help cities around the world combat severe mobility challenges, the TomTom Traffic Index portal provides free access to live and historical traffic and travel information.

The TomTom Traffic Index provides drivers, city planners, auto manufacturers and policy makers with statistics and information about congestion levels in 403 cities across 56 countries on six continents.

Now in its 8th year, the Index gives even more historical insight into congestion in urban centers and offers ideas about how traffic can be alleviated. This year we have added in total 13 cities in India, Japan, Egypt, Colombia, Peru, Ukraine, Israel and Iceland for the first time.

#### 2. REDUCING ENVIRONMENTAL IMPACT

TomTom recognizes that climate change is one of the biggest challenges facing the world today. Our products and services inherently contribute to a cleaner world and thereby address climate change issues. We help everyone – people, cities, governments and businesses – make smarter decisions and into a world with less emissions from driving.

Our traffic information service, for instance, provides drivers with highly accurate measurements of traffic jams and delays for better route calculation. Using traffic information can ease traffic congestion and reduce emissions as a result.

During the year, we also launched a new, free service available to cities, road authorities, event organizers and others seeking to reduce congestion, the TomTom Road Event Reporter. It is designed to provide information on roadwork or stoppages to millions of digital map users, improving roadway safety and reducing greenhouse gas emissions, as it reduces the likelihood of congestion as drivers are informed of potential blockages before they occur, giving them time to find an alternative route.

We are enabling the future of mobility, greener and more sustainable, with our products and services. Vehicles using the TomTom ADAS Map have proved to achieve up to 5% fuel savings, as our technology, integrated within the in-vehicle control systems, accurately anticipates the road ahead and allows for the vehicle to pro-actively adapt speed and gear shifting. TomTom's highly-accurate ADAS Map is used in Daimler's Predictive Powertrain Control (PPC), an advanced driver assistance system or smart cruise control,

for commercial vehicles. Trucks use our ADAS Map to automate driving functions on highways and, in Europe, on interurban roads too. The system leads to a fuel reduction of up to 5% per vehicle, which delivers lower CO<sub>2</sub> emissions. The latest PPC technology is available in the new generation of the Mercedes-Benz Actros.

During 2019 we launched the TomTom EV Suite, which is a toolkit that allows developers to build location-based applications for EV drivers. The TomTom Long Distance EV Routing API and the TomTom EV Charging Stations Availability API will allow for new services that address range anxiety, leading to a reliable and stress-free driving experience and, moreover, an increase in the adoption rates of EV vehicles by drivers.

Further, and based on our Environmental Policy, we are continually taking steps to reduce our environmental impact through our responsible internal business practices: our Go Green programs, our waste take back and recycling efforts, and driving a responsible supply chain.

#### Environmental Policy

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

Our Environmental Policy and associated activities are part of our Social and Environmental Management System (SEMS), which helps us in our efforts to continuously improve our responsible business practices and supports our vision. SEMS is compliant with the requirements of the International Organization for Standardization (ISO) 14001:2015 and the Responsible Business Alliance (RBA). Regular audits are performed by both SEMS internal auditors and Group Internal Audit, as a control mechanism. TomTom has been ISO 14001 certified since 2017 and we plan to continue improving, prolonging this ISO certification.

**We are working towards a future where vehicles are electric, shared and autonomous, eliminating congestion and emissions.**



**FOR MORE INFORMATION**  
Responsible business  
[tomtom.com/company/responsible-business](https://tomtom.com/company/responsible-business)



**FOR MORE INFORMATION**  
Traffic index  
[tomtom.com/en\\_gb/trafficindex](https://tomtom.com/en_gb/trafficindex)



## RESPONSIBLE BUSINESS CONTINUED

### Go Green

We aim to create an organization where sustainability is seamlessly integrated into the design, maintenance, and use of our internal facilities throughout the world. To support this, we launched three Go Green programs in 2019 that reduce our environmental impact.

### Global recycling

We aim to introduce recycling in all TomTom offices worldwide, focused on increasing recycled waste and reducing general waste. The program entails separating waste at the source and making sure each waste type is processed properly by our suppliers.

In our Dutch offices, our objective is a zero-waste office environment that aligns with sustainability objectives set by the Dutch Government for 2050. For our Amsterdam offices we set an ambitious goal of reducing our general waste from 70% in 2018 to 10% by 2020. In December 2019, we had already managed to decrease our general waste to 34%.

### Restriction of single-use plastics

We aim to restrict the use of plastics that are used only once before being discarded (either thrown away or recycled). We have started our efforts in this respect globally in 2019. The scope of this initiative includes all restaurants, kitchens, pantries and coffee areas of all our global facilities.

### Management of energy sources, efficiency and consumption

This program aims to shift towards renewable energy sources while reducing our consumption of both non-renewable or renewable resources. For our biggest locations, we delivered our 2019 objectives by having started to monitor and measure the use of water, gas and electricity in our facilities with an aim to reduce consumption through technology, operational best practices, and education and awareness. We also investigated the energy sources of our offices to determine where we can improve green energy sourcing to reduce our carbon footprint.

In addition, we have introduced LEED (Leadership in Energy and Environmental Design) and Breeam (Building Research Establishment Environmental Assessment Methodology) certification into our real estate strategy. We will be moving into a new, LEED-certified building in Pune, India, in 2020 and we are working with Breeam In-Use for one of our Amsterdam based offices in 2020.

### Waste take-back and recycling

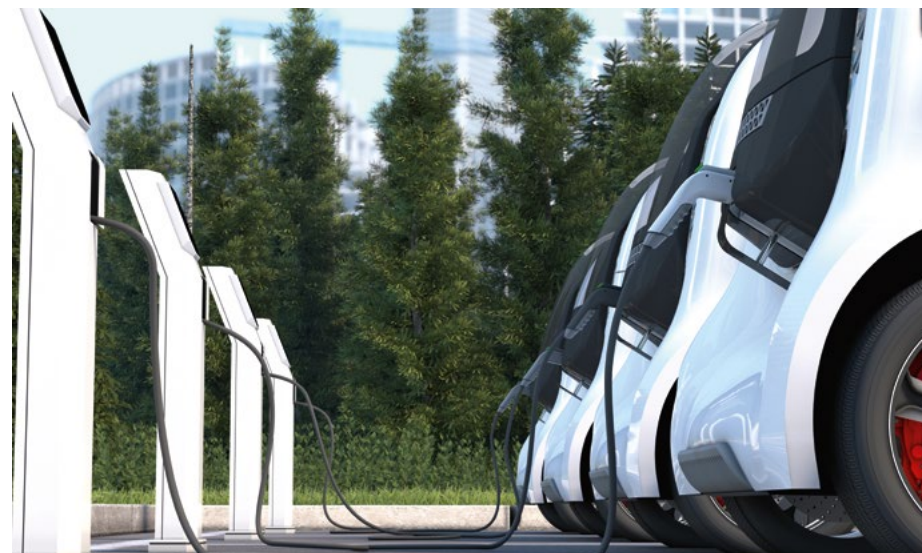
We ensure that we comply with legislation related to restricted substances, takeback programs and recycling in the countries where our products are being sold. In 2019, we financed the collection and recycling of nearly 444 tons (2018: 507 tons) of waste from electrical and electronic equipment (WEEE), 31 tons (2018: 35 tons) of battery waste and 360 tons (2018: 438 tons) of packaging waste. In comparison to 2018, our waste output decreased on average by 15% (2018: 30%). 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 market for personal consumer navigation devices (PNDs), we expect to produce less waste in the coming years, resulting in a smaller environmental footprint.

### Driving a responsible 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 recognize 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 suppliers and is based on the RBA Code of Conduct and covers areas like labor, health and safety, environment and ethics. We ask our major suppliers to sign and comply with this code, to acknowledge our environmental policy and to support our plans and efforts to reduce the environmental footprint of our business activities and improve social, environmental and ethical practices.

In 2019, 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.



## RESPONSIBLE BUSINESS CONTINUED

### 3. FOSTERING EQUALITY

We strive to create a diverse, open and inclusive culture where unique personalities thrive on each other's differences. We are steadfast in our efforts to close the company's gender gap, stimulate personal growth, and foster one cohesive TomTom family.

### 4. GIVING BACK TO SOCIETY

We know that our impact on creating a better world goes beyond our technologies and we take this responsibility seriously. Giving back is about bettering humanity. We leverage our position as a leading location technology company to make an impact in two main areas: tech education and women in tech. Through our efforts, we aim to foster a new, gender-balanced generation equipped with in-demand skills.

#### Partnership with TechConnect

Together with other Amsterdam based organizations, we have entered a partnership with TechConnect, a project initiated by the Amsterdam Economic Board aimed at increasing the local tech talent pool by 50,000 people from underrepresented groups in the next four years.

#### Girlsday with VHTO

To inspire and encourage young women to explore STEM, TomTom promoted and hosted Girlsday for the sixth time in a row in Amsterdam and Ghent, in partnership with Dutch non-profit VHTO.

#### Partnership with Codam Coding College

Codam is a coding school in Amsterdam, started in 2019 by TomTom Co-founder Corinne Vigreux. Codam offers people opportunities regardless of their education, background or financial situation in order to help them reach their full potential – as well as to help meet the major shortage of IT professionals in Europe. Our partnership with Codam creates opportunities for its students to leverage shared knowledge, expertise, technology and/or resources in support of shared goals and commitments with TomTom employees.

#### Employee initiatives

Our employees organized and sponsored many locally driven initiatives across the globe to give back to their communities. We motivate our employees to take the initiative to give back to society resulting in great local volunteer programs around the world.

### TO THE HEART – GHENT

One of the longest lasting giving back initiative is "To The Heart", an employee driven independent charity organization registered in Belgium. This organization identifies activities which not only bring fun to the work floor, but also enables financial sponsoring of good cause projects. To The Heart aims at small grass root projects focused on education and equality, with disadvantaged children as its main target. It is the wider TomTom community which passionately participates and makes sure a handful of exciting projects across the globe can be sponsored. Since its start in 1998 over €250,000 was collected by To The Heart.

### RAINBOW HOMES – INDIA

More than 600+ volunteering hours have been spent by our employees in India to educate young girls who were formerly on the streets through the Rainbow Homes program of the Rainbow Foundation India. This foundation aims at creating a local movement for caring of disadvantaged children through, among others, the provision of sheltering and education.

### TomTom Cares

We launched TomTom Cares in September 2019, a global program that enables our 4,500 employees worldwide to do eight hours of paid voluntary activities annually during working hours for a good cause of their choice. This program was first piloted successfully in the Netherlands. Already 500+ volunteering hours were contributed by our employees.

### 5. ETHICAL BUSINESS PRACTICES

#### Data privacy

We are a data-driven company that separates itself from the competition through strict data privacy practices. We use anonymous data, which means de-identified data, by removing identifiable elements, purely to improve our products. We are not interested in where people have been, are, or plan to go – we care about helping them move safely, freely, efficiently while protecting their personal data privacy. To enforce our beliefs, we provide a no-ad guarantee with our products. The data we collect are not used to feed alternative business models.



#### FOR MORE INFORMATION

People and culture



#### FOR MORE INFORMATION

Privacy and data governance

RESPONSIBLE BUSINESS CONTINUED

**Code of Conduct – policies and procedures**

We have integrated the RBA standards – a set of social, environmental and ethical industry standards – into our way of working through our internal Code of Conduct, underlying policies and procedures, and through an awareness program. Our Code of Conduct describes our 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. Our Code of Conduct training and 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 instill 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, security and confidential information and our Open Ears Procedure. Our business principles and corporate policies and procedures are an integral and mandatory part of our global induction program for all employees.

Our internal Code of Conduct outlines our commitments to human rights by applying labor principles in everything we do. 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.

In our effort to improve our practices continuously, also part of our SEMS, we will further develop and articulate our policies, risk management processes and KPIs in relation with matters like our environmental impact, human rights and anti-corruption and bribery.

Our employees and external stakeholders are provided the opportunity to (anonymously) speak up about any (potential) misconduct, without the fear of retaliation. During 2019, we received six reports through our Open Ears Procedure. The reports related to claims of unsafe working environment, breaches of internal procedures, harassment, discrimination and bullying. All reports were duly investigated and of the six claims, two were found to be substantiated.

**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 are organized to keep internal stakeholders aware of relevant tax legislation and to ensure compliance herewith. Our approach to tax is formulated and published on our corporate governance website.



# Protecting people’s privacy is built into our products, services and business model

Our business model, policies and data processing activities reflect our beliefs that privacy is about clarity, control and care.

We’ve always made it a priority to give everyone the right to personal privacy when using our technologies. To this end, we follow a privacy-by-design approach that ensures that the full life-cycle of our products and services is designed to enable user privacy and control over their personal data. We consider data privacy and the proper dealing of data from and about the users of our products, right from the start of design and throughout the entire engineering and operations process.

We use big data to drive continued innovation and product improvements, processing billions of anonymous (‘de-identified’) global data points every day. People using products and services that contain our technology are a significant contributor to this data. We do not believe in using any of it for advertising purposes. And as an independent company, we are steadfast in our commitments to privacy, innovation and using data for good, helping shape tomorrow’s mobility.

We apply the EU General Data Protection Regulation (GDPR) on a global scale. The GDPR is considered to be the most extensive privacy regulation in the world. It supports us in offering a high level of protection to our users worldwide by only allowing us to use their data when strict regulations are met.

### TOMTOM PRIVACY PRINCIPLES

**Clarity**

We always keep users fully informed. We make sure they understand what data we use, why we use it, how long we use it and who can use it.

**Control**

We enable people to remain in control of their data. We consider personal data to belong to the individual. We only use it for stated and agreed purposes. At any time, people can opt-out or opt-in of using our technologies.

**Care**

We protect people’s personal data. When it is in our hands, we take every measure we can to ensure it’s protected and doesn’t fall into the wrong hands.



**FOR MORE INFORMATION**

How we use your data  
[tomtom.com/en\\_gb/privacy](https://tomtom.com/en_gb/privacy)

## FINANCIAL REVIEW

# Continued growth in Location Technology revenue and increase in gross margin resulted in **free cash flow of €66 million**

## KEY FIGURES OVERVIEW

(€ in millions, unless stated otherwise)	2019	2018	YoY Change
Location Technology	426.0	372.3	14%
Consumer	274.8	314.5	-13%
<b>Revenue</b>	<b>700.8</b>	<b>686.8</b>	<b>2%</b>
<b>Gross profit</b>	<b>515.2</b>	<b>475.3</b>	<b>8%</b>
Gross margin (%) <sup>1</sup>	74%	69%	
<b>EBITDA<sup>1</sup></b>	<b>61.0</b>	<b>142.0</b>	<b>-57%</b>
EBITDA margin (%) <sup>1</sup>	9%	21%	
<b>Net Result</b>	<b>632.9</b>	<b>44.8</b>	
Adjusted EPS – fully diluted (€) <sup>1,2</sup>	0.20	0.32	
<b>Free cash flow (FCF)<sup>1</sup></b>	<b>65.8</b>	<b>89.6</b>	<b>-27%</b>
Free cash flow as a % of revenue	9%	13%	

1. This is a non-GAAP measure and is further explained on page 117.

2. A reconciliation of adjusted net result and adjusted EPS to our income statement is provided in note 26 of the consolidated financial statements.

## REVENUE

Group revenue from continuing operations in 2019 was €701 million, which is 2% higher compared with €687 million in 2018. Location Technology reported significant year on year revenue growth of 14%, driven by 26% revenue growth in Enterprise and 8% growth in Automotive. Consumer performed better than expected, with a year on year decline of 13% compared with 23% last year, as the PND market continues its expected decline.

From a regional perspective, 72% of 2019 revenue was generated in Europe (2018: 78%), 19% in North America (2018: 16%) and 9% in the rest of the world (2018: 7%).

## GROSS PROFIT

The gross margin for the year increased substantially to 74% compared with 69% last year, mainly reflecting an increasing proportion of high margin Location Technology revenue in our product mix. As a result of higher revenue at a higher gross margin, the gross profit for the year was €515 million, 8% higher compared with 2018.

## OPERATING EXPENSES

Total operating expenses for 2019 were €746 million compared with €472 million in 2018. The higher operating expenses are mainly driven by higher amortization and research and development (R&D) expenses. Furthermore, in 2018 we recorded a one-time gain of €22 million from the settlement of litigation.

Total R&D cash spend during the year, including capital expenditures and capitalized contract costs, amounted to €347 million compared with €299 million last year, mainly reflecting increased investments in our map content and technology and our navigation software to support our growing Location Technology business. R&D operating expenses increased by €102 million (2019: €323 million; 2018: €221 million), as a lower proportion of our investments have been capitalized.

Marketing expenses were roughly flat year on year, while selling, general and administrative (SG&A) expenses increased to €133 million in 2019 from €115 million in 2018, explained by the €22 million one-off gain from litigation in 2018. The underlying SG&A showed a marked year on year decline resulting from a smaller Consumer organization.

Total depreciation and amortization expenses were €292 million in 2019 compared with €139 million from continuing operations in 2018. This increase is mainly due to the change in the estimated remaining useful life of our map database, which resulted in an increased amortization expense. Amortization of technology and databases increased by €153 million year on year.

Given the higher operating expenses, 2019 EBITDA decreased year on year and amounted to €61 million (2018: €142 million).

## FINANCIAL REVIEW CONTINUED

### NET RESULT FROM CONTINUING OPERATIONS

The 2019 net result from continuing operations was a loss of €193 million. The net result adjusted for deferred revenue, unbilled revenue, acquisition related amortization on a post-tax basis was €34 million compared with €74 million in 2018. The adjusted EPS for the year was €0.20 (2018: €0.32).

### NET RESULT FROM DISCONTINUED OPERATIONS

On 1 April 2019 we completed the sale of our Telematics business to Bridgestone. Telematics is presented as discontinued operations in the financial statements for all periods presented. The 2019 net result of discontinued operations including the gain from the sale was €826 million. For more details on discontinued operations, see note 12 (Discontinued operations and assets held for sale) in the consolidated financial statements.

### NET RESULT FROM TOTAL OPERATIONS

The total net result for the year was a profit of €633 million (2018: profit of €45 million).

### BALANCE SHEET

Total assets decreased by €186 million, from €1.5 billion at the start of the year to €1.3 billion in December 2019, driven by a €255 million decrease in other intangible assets due to accelerated amortization partially offset by an increase in cash (including fixed-term deposits). The increase in cash balance mainly reflects the cash inflow from the Telematics divestment, minus the subsequent return of capital to shareholders.

Deferred revenue increased over the year from €281 million to €369 million driven by payments received from Automotive customers which are required to be deferred.

### CASH FLOWS

Total cash flows from operating activities in 2019 was €94 million, a decrease of €135 million compared with €229 million in 2018. The year on year trend is impacted by the sale of Telematics and lower capitalization of R&D.

Total cash flow from investing activities in 2019 was an inflow of €627 million compared with an outflow of €84 million in 2018. The inflow includes the net cash received from the sale of Telematics of €873 million, offset by investments made in fixed term deposits. Excluding these, the cash flow used in investing activities decreased due to a lower proportion of capitalized R&D expenditures this year.

Free cash flow from continuing operations amounted to €66 million, which represents 9% of group revenue.

### CASH, LIQUIDITY AND DEBT FINANCING

The cash flow from financing activities for the year was an outflow of €759 million (2018: outflow of €15 million) which included a return of capital to shareholders of €751 million following the divestment of Telematics. In 2019, 1.6 million options (2018: 0.8 million options) were exercised resulting in a €7 million cash inflow for the year (2018: €4 million).

At year-end 2019, TomTom had zero utilization of its available credit facility of €75 million and reported a net cash position of €437 million (2018: €252 million).

### OUTLOOK 2020

	Outlook 2020	2019
Group revenue	€650m – €675m	€701m
Of which Location Technology	€450m – €475m	€426m
FCF <sup>1</sup> as % of group revenue	Mid to high single digit	9%

1. Free cash flow (FCF) is a non-GAAP measure and is further explained on page 117.

- > We reiterate our mid-term location technology revenue guidance, to grow to around €500 million by 2021, which represents a CAGR of around 10% for the period between 2018 and 2021.
- > We will continue to invest to improve our competitive position and capture market opportunities. We forecast for 2020 a limited increase in our cash spend compared with 2019.
- > We expect FCF to be a mid to high single digit percentage of group revenue in 2020, with a double digit FCF as a % of group revenue as a mid-term target.
- > The total number of employees in 2020 is expected to be comparable with 2019.

# 2019 operational performance highlights of our business units

## NEW AUTOMOTIVE DEALS

- > Automotive backlog of €1.8 billion
- > Secured market leadership in HD mapping with deals with top 10 car manufacturers
- > Driver navigation and ADAS:
  - > **Alfa Romeo** chose our SD and ADAS maps, connected navigation and services for its newest vehicles Giulia and Stelvio MY20, plus our Maps APIs for its smartphone app.
  - > **Daimler Trucks** adopted our ADAS Map in its predictive powertrain control system to automate driving functions in its trucks on highways and inter-urban roads.
  - > **Fiat Chrysler Automobiles** choose TomTom as its global supplier for maps, navigation, traffic and other live services for the new IVI system of the following brands: Abanth, Alfa Romeo, Chrysler, Dodge, Fiat, Jeep, Lancia and Dram trucks.
  - > **MG Motor** selected our full stack of navigation components for its MG Hector.
  - > **Nissan** selected our maps, traffic, online search and EV service for its Nissan LEAF.
  - > **Subaru** selected our global maps, navigation software and user interface for its next generation IVI platform for the 2020 Subaru Outback and Legacy U.S. vehicle models.
  - > **Volkswagen Group** extended our global deal to provide traffic service to its car brands, including Volkswagen, Audi, Porsche, Skoda, Lamborghini and Bentley.

## MAPS APIs

- > Navigation technology is now integrated in the **Microsoft** Connected Vehicle Platform.
- > Launched new Maps APIs:
  - > Long Distance EV Routing API.
  - > EV Charging Stations Availability API.
  - > Geofencing API.
  - > Location history.
- > Launched the TomTom Map Styler, a new tool that allows developers to customize every element of a map.
- > Enhanced Maps SDK for website applications.

## NEW COLLABORATIONS

- > Together with **Elektrobit**, we released an industry-first HD map horizon for autonomous driving, thus enhancing driver safety and comfort by enabling vehicles to build a highly accurate virtual picture of the road ahead.
- > With **Hitachi Automotive Systems**, we are developing a proof of concept service to deliver real-time updates on road hazards for both driver navigation and advanced driver assistance systems.
- > Several collaborations were also announced with **ChargeHub**, **DENSO**, **Hella Aglaia**, **Moovit** and **Sumitomo Electric**.



# 2019 financial performance

## highlights of our business units

### Location Technology

- > Location Technology generated revenue of €426 million in 2019, a 14% increase year on year.
- > Automotive revenue was €266 million in 2019, 8% higher compared with €245 million last year.
- > Automotive operational revenue (revenue corrected for deferred and unbilled revenue movement), increased by 20% to €381 million in 2019.
- > The growth in revenue reflects higher volumes from existing contracts.
- > The deferred revenue position of Automotive increased to €278 million at the end of 2019 from €172 million at the end of 2018.
- > Enterprise revenue for the year was €160 million, 26% higher compared with 2018 due to an extension of a partnership.
- > EBITDA declined year on year due to a shift from CAPEX to OPEX and higher investment related to our mapmaking technology and content and our navigation software to support this growing business.

(€ in millions, unless stated otherwise)	2019	2018	YoY Change
Automotive	265.7	245.0	8%
Enterprise	160.3	127.3	26%
<b>Total revenue</b>	<b>426.0</b>	<b>372.3</b>	<b>14%</b>
<b>EBITDA<sup>1</sup></b>	<b>-3.4</b>	<b>87.2</b>	
EBITDA margin (%)	-1%	23%	
<b>Operating result (EBIT)<sup>1</sup></b>	<b>-293.6</b>	<b>-46.0</b>	
EBIT margin (%)	-69%	-12%	

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

### Consumer

- > Consumer generated revenue of €275 million in 2019, a 13% decrease year on year. This decline was lower than we anticipated as the result of higher replacement sales due to the GPS week number rollover (WNRO) issue in April 2019 impacting older generation devices.
- > Although the PND business continued to decline due to consumer preference, it's still a cash generative business and provides valuable consumer insight and location data.
- > EBITDA showed a modest year on year increase due to lower OPEX.

(€ in millions, unless stated otherwise)	2019	2018	YoY Change
Consumer products	238.8	271.0	-12%
Automotive hardware	36.0	43.5	-17%
<b>Total revenue</b>	<b>274.8</b>	<b>314.5</b>	<b>-13%</b>
<b>EBITDA<sup>1</sup></b>	<b>72.1</b>	<b>70.0</b>	
EBITDA margin (%)	26%	22%	
<b>Operating result (EBIT)<sup>1</sup></b>	<b>70.3</b>	<b>63.4</b>	
EBIT margin (%)	26%	20%	

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

 **FOR MORE INFORMATION**  
Business units  
[tomtom.com/company/business](https://tomtom.com/company/business)

 **FOR MORE INFORMATION**  
Press releases  
[tomtom.com/company/press-release](https://tomtom.com/company/press-release)



# Comprehensive risk management and internal control systems are in place to help us achieve our business objectives

The main risks faced by TomTom and our approach to risk management, among other things, are described in this section.

## APPROACH TO RISK MANAGEMENT

TomTom's risk management is designed to provide reasonable assurance that our strategic and operational objectives are met, that legal requirements are complied with, and that the integrity and quality of TomTom's financial reporting and related disclosures is safeguarded. Our risk management is directed towards the following categories: Strategic, Operational, Legal & Compliance and Financial. The main risks are further described below.

Risk management forms an integral part of how TomTom is being governed and managed. TomTom follows a top-down approach whereby the Management Board oversees, identifies and manages risks that could affect the TomTom's strategy and business objectives. When taking decisions, management considers its risk appetite and seeks to manage risks consistently with the risk appetite. The identified risks are expanded and cascaded to specific business units.

A single owner is assigned responsibility for each risk, which helps to ensure clear accountability for mitigating actions.

Every year, we update the risk considerations contained in our strategy, which are then monitored over the year, reviewing the trends and mitigating actions in relation to each risk. TomTom's strategy (including associated risks) forms the basis of our annual budgets.

Our risk management approach enables a controlled framework for managing material risks while considering the entrepreneurial spirit and behavior within the organization.

## INTERNAL CONTROL FRAMEWORK

The objective of our internal control framework is to maintain integrated management control of the company's operations in order to ensure the integrity of the financial reporting, as well as compliance with laws and regulations. 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. Our 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 in place.
- > Comparison reports with analysis on actuals, budgets and forecasts.
- > 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.
- > Ensure the Code of Conduct is accessible to all staff via the intranet, which includes whistleblowing facilities.

Reviews of the internal risk management and control systems were discussed quarterly with the Audit Committee and Supervisory Board and no major failings had been addressed. The Management Board concluded the systems continue to provide reasonable assurance that the financial statements do not contain material misstatements and that there were no material changes to the control framework required to be implemented.

# Risk overview

The Internal Control department further strengthened the control framework by centralizing all Governance Risk and Compliance tools and documents and improving reports and insights to the business on our control environment.

### RISK APPETITE AND IMPACT

Our willingness to assume risks and uncertainties (the risk appetite) differs 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 Risk Overview table highlights the appetite and the potential impact on the group's strategic, operational and financial objectives if one or more of the main risks and uncertainties were to materialize. The likelihood of a risk occurring 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.

### GROUP RISK PROFILE

The following table is an overview of the risks that we believe are the 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 the forward-looking statements. There may be risks not yet known to us or which are currently not deemed to be material.

Category	Description	Appetite	Impact	Likelihood
<b>Strategic risks</b> Page 33	Failure to grow our Automotive business	M	H	M
	Reputation damage	L	M	M
	Failure to improve our mapmaking process	L	M	L
<b>Operational risks</b> Page 34	Inability to attract, develop and retain talent	L	M	M
	Unavailability of online services	L	H	L
	Failure to recover from a disaster	M	H	L
<b>Legal &amp; compliance risks</b> Page 35	Intellectual property claim	M	M	L
	Customer privacy of changing regulatory requirements	L	H	L
	Information security risk	L	H	M
<b>Financial risks</b> Page 36	Unfavorable movements in foreign currencies	M	M	H

High	H	New risk	N
Medium	M	Unchanged	U
Low	L	Increased	I
		Decreased	D

# 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 (successful development of new products and investing in the right technologies) 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. Following the sale of Telematics we are a more agile company, focused on cementing our position as the leading location technology specialist. With our technological innovation, we continuously develop new product and service offerings in the areas of driver navigation and autonomous driving. We believe these innovations will allow us to remain competitive in the automotive market.

Appetite	M
Impact	H
Likelihood	M
Trend	U

## 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 launched. 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.

Appetite	L
Impact	M
Likelihood	M
Trend	U

## FAILURE TO IMPROVE OUR MAPMAKING PROCESS

The competitive environment requires continuous investment in new technology for creating and updating map databases. All our map content needs 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 aim to continuously improve our overall mapmaking process which is evidenced amongst others by a successful transition to our new Content Production Platform (CPP). This transition enabled us to significantly increase the number of modifications we can process in a single month.

Appetite	L
Impact	M
Likelihood	L
Trend	D

# 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 talented people working effectively together.

We aim to employ highly talented people in our organization, which 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.

Significant investments are made in understanding what our employees need and want so we can offer customized experiences. We continue to invest in our workforce and ensure that we have the right Employer Brand strategy in place to attract and retain the talent we need. Also, we carefully consider our long-term location strategy in order to be able to attract and retain the most talented people. [Refer to section People and Culture for more information.](#)

Appetite	L
Impact	M
Likelihood	M
Trend	U

**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 and could trigger contractual penalties, which could in turn, have a material adverse effect on our financial condition and results of operations.

**Risk response**

We have established a process for business continuity in regards to our internal infrastructure, including full redundancy for key services such as location-based services and some traffic delivery platforms. We are also in the process of transitioning our services to the cloud, which should improve both availability and quality of our systems.

Appetite	L
Impact	H
Likelihood	L
Trend	U

**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 with 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.

Appetite	M
Impact	H
Likelihood	L
Trend	U

# Legal and 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 in 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 our products and services against unauthorized use by third parties. By investing in R&D and obtaining and enforcing intellectual property rights, such as patents and trademarks (see page 9), we can prevent the competition from reproducing our unique products. Over time, we have developed a reputation for strongly defending our position in all intellectual property litigation, including against non-practicing entities (NPEs).

Appetite	M
Impact	M
Likelihood	L
Trend	U

## 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 have implemented or are in the process of 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 our 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. [Refer to section Privacy and Data Governance for more information.](#)

Appetite	L
Impact	H
Likelihood	L
Trend	U

## 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 as well as regulatory requirements 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. In 2019, we also increased the capacity of the information security team, which helps to continuously update our defenses to be effective in a changing environment.

Appetite	L
Impact	H
Likelihood	M
Trend	I

# Financial risks

**UNFAVORABLE 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 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 our reporting currency (EUR). Unfavorable foreign currency movements 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, with appropriate risk limits and controls defined. 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 27 of the consolidated financial statements provides further information on other financial risks.



Appetite	M
Impact	M
Likelihood	H
Trend	U

## CORPORATE GOVERNANCE

# We are committed to conducting business in a transparent, ethical and accountable way

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.

TomTom has long recognized the importance of conducting business in a transparent and accountable manner, while continuously ensuring sustainability in our operations.

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

We monitor and assess our corporate governance structure to ensure compliance with the Code, applicable laws and regulations, and relevant developments. If a substantial change to our corporate governance structure occurs that affects compliance with the Code, shareholders will be informed at a General Meeting.

## LONG-TERM VALUE CREATION

At TomTom, we create innovative technologies, we help the world move forward and we support growth and learning. Drivers contribute to TomTom's vision of creating a safer, cleaner, congestion-free world.

All of our activities aim to create the most relevant and beneficial impact for our stakeholders: our people, customers, investors, society and the environment. Our people and culture are fundamental for our success. We allocate capital to the businesses we think offer the best prospects for growth and returns. Our product offerings are aimed at reducing the environmental impact and improving road safety. With our business practices we reduce our own environmental impact where we can. We contribute to society through investments in local communities.

See Our Business Model and Responsible Business sections for more information.

## FOSTERING GOOD GOVERNANCE AND TOMTOM'S CULTURE

Sound corporate governance and being transparent are important components of our culture. We are upholding ethical business practices based on our company values, which are implemented in our Code of Conduct, policies and procedures, and overall way of working. Our responsible approach is supported by comprehensive risk management and internal control systems.

Innovation is not only in our technology; it is also part of who we are, both as individuals and as a global collective of more than 4,500 people. Together we think big, share, learn fast and support each other's growth and development. We have an agile work culture with an entrepreneurial spirit, where our talents make an impact.

See the People & Culture section for more information.

## TRANSPARENCY

We are committed to providing a high degree of transparency. We engage with stakeholders to understand their standpoints in relation with our Remuneration Policy. Our Remuneration Report reflects clearly all remuneration components, and elaborates further on how we have applied the policy and how we have engaged with stakeholders.

We also aim to increase transparency through our interaction with shareholders. In 2019, we held a Capital Markets Day with investors to exhibit TomTom's positioning and prospects. All information made available at the event has been published on our Investor Relations website.

See the Remuneration Report, Investor Relations section and TomTom's corporate website for more information.



### FOR MORE INFORMATION

Corporate governance  
[tomtom.com/company/corporate-governance](https://www.tomtom.com/company/corporate-governance)

## CORPORATE GOVERNANCE CONTINUED

**Management Board**

Management Board members are jointly authorized to represent the company. [Member biographies can be found on page 5.](#)

**Role and responsibilities**

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

Responsibilities involve, among others: establishing and achieving strategic objectives, and managing strategic risks, legal compliance and sustainability matters.

The Management Board is accountable for its actions to the Supervisory Board and the General Meeting. The Management Board consults with the Supervisory Board on important matters and submits important decisions to the Supervisory Board for its pre-approval, as further described in the company's Articles of Association, which are available on our corporate governance website page.

**Composition and appointment**

Our 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.

In 2019, at the Annual General Meeting held on April 17, Taco Titulaer was re-appointed as a member of the Management Board for a four-year term.

The General Meeting may at all times, by a resolution passed with a majority of at least two-thirds of the votes cast, 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 of the Dutch Civil Code.

**Diversity**

The Management Board's composition is based on diversity of experience, background, skills, knowledge and insights. At present, TomTom has no women in the Management Board. And as such, it does not qualify as gender balanced within the meaning of article 2:166 of the Dutch Civil Code, as applicable during 2019, and does not align with our diversity goals as a company, but we aim for at least one woman in the Management Board.

TomTom believes in the strength of diversity and will, when a vacancy in the Management Board arises, consider all diversity aspects, including gender diversity. Currently, TomTom does not have any plans to change the composition of the Management Board. More on diversity and inclusion at TomTom is available online on our corporate governance website.

**Management Board Committees**

Several committees ensure compliance with applicable corporate governance requirements and serve to advise and support the Management Board on certain matters.

Committees	Composition	Responsibilities
Extended Management Board Committee (not deemed to be an Executive Committee, as referred to in best practice provision 2.1.3 of the Code)	Certain key officers: Chief Technology Officer, Chief Product Officer, SVP Engineering, Chief of Staff and Chief HR Officer	Assist Management Board members with support, expertise and advice in executing the company's strategy and business priorities.
Disclosure Committee	Representative of Legal, Group Control, Investor Relations and Corporate Communications	(i) Ensure compliance with the disclosure requirements under applicable laws and regulations, (ii) assist and inform the Management Board on the maintenance and evaluation of disclosure controls and procedures, and (iii) gather all relevant financial and non-financial information and assess materiality, timelines and necessity for disclosure of such information.

**Management Board Remuneration**

The Supervisory Board determines each Management Board member's remuneration, 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 2019. The Remuneration Policy is subject to a binding vote of the General Meeting once every four years, the first time in 2020. The application of the Remuneration Policy is described in the Remuneration Report, as part of the Annual Report over the present year, and is subject to an advisory vote of the General Meeting, the first time in 2020. This results from the implementation of the Shareholder Rights Directive (SRD II) into the Dutch Civil Code on 1 December 2019 ('Wet inzake implementatie van de herziene EU Aandeelhoudersrichtlijn').

For further information about the (application of the) Remuneration Policy, see the Remuneration Report.



CORPORATE GOVERNANCE CONTINUED

**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.

In 2019, no conflicts of interest were reported.

**SUPERVISORY BOARD**

The Supervisory Board consists of five members. All members are independent within the meaning of best practice provision 2.1.7 to 2.1.9 inclusive of the Code. [Member biographies can be found on page 44.](#)

**Role and responsibilities**

The Supervisory Board supervises the Management Board and TomTom's general affairs, and supports the Management Board by providing advice. The Supervisory Board thinks along with the Management Board and regularly discusses the strategy, the implementation of the strategy and the principal associated risks. In performing its duties, the Supervisory Board acts in the interest of the company and stakeholders: employees, shareholders, customers and society, including the environment.

Our 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, grant rights to acquire shares or restrict or exclude pre-emptive rights.

[Reference in this respect to article 14 of our Articles of Association.](#)

For further information on the Supervisory Board's activities in the area of corporate governance, [reference is made to the Supervisory Board Report section.](#)

**Composition and appointment**

Our 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 Supervisory Board members retire periodically in accordance with a rotation plan, which can be downloaded from our corporate governance website page.

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

In 2019, at the Annual General Meeting, the Supervisory Board's Chairman, Peter Wakkie, resigned after 10 years of service. Derk Haank is his successor.

The General Meeting may at all times, by a resolution passed with a majority of at least two-thirds of the votes cast, 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.



**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, our goals for diversity and inclusion aims for:

Objectives	Status
An equal number of men and women during a search, selection and appointment procedure	N.A. in 2019
At least one woman in the Management Board	■
At least two women in the Supervisory Board	■
A Supervisory Board Chairman living in the Netherlands	■
At least one member in the Supervisory Board from outside the EU	■
At least two members in the Supervisory Board with a technology/software background	■

Status: ■ Achieved ■ More to do

These goals were reached in 2019, except for the gender balance target within the meaning of article 2:166 of the Dutch Civil Code, which applied during 2019, and under TomTom's Diversity & Inclusion Policy.

We recognize the benefits and importance of diversity, and are committed to improving gender balance at TomTom.

We also recognize 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, nationality, skills, knowledge and insights.

#### Supervisory Board Committees

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. [The terms of reference of each committee can be found online on our corporate governance website page.](#)

#### Supervisory Board 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, lastly approved by the General meeting on April 17, 2019.

The Remuneration Policy for the Supervisory Board must be submitted to the General Meeting every four years, the first time in 2020, in light of the implementation of the SRD II into the Dutch Civil Code on 1 December 2019 ('Wet inzake implementatie van de herziene EU Aandeelhoudersrichtlijn').

The remuneration of individual members of the Supervisory Board can be found in the Supervisory Board Report. The Remuneration Policy can be found on the corporate website, once approved by the General Meeting.

#### 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. In 2019, no conflicts of interest were reported.

In addition, in accordance with provision 2.7.5 of the Code, we report that no transactions occurred in 2019 between the company and legal or natural persons who hold at least 10% of the shares in the company.

#### RISK MANAGEMENT AND INTERNAL CONTROL FRAMEWORK

We have an adequate Risk Management and Internal Control Framework in place. We follow a top-down approach to risk management. Together with senior management, the Management Board identifies and maintains the strategic, operational, legal and compliance, and financial risks.

The Management Board obtains, at minimum twice a year, input on the effectiveness of internal controls in place to manage and mitigate those risks, also on some elements continuous dashboards and reporting is available. The internal controls are contained and maintained in the Internal Control Framework.

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

The Audit Committee assists the Supervisory Board in its responsibility to oversee the system of internal control and risk management, including 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 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.

#### GENERAL MEETING

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

Recurring agenda items are the compilation of our annual report, the adoption of the annual accounts, the release from liability of Management Board and Supervisory Board members and the advisory vote on 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 are available to the shareholders on our website no later than three months after the meeting.

During 2019, two General Meetings were held: The Annual General Meeting on April 17, 2019, and an Extraordinary General Meeting on March 18, 2019, to obtain shareholders' approval for the divestment of the TomTom Telematics business and a capital repayment associated with a share consolidation. For further details, refer to our website.



#### FOR MORE INFORMATION

Risk management and control



#### FOR MORE INFORMATION

General meeting  
[corporate.tomtom.com/investors/shareholder-information/shareholder-meetings](https://corporate.tomtom.com/investors/shareholder-information/shareholder-meetings)

**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.
- > 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.
- > A legal merger or legal demerger of the company.

**AMENDMENT OF THE ARTICLES OF ASSOCIATION**

The General Meeting may resolve to amend our Articles of Association, 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.

On March 18, 2019, the Extraordinary General Meeting adopted a resolution to amend our Articles of Association, due to a capital repayment in association with a share consolidation captured in three steps. Firstly to increase the nominal share value from €0.20 to €3.34. Secondly, to execute a share consolidation and thirdly, to decrease the nominal share value to €0.20, including a reduction of the share capital. The three succeeding notarial deeds were passed before the Dutch notary on May 22, 2019.

**CAPITAL STRUCTURE**

After the share consolidation in May 2019, the company's authorized share capital amounted to €90,000,000 and was divided into 300,000,000 ordinary shares with a nominal value of €0.20 each and 150,000,000 preferred shares, with a nominal value of €0.20 each.

On December 31, 2019, a total of 132,366,672 ordinary shares were issued and are outstanding.

**Capital structure TomTom NV**

Share capital	Before share consolidation (22 May 2019)	After share consolidation (23 May 2019)
Authorized	600,000,000 ordinary shares	300,000,000 ordinary shares
	300,000,000 preferred shares	150,000,000 preferred shares
Issued	235,318,516 ordinary shares	132,366,672 ordinary shares

**Issue of shares**

The Management Board may issue shares or grant rights to subscribe for shares if so designated by the General Meeting or our 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 to 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, 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 April 17, 2019, 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 October 17, 2020.

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 issue ordinary shares and to restrict or exclude the pre-emptive rights for existing shareholders for those rights, to subscribe for up to 910,000 restricted stock units for the purpose of executing the TomTom Employee Restricted Stock Unit Plan and the Management Board Restricted Stock Unit Plan. It was granted for a period starting from the 2019 General Meeting and ending with the General Meeting to be held in 2020.

At the 2019 Annual General Meeting, the resolution to grant Restricted Stock Units (RSUs) was adopted. See the Remuneration Report for more information.

**Repurchase by the Company of its own shares**

On December 31, 2019, the remainder of the repurchased ordinary shares under the 2017 Share Buyback Program amounted to 824,674 to cover the company's commitments for its stock option and share plans. This equals a capital interest of 0.6% by TomTom NV. Details of the share buyback transactions can be found on our corporate website.

The 2019 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 October 17, 2020.

**Preferred shares**

Stichting Continuïteit TomTom (referred to as the Foundation) has been granted 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. 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 Articles of Association and the legislation on takeovers.

Unless the preferred shares have been issued pursuant to a resolution of the General Meeting, the 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 the preferred shares remain outstanding.

The Foundation was established in 2005, with a board independent of TomTom. The purpose of the Foundation is to safeguard the company's interests and all of its stakeholders, and prevent influences that may threaten its continuity, or identity.

To date, no preferred shares have been issued.

**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.

The following shareholders (in)directly owning 3% or more of the company's issued capital and/or voting rights were registered with the AFM as of December 31, 2019:

Name	% issued capital/ voting rights
Founder – Harold Goddijn	11.2%
Founder – Corinne Vigreux	11.2%
Founder – Peter Frans Pauwels	11.1%
Founder – Pieter Geelen	10.7%
J.H.H. De Mol	between 5% and 10%
DNB Asset Management AS	between 3% and 5%

**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 link its long-term incentive to pre-defined performance criteria. All RSUs granted under the Management Board Restricted Stock Unit Plan shall be granted conditional to continued employment of the Management Board members only. These grants have a vesting period of three years, with a subsequent two-year shareholding requirement. In addition, share ownership requirements has been set to encourage future shareholding for all Management Board members. The Supervisory Board reserves the right to decide not to award RSUs in a given year in case of exceptional market or business circumstances. The reason for this deviation is that it has proven difficult to set long-term performance targets in our rapidly evolving, dynamic market environment.

**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.

Our Articles of Association provide that a binding nomination for the appointment of Management Board or Supervisory Board members 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 board report, and such parts of the financial statements as referred to in the management board report, comprise 'Bestuursverslag', within the meaning of section 2:391 of the Dutch Civil Code.

## IN CONTROL AND RESPONSIBILITY STATEMENT

The Management Board states, in accordance with best practice provision 1.4.3. of the Dutch Civil 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 2019 financial year and no major failings have been detected.
- > The risk management and control systems provide a reasonable assurance that the 2019 financial statements do not contain any errors of material importance. Details are set out in the section Risk Management and Control.
- > 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 cash position and free cash flow generation of the company, the available (undrawn) credit facility and the risks facing the company. Commentary on the company's cash flow, liquidity and financial position is set out in the Financial Review. The financial risk management is set out in note 27 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 above-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.
- > 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 Directors' 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 the Decree Article 10 Takeover Directive ("Besluit artikel 10 overnamerichtlijn"), 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-financiële informatie'). The information regarding environmental, anti-corruption and bribery matters and respect for human rights, as required by this Decree, is incorporated in the Responsible Business section. The information regarding social and employee matters, as required by this Decree, is incorporated in the People and Culture section.

Amsterdam, 5 February 2020

## 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 2019  
[mccg.nl/](http://mccg.nl/)

# Supervisory Board **biographies**



## **DERK HAANK**

CHAIRMAN

Nationality Dutch

Date of first appointment 26 September 2018

Term of office 2018–2022

Age 66

### **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

### **Committee**

Remuneration Committee

Selection and Appointment Committee (Chairman)

### **Expertise**

Business leadership, commercial, transformation



## **JACQUELINE TAMMENOMS BAKKER**

DEPUTY CHAIRMAN

Nationality Dutch

Date of first appointment 1 May 2014

Term of office 2018–2022

Age 66

### **Current positions**

Non-Executive Director of CNH Industrial NV, Supervisory Board member of Royal Boskalis Westminster NV, Supervisory Board member of Unibail-Rodamco, Supervisory Board member of Groupe Wendel, Chairman of the Van Leer Group Foundation

### **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, Chairman of the High-Level Group for the future of aviation regulation in Europe, consultant at McKinsey & Company, and formerly several positions at Shell and Quest International

### **Committee**

Remuneration Committee (Chairman)

Selection and Appointment Committee

### **Expertise**

Governance and remuneration



## **JACK DE KREIJ**

Nationality Dutch

Date of first appointment 1 January 2017

Term of office 2017–2021

Age 60

### **Current positions**

Non-Executive board member of Oranje Fonds, Supervisory Board member and Chairman of the Audit Committee of Corbion NV, Supervisory Board member of Royal Boskalis Westminster NV, Advisory Council member of YGroup Companies

### **Former positions**

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

### **Committee**

Audit Committee (Chairman)

### **Expertise**

Finance, audit and risk management, and international business

## SUPERVISORY BOARD BIOGRAPHIES CONTINUED

**MICHAEL RHODIN**

Nationality American  
 Date of first appointment 24 April 2017  
 Term of office 2017–2021  
 Age 59

**Current positions**

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

**Former positions**

Senior Vice President of IBM

**Committee**

Audit committee

**Expertise**

Technology, innovation, and transformation

**BERND LEUKERT**

Nationality German  
 Date of first appointment 28 September 2017  
 Term of office 2017–2021  
 Age 52

**Current positions**

Head of Technology, Data and Innovation at Deutsche Bank, Supervisory Board member of the German Research Center for Artificial Intelligence, Supervisory Board member of Bertelsmann SE & Co. KgaA, Market Strategy Board member of the International Electrotechnical Commission, and steering committee chairman of the Plattform Industrie 4.0 for the German government's Industrie 4.0 initiative

**Former positions**

Executive Board member and various management positions at SAP SE

**Committee**

Audit committee

**Expertise**

Technology, innovation, and transformation

**CHANGES TO THE SUPERVISORY BOARD DURING 2019****PETER WAKKIE**

Retired as chairman of the Supervisory Board.

SUPERVISORY BOARD REPORT

# We aspire to live up to the highest standards of good corporate governance

**INTRODUCTION**

TomTom is the leading location technology specialist. Its product portfolio and supportive technologies are innovative and competitive. In a fast-moving industry where heightened competition and rapid technology developments are constant, we ensure that the company pursues a growth strategy that positions it for future growth. 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 company's culture, the interests of the company and its stakeholders, and management of a sustainable business model.

Our decision-making process is assisted by the Audit Committee, the Remuneration Committee, and the Selection and Appointment Committee.

With the sale of its Telematics division to Bridgestone in April 2019, TomTom further focused its organization and strategy on location technology aiming to shape the future of mobility.

The agile work culture with entrepreneurial spirit, where talents learn fast, make an impact and support each other's growth and development, enables the company to continue creating the most innovative technologies to help shape tomorrow's mobility providing for significant market opportunities.

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 December 31 of 2019, TomTom's Supervisory Board consisted of five members: Derk Haank (Chairman), Jacqueline Tammenoms Bakker (Deputy Chairman), Jack de Kreij, Michael Rhodin, and Bernd Leukert.

After 10 years of service, Peter Wakkie resigned as member and Chairman of the Supervisory Board. He is succeeded by Derk Haank.

For more details on the Supervisory Board's 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 Dutch Corporate Governance Code (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 2019, one out of five 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 Civil Code. The Supervisory Board recognizes the benefits of diversity, including gender balance. 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 TomTom's 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, which also provides details of the Supervisory Board's committees and its members.

	Committees	Date of initial appointment	2019	2020	AGM 2021	AGM 2022
Derk Haank (Chairman)	R S	26 September 2018	1st term			
Jacqueline Tammenoms Bakker	R S	1 May 2014	2nd term			
Jack de Kreij	A	1 January 2017	1st term			
Michael Rhodin	A	24 April 2017	1st term			
Bernd Leukert	A	28 September 2017	1st term			

**KEY**

Committee Chairman Audit Committee Remuneration Committee Selection and Appointment Committee



## 2019 activities

### Meeting and attendance

The Supervisory Board met 13 times in 2019: six physical meetings and seven conference calls. The conference calls were held to discuss financial updates and recent developments within the company, particularly 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 94%.

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. Availability for ad hoc calls, prompt response on emails, good meeting preparation and active participation in meeting discussions demonstrates that the members were all able to devote adequate attention to the company. If members were unable to attend a meeting, they had the opportunity to discuss any agenda item with the Chairman beforehand.

Meeting agendas were 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 TomTom's CEO. Further, Supervisory Board members held informal consultations with members of the Management Board and senior management to remain closely informed about the business.

Supervisory Board meetings are preceded by committee meetings.

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
Derk Haank	6/6
Jacqueline Tammenoms Bakker	6/6
Jack de Kreij	5/6
Michael Rhodin	6/6
Bernd Leukert	5/6
Peter Wakkie	2/2

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

### EVALUATION

The Supervisory Board and its committees reviewed and discussed its own function, the functioning of its individual members, committees and the functioning of the Management Board and its members. In preparation for these discussions, the members of the Supervisory Board and Management Board provided feedback through interviews performed by an external adviser resulting in an evaluation report. This report has been discussed by the full Supervisory Board, without the presence of the Management Board, during a meeting hosted by the external adviser. The outcome and improvement points determined during this evaluation session, were shared with the Management Board.

Topics which were discussed were each members' role perception, the composition, gender diversity and expertise of the Supervisory Board, its effectiveness, its dynamics with the Management Board and succession planning. The succession planning of the Management Board, (perceived) conflict of interest events and stakeholder management were also topics being addressed and discussed in the evaluation session.

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.

The Supervisory Board concluded that it performs well and is run efficiently. As key strengths are seen its composition, atmosphere, mutual trust, focus and business acumen. The interactions with the Management Board and other talents of the company are seen as constructive and pragmatic though critical. The board dynamics are healthy; there is an open speak-up culture with great willingness to collaborate and share information.

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. The Supervisory Board decided to allocate additional time in 2020 on further increasing its knowledge and understanding of technological developments relevant to TomTom and to discuss technology industry specifics. In principle, the Supervisory Board engages with a third party to assess its functioning every three years, the next time in 2022.

The Management Board evaluates its own functioning annually. The CEO shares the outcome hereof with the Chairman of the Supervisory Board.

### STRATEGIC OVERSIGHT

The Supervisory Board devoted considerable time to reviewing TomTom's strategy and the progress and execution thereof. Constructive discussions were held with the Management Board on the strategic priorities of the Location Technology business. 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 that support this technology, including AI.

The Audit Committee kept the Supervisory Board 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 Management Board regularly updated the Supervisory Board on commercial opportunities, deals, and partnerships. Every quarter, reports were provided by senior management that outlined the developments, achievements, challenges and opportunities in each market segment, HR and our technology department.

The Supervisory Board was frequently updated on the progress made within our mapmaking, traffic and navigation technology, and the positioning and traction of these technology components in the marketplace.

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 2020.

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.

## SUPERVISORY BOARD REPORT CONTINUED

### Culture

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, including participants of the World Class Leadership Acceleration Program. In an open and transparent setting, they held a group dialogue on relevant matters.

### Succession planning

The Supervisory Board discussed its own succession planning and concluded that the current composition suffices the company's current needs. Ample time was spent with the Management Board on the yearly talent review of 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 to meet its commitments reflected in their diversity, inclusion and belonging goals. The Supervisory Board acknowledged that its composition does not comply with the 30% gender diversity threshold and agreed to consider to create an action plan for 2020.

### Works council

The Supervisory Board and the Dutch Works Council held three meetings, one specifically to receive feedback on the Management Board Remuneration Policy.

### Corporate governance, regulations and sustainability

The Supervisory Board was regularly updated on the company's governance and organizational structure, as well as the status of the implementation of the European Shareholder Rights Directive (SRD II) into Dutch law. An update was provided on the company's progress on its Responsible Business program, reflecting the five pillars contributing to the company's vision and creating sustainable value for its stakeholders.

### 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 2019. Next to annual compensation, one member is compensated with an intercontinental travel allowance.

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. Members of the Supervisory Board are not entitled to any benefits upon the termination of their appointment and no loans are made to any members of the supervisory board.

A Supervisory Board Remuneration Policy will be proposed for approval at the 2020 Annual General Meeting, in accordance with the implementation of SRD II into Dutch law as of 1 December 2019.

For more information on the remuneration of the Supervisory Board, please see the Remuneration Report section.

### 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 its composition and the way in which the AC discharges its duties, reference is made to the AC Charter.

### Meetings and attendance

The AC met four times during the course of 2019, 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, Legal & Compliance, 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.



#### FOR MORE INFORMATION

Committees

[tomtom.com/company/committees](https://tomtom.com/company/committees)

## 2019 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 AC 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. Guidance to the financial markets was also discussed. Special attention was paid to the accounting for discontinued operations (Telematics), revenue recognition including our deferred revenue position, the accounting for our intangible assets and our impairment review.

The AC also discussed topics related to TomTom's financing structure and cash flow planning, third-party cloud platforms, cyber-security and the analysis of the financial ratios.

Other areas of attention were significant estimates, pensions, the tax position and the 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 that 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.

### 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.

### Effectiveness review

The effectiveness of the AC was reviewed as part of the 2019 overall evaluation of the Supervisory Board which confirmed that the AC continues to function in line with the requirements in this respect. During 2019, Jack de Kreij 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, information security and data privacy, 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 (IA) 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 IA or a special consulting service to carry out an internal audit. The follow-up on the recommendations made by IA were observed by the AC. The Head of IA reported to the AC each quarter.

### Evaluation of external auditor

EY was appointed as the external auditor in the 2018 General Meeting, for a term of three years up to and including the financial year 2020. The 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 audit team's expertise and composition, 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 that do not conflict with its independence is always subject to pre-approval by 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.

(€ in thousands)	2019	% of total	2018	% of total
Audit – group	520	86%	520	67%
Audit – statutory	58	10%	222	29%
Tax compliance <sup>1</sup>	24	4%	25	3%
Other	-	-	6	1%
<b>Total fees</b>	<b>602</b>		<b>773</b>	

1. Tax compliance comprises foreign tax compliance services.

## SUPERVISORY BOARD REPORT CONTINUED

### SELECTION AND APPOINTMENT COMMITTEE

#### Members:

- > Derk Haank (Chairman)
- > Jacqueline Tammenoms Bakker

#### 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 its composition and the way in which the SelCo discharges its duties, [reference is made to the Selection and Appointment Committee Rules](#).

#### Meetings and attendance

The Selection and Appointment Committee met four times during the course of 2019, 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.

SelCo members	Attendance
Derk Haank	4/4
Jacqueline Tammenoms Bakker	4/4
Peter Wakkie	2/2

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

### 2019 SELCO ACTIVITIES

#### 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 shared included management initiatives regarding career development, management and leadership, policies, and compensation and benefits. Continued attention was given to the Executive Leadership program, introduced in 2017 for senior management, and the World Class Leadership Acceleration program introduced in 2019 to accelerate and prepare female leaders within the organization for their next career step. These initiatives underpin the company's attention to talent management; to attracting, retaining and developing talent at TomTom. 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)
- > Derk Haank

#### Role and responsibility

The Remuneration Committee (RemCo) prepares the Supervisory Board's 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 its composition and the way in which the RemCo discharges its duties, [reference is made to the Remuneration Committee Rules](#).

#### Meetings and attendance

The Committee met six times in the course of 2019, 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 were held prior to each Committee meeting, attended by the Chairman of the Committee, the Head of Rewards and HR Operations and the Company Secretary.

### RemCo members

### Attendance

Jacqueline Tammenoms Bakker	4/4
Derk Haank	4/4
Peter Wakkie	2/2

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

### 2019 REMCO ACTIVITIES

The Management Board's base salaries were assessed against the annual salary benchmark for employees within TomTom's organization, and the internal pay ratio.

The RemCo decided to maintain the Revenue metric and to replace the profitability metric EBITDA minus investment with a free cash flow metric weighted equally at 50% each. The Management Board members' progress against those metrics including target levels were periodically reviewed by the RemCo.

In 2019 the long-term variable remuneration component of the Management Board (options) was replaced by restricted stock units following the 2019 General Meeting. The RemCo evaluated the feedback received and the engagement with Focus Orange who advised the RemCo in this respect.

The RemCo closely monitored the SRD II implementation into Dutch law and reviewed the current policy documents. The RemCo continued constructive dialogues with stakeholders on our Management Board Remuneration Policy. Amendments to the Remuneration Policy of the Management Board and the introduction of a Remuneration Policy for the Supervisory Board will be proposed for approval at the 2020 AGM. Proposed amendments to current policies, were discussed and approved by the RemCo.

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 approved by the Supervisory Board.

[For a full outline of the Remuneration Policy, its application in 2019 and outlook for 2020, reference is made to the 2019 Remuneration report.](#)



#### FOR MORE INFORMATION

Committees

[tomtom.com/company/committees](http://tomtom.com/company/committees)

## REMUNERATION REPORT

# We strive to enhance the transparency of the remuneration of our Management Board

## MANAGEMENT BOARD 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 2019.

### Objectives and principles

The Remuneration Policy at TomTom 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 therefore provides a company-wide framework for result-driven remuneration, linked to the achievement of strategic objectives. TomTom's company values ([see page 18](#)) form the framework for business practices and apply to the policy framework.

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

Our strategy balances growth objectives, financial stability and investments to position TomTom competitively in the evolving field of location technologies. The remuneration of Management Board members is intended to encourage behaviors that drive the generation of both short-term results to ensure ongoing progress and financial stability, and long-term value by pursuing growth and partnership opportunities through our location technologies and innovative services.

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

- > Alignment with company strategy and long-term value creation.
- > Consistency with remuneration policies within TomTom.
- > Attractiveness and competitiveness.
- > Simplicity and transparency.
- > Compliance with relevant laws and regulations and the Dutch Corporate Governance Code.
- > Consideration of stakeholder concerns.

## Summarized view of our remuneration policy and implementation in 2019

	Policy summary	Application in 2019 summary*
<b>Base salary</b>	<ul style="list-style-type: none"> <li>&gt; Median market level of peer group benchmark (conducted at least every three years).</li> <li>&gt; Reviewed annually considering market environment and any planned adjustments for other employees.</li> </ul>	Base salary as follows: <ul style="list-style-type: none"> <li>&gt; Harold Goddijn €474,166</li> <li>&gt; Alain De Taeye €395,138</li> <li>&gt; Taco Titulaer €390,000</li> </ul> The salary of Taco Titulaer was increased by 15%. Other Management Board salaries remained unchanged.
<b>Short-term incentive</b>	<ul style="list-style-type: none"> <li>&gt; On target variable pay CEO: 80% of base salary.</li> <li>&gt; On target variable pay other Management Board members: 64% of base salary.</li> <li>&gt; Maximum level: CEO 120%, other Management Board members 96%.</li> <li>&gt; Aligned with company variable pay structure.</li> <li>&gt; Payout in cash based on annual targets, typically financial in nature.</li> </ul>	Measures: <ul style="list-style-type: none"> <li>&gt; Revenue (excluding Consumer Revenue): 50%</li> <li>&gt; EBITDA minus Investments: 50%</li> </ul> Actual payout: <ul style="list-style-type: none"> <li>&gt; CEO: 97% (of base salary)</li> <li>&gt; Management Board members: 78% (of base salary)</li> <li>&gt; The payout incentive zone is linear between minimum and target, and between target and maximum.</li> </ul>
<b>Long-term incentive</b>	<ul style="list-style-type: none"> <li>&gt; Restricted Stock Unit (RSU) plan only.</li> <li>&gt; Annual grant of RSU vests after three years, followed by a two year holding requirement.</li> <li>&gt; Vesting is conditional upon employment only.</li> <li>&gt; Target level CEO: 140% of base salary.</li> <li>&gt; Target level for other Management Board members: 100% of base salary.</li> <li>&gt; Actual grant levels do not deviate from target.</li> </ul>	RSU grants as follows: <ul style="list-style-type: none"> <li>&gt; Harold Goddijn 87,630</li> <li>&gt; Alain De Taeye 52,160</li> <li>&gt; Taco Titulaer 51,480</li> </ul> <ul style="list-style-type: none"> <li>&gt; Vest on the third anniversary of grant, followed by a two-year holding requirement.</li> <li>&gt; Conditional on continued employment.</li> </ul>
<b>Pension benefits</b>	<ul style="list-style-type: none"> <li>&gt; Maximum contribution: 20% of gross annual base salary.</li> <li>&gt; Opportunity to opt out of the pension provisions.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Harold Goddijn Waived his pension rights</li> <li>&gt; Alain De Taeye €79,028</li> <li>&gt; Taco Titulaer €78,000</li> </ul>

\* For a two-year remuneration overview reference is made to page 55.

## REMUNERATION REPORT CONTINUED

### IMPLEMENTATION IN 2019

This section provides an overview of the application of the Remuneration Policy in 2019, other remuneration information to ensure reporting transparency, and important contract terms of the Management Board members.

#### Peer group

In principle, the remuneration is benchmarked with a peer group at least every three years and reviewed annually. This helps to determine the overall competitiveness of our Management Board remuneration and gives an appropriate reflection of relevant competitive markets. The selection of the peer group is discussed and approved by the Supervisory Board.

In the years where no benchmark is performed, such as in 2019, the Supervisory Board considers the appropriateness of any changes to the base salary based on the market environment as well as on the average salary adjustments for our employees in The Netherlands.

#### Base salary

The base salary level benchmarked in 2018 was considered for 2019. The base salary for the CEO remained under median market level. However, it was decided not to bring the CEO's base salary closer to the median in 2019. The Management Board Member's base salary was in line with the median market level. The CFO's base salary was below median market level. As a result, the Supervisory Board approved a 15% increase to the base salary for the CFO for 2019.

### Short-term incentive plan

Management Board members participate in the short-term, annual incentive plan, which 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 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.

### 2019 Management Board variable pay award level structure

(% of salary)	Target performance	Minimum performance	Maximum performance
<b>CEO</b>	80%	0%	120%
<b>Other Board members</b>	64%	0%	96%

The benchmark as 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.

### 2019 PERFORMANCE CRITERIA AND OUTCOMES

On an annual basis, the Supervisory Board determines the most relevant performance criteria for the Management Board in regards to the short-term incentive plan. These criteria provide the framework for employee incentive schemes and are being cascaded down by the Management Board to the rest of the organization. This ensures the Management Board bonus structure is aligned with the company bonus structure. Additionally, the Supervisory Board sets challenging yet realistic target levels for each performance criteria. Similar to 2018, the emphasis for 2019 was on financial metrics in line with the company's strategy in achieving growth in location technology 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, remuneration is directly linked to the company's long-term value creation.

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. There is a range within which a payout under the plan may occur, as detailed in the structure above. 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.

For 2019, the performance criteria selected reflect the balance between growth in key areas and overall profitability. These criteria are: Location Technology revenue weighted at 50% and TomTom EBITDA minus Investment also weighted at 50%. Location Technology revenue, excluding Consumer, was selected as it directly reflects our long-term success and value creation. Considering the expected continuing revenue decline in our Consumer segment, and to reflect TomTom's business transformation, the revenue metric excludes revenue from our Consumer unit. However, at a profitability level, the full TomTom group profitability is important and as such Consumer is included in the profitability metric of EBITDA minus Investments. The EBITDA minus Investments metric was introduced in 2017 to ensure appropriate focus on cash flow generation. Each Management Board member's performance has been determined against these criteria.

## REMUNERATION REPORT CONTINUED

The assessment of performance under the short-term incentive plan is done by the Remuneration Committee, after consultation with the Audit Committee. It is then proposed to the Supervisory Board for decision-making purposes. In preparation for that assessment, the Chairs of the Remuneration Committee and the Audit Committee review the final outcomes, including any quality of earnings elements and relevant aspects of operational business performance, to ensure complete alignment on performance by both committees. The proposal for approval to the Supervisory Board includes a view on the coherence between the proposed payment and overall business performance.

### 2019 Short-term incentive plan measures and outcomes

Measures <sup>1</sup>	Measure weight	Achievement of target	Variable pay outcome
Location Technology Revenue	50%	92%	46%
EBITDA – Investments	50%	150%	75%
<b>Total</b>	<b>100%</b>		<b>121%</b>

### 2019 Variable pay outcome calculation

#### Harold Goddijn

Target variable pay:			
€ 474,166	x	Outcome:	= € 459,372
(base salary) x 80% =		121%	(97% of base salary)
€ 379,333			

#### Alain De Taeye

Target variable pay:			
€ 395,138	x	Outcome:	= € 306,248
(base salary) x 64% =		121%	(78% of base salary)
€ 252,889			

#### Taco Titulaer

Target variable pay:			
€ 390,000	x	Outcome:	= € 302,266
(base salary) x 64% =		121%	(78% of base salary)
€ 249,600			

The Supervisory Board applies an element of judgement in the assessment of alignment between calculated payout and overall business performance. For 2019, the Supervisory Board deemed the payout fair and reflective of the overall company performance given that our Location Technology business showed significant year on year revenue growth and our Consumer business performed much better than expected, resulting in a free cash flow of continuing operations of €66 million.

### Long-term incentive

In 2019 TomTom replaced its long-term incentive plan based on stock options with restricted stock units (RSUs). One reason for this change is that stock options are considerably less prevalent in recent benchmark assessments. As our long-term incentive aims at creating long-term value and the retention of Management Board members, introducing RSUs supports those aims by promoting share-ownership and alignment with long-term value creation and shareholder interest. Internal consistency is maintained as the long-term incentive plan for the senior leadership has also shifted from stock options to RSUs in 2019.

RSUs are a simple and transparent instrument. Outcomes of the grant are predictable, both for the recipients and for shareholders, as downward risk and upward potential are balanced. The predictability makes RSUs a superior retention instrument that is attractive to top managers. Further, RSUs are supported by an extended two-year holding period following a three-year vesting period, conditional to continued employment. As with the previously used stock options, vesting is not dependent on performance conditions. This does not comply with best practice provision 3.1.2 v) of the Code. As explained in the Corporate Governance report, the reason for this deviation is that it has proven difficult to set long-term performance targets in our rapidly evolving, dynamic market environment. The Supervisory Board has the discretion to not award RSUs in case of exceptional market or business circumstances.

The RSU grant target value is 140% of base salary for the CEO and 100% for the other Management Board members.

Share ownership requirements have been set to encourage further shareholding for all Management Board members, expecting the CEO to hold a participation in the company of at least three times base salary, with other Management Board members expected to build up and hold a participation of at least two times base salary. [Refer to note 8 for further information on the stock compensation plans.](#)

### Long-term incentives in 2019

The annual grants are set as a percentage of the fixed salary of the Management Board members. The following overview shows the number of RSUs granted to each of the members of the Management Board in 2019.

Board member	% of gross annual salary	Share price at grant date (€)	Granted in 2019	Outstanding at 31 December 2019	Vesting date	End of holding period	Market value at 31 December 2019 (€) <sup>1</sup>
Harold Goddijn	140%	7.89	87,630	87,630	3/5/2022	3/5/2024	825.475
Alain De Taeye	100%	7.89	52,160	52,160	3/5/2022	3/5/2024	491.347
Taco Titulaer	100%	7.89	51,480	51,480	3/5/2022	3/5/2024	484.942
<b>Total</b>			<b>191,270</b>	<b>191,270</b>			

1. Market value is based on the number of instruments outstanding and at a closing share price of €9.42 at 31 December 2019. It is assumed that outstanding RSUs will vest.

## REMUNERATION REPORT CONTINUED

The following tables summarizes the information about outstanding options of each member of the Management Board, as well as the movements during the year.

### Options

Board member	Year of grant	Outstanding at 1 January 2019	Exercised in 2019	Outstanding at 31 December 2019 <sup>1</sup>	Exercise price (€)	Expiry date	Market value at 31 December 2019 (€) <sup>2</sup>
Harold Goddijn	2012	113,750	-113,750		3.51	10/5/2019	
	2013	155,000		155,000	3.53	8/5/2020	912,950
	2014	300,000		300,000	5.28	13/5/2021	1,242,000
	2015	210,000		210,000	7.83	7/5/2022	333,900
	2016	112,500		112,500	7.58	10/5/2023	207,000
	2017	165,000		165,000	9.57	10/5/2024	
	2018	201,500		201,500	8.13	2/5/2025	259,935
Alain De Taeye	2012	113,750	-113,750		3.51	10/5/2019	
	2013	155,000		155,000	3.36	8/5/2020	939,300
	2014	150,000		150,000	4.93	13/5/2021	673,500
	2015	110,000		110,000	7.83	7/5/2022	174,900
	2016	56,500		56,500	7.58	10/5/2023	103,960
	2017	100,000		100,000	9.57	10/5/2024	
	2018	120,000		120,000	8.13	2/5/2025	154,800
Taco Titulaer	2013	50,000		50,000	3.53	8/5/2020	294,500
	2014	34,600		34,600	5.28	13/5/2021	143,244
	2015	39,200		39,200	7.83	7/5/2022	62,328
	2016	48,500		48,500	7.58	10/5/2023	89,240
	2017	85,000		85,000	9.57	10/5/2024	
	2018	102,800		102,800	8.13	2/5/2025	132,612
<b>Total</b>		<b>2,423,100</b>	<b>-227,500</b>	<b>2,195,600</b>			

1. The 2019 and 2018 options will vest three years after the grant date, conditional to the Management Board member still being in service. All options relating to prior periods to 2019 have vested.
2. The market value is calculated assuming that all options that are in-the-money are exercised, based on a share price of €9.42 at 31 December 2019, less the strike price to be paid. The 2019 share options are out-of-the-money at 31 December 2019

### Pension benefits

Pension contributions are an element of the overall total remuneration of Management Board members, and vary by individual. Pension contribution is capped at 20% of gross annual base salary and members may elect to waive their rights for personal reasons. Pension can be received as a gross pension allowance or through contribution to the company's plan. The company's pension plan is a Defined Contribution plan with age defined contribution percentages and a salary cap at €107,593 in 2019. Employee contribution is 6.1% of pension base. The scheme below provides an overview of the pension contributions provided by TomTom to each member of the Management Board in 2019.

#### Board member Pension contribution 2019

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.
Alain De Taeye	€79,028 paid as a gross pension allowance.
Taco Titulaer	€78,000 (consisting of €7,240 into the company pension plan and €70,760 as gross pension allowance).

### Other benefits

In addition to 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, advanced payments or guarantees to members of the Management Board.



## REMUNERATION REPORT CONTINUED

**Overview of salaries, performance-related bonuses and other emoluments of the Management Board**

The direct remuneration and other remuneration-related expenses are presented below:

(€)	Short-term benefits				Total direct remuneration	Stock compensation <sup>2</sup>	Other short-term expenses	Total including other and direct remuneration <sup>3</sup>
	Salary	Bonus	Other emoluments <sup>1</sup>	Post-employment benefits				
<b>2019</b>								
Harold Goddijn	474,166	459,372			<b>933,538</b>	617,861	10,005	<b>1,561,404</b>
Alain De Taeye	395,138	306,248	25,320	79,028	<b>805,734</b>	366,390	10,005	<b>1,182,129</b>
Taco Titulaer	390,000	302,266	70,760	7,240	<b>770,266</b>	324,890	10,005	<b>1,105,161</b>
<b>Total</b>	<b>1,259,304</b>	<b>1,067,886</b>	<b>96,080</b>	<b>86,268</b>	<b>2,509,538</b>	<b>1,309,141</b>	<b>30,015</b>	<b>3,848,694</b>
<b>2018</b>								
Harold Goddijn	474,166	568,999			<b>1,043,165</b>	535,887	9,770	<b>1,588,822</b>
Alain De Taeye	395,138	379,333	25,320	79,028	<b>878,819</b>	305,888	9,770	<b>1,194,477</b>
Taco Titulaer	338,580	325,037	60,645	7,071	<b>731,333</b>	243,248	9,770	<b>984,351</b>
<b>Total</b>	<b>1,207,884</b>	<b>1,273,369</b>	<b>85,965</b>	<b>86,099</b>	<b>2,653,317</b>	<b>1,085,023</b>	<b>29,310</b>	<b>3,767,650</b>

- 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 €107,593. The remaining other emoluments relates to company car and other costs.
- The expenses recognizes for stock compensation awards are determined in accordance with IFRS 2 and do not represent the amounts paid or payable to Management Board members. Refer to note 8 of the consolidated financial statements for further information on the stock compensation plans.
- Remuneration of the Management Board is directly paid by TomTom N.V. and not allocated to any of its subsidiaries.

**OTHER INFORMATION****Pay ratio**

The Corporate Governance Code requires reporting on pay ratio. TomTom's pay ratio reflects the average total compensation of the total global employee workforce, relative to the total remuneration package of the CEO. This has resulted in the following outcome:

Fiscal year	CEO total remuneration <sup>1</sup>	Average total compensation (All global employees) <sup>2,3</sup>	Resulting pay ratio
2019	€1,551,399	€57,281	27.1
2018	€1,579,052	€54,621	28.9
2017	€1,388,686	€55,648	25.0
2016	€1,001,065	€51,882	19.3

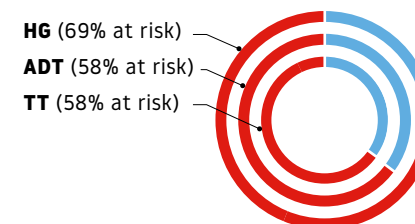
- Excluding social security costs.
- All global employees.
- Total personnel expenses (note 7 - consolidated financial statements) excluding social security costs, Management Board total remuneration and capitalized employee expenses.

The pay ratio decreased for 2019 as a result of the investment made in employee salaries in key markets and the decrease in bonus payout for Management Board members for 2019. The Supervisory Board deems the pay ratio for TomTom of 27.1 to be at a comfortable level.

Annually, we also review the livable wage and local competitive dynamics in each of TomTom's operating locations. If needed, adjustments are made to ensure employees compensation are above those levels as part of TomTom's efforts to be a good employer. This contributes positively to our pay ratio.

**Target Compensation Mix**

The Remuneration Committee believes that the target compensation mix of Management Board members aligns with the long-term interests of shareholders. The charts below illustrate the target pay that is at risk for the respective Management Board member represented as percentage of the total potential compensation package designed to reward based on company performance.



	Harold Goddijn (HG)	Alain De Taeye (ADT)	Taco Titulaer (TT)
Base	31%	35%	35%
Target Variable	25%	23%	23%
Target LTI	44%	35%	35%
Pension	-	7%	7%

**Remuneration and company performance development**

The following table illustrates the five-year development of Management Board remuneration and company performance. For this purpose, the Remuneration Committee has decided

## REMUNERATION REPORT CONTINUED

to take the metrics of Location Technology Revenue development and free cash flow generation over the last five years as an appropriate measurement of the company's performance.

(€ in thousands, unless otherwise indicated)

<b>Management Board remuneration</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019<sup>3</sup></b>
Harold Goddijn	1,049	1,001	1,389	1,579	1,551
Alain De Taeye	853	771	1,036	1,183	1,172
Taco Titulaer <sup>1</sup>	214	502	786	975	1,095
Total management board remuneration	2,116	2,274	3,211	3,736	3,819

### Remuneration per FTE

Management Board <sup>2</sup>	684	758	1,070	1,245	1,273
Global employees	58	52	56	55	57

### Key performance measure (€ in millions, unless stated otherwise)

Location Technology Revenue	248.0	269.0	333.2	372.3	426.0
Free cash flow (total operations, excluding acquisitions)	11.0	26.7	68.2	144.8	69.6
Share price (€)	11.61	7.37	9.78	7.90	9.42

1. Taco Titulaer was appointed CFO in 2015.

2. The salary of Taco Titulaer has been annualized for comparative purposes.

3. Including results of Telematics for Q1 2019. Excluding results from the sale of Telematics.

The company performance showed an overall positive trend in the last five years as reflected by Location Technology revenue and FCF generation. The total remuneration of the Management Board developed in line with this. The remuneration per employee remained relatively stable as the change in the mix of our workforce offset the increase in remuneration for individual employees.

### Scenario analysis

A scenario analysis of the possible outcomes of the variable components and the impact on the Management Board members' remuneration is conducted annually to minimize the risk that the performance criteria lead to inappropriate outcomes. The effect of different performance scenarios on the level and composition of remuneration has been analyzed and the outcome has been taken into consideration by the Supervisory Board when reviewing the Management Board members' remuneration. These scenarios include minimum (0%), target (100%) and maximum (150%) variable pay achievement and share price decrease of 20%, no change to the TomTom share price, and a share price increase of 20%. Under all scenarios (minimum, target, and maximum performance levels), the Supervisory Board has assessed that the range of potential remuneration is within outcomes that are appropriate for that level of performance.

### Management Board members' views

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, who together consider 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 2019 to provide an additional variable pay for each member of the Management Board for exceptional individual performance.

### Share ownership

TomTom introduced share ownership guidelines for its Management Board members in 2019. Share ownership requirements have been set to encourage further shareholding for all Management Board members, expecting the CEO to hold a participation in the company of at least three times base salary, with other Management Board members expected to build up and hold a participation of at least two times base salary.

<b>Board member</b>	<b>Share Ownership Guidelines<sup>1</sup></b>	<b>Current shares</b>	<b>Value of shares<sup>2</sup></b>
Harold Goddijn	3x	14,868,609	295x
Alain De Taeye	2x	156,737	4x
Taco Titulaer	2x	-	-

1. As a multiple of base salary.

2. Based on share price at 31 December 2019.

## REMUNERATION REPORT CONTINUED

### 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 Management Board members' employment. The Supervisory Board can revise (downwards or upwards) the amount of the variable pay to an appropriate amount if payment of the bonus would be unacceptable according to standards of reasonableness and fairness.

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 underlying the bonus or about the circumstances that the bonus was made subject to.

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.

No variable Remuneration has been clawed-back in 2019.

#### Deviation from Remuneration Policy

The Remuneration Committee did not deviate from its decision-making process in relation to the implementation of the Remuneration Policy. It also did not deviate from the Remuneration Policy itself, except for the base salary of the CEO which remains under the median market level.

#### Change of control

In case of a change of control, the Supervisory Board may determine that any long-term incentives, granted to a Management Board member, shall be (deemed to be) vested, and exercisable if applicable, 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, previously granted stock options will lapse.

#### Term of appointment

All Management Board members' term of appointment is four years, while the term of employment is indefinite. Management Board members may be re-appointed for another term of four years.

#### Notice period

All members of the Management Board have a notice period of six months. For the company, the 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 a Management Board member's employment 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 Management Board member's employment is terminated for any reason as set out in articles 7:677 (1) and 7:678 of the DCC. 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 employment is terminated by himself, or on his own initiative.

#### NEW LEGISLATION – SHAREHOLDER RIGHTS DIRECTIVE II

This Remuneration Report assumes to reflect the reporting requirements as provided by article 2:135b of the Dutch Civil Code (DCC), effective on 1 December 2019 and implementing the EU Shareholder Rights Directive II (SRD II), effective as of April 3, 2017. One of the key objectives of the SRD II is to instill greater transparency for company stakeholders. Transparency has always been important at TomTom; initiatives like the SRD II and its implementation into Dutch law are welcome.

The Supervisory Board will propose amendments to the Remuneration Policy at the 2020 AGM to align the policy with article 2:135a DCC.

#### Governance

The Remuneration Committee prepares the Supervisory Board's decisions regarding the remuneration of individual Management Board members, within the scope of the applicable Remuneration Policy.

In accordance with article 2:135a sub 2 DCC, the Supervisory Board proposes for adoption once every four-year period, the first time at the 2020 AGM, TomTom's Management Board Remuneration Policy to the General Meeting of Shareholders. The decision for adoption of the Remuneration Policy requires at least 75% of the cast votes in favor.

The Remuneration Report describes the process which has been followed by the Remuneration Committee in relation to the implementation of the Remuneration Policy over the given financial year, and, if applicable, any proposed revision of the Remuneration Policy. Every year, the implementation of the Remuneration Policy, through the Remuneration Report, is put forward for an advisory vote to the AGM (in line with article 2:135b sub 2 DCC), the first time at the 2020 AGM.

#### Alignment with long-term value creation

The remuneration of Management Board members is intended to encourage behaviors that focus on generating 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. The introduction of RSUs in 2019 further promotes share ownership and alignment with our long-term value creation and shareholder interests.

## REMUNERATION REPORT CONTINUED

### Engagement with stakeholders

Both the Management Board and the Supervisory Board have a transparent relationship with the Dutch Works Council. Members of the works council have the opportunity to raise and discuss matters, including the Remuneration Policy and application hereof or any other matter that requires attention, both within and outside the regular meeting schedule (bi-annually with the Supervisory Board and quarterly with management).

In preparation of the 2019 AGM, the Remuneration Committee members had engaged with several shareholders and Eumedion to explain the proposal's rationale and pro-actively address any questions prior to the meeting. The proposal to introduce RSUs was adopted by the 2019 annual General Meeting of Shareholders with 82% votes cast in favor.

Our engagement with stakeholders before the 2019 AGM had been experienced as positive by all parties.

The Remuneration Committee considered the voting outcome and decided to continue constructive dialogues with representatives of shareholders (VEB, Eumedion) and proxy advisors (ISS, Glass Lewis) prior to the convocation of the agenda of the 2020 AGM. Recommendations in relation to the Remuneration Policy and the Remuneration Report included, among others, i) disclosure of market value of not yet vested RSUs (Eumedion), and ii) disclosure of STIP targets (ex-post) (Eumedion, VEB), and iii) greater transparency on decision-making process and considerations of the Remuneration Committee (VEB, Eumedion, ISS).

Concerns were raised, among others, in relation to iv) TomTom's peer group composition where Eumedion feels that there are too many US companies included, and v) the provision allowing the Supervisory Board to grant each Management Board member an additional variable pay for exceptional individual performance.

TomTom has implemented recommendations regarding items i) and iii). Regarding item ii), TomTom will meet the requirements for greater disclosure on STI targets in 2021, whenever required by the SRD II. Regarding iv) TomTom considers that the competitive environment within which TomTom operates justifies the inclusion of relevant US companies which can be the source for TomTom talent (or attract it). However, the Remuneration Committee has decided to perform the next benchmark in 2020 versus 2021, and the peer group will be reviewed, bearing in mind concerns raised.

The provision referred to under v) will be removed from the Remuneration Policy which will be submitted to the 2020 General Meeting, since the Supervisory Board's discretion is already covered by article 2:135 sub 6 of the DCC.

The Remuneration Committee will follow the implementation of the Guidelines on the standardized presentation of the remuneration report, as regards the encouragement of long-term shareholder engagement, issued by the European Commission.

### Public perception

Management Board remuneration at TomTom specifically is not deemed to be a topic that is debated. It has not been raised as a concern by (potential) institutional investors. When remuneration has been discussed, it has been from the perspective of being modest compared to other organizations in the global tech industry.

The Remuneration Committee is committed to continuously improving the transparency regarding Management Board remuneration. TomTom believes that this enables greater understanding and discussion with our stakeholders on a topic which is currently highly debated in society.

### SUPERVISORY BOARD REMUNERATION POLICY

This section provides an overview of the Remuneration Policy for TomTom's Supervisory Board, last amended in 2019. A Supervisory Board remuneration Policy will be proposed for approval at the 2020 Annual General Meeting, in accordance with the implementation of SRD II into Dutch law as of 1 December 2019.

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
Intercontinental travel allowance*		€3,000

\* Per regular physical Supervisory Board meeting in the Netherlands. Only Mike Rhodin is currently eligible.

### Overview of remuneration of the members of the Supervisory Board<sup>1</sup>

(€)	2019	2018
Derk Haank <sup>2</sup>	56,000	13,000
Jacqueline Tammenoms Bakker	51,000	51,000
Bernd Leukert	47,000	47,000
Jack de Kreij	50,000	50,000
Michael Rhodin	62,000	47,649
Peter Wakkie <sup>2</sup>	27,000	61,450
<b>Total</b>	<b>293,000</b>	<b>270,099</b>

1. The remuneration has not changed over the last five years, except for intercontinental travel allowance which was approved at the 2019 AGM.
2. Derk Haank was appointed as a member of the Supervisory Board for a term of 4 years on 26 September 2018 and was appointed as the Chairman of the Supervisory Board following the resignation of Peter Wakkie at the Annual General Meeting on 17 April 2019.

### OUTLOOK 2020

The Management Board members' salaries were assessed against the market environment and the adjustments for other employees. For 2020, the salaries will be adjusted by 4.12% in line with salary market movement for employees in the Netherlands, since the last increase for Management Board base salaries in 2018.

For the 2020 short-term incentive scheme, changes will be made, by replacing the profitability metric EBITDA minus Investment with a Free Cash Flow metric to ensure better alignment of the Management Board remuneration with TomTom's guidance to the financial market and aimed at greater simplicity and transparency.

No changes are anticipated for the 2020 long-term incentive scheme.

The remuneration of the Management Board will be benchmarked in 2020 which will include a peer group review.

The Supervisory Board will propose amendments to the Remuneration Policy at the 2020 AGM to align it with article 2:135a DCC.

# 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.

TomTom's annual financial statements for 2019, prepared by the Management Board, have been audited by EY. The financial statements, independent auditor's report and 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 2019 financial statements of TomTom NV meet all requirements for correctness and transparency. The Supervisory Board has approved the financial statements for 2019. All members of the Supervisory Board and members of the Management Board have signed the financial statements for 2019 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 2019, and requests that the General Meeting discharges the Management Board members' responsibility for the conduct of business in 2019 and the Supervisory Board members' supervision in 2019. The Annual Report for 2019 is available at the company's offices on request and on the company's website: [corporate.tomtom.com/annuals.cfm](https://corporate.tomtom.com/annuals.cfm).

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, 5 February 2020

## THE SUPERVISORY BOARD

**DERK HAANK**

**JACQUELINE TAMMENOMS BAKKER**

**JACK DE KREIJ**

**MICHAEL RHODIN**

**BERND LEUKERT**

# FINANCIAL STATEMENTS

61	Consolidated statement of income
62	Consolidated statement of comprehensive income
63	Consolidated balance sheet
64	Consolidated statement of cash flows
65	Consolidated statement of changes in equity
66	Notes to the consolidated financial statements

**CONSOLIDATED STATEMENT OF INCOME**  
**FOR THE YEAR ENDED 31 DECEMBER**

(€ in thousands)	Notes	2019	2018
<b>Revenue</b>	5	<b>700,759</b>	<b>686,798</b>
Cost of sales	6	185,557	211,471
<b>Gross profit</b>		<b>515,202</b>	<b>475,327</b>
Research and development expenses		322,785	220,853
Amortization of technology and databases		261,194	108,200
Marketing expenses		29,436	28,015
Selling, general and administrative expenses		132,744	115,354
<b>Total operating expenses</b>	7-10	<b>746,159</b>	<b>472,422</b>
<b>Operating result</b>		<b>-230,957</b>	<b>2,905</b>
Financial (expense)/income and result of associate	17, 29	-3,432	3,475
<b>Result before tax</b>		<b>-234,389</b>	<b>6,380</b>
Income tax gain/(expense)	11	41,424	-9,242
<b>Net result from continuing operations</b>		<b>-192,965</b>	<b>-2,862</b>
Result after tax from discontinued operations		18,615	47,622
Result on business disposal		807,237	0
<b>Net result from discontinued operations</b>	12	<b>825,852</b>	<b>47,622</b>
<b>Net result</b>		<b>632,887</b>	<b>44,760</b>
Attributable to:			
– Equity holders of the parent		632,887	44,857
– Non-controlling interests		0	-97
<b>Net result</b>		<b>632,887</b>	<b>44,760</b>
<b>Earnings per share (€)</b>	26		
Basic		3.70	0.19
Diluted		3.66	0.19
<b>Earnings per share from continuing operations (€)</b>	26		
Basic		-1.13	-0.01
Diluted		-1.13	-0.01

The notes on pages 66 to 96 are an integral part of these consolidated financial statements.

**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**  
**FOR THE YEAR ENDED 31 DECEMBER**

(€ in thousands)	Notes	2019	2018
Net result		<b>632,887</b>	44,760
<b>Other comprehensive income</b>			
<i>Items that will not be reclassified to profit or loss</i>			
Actuarial (gains)/losses on defined benefit plans <sup>1</sup>	7	-5,878	1,024
<i>Items that may be subsequently reclassified to profit or loss</i>			
Currency translation differences		3,603	-505
Recycled currency translation differences on business disposal		-793	0
Remeasurement of deferred tax in equity	11	1,070	-814
<b>Other comprehensive loss for the period</b>		<b>-1,998</b>	<b>-295</b>
<b>Total comprehensive income for the period</b>		<b>630,889</b>	<b>44,465</b>
Attributable to:			
- Equity holders of the parent		630,889	44,760
- Non-controlling interests		0	-295
<b>Total comprehensive income for the period</b>		<b>630,889</b>	<b>44,465</b>

1. The items in the statement above are presented net of tax of €2.1 million for 2019 (2018: €0.3 million).

The notes on pages 66 to 96 are an integral part of these consolidated financial statements.



## CONSOLIDATED BALANCE SHEET

AS AT 31 DECEMBER

(€ in thousands)	Notes	2019	2018 <sup>1</sup>
Goodwill	13	192,294	192,294
Other intangible assets	14	380,160	634,728
Property, plant and equipment	15	28,588	26,380
Lease assets	16	32,667	35,393
Other contract related assets	5	2,489	10,426
Investments in associates	17	4,573	3,899
Deferred tax assets	11	5,626	5,296
<b>Total non-current assets</b>		<b>646,397</b>	<b>908,416</b>
Inventories	18	25,315	26,400
Trade receivables	19	99,776	92,530
Unbilled receivables	5	34,374	22,512
Other contract related assets	5	21,434	14,071
Other receivables and prepayments	20-21	45,351	54,998
Fixed term deposits	22	222,579	0
Cash and cash equivalents	22	213,941	247,675
		<b>662,770</b>	<b>458,186</b>
Assets held for sale	12	0	128,323
<b>Total current assets</b>		<b>662,770</b>	<b>586,509</b>
<b>Total assets</b>		<b>1,309,167</b>	<b>1,494,925</b>
Equity attributable to equity holders of the parent	25	665,932	774,109
<b>Total equity</b>		<b>665,932</b>	<b>774,109</b>
Lease liabilities	16	22,531	25,558
Deferred tax liability	11	27,283	80,436
Provisions	30	46,746	48,220
Deferred revenue	5	216,378	155,875
<b>Total non-current liabilities</b>		<b>312,938</b>	<b>310,089</b>
Trade payables	23	47,085	51,076
Lease liabilities	16	11,737	13,172
Provisions	30	8,274	26,192
Deferred revenue	5	152,939	125,035
Other contract related liabilities	5	26,745	38,665
Income taxes	11	14,701	17,609
Accruals and other liabilities	24	68,816	83,571
		<b>330,297</b>	<b>355,320</b>
Liabilities associated with assets held for sale	12	0	55,407
<b>Total current liabilities</b>		<b>330,297</b>	<b>410,727</b>
<b>Total equity and liabilities</b>		<b>1,309,167</b>	<b>1,494,925</b>

1. Further explained in note 2, the balance sheet at 31 December 2018 has been restated to represent uncertain tax provisions as part of income taxes.

The notes on pages 66 to 96 are an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER

(€ in thousands)	Notes	2019	2018
Operating result from continuing operations		-230,957	2,905
Operating result from discontinued operations	12	19,016	52,608
<b>Operating result</b>		<b>-211,941</b>	<b>55,513</b>
Financial (losses)/gains		-319	269
Depreciation and amortization	9	291,985	158,188
Change in provisions	30	-28,132	-1,155
Equity-settled stock compensation expenses	8	4,533	5,504
Changes in working capital:			
Change in inventories		3,461	8,140
Change in receivables and prepayments		-5,353	-29,814
Change in liabilities (excluding provisions) <sup>1</sup>		52,369	42,592
<b>Cash flow from operations</b>		<b>106,603</b>	<b>239,237</b>
Interest received	29	1,186	429
Interest paid	29	-2,311	-1,593
Corporate income taxes paid	11	-11,799	-9,100
<b>Cash flow from operating activities</b>		<b>93,679</b>	<b>228,973</b>
Investments in intangible assets	14	-11,416	-64,117
Investments in property, plant and equipment	15	-12,644	-20,035
Net cash inflow from business disposal	12	873,439	0
Dividends received	17	287	259
Increases in fixed term deposits		-222,579	0
<b>Cash flow from investing activities</b>		<b>627,087</b>	<b>-83,893</b>
Repayment of lease liabilities	16	-15,615	-17,011
Purchase of non-controlling interest		0	-1,545
Repayment of capital	8	-750,949	0
Proceeds on issue of ordinary shares	25	7,448	3,785
<b>Cash flow from financing activities</b>		<b>-759,116</b>	<b>-14,771</b>
<b>Net (decrease)/increase in cash and cash equivalents</b>		<b>-38,350</b>	<b>130,309</b>
Cash and cash equivalents at the beginning of period		252,112	120,850
Exchange rate changes on cash balances held in foreign currencies		179	953
<b>Cash and cash equivalents at the end of the period</b>		<b>213,941</b>	<b>252,112</b>
Cash and cash equivalents held for sale	12	0	4,437
Cash and cash equivalents at 31 December	22	213,941	247,675

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

The notes on pages 66 to 96 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	Retained earnings	Shareholders' equity	Non-controlling interests	Total equity
Balance as at 1 January 2018		47,064	1,068,149	-48,790	263,164	-609,993	<b>719,594</b>	2,308	<b>721,902</b>
<b>Comprehensive income</b>									
Result for the year		0	0	0	0	44,857	<b>44,857</b>	-97	<b>44,760</b>
<b>Other comprehensive income</b>									
Currency translation differences		0	0	0	-307	0	<b>-307</b>	-198	<b>-505</b>
Actuarial gain on defined benefit obligations	7	0	0	0	0	1,024	<b>1,024</b>	0	<b>1,024</b>
Remeasurement of deferred tax in equity	11	0	0	0	0	-814	<b>-814</b>	0	<b>-814</b>
<b>Total other comprehensive income</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>-307</b>	<b>210</b>	<b>-97</b>	<b>-198</b>	<b>-295</b>
<b>Total comprehensive income</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>-307</b>	<b>45,067</b>	<b>44,760</b>	<b>-295</b>	<b>44,465</b>
<b>Transactions with owners</b>									
Stock compensation related movements	8	0	-1,948	11,083	152	0	<b>9,287</b>	0	<b>9,287</b>
Change in non-controlling interest		0	0	0	0	468	<b>468</b>	-2,013	<b>-1,545</b>
<b>Other movements</b>									
Transfers between reserves		0	0	0	-11,210	11,210	<b>0</b>	0	<b>0</b>
<b>Balance as at 31 December 2018</b>		<b>47,064</b>	<b>1,066,201</b>	<b>-37,707</b>	<b>251,799</b>	<b>-553,248</b>	<b>774,109</b>	<b>0</b>	<b>774,109</b>
<b>Comprehensive income</b>									
Result for the year		0	0	0	0	632,887	<b>632,887</b>	0	<b>632,887</b>
<b>Other comprehensive income</b>									
Currency translation differences		0	0	0	3,603	0	<b>3,603</b>	0	<b>3,603</b>
Actuarial loss on defined benefit obligations	7	0	0	0	0	-5,878	<b>-5,878</b>	0	<b>-5,878</b>
Recycled currency translation differences on business disposal		0	0	0	-793	0	<b>-793</b>	0	<b>-793</b>
Remeasurement of deferred tax in equity		0	0	0	0	1,070	<b>1,070</b>	0	<b>1,070</b>
<b>Total other comprehensive income</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>2,810</b>	<b>-4,808</b>	<b>-1,998</b>	<b>0</b>	<b>-1,998</b>
<b>Total comprehensive income</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>2,810</b>	<b>628,079</b>	<b>630,889</b>	<b>0</b>	<b>630,889</b>
<b>Transactions with owners</b>									
Stock compensation related movements	8	0	2,281	19,370	-2,956	-6,812	<b>11,883</b>	0	<b>11,883</b>
Capital repayment and share consolidation	25	-20,591	-730,358	10,899	0	-10,899	<b>-750,949</b>	0	<b>-750,949</b>
<b>Other movements</b>									
Transfers between reserves		0	0	0	-63,145	63,145	<b>0</b>	0	<b>0</b>
<b>Balance as at 31 December 2019</b>		<b>26,473</b>	<b>338,124</b>	<b>-7,438</b>	<b>188,508</b>	<b>120,265</b>	<b>665,932</b>	<b>0</b>	<b>665,932</b>

1. Other reserves includes the Legal reserve, the 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 66 to 96 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:

#### GENERAL INFORMATION AND BASIS OF REPORTING

1	General	67
2	Basis of preparation	67
3	Accounting estimates	68

### SECTION 2:

#### RESULTS OF THE YEAR

4	Segment reporting	69
5	Revenue from contracts with customers	70
6	Cost of sales	73
7	Personnel expenses	73
8	Stock compensation	74
9	Depreciation, amortization and impairment	76
10	Government grants	76
11	Income tax	76
12	Discontinued operations and assets held for sale	78

### SECTION 3:

#### NON-CURRENT ASSETS AND INVESTMENTS

13	Goodwill	80
14	Other intangible assets	82
15	Property, plant and equipment	83
16	Leased assets and liabilities	84
17	Investments in associates	85

### SECTION 4:

#### WORKING CAPITAL

18	Inventories	87
19	Trade receivables	87
20	Other receivables and prepayments	87
21	Other financial assets/liabilities	87
22	Cash and cash equivalents and fixed term deposits	88
23	Trade payables	88
24	Accruals and other liabilities	88

### SECTION 5:

#### FINANCING, FINANCIAL RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

25	Shareholder's equity	89
26	Earnings per share	90
27	Financial risk management	90
28	Financial instruments	92
29	Financial income and expenses	93

### SECTION 6:

#### OTHER DISCLOSURES

30	Provisions	94
31	Commitments, contingent assets and liabilities	95
32	Related party transactions	96
33	Auditor's remuneration	96
34	Subsequent events	96

## Section 1: General information and basis of reporting

This section introduces the basis of preparation and the general accounting policies 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 includes the development and sale of navigation and location-based products and services which includes maps, traffic, navigation software and personal navigation devices (PNDs).

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

The financial statements have been prepared by the Management Board and were authorized for issue on 5 February 2020. The financial statements will be submitted for approval to the General Meeting on 15 April 2020

### 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 2019 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 POLICIES

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 policies 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 2019, the group has adopted IFRIC 23 'Uncertainty over Income Tax Treatments', and to the extent relevant, all other IFRS standards, interpretations and amendments that were in issue and effective from 1 January 2019.

IFRIC 23 'Uncertainty over Income Tax Treatments' is an interpretation which clarifies the accounting for income tax when it is unclear whether a tax authority will accept the income tax treatment as applied in income tax filings. Other than a change in the presentation of provision for tax uncertainty on the balance sheet, the interpretation had no impact on the recognition and measurement of the Group's provision. Previously the uncertain tax positions were presented as part of 'provisions' in the balance sheet. These positions are now, for all periods presented, included in the line 'Income taxes'. This change resulted in a decrease of non-current and current 'Provisions' of €13.9 million and €2.8 million respectively with a corresponding increase in 'Income taxes' of €16.7 million.

#### 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 policies 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'.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

### 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. Amortisation of technology and databases is disclosed as a separate line item, to provide additional insight, as it is a material non-cash expense.

### 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

Driven by technological advances that allow for an acceleration of the speed at which our maps are updated, and also changes to our map production process, the requirements of our customers and increasing use of third party data, we have reassessed and reduced the estimated remaining useful life of the map database from Tele Atlas acquisition to 24 months effective from 1 January 2019.

The remaining useful life of content capitalized since the acquisition that exceeds 6 years have been reduced to 6 years; all newly created content from 2019 onwards will be amortized over a period of 6 years. The change in estimate resulted in increased amortization of €164 million during 2019. A similar impact is expected for 2020.

### 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	30-31

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.

## 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.

Following the divestment of the Telematics segment (refer to note 12) the Group has redefined its operating segments into two distinct segments namely, Location Technology, which includes the previously reported operating segments Automotive and Enterprise, and Consumer.

The Group's internal management reporting is structured primarily based on the nature of the business of each segment. Location Technology is engaged in developing and selling location-based application components such as maps, services (e.g. traffic) and navigation software to customers in different market segments. Consumer generates revenue mainly from the sale of consumer electronic devices such as PNDs.

Management assesses the performance of segments based on the measures of revenue, operating result (EBIT) and EBITDA, whereby the EBIT and EBITDA measure include 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. The effects of non-recurring items are excluded from management's measurement basis. Interest income and expenses and tax are not allocated to the 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)	2019	2018
Location Technology	441,415	389,935
External Customers	425,982	372,272
Inter-segment	15,433	17,663
Consumer	274,777	314,526
Eliminations	-15,433	-17,663
<b>Total revenue by segment</b>	<b>700,759</b>	<b>686,798</b>

#### The EBIT of each segment is as follows:

Location Technology <sup>1</sup>	-293,557	-46,044
Consumer <sup>2</sup>	70,335	63,419
<b>Total segment operating result (segment EBIT)</b>	<b>-223,222</b>	<b>17,375</b>

#### The EBITDA of each segment is as follows:

Location Technology	-3,367	87,203
Consumer	72,101	69,970
<b>Total segment EBITDA</b>	<b>68,734</b>	<b>157,173</b>

1. Location Technology EBIT includes an impact of €164 million from the change in the estimated remaining useful life of the map database and €10 million in restructuring charges (2018: includes €9 million gain from litigation).
2. Consumer EBIT includes a provision release of €9 million (2018 includes a €13 million gain from litigation).

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)	2019	2018
Total segment EBIT	-223,222	17,375
Unallocated expenses	-7,735	-7,588
Items no longer allocated as a result of discontinued operation	0	-6,882
Interest expense	-1,102	-1,062
Other financial (expense)/income	-2,342	3,555
Income from associates	12	982
<b>Result before tax and discontinued operations</b>	<b>-234,389</b>	<b>6,380</b>

1. In 2018 costs previously allocated to the Telematics segment which do not form part of discontinued operations have not been reallocated to the remaining segments.

## 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)	2019	2018
<b>External revenue by products and services</b>		
License revenue	343,279	323,535
Rendering of services	142,636	114,927
Sale of goods	214,844	248,336
	<b>700,759</b>	<b>686,798</b>
<b>Revenue by timing of revenue recognition</b>		
Goods and services transferred at a point in time	274,921	301,378
Goods and services transferred over time	425,838	385,420
	<b>700,759</b>	<b>686,798</b>
<b>External revenue by geographical areas</b>		
Europe <sup>1</sup>	504,224	532,375
North America <sup>2</sup>	132,998	109,307
Rest of World	63,537	45,116
	<b>700,759</b>	<b>686,798</b>

- Germany, France and the United Kingdom accounted for respectively 22%, 15% and 6% of 2019 revenue (23%, 20% and 7% of 2018 revenue).
- The North American revenue in 2019 and in 2018 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 of revenue from licensing arrangements is based on the coverage of the group's geographical map data and other content.

Total revenue generated in the Netherlands in 2019 amounted to €32 million (2018: €30 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, unbilled receivables, and the following other contract related assets:

(€ in thousands)	2019	2018
Capitalized contract costs	23,032	22,874
Other deferred cost of sales	891	1,623
<b>Other contract related assets</b>	<b>23,923</b>	<b>24,497</b>
<b>Other contract related assets are disclosed as:</b>		
Current	21,434	14,071
Non-current	2,489	10,426

Unbilled receivables is presented net of expected credit losses of €0.4 million (2018: €0.4 million). For details regarding the balance of trade receivables and expected credit losses refer to note 19.

Revenue of €124 million (2018: €114 million) was recognized from amounts included in contract liabilities at the beginning of the year. An amount of €20 million (2018: €22 million) was recognized relating to performance obligations satisfied in previous years.

Contract related liability balances are as follows:

(€ in thousands)	2019	2018
Deferred revenue	369,317	280,910
Other contract related liabilities <sup>1</sup>	26,745	38,665
<b>Total contract related liabilities</b>	<b>396,062</b>	<b>319,575</b>
<b>Of which:</b>		
Current	179,684	163,700
Non-current	216,378	155,875

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

Deferred revenue amounted to €369 million at the end of the year (2018: €281 million). Deferred revenue per segment is as follows:

(€ in thousands)	2019	2018
Location Technology	301,610	189,507
Consumer	67,707	91,403
<b>Total deferred revenue</b>	<b>369,317</b>	<b>280,910</b>

At balance sheet date, €278 million (2018: €172 million) of Location Technology's deferred revenue related to Automotive and €23 million (2018: €17 million) related to Enterprise.

Automotive and Consumer deferred revenue is mostly driven by upfront payments by 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 each year for their annual license to our content.

**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 / guaranteed royalties for larger customers or usage-based royalty payments for smaller customers. The payments typically correspond with the period the group is obliged to provide the license and/or services.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

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 2019, the total of the transaction price allocated to the group's (partially) unfulfilled performance obligations is estimated at €1.2 billion (2018: €1.0 billion), of which €369 million (2018: €281 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)	2019	2018
Less than 1 year	339	281
Between 1-5 years	734	619
More than 5 years	87	107
<b>Total unfulfilled performance obligations</b>	<b>1,160</b>	<b>1,006</b>

### ACCOUNTING POLICY

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

#### License revenue

License revenue is generated through licensing of digital map content and/or navigation software to B2B customers of Location Technology and through the 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 which is 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 it exists at the moment the control passes to the customer. This does not give the customer 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 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 an 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 customer.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

**Service revenue**

Service revenue includes revenue generated from the 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 (Maps APIs) and providing connected navigation 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, Automotive hardware products and related accessories. Revenue from sale of goods is generally recognized at the moment the control passes to the customers.

**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 balances**

The group uses the terms 'unbilled receivables' and 'deferred revenue' to describe contract assets and contract liabilities. The term 'Contract related assets' is used to denote the aggregate balance of unbilled receivables and capitalized contract costs while 'Contract related liabilities' refers to the collective balance of deferred revenue and other contract-related liabilities.

**Contract costs**

Contract costs are capitalized only to the extent they are recoverable. Internal development costs relating to customer-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 costs are expensed.

**SIGNIFICANT ESTIMATES**

Significant revenue estimates include the estimates of various pricing allowances deducted from the revenue, estimates of the stand-alone selling price of various elements in bundled arrangements and of 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 stand-alone selling price**

The relative stand-alone selling price of each element in bundled arrangements is based on the available stand-alone selling price or is estimated using methods allowed under IFRS, such as the cost plus reasonable margin method, 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 bundled arrangements as at 31 December 2019 amounted to €64 million (31 December 2018: €84 million).

**Total transaction price**

The (expected) total transaction price of certain contracts that include variable considerations needs 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 that it will not be subject to significant reversal in the future.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

**6 COST OF SALES**

The group's cost of sales includes material and fulfilment costs for goods sold to customers, costs of services, royalty costs, and costs attributed to certain contracts with customers.

**7 PERSONNEL EXPENSES**

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

(€ in thousands)	2019	2018
Salaries	213,947	190,763
Social security costs	32,587	38,987
Pensions	9,942	9,589
Stock compensation	8,778	8,923
Temporary employee expenses	18,264	20,625
Other <sup>1</sup>	58,314	32,900
<b>Total personnel expenses</b>	<b>341,832</b>	<b>301,787</b>

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 €3 million (2018: €39 million).

Of the group personnel costs, €11 million (2018: €45 million) is presented as part of discontinued operations.

The average number of employees including discontinued operations (in FTE equivalents) in 2019 was 4,712 (2018: 4,834) spread across the following functional areas:

(€ in thousands)	2019	2018
Research and development	3,697	3,448
Marketing	100	113
Sales, general and administrative	915	1,273
<b>Total FTE</b>	<b>4,712</b>	<b>4,834</b>

At 31 December 2019, the group (including discontinued operations) had a headcount of 4,575 (2018: 5,144) employees. During 2019, 3,461 (2018: 3,991) 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 €9.9 million (2018: €9.6 million) consists of the costs of the defined contribution plans of €8.5 million (2018: €7.9 million) and of the defined benefit plan of €1.4 million (2018: €1.7 million).

**Belgium**

The Belgian defined benefit plan is a (guaranteed) insurance plan. The plan is funded by fixed monthly contributions from both the employer and employees. It provides a lump-sum payment at retirement, based on the contributions made, as well as 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 shortfall only needs to be compensated by the employer at the point in time when the employee either retires or leaves. As this plan has defined benefit features (when the return provided by the insurance company is below the legally required minimum return), the group treats this plan as a defined benefit plan.

(€ in thousands)	2019		2018	
	Plan Assets	Plan Liabilities	Plan Assets	Plan Liabilities
Present value as at 1 January	10,691	-13,333	10,073	-11,382
Return on assets	581		0	
Current service cost	0	-1,333	0	-1,258
Interest cost	0	-450	0	-212
	<b>11,272</b>	<b>-15,116</b>	<b>10,073</b>	<b>-12,852</b>
<b>Remeasurements:</b>				
Experience gains due to change in demographical assumptions	-461	-1,521	0	270
Gains/losses from change in financial assumptions	0	-3,906	709	-843
Other remeasurements	8,291	-8,291	0	0
	<b>7,830</b>	<b>-13,718</b>	<b>709</b>	<b>-573</b>
Benefits paid	294	-294	-91	92
Employers contributions	2,022	0	0	0
<b>Present value as at 31 December</b>	<b>21,418</b>	<b>-29,128</b>	<b>10,691</b>	<b>-13,333</b>
<b>Net defined benefit obligation</b>		<b>-7,710</b>		<b>-2,642</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

**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)	2019	2018
Present value as at 1 January	-8,690	-9,647
Current service cost	-68	-86
Interest cost	-159	-158
	<b>-8,917</b>	<b>-9,891</b>
<b>Remeasurements:</b>		
Experience (gains)/losses due to change in demographical assumptions	-1,524	861
(Gains)/losses from change in financial assumptions	-380	190
	<b>-1,904</b>	<b>1,051</b>
Benefits paid	185	150
<b>Present value as at 31 December</b>	<b>-10,636</b>	<b>-8,690</b>

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

	2019		2018	
	Belgium	Germany	Belgium	Germany
Discount rate	0.7%	0.9%	2.0%	1.9%
Average life expectancy <sup>1</sup>	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 (2018: 65) in accordance with MR/FR -5 and 65,580 (2018: 66) for the Germany plan set in accordance with the common German mortality tables 'Heubeck 2018G'.

The table below indicates the sensitivity of the defined benefit obligation to changes in the discount rate:

(€ in thousands)	Impact on defined benefit obligation	
	Belgium	Germany
Discount rate increases by 1%	-4,596	-1,594
Discount rate decreases by 1%	4,596	2,066

**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 services have 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 recognizes a liability 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 for which the terms to maturity approximate 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 STOCK COMPENSATION**

The group has stock compensation plans for members of the Management Board and certain employees as part of their remuneration. The group currently operates stock option plans, restricted stock unit plans and phantom share plans. The purpose of the stock 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 disclosure in this note relates to the total operations of the group.

In 2019, the group changed its long-term incentive plan. From 2019 the group no longer grants stock options and phantom shares and only grants restricted stock units. This change promotes share-ownership increasing alignment with our long-term value creation and shareholder interest.

**EQUITY-SETTLED PLANS**

The group's stock option plans (options) and restricted stock unit plans (RSU) classify as equity-settled plans as these plans are settled with the company's own equity instruments.

The equity-settled plans are 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 stock compensation will be covered at the time of exercise, firstly through the issue of treasury shares held by the company, and secondly through the issue of new shares.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The following table summarizes movements in the equity stock compensation reserve (as included in 'Other reserves') relating to the equity-settled plans during 2019 and 2018:

(€ in thousands)	2019	2018
Balance as at 1 January	18,065	17,913
Stock compensation expense	4,533	5,504
Transfer to retained earnings	-620	0
Stock options exercised and settlement of restricted shares	-6,869	-5,352
<b>Balance as at 31 December</b>	<b>15,109</b>	<b>18,065</b>

### Stock 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 and are considered to have lapsed after a period of seven years following the grant date.

The following table summarizes information about the stock options outstanding at 31 December 2019:

Year of grant	Number outstanding at 31/12/2019	Exercise price per share (€)	Weighted average remaining life	Number exercisable at 31/12/2019	Weighted average exercise price (€)
2013	668,500	3.36 - 3.53	0.35	668,500	3.49
2014	824,680	4.93 - 5.28	1.37	824,680	5.21
2015	740,600	7.60 - 7.83	2.35	740,600	7.81
2016	475,304	7.50 - 7.58	3.36	475,304	7.57
2017	665,420	7.95 - 9.60	4.38	0	9.53
2018	694,230	7.52 - 8.30	5.35	0	8.12
2019	61,538	10.06	6.80	0	10.06

A summary of the group's stock option plans and the movements during the years 2019 and 2018 is presented below:

	2019		2018	
	Number	Weighted average exercise price (€)	Number	Weighted average exercise price (€)
Outstanding as at 1 January	5,828,770	7.28	6,046,730	5.93
Granted	78,178	9.55	735,590	8.13
Exercised	-1,631,649	4.56	-766,510	4.94
Expired	-63,055	7.95	-66,950	6.45
Forfeited	-81,972	8.54	-120,090	8.01
<b>Outstanding as at 31 December</b>	<b>4,130,272</b>	<b>6.93</b>	<b>5,828,770</b>	<b>7.28</b>

Options were exercised on a regular basis throughout the year. The average share price during the year was €9.09 (2018: €8.00).

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.

	2019	2018
Share price at grant date (€)	10.06	8.30
Exercise price (€)	10.06	8.00 - 8.30
Expected volatility	41%	41%
Expected average option life in years	5.30	5.30
Weighted average risk-free rate	0.50%	0.68%
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 stock 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

An RSU gives the holder the right to receive one TomTom share after the completion of the vesting period. After the vesting period Members of the management Board are subject to a two year holding period. For other employees, there is no minimum holding period after the vesting period.

RSUs vest either in total after a three-year vesting period (cliff vesting) or, in some cases, in equal tranches on an annual basis over a three-year period (graded vesting). 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 number of restricted stock units during the years 2019 and 2018 is summarized below:

	2019	2018
Outstanding as at 1 January	856,852	1,283,540
Granted	892,320	3,450
Vested and settled	-424,397	-427,838
Forfeited	-24,337	-2,300
<b>Outstanding as at 31 December</b>	<b>1,300,438</b>	<b>856,852</b>

### CASH SETTLED PLAN

#### Phantom share plan

Under this plan, eligible employees are entitled to receive a cash payment equal to the value of the number of shares that have vested. Phantom shares vest and are paid out after the completion of a three-year vesting period. No phantom share was granted in 2019 as the phantom share plan is largely replaced with the granting of RSUs in 2019.

As at 31 December 2019, the outstanding liability with regard to the phantom share plan was €4.1 million (2018: €6.9 million).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

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

	2019	2018
Outstanding as at 1 January	1,269,180	1,530,700
Granted	0	491,410
Vested and paid out	-512,722	-594,640
Forfeited	-120,358	-158,290
<b>Outstanding as at 31 December</b>	<b>636,100</b>	<b>1,269,180</b>

**ACCOUNTING POLICY**

The fair value, as measured at the date of grant, of equity-settled stock compensation grants is expensed on a straight-line basis over the vesting period. For options, the fair value at grant date is measured using the binomial tree model. For restricted stock units, the fair value at grant date is equal to the share price at the date of grant.

Cash-settled stock compensation plans 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 any changes recognized immediately through profit and loss.

All stock compensation expenses are based on the number of units that are expected to vest, the estimates of which are revised at each balance sheet date.

**9 DEPRECIATION, AMORTIZATION AND IMPAIRMENT**

Total depreciation and amortization for the year was €292 million (2018: €158 million), none of which relates to discontinued operations (2018: €19 million).

(€ in thousands)	2019	2018
Amortization	266,532	127,117
Depreciation	25,453	31,071
<b>Total depreciation and amortization</b>	<b>291,985</b>	<b>158,188</b>

Amortization charges totaling €267 million (2018: €127 million) are included in the following line items in the Income Statement:

(€ in thousands)	2019	2018
Amortization of technology and databases	261,194	108,200
Research and development expenses	120	160
Selling, general and administration expenses	5,218	5,283
Discontinued operations	0	13,474
<b>Total amortization</b>	<b>266,532</b>	<b>127,117</b>

**10 GOVERNMENT GRANTS**

In 2019, the group received government grants amounting to €4.9 million, in relation to the research and development activities performed by the group (2018: €3.7 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 reasonable assurance that the grants will be received and that the group will comply with the conditions attached to them. Government grants that are receivable as compensation for expenses or losses that are already incurred, or for the purpose of giving immediate financial support to the group with no related future costs, are recognized as a deduction of related expenses in the period in which the grants become receivable.

**11 INCOME TAX**

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

(€ in thousands)	2019	2018
Current tax	8,910	9,413
Deferred tax	-50,334	-171
<b>Total income tax</b>	<b>-41,424</b>	<b>9,242</b>

**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 2019 (including discontinued operations) was €12 million (2018: €9.1 million). The current income tax charge has a €0.05 (2018: €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 9% 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.

	2019	2018
Dutch tax rate	25.0%	25.0%
Higher/(lower) weighted average statutory rate of group activities	0.81%	-14.9%
Income exempted from tax	0.0%	-9.0%
Non-deductible expenses and additional tax deductibles	-1.1%	53.1%
Losses not capitalized/utilization of losses not previously capitalized	-2.2%	0.0%
Effect of prior years' settlements and/or adjustments	-0.6%	0.0%
Remeasurement of deferred tax	-1.6%	-57.0%
Elimination of discontinued operations	-1.0%	163.2%
Other	-1.51%	-15.4%
<b>Effective tax rate</b>	<b>17.7%</b>	<b>145.0%</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The income tax gain of €41 million in 2019 represents an ETR of 17.7% (2018: 145%). This ETR is primarily impacted by the effect of the remeasurement of our deferred tax assets and liabilities and the effect of not capitalizing part of current year's tax losses. 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 income tax credited directly to equity in 2019 amounted to €2 million (2018: credit of €1 million) which is mainly related to the deferred tax assets on pension liability and remeasurement of deferred tax on items that originated through equity.

**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 the 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. Uncertain tax positions are included in current tax. The group recognizes uncertain tax provision when it is not probable that a particular tax treatment will be accepted by the tax authorities.

**DEFERRED INCOME TAX**

As at 31 December 2019, the group had a deferred tax liability of €27 million (2018: €80 million) and a deferred tax asset of €6 million (2018: €5 million). The deferred tax asset and liability mainly results from the timing difference between the tax and accounting treatment of intangible assets, lease assets and liabilities, cash-settled stock compensation 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	Leases and provisions	Stock compensation expense	Intangible assets	Other	Total
Balance as at 1 January 2018	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
<b>Balance as at 31 December 2018</b>	<b>24,251</b>	<b>3,883</b>	<b>1,296</b>	<b>-103,295</b>	<b>-1,275</b>	<b>-75,140</b>
(Charged)/credited to income statement	6,578	-1,294	-102	48,500	0	55,682
Credited/(charged) to equity	0	2,068	0	0	0	2,068
Impact of remeasurement (charged)/credited to income statement	646	0	218	-4,696	0	-3,832
Impact of remeasurement (charged)/credited to equity	1,070	0	0	0	0	1,070
Disposal of subsidiaries	0	0	0	0	240	240
Reclassifications	-547	547	0	0	0	0
Currency translation differences	259	-184	0	179	0	254
<b>Balance as at 31 December 2019</b>	<b>32,257</b>	<b>5,020</b>	<b>1,412</b>	<b>-59,312</b>	<b>-1,035</b>	<b>-21,658</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

In some jurisdictions the group has remaining tax losses that have not been recognized as a deferred tax asset as the future recovery of these losses against future taxable income is uncertain. As at 31 December 2019, these losses amounted to €48 million (2018: €26 million) of which €26 million relates 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 from 2023 to 2026. In addition, the group has uncapitalized withholding tax credits amounting to €8.3 million (2018: €5.5 million).

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

(€ in thousands)	2019	2018
To be reversed within 12 months	-26,026	-4,190
To be reversed after more than 12 months	4,368	-70,950
<b>Total deferred tax</b>	<b>-21,658</b>	<b>-75,140</b>

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

(€ in thousands)	2019	2018
Deferred tax assets	5,626	5,296
Deferred tax liabilities	-27,283	-80,436
<b>Total deferred tax</b>	<b>-21,658</b>	<b>-75,140</b>

**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 income 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, or a new estimate, 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 the periods during which the tax losses or temporary differences 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**

Telematics was classified as a discontinued operation and a disposal group held for sale at 30 November 2018. The business of Telematics represents the entirety of the previously disclosed Telematics operating segment.

The sale of Telematics, approved by shareholders on 18 March 2019, was completed on 1 April 2019 resulting in a net gain of €807 million and a net cash inflow of €873 million.

The results and cash flows of discontinued operations (representing 3 months and 12 months of operations in 2019 and 2018 respectively) are presented below:

(€ in thousands)	2019	2018
Revenue	44,582	173,808
Cost of sales	8,945	38,512
<b>Gross result</b>	<b>35,637</b>	<b>135,296</b>
Operating expenses	-16,621	-82,688
Financial income and expenses	663	-3,615
<b>Result before tax from discontinued operations</b>	<b>19,679</b>	<b>48,993</b>
Income tax expense	-1,064	-1,371
Result on business disposal	807,237	0
<b>Net result from discontinued operations</b>	<b>825,852</b>	<b>47,622</b>
<b>Earnings per share from discontinued operations</b>		
Basic	4.83	0.24
Diluted	4.78	0.24
<b>Cash flows</b>		
Operating	4,849	62,627
Investing	872,456	-7,422
Financing	-368	-1,588
<b>Net cash inflow</b>	<b>876,937</b>	53,617



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The following table summarizes the major classes of assets and liabilities disposed of on 1 April 2019 and the amounts classified as held for sale at 31 December 2018.

(€ in thousands)	2019	2018
Goodwill and other intangible assets	82,883	82,865
Property, plant, equipment and leased assets	15,136	17,064
Deferred tax assets	811	805
Inventories	9,018	8,502
Trade receivables	12,662	12,700
Other receivables, prepayments and contract related assets	858	1,950
Cash and cash equivalents	33,958	4,437
<b>Assets held for sale</b>	<b>155,326</b>	<b>128,323</b>
Provisions	3,604	565
Deferred tax liability	2,424	2,099
Lease liabilities	494	4,225
Deferred revenue	27,187	27,470
Trade payables	3,725	4,150
Income taxes	691	1,035
Accruals, other liabilities and contract related liabilities	10,877	15,863
<b>Liabilities associated with assets held for sale</b>	<b>49,002</b>	<b>55,407</b>
<b>Net assets held for sale</b>	<b>106,324</b>	<b>72,916</b>

The sale of Telematics did not take place on an intercompany debt-free basis resulting in the recognition of payables amounting to €5 million at the date of disposal which were previously eliminated on consolidation.

The net cash inflow and the net profit on disposal is as follows:

(€ in thousands)	2019
Transaction proceeds net of direct transaction costs	907,397
Currency translation differences recycled to profit and loss	793
Net assets disposed of	-100,953
<b>Net profit on business disposal</b>	<b>807,237</b>
Transaction proceeds net of direct transaction costs	907,397
Cash balances disposed of	-33,958
<b>Net cash inflow on business disposal</b>	<b>873,439</b>

The net cash inflow on disposal includes an amount of €5 million received in escrow.

At 31 December 2018, the currency translation reserve relating to the disposal group classified as held for sale was €1 million.

Immediately before classification of Telematics as a disposal group held for sale it was determined that the fair value of the disposal group (as determined using level 3 inputs) exceeded its carrying value. No adjustment to the carrying value of the disposal group was required. Refer to the accounting policy regarding fair value estimation in note 27.

**ACCOUNTING POLICY****Non-current assets held for sale**

Non-current assets and disposal groups are classified as held for sale if the carrying amount will be recovered principally through a sale transaction rather than continuing use.

To be classified as held for sale, 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 represent amounts for continuing operations, unless indicated otherwise in the note.

## Section 3: Non-current assets and investments

The notes in this section specify the group's non-current assets (and directly related liabilities) including investments made during the year either through separate asset acquisitions or business combinations.

### 13 GOODWILL

(€ in thousands)	2019	2018
Cost	1,881,901	1,945,926
Accumulated impairment	-1,689,607	-1,689,607
<b>Balance as at 1 January</b>	<b>192,294</b>	<b>256,319</b>
<b>Movements</b>		
Classified as held for sale	0	-63,559
Currency translation differences	0	-466
	<b>0</b>	<b>-64,025</b>
Cost	1,881,901	1,881,901
Accumulated impairment	-1,689,607	-1,689,607
<b>Balance as at 31 December</b>	<b>192,294</b>	<b>192,294</b>

Goodwill is wholly allocated to the Location Technology segment (in 2018, Automotive & Enterprise, now collectively 'Location Technology') which represents the lowest level at which Goodwill is monitored in the group. Refer to note 4 for details on operating segments.

Our 2019 and 2018 impairment tests did not result in an impairment of Goodwill. Details of the assumptions and estimates made are presented under Significant estimates below.

### 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 acquiree at the date of acquisition and is carried at cost 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

Goodwill and intangible assets 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 are subject to a certain degree of judgment and uncertainty.

Impairments to 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 Location Technology (2018: Automotive & Enterprise).

The recoverable amount of a segment 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 Location Technology uses post-tax cash flow projections based on financial forecasts approved by management covering a five-year period (forecasted period) including terminal value.

Management's cash flow projections for Location Technology in the forecast 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.

Location Technology's revenue is projected to grow in line with management's mid- and long-term plan in the forecast 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 forecast period as well as the discount rate used is 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).

	<b>Location Technology</b>
<b>2019</b>	
Revenue – perpetual growth <sup>1</sup>	1.0%
Discount rate <sup>2</sup>	8.5%

**2018**

	<b>Automotive</b>	<b>Enterprise</b>
Revenue – perpetual growth <sup>1</sup>	1.0%	1.0%
Discount rate <sup>2</sup>	8.5%	8.5%

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 from various analysts, and to the extent available, with market information on recent comparable transactions (merger and acquisition activities of comparable companies).

The sensitivity test for Location Technology showed that a reasonably possible change in any of the above-mentioned key assumptions as well as other assumptions in the forecasted period would not cause the fair value less costs of disposal to fall below the level of the carrying value.

## 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 <sup>2</sup>	Internally generated technology	Other <sup>1</sup>	Total
Cost	1,140,725	165,966	224,227	1,530,918
Accumulated amortization and impairment	-515,539	-118,617	-178,365	-812,521
<b>Balance as at 1 January 2018</b>	<b>625,186</b>	<b>47,349</b>	<b>45,862</b>	<b>718,397</b>
<i>Of which internally generated<sup>3</sup></i>	<i>171,748</i>	<i>47,349</i>	<i>0</i>	<i>219,097</i>
<b>Movements</b>				
Additions	57,998	7,499	861	66,358
Reclassified to assets held for sale	0	-8,712	-10,543	-19,255
Transfers	0	0	-2,230	-2,230
Amortization charges	-86,846	-17,925	-22,346	-127,117
Currency translation differences	-1,342	-117	34	-1,425
	<b>-30,190</b>	<b>-19,255</b>	<b>-34,224</b>	<b>-83,669</b>
Cost	1,197,121	202,732	126,833	1,526,686
Accumulated amortization and impairment	-602,125	-174,638	-115,195	-891,958
<b>Balance as at 31 December 2018</b>	<b>594,996</b>	<b>28,094</b>	<b>11,638</b>	<b>634,728</b>
<i>Of which internally generated<sup>3</sup></i>	<i>180,331</i>	<i>28,094</i>	<i>0</i>	<i>208,425</i>
<b>Movements</b>				
Additions	11,407	0	209	11,616
Amortization charges	-248,477	-12,218	-5,837	-266,532
Currency translation differences	556	-70	-138	348
	<b>-236,514</b>	<b>-12,288</b>	<b>-5,766</b>	<b>-254,568</b>
Cost	1,201,557	135,401	84,962	1,421,920
Accumulated amortization and impairment	-843,075	-119,595	-79,090	-1,041,760
<b>Balance as at 31 December 2019</b>	<b>358,482</b>	<b>15,806</b>	<b>5,872</b>	<b>380,160</b>
<i>Of which internally generated<sup>3</sup></i>	<i>148,080</i>	<i>15,806</i>	<i>0</i>	<i>163,886</i>

1. Other intangible assets consists primarily of customer relationships with a book value of €5 million (2018: €9 million).
2. The map content as acquired at acquisition date (June 2008) represents geographical content data used for the group's digital map and has a remaining useful life of 1 year (2018: 9 years and 5 months).
3. Internally generated technology includes technology in development for an amount of €0.4 million (2018: €5 million).

During the year the total gross amount of the assets disposed across all intangible asset classes was €116 million (2018: €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 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 quality is reached and ongoing activities focus on maintenance.

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**

Intangible assets acquired separately are initially recognized at cost, including 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 when 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.

All intangible assets are subsequently 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: 5-12 years;
- > Internally generated core technology: 3-6 years;
- > Acquired technology: 3-5 years;
- > Customer relationships: 5-13 years; and
- > Computer software: 2-5 years.

During the year, the estimated useful life of all map content created since Tele Atlas acquisition has been revised to 6 years (previously 4-12 years) while map content from Tele Atlas acquisition has been set to 12 years with a year remaining as of 31 December 2019. Refer to note 3 Accounting estimates for details regarding the reasons and impact of this change in accounting estimate.

**Impairment**

Intangible assets which have an indefinite useful life and intangible assets not yet ready for 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, assumptions are also made on the level of completion, at which point the capitalization is discontinued and future activities are considered to be maintenance. The estimated (remaining) useful life of map database, as changed in 2019, has been determined based on the speed at which we update our map, technological trends as well as requirements from our customers.

Such estimates are made on a regular basis, as they can be significantly affected by changes in technology and other factors.

**Impairment of intangible assets**

No impairment charge has been recorded for intangible assets in either period presented.

**15 PROPERTY, PLANT AND EQUIPMENT**

(€ in thousands)	Furniture and fixtures	Computer equipment	Leasehold improvements	Other <sup>1</sup>	Total
Cost	13,182	64,480	17,179	27,735	122,576
Accumulated depreciation	-8,734	-47,548	-11,887	-20,786	-88,955
<b>Balance as at 1 January 2018</b>	<b>4,448</b>	<b>16,932</b>	<b>5,292</b>	<b>6,949</b>	<b>33,621</b>

**Movements**

Additions	1,934	11,087	3,233	4,215	20,469
Disposals (net) <sup>2</sup>	-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
	<b>-813</b>	<b>-338</b>	<b>-34</b>	<b>-6,056</b>	<b>-7,241</b>

Cost	10,213	65,688	15,780	4,053	95,734
Accumulated depreciation	-6,578	-49,094	-10,522	-3,160	-69,354
<b>Balance as at 31 December 2018</b>	<b>3,635</b>	<b>16,594</b>	<b>5,258</b>	<b>893</b>	<b>26,380</b>

**Movements**

Additions	1,420	6,985	1,247	2,328	11,980
Disposals (net) <sup>2</sup>	-189	-34	-5	-76	-304
Depreciation charges	-1,235	-7,815	-1,559	-501	-11,110
Currency translation differences	411	641	589	1	1,642
	<b>407</b>	<b>-223</b>	<b>272</b>	<b>1,752</b>	<b>2,208</b>

Cost	10,535	46,072	16,373	5,217	78,197
Accumulated depreciation	-6,493	-29,701	-10,843	-2,572	-49,609
<b>Balance as at 31 December 2019</b>	<b>4,042</b>	<b>16,371</b>	<b>5,530</b>	<b>2,645</b>	<b>28,588</b>

1. Other property, plant and equipment includes vehicles, production tools and moulds.

2. The total gross amount of the assets disposed across all asset classes was €30 million (2018: €25 million).

No impairment has been recognized for Property, plant and equipment in 2019 or 2018.

## 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: 2–5 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 LEASE ASSETS AND LEASE LIABILITIES****LEASE ASSETS**

The group leases assets including buildings, cars and, to a limited extent, certain office equipment. The balances at year end as well as key movements relating to lease assets are presented below:

(€ in thousands)	Lease buildings	Lease vehicles	Total
<b>2019</b>			
Additions to leased assets	7,369	3,166	10,535
Depreciation charges	12,105	2,238	14,343
Balance as at 31 December	28,043	4,624	32,667
<b>2018</b>			
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

**Lease buildings**

Buildings are leased for office space for periods of approximately of 2-5 years. Leases for office buildings typically include an option, exercisable by the group as lessee up to one year before the end of the cancellable lease term, to renew the lease for an additional period of the same duration after the end of the contract term.

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 €36 million (2018: €30 million).

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 lease 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 2019 was €0.3 million and €0.4 million respectively (2018: €0.5 million and €0.2 million).

**LEASE LIABILITIES**

The total interest expense on lease liabilities in 2019 was €0.4 million (2018: €0.6 million) and the total cash outflow for lease related payments was €16 million (2018: €17 million). Lease liabilities have the following maturities:

(€ in thousands)	2019	2018
Less than 1 year	11,737	13,172
Between 1-5 years	21,730	25,558
More than 5 years	801	0
<b>Total undiscounted lease liabilities at 31 December</b>	<b>34,268</b>	<b>38,730</b>

**ACCOUNTING POLICY****Leases as a lessee**

A contract is classified as a lease at the inception of the contract, if the contract conveys the right to control the use of an identified asset for a period in exchange for consideration.

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 group does separate the payments for lease cars into lease components and non-lease components.

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 (term of 12 months or less) leases 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 mainly applicable 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 favorable 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.

The size and the relative importance of the lease 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 INVESTMENTS IN ASSOCIATES**

As of 31 December 2019, the group held interests in Cyient Ltd. ('Cyient'). WayTag (Pty) Ltd. ('WayTag') was successfully deregistered on 13 February 2019.

Cyient provides content development and support services and has no commitment to provide financing to Cyient.

The movements in the investment in associates is specified below:

(€ in thousands)	2019	2018
Balance as at 1 January	3,899	4,223
Result of associates <sup>1</sup>	12	982
Dividend received	-287	-259
Other direct equity movements	949	-1,047
<b>Balance as at 31 December</b>	<b>4,573</b>	<b>3,899</b>

1. The group's share in 'Other comprehensive income' of the associates are presented under 'Other direct equity movements' in the table above.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

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	
<b>2019</b>						
Cyient Ltd. <sup>1</sup>	India	485,629	165,697	588,355	60,791	1.36%
<b>2018</b>						
Cyient Ltd. <sup>1</sup>	India	430,149	136,390	521,135	53,623	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 2019 and 31 March 2018.

Cyient is regarded as an associate as TomTom is represented in its Board of Directors. The fair value of the investment in Cyient is €8 million (2018: €12 million).

**ACCOUNTING POLICY**

Associates are entities over which the group has significant influence but not control. This is generally evidenced by a shareholding of between 20% and 50% of the voting rights. In some cases, other factors can indicate significant influence. Investments in associates are initially recognized at cost and are subsequently accounted for using the equity method.

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 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 policies of associates has been adjusted where necessary to ensure consistency with the policies adopted by the group.



## 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.

### 18 INVENTORIES

(€ in thousands)	2019	2018
Finished goods	15,267	16,022
Components and sub-assemblies	10,048	10,378
<b>Total inventories</b>	<b>25,315</b>	<b>26,400</b>

The amount of inventories recognized as an expense when the inventories are sold and included in cost of sales amounted to €129 million (2018: €144 million). As a result of the write-down of inventories to their net realizable value, the group recognized a cost of €3.8 million (2018: €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.

### 19 TRADE RECEIVABLES

(€ in thousands)	2019	2018
Gross accounts receivables	102,124	94,352
Expected credit loss allowance	-2,348	-1,823
<b>Total trade receivables (net)</b>	<b>99,776</b>	<b>92,530</b>

The carrying amount of trade receivables approximates their fair value and the group expects to recover all receivables within a year. The group does not hold any collateral over these balances.

Trade accounts receivable include amounts denominated in the following major currencies:

(€ in thousands)	2019	2018
EUR	75,678	75,236
GBP	678	2,387
USD	20,461	12,455
Other	2,959	2,452
<b>Total trade receivables (net)</b>	<b>99,776</b>	<b>92,530</b>

#### 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 27.

### 20 OTHER RECEIVABLES AND PREPAYMENTS

(€ in thousands)	2019	2018
Prepayments	27,351	36,920
Corporate income tax, VAT and other taxes	8,926	5,851
Other receivables	9,074	12,227
<b>Total other receivables</b>	<b>45,351</b>	<b>54,998</b>

The carrying amount of the other receivables and prepayments approximates their fair value.

### 21 OTHER FINANCIAL ASSETS AND LIABILITIES

Other financial assets/liabilities includes derivative financial instruments carried at fair value through profit or loss. Derivative assets are disclosed as part of other receivables and prepayments and derivative liabilities are included in accruals and other liabilities.

(€ in thousands)	2019		2018	
	Assets	Liabilities	Assets	Liabilities
Derivatives at fair value through profit or loss	201	-97	21	-114

The notional principal amounts of the outstanding forward foreign exchange and option contracts as at 31 December 2019 were €9.4 million (2018: €4.5 million). All the group's outstanding options and forwards have a contractual maturity of less than one year.

#### 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.

The group does not apply hedge accounting.

## 22 CASH AND CASH EQUIVALENTS AND FIXED TERM DEPOSITS

### CASH AND CASH EQUIVALENTS

Cash and cash equivalents of €214 million (2018: €248 million) consists of cash held in short-term bank deposits with an original maturity of three months or less. Cash and cash equivalents are predominantly denominated in euros and partly in US dollars.

All cash and cash equivalents are available for immediate use by the group and the carrying amount of these approximates its fair value.

### FIXED TERM DEPOSITS

Fixed term deposits are investments in term deposits with financial institutions of €223 million. Investments are made with institutions with investment grade credit ratings and are denominated in euros (€150 million) and US Dollars (€73 million).

Fixed term deposits have maturities of more than three but less than twelve months from the date of acquisition. The carrying amount of these assets approximates their fair value.

#### ACCOUNTING POLICY

##### Cash and cash equivalents

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 which have a maturity of three months or less from the date of acquisition. They are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value.

##### Fixed term deposits

Cash presented as fixed term deposits are deposits with maturity dates longer than three months but less than twelve months at the date of acquisition.

## 23 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.

## 24 ACCRUALS AND OTHER LIABILITIES

Accruals and other liabilities comprise of the following:

(€ in thousands)	2019	2018
Personnel related accruals	49,579	54,535
Operating expense accruals	10,800	22,077
Taxes and social security	8,340	6,845
Financial liabilities	97	114
<b>Total accruals and other liabilities</b>	<b>68,816</b>	<b>83,571</b>

## Section 5: Financing, financial risk management and financial instruments

This section includes notes related to financing items such as equity and borrowings, including related items such as earnings per share, as well as financial risk management related items financial income and expenses, are included in this section.

### 25 SHAREHOLDER'S EQUITY

	2019		2018	
	Number	(€ in thousands)	Number	(€ in thousands)
<b>Authorized:</b>				
Ordinary shares	300,000,000	60,000	600,000,000	120,000
Preferred shares	150,000,000	30,000	300,000,000	60,000
Total	<b>450,000,000</b>	<b>90,000</b>	<b>900,000,000</b>	<b>180,000</b>
<b>Issued and fully paid:</b>				
Ordinary shares	132,366,672	26,473	235,318,516	47,064
Of which held in Treasury	824,674		4,078,002	

During the year, the group completed a capital repayment to shareholders of €3.23 per pre-consolidated share, for a total cash payment of €751 million, followed by a share consolidation, whereby each shareholder received 9 new shares in exchange for 16 old shares. This concluded the Group's plan to distribute the majority of the proceeds from the sale of Telematics (refer to note 12) to shareholders.

The share consolidation resulted in a reduction in the issued number of ordinary shares by 103 million shares, with a decrease in the number of treasury shares on hand of 1.2 million shares.

In 2019, 2,056,046 treasury shares were issued to cover the exercise of employee stock options and settlement of restricted stock units (2018: 1,194,000 treasury shares). All shares have a par value of €0.20 per share (2018: €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.

Reserves are freely distributable except for €173 million of legal reserves (2018: €234 million). Note E. Other reserves in the company financial statements provides an overview of the non-distributable reserves.

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 is further disclosure provided.

### ACCOUNTING POLICY

#### Share capital

Ordinary shares are classified as share capital. Equity instruments are recorded at the proceeds received, net of direct issue costs.

#### 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. Upon reissue, any difference between the carrying amount, determined on a first-in, first-out basis, and the consideration, is recognized in the retained earnings.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

**26 EARNINGS PER SHARE**

The calculation of basic and diluted earnings per share is based on the following data:

(€ in thousands)	2019	2018
<b>Earnings attributable to ordinary equity holders</b>		
Net result from continuing operations	-192,965	-2,862
Net result from discontinued operations	825,852	47,622
<b>Net result attributable to ordinary equity holders</b>	<b>632,887</b>	<b>44,760</b>
<b>Number of shares</b>		
Weighted average number of ordinary shares for basic earnings per share	170,973	230,878
<b>Effect of dilutive potential ordinary shares</b>		
Stock options and restricted shares	1,907	2,265
Weighted average number of ordinary shares for diluted earnings per share	172,880	233,143
<b>Earnings per share (€)</b>		
Basic	3.70	0.19
Diluted	3.66	0.19
<b>Earnings per share from continuing operations (€)</b>		
Basic	-1.13	-0.01
Diluted	-1.13	-0.01

TomTom also reports an adjusted earnings per share. Adjusted net result is calculated as net result attributed to equity holders adjusted for movement of deferred/unbilled revenue, acquisition-related amortization and impairments on a post-tax basis.

The reconciliation of the adjusted net result to the reported net result is presented below:

(€ in thousands)	2019	2018
Net result attributed to equity holders from continuing operations	-192,965	-2,862
Movement of deferred revenue and unbilled revenue	76,544	53,200
Acquisition-related amortization	207,283	46,571
Tax effect of adjustments	-57,134	-23,074
<b>Adjusted net result</b>	<b>33,728</b>	<b>73,835</b>
<b>Adjusted earnings per share (€)<sup>1</sup></b>		
Basic	0.20	0.32
Diluted	0.20	0.32

1. Adjusted earnings per share is not an IFRS performance measure and hence is not comparable across companies.

**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 stock options and other equity-settled stock compensation plans. When the effect of the equity-settled stock compensation plans is anti-dilutive, the number is excluded from the calculation of diluted earnings.

**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.

**27 FINANCIAL RISK MANAGEMENT**

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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

The following table summarizes the movement in the expected credit loss allowances for both trade receivables unbilled receivables:

(€ in thousands)	2019	2018
Balance as at 1 January	-2,266	-5,196
Additions to provision	-2,482	-4,634
Receivables written off during the year as uncollectible	54	2,609
Unused amounts reversed	1,980	2,504
Reclassified to assets held for sale	0	2,469
Currency translation differences	0	-18
<b>Balance as at 31 December</b>	<b>-2,714</b>	<b>-2,266</b>

To measure the expected credit losses, trade receivables and unbilled receivables have been grouped based on shared credit risk characteristics and the days past due as presented below:

(€ in thousands)	2019	2018
Gross unbilled receivables	34,740	22,956
Gross trade receivables	102,124	94,352
	<b>136,864</b>	<b>117,308</b>
<b>Of which:</b>		
Not overdue	118,018	99,802
Overdue less than 3 months	8,449	15,826
Between 3-6 months	1,200	177
More than 6 months	9,197	1,503
<b>Gross receivables</b>	<b>136,864</b>	<b>117,308</b>

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 2019, the total expected credit loss allowance represented approximately 0.4% of group revenue (2018: 0.3%).

**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. 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 passed due. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. The expected loss allowances and any subsequent recoveries of amounts previously written off, are recognized in operating expenses within 'Selling, general and administrative'.

**FOREIGN CURRENCY**

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. 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 2019 would have had the following impact (either an increase/(decrease)) on profit or loss, and equity:

(€)	2019		2018	
	Strengthen	Weaken	Strengthen	Weaken
USD	1,746,881	-1,746,881	-389,550	389,550
GBP	658,268	-658,268	-418,811	418,811

This analysis assumes that all other variables remain constant. The analysis was performed on the same basis as in 2018.

A breakdown of receivables held in foreign currencies is provided in note 19.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

### 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 a credit facility.

During the year, TomTom refinanced and extended the credit facility agreement (the facility). The facility is now effective up to 24 June 2024 and comprises of a revolving credit facility for an amount of €75 million with an additional accordion option of €40 million (2018: a revolving credit facility of €250 million).

Under the covenants of the facility, the group is required to meet certain performance indicators with regard to its leverage ratio (3.0) and interest cover, which is tested quarterly.

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 2019, the group complied with the loan covenants and, based on the group's plan for 2020, management expects to be able to comply with the loan covenants during 2020.

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. The interest is in line with market conditions and is based on Euribor plus a margin that depends on certain leverage covenants and the utilization percentage.

No interest is paid on the facility during the periods presented as the facility was undrawn at the end of 2019 and 2018.

### INTEREST RATE

Interest rate risk arises primarily from the exposure to interest income/expense on cash balances.

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.

### CAPITAL

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 2019, the group had a net cash position of €437 million (2018: €252 million).

For further quantitative disclosures in respect of liquidity, interest rate and capital risks, reference is made to note 22 and note 25.

## 28 FINANCIAL INSTRUMENTS

The group holds the following financial instruments for which additional disclosures are provided in the notes as indicated:

(€ in thousands)	Note	2019	2018
<b>Financial assets</b>			
<b>Financial assets at amortized cost</b>			
Trade receivables	19	99,776	92,530
Fixed term deposits	22	222,579	0
Cash and cash equivalents	22	213,941	247,675
<b>Financial assets at fair value through profit or loss</b>			
Derivative instruments	21	201	21
<b>Total financial assets</b>		<b>536,497</b>	<b>340,226</b>
<b>Financial liabilities</b>			
<b>Financial liabilities at amortized cost</b>			
Trade payables	23	47,085	51,076
Lease liabilities	16	34,268	38,730
<b>Financial liabilities at fair value through profit or loss</b>			
Derivative instruments	21	97	114
<b>Total financial liabilities</b>		<b>81,450</b>	<b>89,920</b>

Refer to note 27 for disclosure of groups exposure to risks associated with financial instruments.

**ACCOUNTING POLICY****Financial assets**

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 which are fixed and determinable and consist solely of payments of principal and interest. They 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. Financial assets 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. For further details regarding expected credit losses, refer to note 27. 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 favor 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 issued by the group are classified according to the substance of the contractual arrangements entered into, and the definition of a financial liability. Financial liabilities are initially recognized and measured at fair value and subsequently at amortized cost.

**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.

**29 FINANCIAL INCOME AND EXPENSES**

Financial (income) and expenses include the following items:

(€ in thousands)	2019	2018
Interest income	1,184	397
Interest expense	-2,286	-1,459
<b>Interest result</b>	<b>-1,102</b>	<b>-1,062</b>
Other financial result	14	25
Foreign exchange result	-2,356	3,530
<b>Other financial result</b>	<b>-2,342</b>	<b>3,555</b>

The interest expense relates mainly to interest expense on cash balances, lease liabilities and commitment fees for the loan facility (see note 27. Financial risk management).

The foreign exchange result (gain) includes results related to hedging contracts and monetary 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.

## Section 6: Other disclosures

This section includes the notes on provisions, commitments and contingent liabilities, related party transactions and auditor's remuneration.

### 30 PROVISIONS

(€ in thousands)	2019	2018 <sup>1</sup>
Non-current	46,746	48,220
Current	8,274	26,192
<b>Total provisions</b>	<b>55,020</b>	<b>74,412</b>

<sup>1</sup> The 2018 provisions balance has been represented to reflect the reclassification of uncertain tax positions to income taxes following the adoption of IFRIC 23 as described in note 2.

The movements in each category of provisions are as follows:

(€ in thousands)	Warranty	Claims and litigation <sup>1</sup>	Pensions	Other	Total <sup>1</sup>
Balance as at 1 January 2018	19,513	25,043	13,954	7,319	65,829
Increases in provisions	27,645	1,503	996	7,696	37,840
Utilized	-8,220	-897	-406	-7,412	-16,935
Released	-8,742	-947	-1,453	-648	-11,790
Reclassified	-330	0	0	-202	-532
<b>Balance as at 31 December 2018</b>	<b>29,866</b>	<b>24,702</b>	<b>13,091</b>	<b>6,753</b>	<b>74,412</b>
Increases in provisions	3,074	4,406	8,599	0	16,079
Utilized	-10,094	-475	-307	-4,358	-15,234
Released <sup>2</sup>	-9,407	-8,435	0	-2,395	-20,237
<b>Balance as at 31 December 2019</b>	<b>13,439</b>	<b>20,198</b>	<b>21,383</b>	<b>0</b>	<b>55,020</b>

- Total provisions for 2018 has been restated to reflect the reclassification of uncertain tax positions to income taxes, as explained in note 2. Income taxes were previously included in the Claims and litigation category.
- In 2019, releases of warranty claims resulted from lower warranty claims as more consumers preferred to replace impacted PND's. Releases in claims and litigations mainly reflects the expiry of statute of limitations.

### 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 provision

The group made a provision for potential legal, tax penalties 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.



**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 €13 million (2018: €30 million), it is estimated that an amount of €6.7 million (2018: €18 million) will be utilized within 12 months while the remaining will be utilized between 1-3 years.

**Claims and litigation provision**

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 €1.2 million (2018: €1.9 million).

**31 COMMITMENTS, CONTINGENT ASSETS AND LIABILITIES**

The group has long-term financial commitments, which are not shown in the group's balance sheet as at 31 December 2019. These commitments relate mainly to service contracts with suppliers.

Also included is 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. In certain circumstances, the group has a contractual obligation to purchase these components from the manufacturers.

The total commitments under these contracts are presented below.

(€ in thousands)	2019	2018
Less than 1 year	84,389	57,096
Between 1-5 years	116,135	82,567
More than 5 years	0	13,333
<b>Total commitments</b>	<b>200,524</b>	<b>152,996</b>

Included in commitments is an amount of €0.2 million relating to short term leases.

Commitments in 2019 include a commitment to purchase services with a total value of €12 million (2018: €26 million) from Cyient Ltd, an associate of the group.

The group has a guarantee facility of €10 million, of which a total amount of €3 million has been issued (2018: €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 11 and note 30 for disclosures on tax and legal contingencies.

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 2019.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

**32 RELATED PARTY TRANSACTIONS**

A full overview of the remuneration of the Management board and the Supervisory board is included in the Remuneration Report.

The expenses relating to remuneration of key management personnel are presented in the following table:

(€)	Salary and bonus <sup>1</sup>	Other short-term benefits <sup>2</sup>	Post-employment benefits	Stock compensation	Total remuneration <sup>3</sup>
<b>2019</b>					
Management Board and senior management	4,121,465	284,075	103,814	1,677,313	6,186,667
Supervisory Board	293,000	0	0	0	293,000
<b>Total remuneration</b>	<b>4,414,465</b>	<b>284,075</b>	<b>103,814</b>	<b>1,677,313</b>	<b>6,479,667</b>
<b>2018</b>					
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
<b>Total remuneration</b>	<b>3,415,538</b>	<b>238,928</b>	<b>86,099</b>	<b>1,306,078</b>	<b>5,046,643</b>

1. In 2019, the total bonus expense amounted to €1.4 million versus €1.5 million in 2018.
2. The other short-term benefits in 2019 and 2018 relate mainly to social security charges.
3. The increase in total remuneration is due to additions made to the extended management board in the second half of 2018 and early 2019.

Certain key personnel also hold ownership interests in TomTom NV, as disclosed in the Corporate Governance section under '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 2019 amounted to €19 million (2018: €18 million). As at 31 December 2019, the outstanding payable due to Cyient Ltd. amounted to €1.5 million (2018: €1.7 million).

**33 AUDITOR'S REMUNERATION**

The total remuneration to Ernst & Young Accountants LLP for the 2019 statutory audit of the group amounted to €520,000 (2018: €520,000). The total service fees paid/payable to the Ernst & Young network amounted to €602,000 (2018: €773,000). Included in the total remuneration of €557,000 (2018: €617,000) invoiced by Ernst & Young Accountants LLP, is an amount of €37,000 (2018: €97,000) for other statutory audits.

The service fees paid to the EY Network in 2019 included €22,000 (2018: €125,000) relating to statutory audits. Other services in 2018 included €6,000 for services relating to government grant declarations performed by EY network.

Details of the audit, audit-related and non-audit fees paid to EY can also be found in the Audit Committee report.

**34 SUBSEQUENT EVENTS**

Reference is made to note H in the company financial statements.

98	Company statement of income
99	Company balance sheet
100	Notes to the company financial statements

# COMPANY FINANCIAL STATEMENTS

**COMPANY STATEMENT OF INCOME OF TOMTOM NV**  
**FOR THE YEAR ENDED 31 DECEMBER**

(€ in thousands)	Notes	2019	2018
Result from disposal of subsidiaries	C	807,237	0
General and administrative expenses	B	6,563	6,608
<b>Operating result</b>		<b>800,674</b>	<b>-6,608</b>
Interest expense		-13,805	-3,151
Other financial result		-173	393
<b>Result before tax</b>		<b>786,696</b>	<b>-9,366</b>
Income tax gain		8,013	2,358
Result of subsidiaries after taxation	C	-161,822	51,865
<b>Net result</b>		<b>632,887</b>	<b>44,857</b>

The notes on pages 100 to 101 are an integral part of these company financial statements.

**COMPANY BALANCE SHEET OF TOMTOM NV**  
**AS AT 31 DECEMBER (BEFORE PROPOSED APPROPRIATION OF RESULT)**

(€ in thousands)	Notes	2019	2018
Investments in subsidiaries	C	2,466,523	2,804,801
<b>Total non-current assets</b>		<b>2,466,523</b>	<b>2,804,801</b>
Receivables		41,028	34,794
Cash and cash equivalents		8	20
<b>Total current assets</b>		<b>41,036</b>	<b>34,814</b>
<b>Total assets</b>		<b>2,507,559</b>	<b>2,839,615</b>
Share capital		26,473	47,064
Share premium		338,124	1,066,201
Treasury shares		-7,438	-37,707
Other reserves	E	188,508	251,896
Accumulated deficit		-512,622	-598,202
Result for the year		632,887	44,857
<b>Total shareholders' equity</b>	D	<b>665,932</b>	<b>774,109</b>
Intercompany payable	F	1,840,010	2,063,784
<b>Total non-current liabilities</b>		<b>1,840,010</b>	<b>2,063,784</b>
Other liabilities		1,617	1,722
<b>Total current liabilities</b>		<b>1,617</b>	<b>1,722</b>
<b>Total equity and liabilities</b>		<b>2,507,559</b>	<b>2,839,615</b>

The notes on pages 100 to 101 are an integral part of these company financial statements.

## 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 the Supervisory Board and the Remuneration Report in this annual report. The auditor's fee is further disclosed in note 33 of the consolidated financial statements

### C. INVESTMENTS IN SUBSIDIARIES

The movements in investments in subsidiaries were as follows:

(€ in thousands)	2019	2018
Balance as at 1 January	2,804,801	2,748,843
Result of subsidiaries	-161,822	51,865
Transfer to stock compensation reserve	3,205	4,419
Dividend received	-78,508	0
Disposal of subsidiary	-100,953	0
Currency translation differences	3,603	-307
Other direct equity movements	-3,803	-19
<b>Balance as at 31 December</b>	<b>2,466,523</b>	<b>2,804,801</b>

The disposal of subsidiary relates to the disposal of the TomTom Telematics B.V. entities as explained in note 12 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 equity for the year ended 31 December 2019, please refer to Consolidated statement of changes in equity in the consolidated financial statements. Additional information on the shareholders' equity is disclosed in note 25 of the consolidated financial statements.

### E. OTHER RESERVES

(€ in thousands)	Legal reserve participations	Cumulate translation reserve	Total legal reserve	Stock compensation reserve	Total other reserves
Balance as at 1 January 2018	231,627	13,624	<b>245,251</b>	17,913	<b>263,164</b>
Currency translation differences	0	-307	<b>-307</b>	0	<b>-307</b>
Stock compensation expenses	0	0	<b>0</b>	5,504	<b>5,504</b>
Transfers between reserves	-11,210	0	<b>-11,210</b>	-5,352	<b>-16,562</b>
<b>Balance as at 31 December 2018</b>	<b>220,417</b>	<b>13,317</b>	<b>233,734</b>	<b>18,065</b>	<b>251,799</b>
Currency translation differences	0	3,603	<b>3,603</b>	0	<b>3,603</b>
Disposal of subsidiary	0	-793	<b>-793</b>	0	<b>-793</b>
Stock compensation expenses	0	0	<b>0</b>	4,533	<b>4,533</b>
Transfers between reserves	-63,145	0	<b>-63,145</b>	-7,489	<b>-70,634</b>
<b>Balance as at 31 December 2019</b>	<b>157,272</b>	<b>16,127</b>	<b>173,399</b>	<b>15,109</b>	<b>188,508</b>

### LEGAL RESERVE

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 reserve.

### STOCK COMPENSATION RESERVE

The stock compensation reserve represents the cumulative expense of issued stock options that have been granted but not exercised and restricted stock units that have not yet vested.

### F. INTERCOMPANY PAYABLES

Intercompany payables comprises of loans provided by subsidiaries. The interest rate on the loan during 2019 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 0.6% (2018: 0%). Although no repayment period has been agreed the loan has a long-term nature.

### G. 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 (2018: €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.

## NOTES TO THE COMPANY FINANCIAL STATEMENTS CONTINUED

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.

### H. SUBSEQUENT EVENTS

There has been no subsequent events from 31 December 2019 to the date of issue of these financial statements.

### I. PROPOSED APPROPRIATION OF RESULT

The Management Board proposes to add the net result in full to the Accumulated deficit.

#### TomTom NV

Amsterdam, 5 February 2020

##### **The Management Board**

**HAROLD GODDIJN**

**TACO TITULAER**

**ALAIN DE TAEYE**

Amsterdam, 5 February 2020

##### **The Supervisory Board**

**DERK HAANK**

**JACQUELINE TAMMENOMS BAKKER**

**JACK DE KREIJ**

**MICHAEL RHODIN**

**BERND LEUKERT**

103	Other information
104	Independent auditor's report

# OTHER INFORMATION



## 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 2019 INCLUDED IN THE ANNUAL REPORT

#### OUR OPINION

We have audited the financial statements 2019 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 2019 and of its result and its cash flows for the year 2019 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 2019 and of its result for 2019 in accordance with Part 9 of Book 2 of the Dutch Civil Code

#### The consolidated financial statements comprise:

- > The consolidated statement of financial position as at 31 December 2019
- > The following statements for 2019: 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 2019
- > The company statement of income for 2019
- > 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.

#### OUR AUDIT APPROACH

##### Our understanding of the business

TomTom N.V. develops and sells navigation and location-based products, and services which includes maps, traffic, navigation software and personal navigation devices (PNDs). The group is structured in components and we tailored our group audit approach accordingly. We paid specific attention in our audit to a number of areas driven by the operations of the group and our risk assessment.

We start by determining materiality and identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud, non-compliance with laws and regulations or error in order to design audit procedures responsive to those risks, and to obtain 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.

MATERIALITY	BENCHMARK APPLIED	EXPLANATION
€6.45 million (2018: €7.20 million)	1.25% of gross profit (2018: 1.5% of gross profit)	Based on our professional judgment we have considered earnings-based measures, such as profit before tax and gross profit, 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. Gross profit as percentage of revenues is increasing, mainly as a result of the sale of TomTom Telematics and decreasing revenues from the Consumer segment. We lowered the benchmark percentage to 1.25% to balance these changes in revenue mix and gross profit.

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 €322,000, 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.

## INDEPENDENT AUDITOR'S REPORT CONTINUED

### OUR FOCUS ON FRAUD AND NON-COMPLIANCE WITH LAWS AND REGULATIONS

#### Our responsibility

Although we are not responsible for preventing fraud or non-compliance and cannot be expected to detect non-compliance with all laws and regulations, it is our responsibility to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether caused by fraud or error.

Non-compliance with laws and regulations may result in fines, litigation or other consequences for the company that may have a material effect on the financial statements.

#### Our audit response related to fraud risks

In order to identify and assess the risks of material misstatements of the financial statements due to fraud, we obtained an understanding of the entity and its environment, including the entity's internal control relevant to the audit and in order to design audit procedures that are appropriate in the circumstances. As in all of our audits, we addressed the risk of management override of internal control. We do not audit internal control per se for the purpose of expressing an opinion on the effectiveness of the company's internal control.

We considered available information and made enquiries of relevant executives, directors (including internal audit, legal and compliance) and the supervisory board. As part of our process of identifying fraud risks, we evaluated fraud risk factors with respect to financial reporting fraud. In our risk assessment we considered the potential impact of performance based bonus schemes which the company has in place. Furthermore, as TomTom N.V. is a global company, operating in multiple jurisdictions, we considered the risk of bribery and corruption.

We evaluated the design and the implementation of internal controls that mitigate fraud risks. In addition, we performed procedures to evaluate key accounting estimates for management bias in particular relating to important judgment areas and significant accounting estimates as disclosed in Note 3 to the financial statements. We have also used data analysis to identify and address high-risk journal entries.

We incorporated elements of unpredictability in our audit. We considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance. If so, we reevaluate our assessment of fraud risk and its resulting impact on our audit procedures.

#### Our audit response related to risks of non-compliance with laws and regulations

We assessed factors related to the risks of non-compliance with laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general industry experience, through discussions with the management board, reading minutes, read internal audit and compliance reports, and performing substantive tests of details of classes of transactions, account balances or disclosures.

We also inspected lawyers' letters and correspondence with regulatory authorities and remained alert to any indication of (suspected) non-compliance throughout the audit. Finally we obtained written representations that all known instances of non-compliance with laws and regulations have been disclosed to us.

#### GOING CONCERN

In order to identify and assess the risks of going concern and to conclude on the appropriateness of management's use of the going concern basis of accounting, we consider 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.

#### SCOPE OF THE GROUP AUDIT

TomTom N.V. is the parent 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.

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.

#### TEAMING, USE OF SPECIALISTS

We ensured that the audit team included the appropriate skills and competences which are needed for the audit of a listed client in this industry. We included specialists in the areas of IT audit, forensics, income tax, impairment testing and actuaries.

## INDEPENDENT AUDITOR'S REPORT CONTINUED

### GENERAL AUDIT PROCEDURES

Our audit further included among others:

- > Performing audit procedures responsive to the risks identified, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion
- > Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management
- > 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

### 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. In comparison with previous year, our key audit matters did not materially change.

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.

### REVENUE RECOGNITION LOCATION TECHNOLOGY

(Reference is made to Note 5 of the consolidated financial statements)

<b>Risk</b>	<p>TomTom's Location Technology segment includes sales contracts that involve performance obligations for which revenue is recognized based on their stand-alone selling prices. 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 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>
<b>Our audit approach</b>	<p>Our audit procedures included an assessment of the appropriateness of the Company's revenue recognition policies, understanding of the internal control environment, substantive data analytics procedures on revenues and substantive procedures relating to the estimated contract value for relevant contracts, contractual terms and conditions including the appropriate accounting thereof.</p> <p>For a sample of contracts containing performance obligations, we assessed the allocation of revenue to the separate performance obligations, based on the estimated stand-alone selling prices of each performance obligation 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>
<b>Key observations</b>	<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>

## INDEPENDENT AUDITOR'S REPORT CONTINUED

### IMPAIRMENT OF GOODWILL AND OTHER INTANGIBLE ASSETS

(Reference is made to Note 13 of the consolidated financial statements)

<b>Risk</b>	<p>At 31 December 2019, the total carrying value of goodwill and other intangible assets amounts to €572 million (PY: €827 million). The decrease mainly relates to accelerated amortization as a result of changes to the useful life of certain intangible assets following technological and economic developments.</p> <p>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.</p> <p>The valuation of goodwill and other intangible assets is significant to our audit due to the significance 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 loss recorded during 2019 relating to goodwill and other intangible assets.</p>
<b>Our audit approach</b>	<p>We challenged management's reassessment of useful lives for certain elements of intangible assets (maps) including comparison with market benchmarks.</p> <p>We involved a valuation expert in evaluating the goodwill 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>
<b>Key observations</b>	<p>Management has updated the key assumptions and related forecast in the impairment models.</p> <p>Useful lives of intangible assets and forecasted revenue growth are significant assumptions however they are in line with management's expectations, external developments and benchmarks, 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>

### DISCONTINUED OPERATIONS TELEMATICS

(Reference is made to Note 12 of the consolidated financial statements)

<b>Risk</b>	<p>The Company completed the sale of Telematics on 1 April 2019.</p> <p>Management continued Telematics to be accounted for as a discontinued operations and as assets held for sale up to completion of the sale. Management has accounted for the result of business disposal in accordance with IFRS 5.</p> <p>The accounting for the Telematics disposal is significant to our audit due to the significance of the transaction and complexity of accounting.</p>
<b>Our audit approach</b>	<p>Our audit procedures included, amongst others, assessing the appropriateness of the Company's accounting policies in relation to the assets held for sale, discontinued operations and result on business disposal as well as the basis for the accounting of discontinued operations, result on business disposal and assessment of compliance with the respective accounting policies.</p> <p>We assessed the Company's accounting for the Telematics sale as result on business disposal in accordance with IFRS. Audit procedures included inspection of the sales contract, reconciliation to bank statements and accounting entries. We also assessed the adequacy of the Company's disclosure as included in note 12.</p>
<b>Risk</b>	<p>We agree with the accounting of the Telematics sale as result on business disposal including disclosures.</p>

## INDEPENDENT AUDITOR'S REPORT CONTINUED

### 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
- > Remuneration 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 and section 2:135b 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 and section 2:135b sub-section 7 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, other information as required by Part 9 of Book 2 of the Dutch Civil Code and the remuneration report in accordance with section 2:135b 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.

#### OUR RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objective is to plan and perform the audit engagement 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. The Our audit approach section above includes an informative summary of our responsibilities and the work performed as the basis for our opinion.

#### COMMUNICATION

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.

## INDEPENDENT AUDITOR'S REPORT CONTINUED

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, 5 February 2020

**Ernst & Young Accountants LLP**

**P.J.A. GABRIËLS**

# SUPPLEMENTARY INFORMATION

111	Investor relations
113	Key figures overview 2012–2019
114	Quarterly statement of income 2019
115	Quarterly statement of cash flows 2019
116	Definitions and abbreviations
117	Non-GAAP measures
118	Other notices



## 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 program, 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.

We also held during 2019, a Capital Markets Day with investors to exhibit TomTom's positioning and prospects. All information made available in the event has been published in our 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](mailto:ir@tomtom.com)
- > Phone: +31 20 757 5194

### WEBSITE

The company's Investor Relations website <https://corporate.tomtom.com/investors/overview> 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: [www.tomtom.com/company/](http://www.tomtom.com/company/)
- > Corporate Governance: [www.tomtom.com/company/corporate-governance/](http://www.tomtom.com/company/corporate-governance/)

### FINANCIAL CALENDAR 2020

Date	Event
15 April 2020	Publication Q1 2020 results
15 April 2020	Annual General Meeting
15 July 2020	Publication Q2 2020 results
14 October 2020	Publication Q3 2020 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 2019:

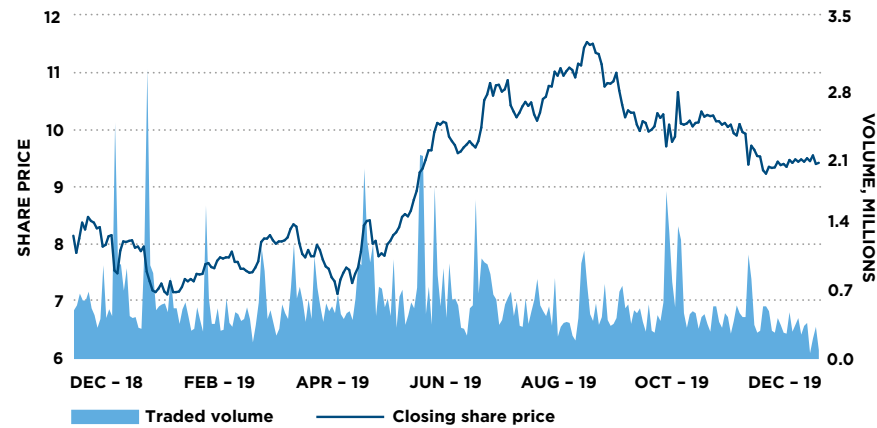
Name	# shares	% of total
Founder – Harold Goddijn	14,868,609	11.2%
Founder – Corinne Vigreux	14,794,217	11.2%
Founder – Peter–Frans Pauwels	14,702,531	11.1%
Founder – Pieter Geelen	14,140,030	10.7%
<b>Total founders</b>	<b>58,505,387</b>	<b>44.2%</b>
Free float	73,036,611	55.2%
Treasury shares*	824,674	0.6%
<b>Total shares outstanding</b>	<b>132,366,672</b>	<b>100%</b>

\* Treasury shares are related to the share buyback program held in 2017.

## INVESTOR RELATIONS CONTINUED

### SHARE PRICE

The graph below shows TomTom's share price development during 2019.



### KEY SHARE DATA

(€, unless stated otherwise)	2019	2018
Share price at the end of the previous year	7.99	8.26
Share price at the end of the year	9.42	7.99
Highest closing share price	11.54	9.05
Lowest closing share price	7.11	5.97
Market capitalization at year-end (€ in millions)	1,247	1,848
Average daily volume traded (# in thousands)	579	880
Weighted average number of shares outstanding (# in millions)	171.0	230.9
Weighted average number of shares fully diluted (# in millions)	172.9	233.2

Note: Where applicable, pre-consolidation share price data has been adjusted to enable comparability between periods.

### LISTING

TomTom NV shares are traded on Euronext Amsterdam in the Netherlands, where the company is included in the Amsterdam Small Cap Index (AScX):

- > Euronext Amsterdam symbol: TOM2
- > ISIN: NL0013332471
- > Common Code: 021984272
- > Amsterdam Security Code Number: 38705

### DIVIDEND POLICY

TomTom's dividend policy remains unchanged. We do not distribute dividends, except for the capital repayment in 2019 following the divestment of the Telematics business. The company gives priority to 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 2012–2019<sup>1</sup>

(€ in millions, unless stated otherwise)	Continuing operations (unless stated otherwise)			Total operations				
	2019	2018	2017	2016	2015	2014	2013	2012
<b>Income and expenses</b>								
Revenue	701	687	739	987	1,007	950	963	1,057
Gross result	515	475	446	566	519	523	521	555
Operating result <sup>2</sup>	-231	3	-43	9	1	21	26	70
Net result <sup>2</sup>	633	45	-4	12	18	23	20	129
<b>Data per share</b>								
Earnings per share (€) – diluted	-1.13	-0.01	-1.05	0.05	0.08	0.10	0.09	0.58
<b>Shares outstanding (# in millions)</b>								
Average # basic shares outstanding	171	231	234	232	228	223	222	222
Average # diluted shares outstanding	173	233	237	235	232	225	223	222
<b>Regional revenue split</b>								
Europe	504	532	552	773	771	719	710	773
North America	133	109	136	167	186	163	178	208
Rest of World	64	45	51	47	49	68	76	76
<b>Cash flows from total operations</b>								
Cash generated from operations	107	239	184	158	123	135	188	187
Cash flows from operating activities	94	229	174	144	119	119	260	167
Cash flows from investing activities	850	-84	-130	-120	-154	-106	95	-51
Cash flows from financing activities	-759	-15	-64	-29	29	-118	-74	-146
Net (decrease)/increase in cash and cash equivalents	184	130	-20	-5	-6	-106	95	-30
<b>Balance sheet</b>								
Goodwill	192	192	256	400	403	382	382	382
Intangible assets	380	635	718	796	811	801	804	821
Inventories	25	26	32	54	49	47	42	44
Trade receivables	100	93	114	132	139	133	115	150
Cash and cash equivalents	437	248	121	143	148	153	258	164
Provisions	55	74	81	91	68	83	80	81
Borrowings	0	0	0	10	49	49	173	247
Trade payables	47	51	51	77	95	88	82	84
Total equity and liabilities	666	774	1,399	1,629	1,654	1,591	1,678	1,724
Net cash/(net debt)	437	252	121	133	98	103	83	-96
<b>Number of employees (#)</b>								
At end of period (FTE)	4,516	5,077	4,768	4,716	4,605	4,116	3,630	3,441

1. Periods prior to 2017 have not been restated for the adoption of new accounting standards as disclosed in note 2 of the 2018 financial statements included in the annual report or the divestment of Telematics.

2. Operating result in 2017 excludes the acquisition-related impairment charges of €169 million and restructuring charges of €28 million. Net result excludes these charges and the relaxed tax effects.

## QUARTERLY STATEMENT OF INCOME 2019

(€ in thousands, unless stated otherwise; quarterly data unaudited)	Q1 2019	Q2 2019	Q3 2019	Q4 2019	FY 2019
<b>Revenue</b>	169,527	210,803	164,206	156,223	<b>700,759</b>
Cost of sales	48,273	68,759	36,277	32,249	185,557
<b>Gross profit</b>	<b>121,254</b>	<b>142,044</b>	<b>127,929</b>	<b>123,974</b>	<b>515,202</b>
Research and development expenses	72,498	78,840	80,272	91,175	322,785
Amortisation of technology and databases	24,474	106,561	65,038	65,120	261,194
Marketing expenses	6,945	6,432	7,057	9,002	29,436
Selling, general and administrative expenses	30,529	33,170	32,647	36,398	132,744
<b>Total operating expenses</b>	<b>134,446</b>	<b>225,003</b>	<b>185,014</b>	<b>201,695</b>	<b>746,159</b>
<b>Operating result</b>	<b>-13,192</b>	<b>-82,959</b>	<b>-57,085</b>	<b>-77,721</b>	<b>-230,957</b>
Financial (expense)/income and results of associate	-2,253	386	785	-2,351	-3,432
<b>Result before tax</b>	<b>-15,445</b>	<b>-82,573</b>	<b>-56,300</b>	<b>-80,072</b>	<b>-234,389</b>
Income tax gain	120	17,319	12,871	11,114	41,424
<b>Net result from continuing operations</b>	<b>-15,325</b>	<b>-65,254</b>	<b>-43,429</b>	<b>-68,958</b>	<b>-192,965</b>
Net profit from discontinued operations	18,615	807,237	0	0	825,852
<b>Net result attributable to equity holders of the parent</b>	<b>3,290</b>	<b>741,983</b>	<b>-43,429</b>	<b>-68,958</b>	<b>632,887</b>
<b>Margins</b>					
Gross margin (%)	72%	67%	78%	79%	74%
EBIT margin (%)	-8%	-39%	-35%	-50%	-33%
<b>Calculation of adjusted earnings per share (€ in million)</b>					
Net result from continuing operations	-15.3	-65.3	-43.4	-69.0	-193.0
Movement of deferred revenue, unbilled revenue and deferred CoS	6.6	-10.8	60.6	20.1	76.5
Acquisition-related amortization	11.6	92.0	51.8	51.8	207.3
Tax impact	-3.8	-17.0	-24.7	-11.5	-57.1
<b>Adjusted net result</b>	<b>-0.9</b>	<b>-1.0</b>	<b>44.3</b>	<b>-8.6</b>	<b>33.7</b>
Basic number of shares (in thousands)	231,584	191,057	131,305	131,483	170,973
Diluted number of shares (in thousands)	233,233	192,528	133,283	133,341	172,872
<b>Earnings per share from continuing operations</b>					
Basic EPS (€)	-0.07	-0.34	-0.33	-0.52	-1.13
Fully diluted adjusted EPS (€)	0.00	-0.01	0.33	-0.07	0.20

## QUARTERLY STATEMENT OF CASH FLOWS 2019

(€ in thousands, quarterly data unaudited)	Q1 2019	Q2 2019	Q3 2019	Q4 2019	FY 2019
Operating result from continuing operations	-13,192	-82,959	-57,085	-77,721	-230,957
Operating result from discontinued operations	19,016	0	0	0	19,016
<b>Operating result</b>	<b>5,824</b>	<b>-82,959</b>	<b>-57,085</b>	<b>-77,721</b>	<b>-211,941</b>
Financial (losses)/gains	-437	-208	1,424	-1,098	-319
Depreciation and amortization	31,971	113,942	72,939	73,133	291,985
Change in provisions	-1,107	-2,755	-14,104	-10,166	-28,132
Equity-settled stock compensation expenses	911	991	1,496	1,135	4,533
Changes in working capital:					
Change in inventories	433	5,159	-5,134	3,003	3,461
Change in receivables and prepayments	-4,537	-29,576	-18,936	47,696	-5,353
Change in liabilities (excluding provisions)	-30,082	17,587	47,501	17,363	52,369
<b>Cash flow from operations</b>	<b>2,976</b>	<b>22,181</b>	<b>28,101</b>	<b>53,345</b>	<b>106,603</b>
Interest received	277	213	339	357	1,186
Interest paid	-437	-1,203	-262	-409	-2,311
Corporate income taxes paid	-1,887	-6,816	-1,062	-2,034	-11,799
<b>Cash flow from operating activities</b>	<b>929</b>	<b>14,375</b>	<b>27,116</b>	<b>51,259</b>	<b>93,679</b>
Investments in intangible assets	-4,851	-3,530	-1,573	-1,462	-11,416
Investments in property, plant and equipment	-5,062	-2,592	-2,872	-2,118	-12,644
Net cash flow on disposal of subsidiaries and businesses	0	873,439	0	0	873,439
Dividends received	0	174	0	113	287
Increases in fixed term deposits	0	0	0	-222,579	-222,579
<b>Cash flow from investing activities</b>	<b>-9,913</b>	<b>867,491</b>	<b>-4,445</b>	<b>-222,579</b>	<b>627,087</b>
Repayment of lease liabilities	-3,434	-3,641	-4,082	-4,458	-15,615
Repayment of capital	0	-750,949	0	0	-750,949
Proceeds on issue of ordinary shares	532	4,369	1,851	696	7,448
<b>Cash flow from financing activities</b>	<b>-2,902</b>	<b>-750,221</b>	<b>-2,231</b>	<b>-3,762</b>	<b>-759,116</b>
<b>Net increase in cash and cash equivalents</b>	<b>-11,886</b>	<b>131,645</b>	<b>20,440</b>	<b>178,549</b>	<b>38,350</b>
Cash and cash equivalents at the beginning of period	252,112	240,551	372,030	392,865	252,112
Exchange rate changes on cash balances held in foreign currencies	325	-166	395	-375	179
<b>Cash and cash equivalents at the end of the period</b>	<b>240,551</b>	<b>372,030</b>	<b>392,865</b>	<b>213,941</b>	<b>213,941</b>
<b>Calculation of free cash flow</b>					
Cash flow from operating activities	929	14,375	27,116	51,259	93,679
Investments in intangible assets	-4,851	-3,530	-1,573	-1,462	-11,416
Investments in property, plant and equipment	-5,062	-2,592	-2,872	-2,118	-12,644
<b>Free cash flow from total operations</b>	<b>-8,984</b>	<b>-8,253</b>	<b>22,671</b>	<b>47,679</b>	<b>69,619</b>
Free cash flow from discontinued operations	-11,244	7,378	0	0	-3,866
<b>Free cash flow from continuing operations</b>	<b>-20,228</b>	<b>15,631</b>	<b>22,671</b>	<b>47,679</b>	<b>65,753</b>

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

## DEFINITIONS AND ABBREVIATIONS

Term	Definition
AC	Audit Committee
ADAS	Advanced Driver Assistance Systems
AFM	the Netherlands Authority for Financial Markets
AGM	Annual General Meeting
AScX	the Amsterdam Small-Cap Index
API	Application programming interface
App	Application
ASP	Average Selling Price
B2B	Business to Business
B2C	Business to Consumer
CAGR	Compound Annual Growth Rate
Code	the Dutch Corporate Governance Code
Company	TomTom NV
CRM	Customer Relationship Management
CSR	Corporate Social Responsibility
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
EICC	the Electronic Industry Citizenship Coalition
EPC	Environmental Product Compliance
EPS	Earnings Per Share
ERP	Enterprise Resource Planning
ETR	Effective Tax Rate
EV	Electric vehicle
EY	Ernst and Young Accountants
FCF	Free Cash Flow
FMS	Fleet Management Service
Foundation	Foundation Continuity TomTom
FTE	Full-Time Equivalents
GAAP	Generally Accepted Accounting Principles
GDPR	General Data Protection Regulation
GIS	Geographical Information System
GPS	Global Positioning System
Group	TomTom NV together with its subsidiaries
HD	High Definition
IA	Internal Audit committee
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
MB	Management Board
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
RBA	Responsible Business Alliance
R&D	Research & Development
RemCo	Remuneration Committee
RSU	Restricted Stock Unit
SaaS	Software-as-a-Service
SB	Supervisory Board
SD	Standard Definition
SDK	Software Development Kit
SelCo	Selection Committee
SEMS	Social and Environmental Management System
SG&A	Selling, general and administrative
SB	Supervisory Board
TPEG	Transport Protocol Experts Group
USP	Unique Selling Point
xFCD	Extended Floating Car Data
YoY	Year on Year

Android™ is a trademark of Google Inc.

LinkedIn™ is registered trademark or trademark of LinkedIn Corporation. and its affiliates in the United States and/or other countries.

Wi-Fi® is a registered trademark of Wi-Fi Alliance®.

Siri is a trademark of Apple Inc., registered in the US and other countries.

## 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
Automotive operational revenue	is IFRS Automotive revenue adjusted for the movement of deferred and unbilled revenue
Gross margin	is calculated as gross profit divided by revenue
EBIT	is equal to our operating result
EBIT margin	is calculated as operating result divided by revenue
EBITDA	is equal to our operating result plus depreciation and amortization charges
EBITDA margin	is calculated as operating result plus depreciation and amortization charges divided by revenue
Adjusted net result	is calculated as the net result attributed to equity holders of the parent from continuing operations adjusted for the movement of deferred and unbilled revenue, impairments and acquisition-related amortization on a post-tax basis
Adjusted EPS	is calculated as adjusted net result divided by the weighted average number of diluted shares over the period
Automotive backlog	is the cumulative expected IFRS revenue from all awarded Automotive deals
Free cash flow	is cash from operating activities from continuing operations minus capital expenditure (investments in intangible assets and property, plant and equipment) of continuing operations
Net cash	is cash and cash equivalents, including cash classified as held for sale, plus cash held in fixed term deposits minus the nominal value of our outstanding bank borrowings

## OTHER NOTICES

**In this Annual Report ‘TomTom’ ‘the company’ and the ‘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 section 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.



TOMTOM NV  
DE RUIJTERKADE 154  
1011 AC AMSTERDAM  
THE NETHERLANDS  
TEL: +31 (0)20 757 5000  
WWW.TOMTOM.COM



**MORE INFORMATION**

For more information about TomTom,  
please visit our investor website:

[corporate.tomtom.com/investors/overview](https://corporate.tomtom.com/investors/overview)